THOMAS WIJCK'S PAINTED ALCHEMISTS AT THE INTERSECTION OF ART, SCIENCE, AND PRACTICE

by

Elisabeth Berry Drago

A dissertation submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Art History

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ABSTRACT

The sixteenth and seventeenth centuries represent an alchemical "Golden Age," a time of growth and discovery for alchemy's diverse practitioners. During this era, alchemists were engaged in a wide array of commercial enterprises, from mining to dye and pigment manufacture to the production of chemical medicines. Alchemical treatises circulated across a broad spectrum of society, from artisans and tradesmen to scholars and princes. The term "laboratory" emerged during this period as a specific descriptor of sites of chemical inquiry—indicating alchemy's importance to the history of science as a whole. Yet despite its past ubiquity and utility, alchemy has since borne negative associations with magic, occultism, delusion, and greed, and alchemical imagery has in turn suffered misinterpretation or obscurity.

Many modern interpretations of alchemical art centralize Pieter Bruegel the Elder's 1558 satirical print, *The Alchemist*, a scene that lampoons vain hopes for transmutated gold; others focus on the mess and disorder of the pictured workshop as signs of alchemy's failures. Yet the popularity of alchemical scenes swelled during this period, particularly in the Dutch Republic, where they were produced in large numbers. The diversity of these images indicate a similarly diverse range of responses to alchemy, ranging from skepticism to respect, delight and curiosity. The alchemical paintings of Thomas Wijck (1616-1677) present a substantial body of laboratory imagery—as well as a remarkable challenge to narratives of greed and folly. Wijck's painted laboratories model domestic harmony, scholarly study, and expert knowledge of materials. Rather than charlatans or dupes, his alchemists are respectable and scholarly artisans who pursue intellectual and empirical work. In representing alchemists as artisans, Wijck reframes alchemy in the context of the familiar, as well as socially and economically vital, artisanal workshop. His images further emphasize the practices and products of the laboratory, presenting colored powders and raw materials that epitomize the desirable and useful alchemically created pigments, dyes, and medicines that circulated widely in the early modern marketplace. Wijck's choice to depict his alchemists as makers of artists' materials, rather than seekers of gold or cures, is a remarkable one. It affirms the connections between his subject matter, his practices as a painter, and his place within a Netherlandish art-theoretical tradition that linked alchemy and experiment to artistic virtuosity.

Wijck's international success, and his connections to elite communities engaged in natural philosophical experiments, shed new light on the market for alchemical pictures and other "modern" genre scenes of emerging empirical disciplines. His specialization in alchemy further indicates its utility as a tool for fashioning an artistic identity rooted in curiosity, ingenuity, and transformation. As a painter, and particularly as a painter in oils, Wijck was connected to a legacy of experiment in workshop process, as well as concerns for *mimesis*, naturalism, and material change. The work of artists, like the work of alchemists, contained intellectual-creative and manual-material aspects.

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While the work of alchemists and painters might be considered artisanal, both alchemists and artists claimed a special status owing to their creative powers. Alchemy shared deeper connections (and rivalries) with art-making, centering on the replication of nature. Wijck's formation of an artistic and professional identity around alchemical themes indicates his desire to explore this curious territory, and ultimately to demonstrate art's superior claims to knowledge of the natural world.

Chapter 1

INTRODUCTION

Neither pure realism nor pure invention, Thomas Wijck's *The Alchemist* (Figure 1, Rijksmuseum, Amsterdam) has much to tell us about early modern notions of experiment, curiosity, artistry, and the investigation of the natural world. Images of alchemists at work in the laboratory saw a significant increase during the seventeenth century, particularly in the Dutch Republic. This is not surprising, as this also marks a watershed moment in the history of alchemy or, as it was frequently called, *chymistry*.¹ The sixteenth and seventeenth centuries represent an alchemical "Golden Age" of growth, diversification, and transition within the discipline.²

During this era, alchemists were employed by elites and engaged in a wide array of commercial enterprises, from mining to dye manufacture to the production of chemical medicines. Alchemical treatises circulated instruction and theory across a broad spectrum of society, from artisans and tradesmen to scholars and princes.³ Although popular culture (both past and contemporary) has long associated alchemy with magic, occultism,

¹ For a discussion of the terms *alchemy* and *chymistry*, see William R. Newman and Lawrence Principe. "Alchemy vs. Chemistry: The Etymological Origins of a Historiographic Mistake." *Early Science and Medicine* 3 (1998): 32-65.

² Lawrence Principe. *The Secrets of Alchemy*. (Chicago: University of Chicago Press, 2013): 6.

³ Bruce Moran. *Distilling Knowledge: Alchemy, Chemistry, and the Scientific Revolution*. (Cambridge: Harvard University Press, 2005): 53-59.

and a long-debunked goal of transmuting lead into gold, alchemy was much more than an esoteric quest for immortality or a delusional search for riches. It constituted a practical set of tools by which early modern individuals manipulated their environments.⁴ Alchemists explored matter, testing and observing the characteristic actions and interactions of metals and minerals as well as organic substances such as oil and resin. Their discoveries paved the way for chemistry, pharmacy, and other fields producing synthetic goods. Contemporary historians of science have emphasized alchemy's utility to society, as well as its commercial and industrial potential. They have likewise stressed its diversity, suggesting plural *alchemies* rather than a singular *alchemy*, as the goals and methods of its practitioners were vastly diverse.⁵ The corresponding rise in visual representations of alchemists at work speaks to the ubiquity of alchemical thought, as well as increased interest in the practitioners of natural philosophy and emerging science.⁶

⁴ Tara Nummedal. *Alchemy and Authority in the Holy Roman Empire*. (Chicago: University of Chicago Press, 2007).

⁵ Stanton J. Linden, ed. *The Alchemy Reader: from Hermes Trismegistus to Isaac Newton.* (New York: Cambridge University Press, 2003): 4-5.

⁶ Natural philosophy is often assumed to be pre-modern science under a different name; yet while natural philosophy was not itself theology, the centrality of God to natural philosophical cosmologies distinguishes it from modern or emerging science as a supposedly secularized, "objective" discipline. The early modern term "scientia" is also not a universal analogue, as it was used to refer to what Andrew Cunningham calls "knowledge that was based on demonstrable principles" as well as "activities which produced knowledge of this kind," definitions that also encompassed theology— sometimes called the "queen of the sciences." The difficulty in separating out natural philosophy and "emerging science" is outside the scope of this project. I have refrained from overuse of the modern term "science" where it would appear inappropriate. For further discussion, see Andrew Cunningham. "The Identity of Natural Philosophy: A Response to Edward Grant." *Early Science and Medicine* 5, No. 3 (2000): 259-278.

The paintings of Thomas Wijck represent one of the major sources for alchemical imagery in early modern northern Europe. His known alchemical works—numbering roughly thirty-four surviving paintings—are second in quantity only to those of the better-known Flemish painter David Teniers the Younger. Despite this, no sustained scholarly analysis has ever been directed at this body of images as a thematic whole. Wijck's largely overlooked alchemists hold rich potential to deepen our understanding of alchemy, natural philosophy and artistry in the early modern period. The full importance of his alchemical pictures has yet to be contextualized and understood. The strict realism once thought to characterize the essence of Dutch painting has since been qualified: pictures, we know, are constructed places. Wijck appears to have been highly selective in his choice of the themes, practices, and social markers depicted within his alchemical workshops. We are thus invited to ask what sort of practitioner Wijck's alchemist might have been, and how we might begin to understand his place in two interconnected worlds: the painted world within the frame, and the real one that encompassed it.

Wijck's alchemist is a man in middle age, wearing a neatly trimmed beard and a fine, fur-lined robe and plain cap. He sits before a wooden lectern with a hinged lid, of a common type that can also be found in Rembrandt van Rijn's 1631 *Portrait of a Scholar* (Figure 2, Hermitage Museum, St. Petersburg). Around his desk sit small piles of printed books, manuscripts, and papers. A file of notes, potentially letters, contracts,⁷ or collected

⁷ Dutch paintings of the period often showed letters and records hung from the wall by a hook or string; letter-racks, pin-boards, and other storage solutions were less widely represented. See Dror Wahrman. *Mr. Collier's Letter Racks: A Tale of Art and Illusion at the Threshold of the Modern Information Age*. (Oxford: Oxford University Press, 2012): 230-231.

recipes, has been pierced and hung by the window at left. At the corner of the table is a large document with a broken red wax seal. A seal for making these impressions lies on its side to the right. With two brief lines of white paint, Wijck has deftly indicated the quill pen that the alchemist holds, poised above the surface of his paper. Here we may begin to view the alchemist as both reader and writer, engaged with communication. Reading and writing, reception and interpretation of knowledge, were and are thought of as the behaviors of scholarship. We see first that Wijck's alchemist is a scholar.

By the side of the desk—drawing the alchemist's attention—a young boy raises a metal basin for inspection. The boy's clothing is simple, and a heavy apron hangs nearly to his knees. Leather or canvas gaiters circle his legs, completing the look of workmanlike preparation. A heavy mortar and pestle rest behind him, surrounded by small chunks of a coarse dark substance, which might be charcoal, earth, or mineral. His attire and tools suggest he is engaged in one of the initial stages in the alchemical process, calcination, what the thirteenth-century philosopher and theologian Albertus Magnus called "the pulverizing of substances by fire,"⁸ a process that crystallized and refined matter. Calcined substances were first ground together with salt or mercury, then heated and ground again in stages until all moisture was removed. The boy's protective leather apron suggests that he may shortly be tending a fire, possibly in the copper brazier placed just to the rear. The alchemist's appraising glance, and the boy's offering of his labor for scrutiny, tells us that the alchemist is the expert in these matters. The textual knowledge of the alchemist's books and papers is now supplemented by working

⁸ Quoted in Linden, Alchemy Reader, 106.

knowledge that allows him to guide his apprentice through an experiment in progress. Here Wijck's alchemist is a material expert, as well as an expert teacher.

He is also a husband and father. In the painting's background, a modestly dressed woman sits with a small bundle of cloth on her lap. Her hair is tucked neatly into a cloth cap, and her right hand is lifted in a gesture that suggests she holds needle and thread. In Dutch imagery, sewing has long been used as a symbol of feminine virtue and a sign of the orderly maintenance of the household.⁹ Kneeling at her feet is another young boy, who bends over a woven basket and appears to tend an unseen fire. Though the clutter of the household may give the viewer an impression of social disorder, the manner in which domestic and material labor is conducted implies otherwise. The placid atmosphere and the diligent performance of gendered behaviors—scholarship and mending—as well as hierarchical reinforcement of the alchemist as teacher and head of household, strongly suggests that this alchemist's pictured microcosm is ordered in ways that would have been familiar to Wijck's seventeenth-century audience.

Prints or drawings tacked onto the walls of the alchemist's chamber tell us that Wijck's alchemist also makes use of images and interprets them in turn. The opacity and complexity of alchemical texts and images was legendary, even in Wijck's time. False alchemists spinning confusing metaphors were stock-in-trade elements of satire; yet alchemical authors did in reality veil their proprietary knowledge in symbol and allegory. Alchemy did not yield its secrets easily. But the game of interpretation could be a

⁹ For an extensive look at domestic imagery and Dutch constructions of femininity, see Wayne E. Franits. *Paragons of virtue: women and domesticity in seventeenth-century Dutch art.* (Cambridge: Cambridge University Press, 1993.)

pleasurable one, and many Dutch paintings of the same period were rich in emblematic meaning. Thus there is a potential link between the complex interpretation of alchemical imagery and the pleasure of viewing and interpreting Wijck's compositions. An educated (or alchemically initiated) audience would have enjoyed such an image, together with its visual and literary allusions, in light of their own experiences of alchemy and its wider cultural and natural philosophical associations.

Interpretation of the Rijksmuseum *Alchemist* must also take into account the representation of mess immediately at the picture's foreground: the scattered papers and ragged-edged books strewn across the room, barrels and vessels propped against the hearth and wall, and smears or stains of raw material left behind on the floor. This overflowing largesse of clutter is more than typical household flotsam: vessels and books signal respectively the laborious manual and mental workings of alchemy. Wijck's careful handling and tonal highlights—particularly the bright edges of light-colored papers tucked into folios, as at lower left—draw the viewer directly to the materials spilling across the front of the scene, indicating their importance to understanding the painting as a whole. Previous interpretations of Wijck's pictures, and the alchemical scenes of his peers, have relied on the appearance of mess and disorder to characterize alchemy as misguided folly and its practitioners as witless and hopeless. Older images, prints designed or inspired by master satirists such as Pieter Bruegel the Elder and Sebastian Brant, did indeed represent alchemical workshops as places of ruin where tools were dented and cast aside, walls crumbled, and ragged children went unfed. Yet the respectability and diligence of the family at center challenges a reading of the

surrounding mess as a simplistic sign of failure or delusion. The presence of such paradoxical signs—order and disorder, chaos and harmony—within the Rijksmuseum *Alchemist* invites deeper analysis of Wijck's themes.

Alchemy was received with ambivalence in early modern society, hailed by some as a miraculous panacea or a tool of great utility, but by others as a fraudulent fool's errand. As an emerging empirical discipline, alchemy not only adapted the learning of the past but generated new knowledge and new questions that were greeted with a mix of caution and excitement. Wijck's images, while overall modeling a positive vision of alchemy, are multifaceted in their representations, and in turn speak to the multifaceted social reception of alchemy. Wijck's finely dressed scholar is juxtaposed with the humble earthiness of his family home. The room is both kitchen and study, living space and laboratory. The work of the scholar is solitary, the work of the teacher supervisory. Texts are one way of seeking and producing knowledge, and experiment another. A cluttered workshop may be a sign of chaos, but it may also represent the continual movement of productive work. Even broken vessels, long thought to be signs of failure, may be signs of alchemical process. Wijck's images do not mimic the moralizing anxieties on display in Bruegel's scene, but participate in forming period questions regarding who alchemists were, what alchemists knew, and how they should be regarded within society.

The question of a market or audience for alchemical paintings has received little attention, despite the vast number of alchemical pictures produced during the seventeenth century. This project profiles a number of Wijck's patrons, finding a demand for his works among successful tradesmen and artisans, as well as courtiers in elite circles.

Goldsmiths, dyers, or apothecaries often had knowledge that bordered on the alchemical. Their professional interests may have prompted the desire to own alchemical subjects. Wealthy individuals who patronized alchemists—among them princes hoping to build currency reserves or glean the most from a flagging silver mine—may have wished to own paintings demonstrating their tastes and patronage. Broadening interest in natural philosophy and emerging science across nearly all levels of European society further widens the possible pool of interested audiences, as alchemy was both literal and spiritual precursor to the modern discipline of chemistry.¹⁰ Aspiring adepts and scholars, knowledgeable artisans, curious patrons, and intrigued skeptics all may have sought paintings like Wijck's for a variety of reasons.

The Alchemist is also a painting that bears signs of its own making. Painters kept workshops just as alchemists did: their workrooms were filled with apprentices needing guidance, unfinished works in progress, signs of labor and also of thought and experiment. Wijck's painting draws attention to the painterly craft that produced it, in its depiction of textures and effects of reflected light. Filled at every corner with rich profusions of objects, grouped carefully into seemingly natural and minute still-life vignettes, the picture requires close looking and close interpretation—down to the folded edges of paper folios and the water-stained beams of the wooden ceiling. Though the space is humble and cluttered, the scene nevertheless conveys serious ideas regarding alchemy and the expert individuals who practiced it. In this sense, the painting may be compared to *A Painter in his Workshop* (Figure 3, Gemäldegalerie Alte Meister,

¹⁰ Moran, *Distilling Knowledge*, 182-189.

Dresden) by Wijck's teacher, Adriaen van Ostade of Haarlem. In this painting, the rustic space in which the painter sits is scattered with brushes and tools, letters and sketches, props and models. A young apprentice works at his appointed tasks. Though indoors, the painter is at work on a landscape, evidence of the creative faculties needed for his art. Technical mastery, diligent focus, and guidance of an apprentice are evident in both depictions. Though the arts they represent differ, both Wijck and Van Ostade formulate the practice of artisanal trade as one that requires material skill as well as creative and intellectual vision. Until now, such parallels have remained largely unexamined.

Wijck's skillful transformation of his materials—especially oil and pigment—into a simulacrum of reality, echoes the desire of the alchemists to combine elements of the natural world into new and perfected forms. Rhetoric regarding transformation and creative genesis could be found in both alchemical and artistic writings. Both artists and alchemists laid claim to divine inspiration—genius—that set their art apart from others. But alchemy and art also shared concrete ties: the vast majority of painters made common use of distilled oils and solvents as well as alchemically produced pigments such as vermillion and verdigris. From alchemy's beginnings, links between art and alchemy can be found in the permeable boundary between the studio and laboratory. It has been demonstrated that in the West, the origins of alchemy itself lie in ancient papyrus recipe books for metals, glass, ceramics, gems, and other goods produced in Greco-Roman Egypt. Such texts provided metalworkers and artisans with tools and techniques for manipulating nature, developments that contributed to the origins of natural philosophy

and the emergence of alchemy as a distinct discipline.¹¹ Artists' workshops, like alchemists' laboratories, were sites of innovation and experimentation, locations where the boundaries of knowledge were continually observed, tested, and manipulated. Alchemy and art are fundamentally interwoven; thus a productive investigation into Wijck's images of alchemy must encompass visual, contextual, and technical analysis.

The purpose of this dissertation is two-fold. First, it provides a sustained analysis of Wijck's alchemical pictures, one that moves beyond previous interpretations to seek new insights. Using period alchemical manuscripts and printed texts as comparisons and counterpoints, I identify and interpret the alchemical equipment, practices, and implications of Wijck's works, as viewed through the lens of his contemporaneous audience. I have examined his background and training, his travels, and his personal circles, influences, communications, and the circulation of alchemical thought within his world. Using Wijck as a focal point, I establish a fuller understanding of why alchemical pictures were created and collected, to demonstrate their relevance to the early modern art market. More broadly, this project argues for the necessity of their re-examination within genre painting and challenges their past omissions from the study of Dutch art.

Second, I identify and investigate a strong and multifaceted link between the practices of the alchemists depicted in Wijck's compositions and the practices of seventeenth-century painters. The rise of alchemical pictures during the Dutch Golden Age, an era of expanding artistic self-consciousness, reinforces the mutuality of artistic

¹¹ William R. Newman. *Promethean Ambitions: Alchemy and the Quest to Perfect Nature*. (Chicago: University of Chicago Press, 2004): 24-33.

and alchemical knowledge. More crucially for Wijck, alchemy's parallels with art—in the territories of imitation and transformation of natural materials—offer a uniquely potent subject by which to form an artistic persona. His naturalistic mode of painting, specifically painting in oils, argues for his mastery over nature and materials, while his innovations in subject matter demonstrate his insistent modernity and development of a professional "brand." Whereas others have treated these understudied images as mere moralizing tropes, or as simple conventions of genre imagery, I instead argue that the alchemist is a powerful subject as explored by the early modern artist, one which speaks to workshop process, experiment, and mimesis. Like artists, alchemists both enjoyed praise and endured scorn for their attempts to mimic or improve upon the works of nature. Their dual search to understand the inner workings of nature both joined these two arts, and made them potential rivals for nature's crown.

This project draws on the approaches of Pamela H. Smith and Pamela O. Long, in centralizing the tacit, studio-based knowledge of the artist/artisan as a productive route to a greater understanding of pictorial or artistic meaning. Studio knowledge is key not only to technical process or workshop organization, but to the selection of themes and pictorial programs, and the interactions between artist, subject, persona, and market. Smith's work focuses on the aesthetic and ethos of naturalism, a pictorial mode Smith suggests is the artisan's expression of his or her authority to master and manipulate nature itself. She argues for a unique "artisanal epistemology"¹² based in bodily knowledge. Similarly,

¹² Pamela H. Smith. *The Body of the Artisan*. (Chicago: University of Chicago Press, 2004): 8.

Long's work has emphasized the close relation between art and nature, the extent to which both categories are culturally constructed, and the role of artists in generating new knowledge about nature, as well as in generating new strategies for communicating and authenticating that knowledge.¹³ Contemporary re-examinations of alchemy, by Lawrence Principe, Bruce Moran, William Newman, and Tara Nummedal, have reclaimed its artisanal methodology and wider social currency. My use of painters' manuals and period recipe books as sources for alchemical studio knowledge also builds on recent material-centric approaches modeled by the Art Technological Source Research Working Group of the International Council of Museums' Committee for Conservation, as well as the Art and Knowledge in Pre-Modern Europe Research Group of the Max Planck Institute for the History of Science, and the joint "Making and Knowing Project" of Columbia University and the Chemical Heritage Foundation under the direction of Pamela Smith.

I do not argue for a re-evaluation of Wijck as a generator of new alchemical or natural knowledge, in the vein of other artist-naturalists such as Jacques de Gheyn II or Maria Sibylla Merian, or the artist-anatomists of the Italian Renaissance. Rather, this project examines Wijck's powerful role as a communicator of practice. Alchemy's unusual place among established disciplines—between new empirical "science" and old artisanal traditions, between divinely-inspired art and tedious labor, between respectable trade and esoteric secret— contributed to its ambivalent reception within society. Yet

¹³ Pamela O. Long. *Artisan/Practitioners and the Rise of the New Sciences*, 1400-1600. (Corvallis: Oregon State University Press, 2011): 38-60.

Wijck's paintings model a way of receiving alchemical knowledge as both curious and useful, and alchemical practitioners as both scholar and master. His images do not merely reflect cultural attitudes towards alchemy: they actively shape them, and open new space for dialogue on alchemy's utility, legitimacy, and deep ties to artistry and creativity. They offer a framework that in turn helps to frame alchemy itself, a means by which to draw connections between the productive work of alchemists and other makers—and between the knowledge sets of one expert and another.

In the following chapter, "Thomas Wijck in Haarlem," I profile Wijck's early life and training in the Haarlem studio of Adriaen van Ostade, and demonstrate his connections to the emergence of genre painting and Dutch "realism," as well as his leadership of the Haarlem Guild of Saint Luke. His life presents a picture of an artist engaged with nature, labor, and materials, whose work was urgently modern in its thematic innovations. Wijck's unusual scenes of alchemy are discussed in the context of Haarlem's role as an incubator for new genre modes. In particular, his adoption of workshop imagery as a recurring subject throughout his lifetime positions him within local traditions that emphasized work, skill, and the dignity of the maker. Within this chapter, I also present evidence of Wijck's high reputation both during his lifetime and for over a century afterwards. A brief historiography of his few appearances in later scholarship highlights the marked contrast between his success and his later underrepresentation. His frequent omission from the art-historical canon is likely linked in part to misunderstandings of alchemy as a discipline.

The third chapter, "Folly Versus Expertise in Alchemical Imagery," addresses the pictorial and literary traditions that Wijck's images challenge and transform. While the best-known imagery emerged from Bruegel's alchemical satire, an alternative visual tradition presented alchemy as a positive and productive enterprise. Likewise, in reality, diverse reactions greeted alchemy and its practitioners. Secrecy and complexity contributed to a popular image of alchemy as the domain of lying frauds or self-deluding buffoons, while anxieties about the nature of creation—thought to be the province of God, but explored by alchemists and artists—clouded the moral interpretation of alchemy. Yet at the same time, alchemy was widely patronized by individuals from all walks of life, and its theories were explored by some of the seventeenth century's most prominent thinkers. This chapter establishes the contrasting pictorial traditions for alchemy during the sixteenth and seventeenth century, and explores alchemy as it is represented by Wijck's teachers and peers, to build a foundation for a new evaluation of Wijck's images as unusual, subtle, and serious.

In the fourth chapter, "Wijck's Alchemical Artisans," I analyze a core set of his paintings, examining their characterization of the alchemist as paterfamilias, experimental artisan, and scholar. Wijck deviates from the satirical pictorial tradition to represent alchemy as a serious discipline and its practitioners as hybrid scholar-artisans. Within these paintings, alchemy's complex and unfamiliar language becomes the familiar visual language of the studio, the workshop, and the domestic home. Its hermetic practitioners appear as respectable and productive tradesmen, engaged with their texts, tools, and apprentices. The alchemist's solitude appears contemplative and creative rather

than merely isolating. Wijck's innovative paintings transform the pictorial tradition to translate alchemy into the mode of the artisanal workshop, while retaining marks of alchemy's unique status as an empirical and experimental discipline.

Chapter five, "Artistic Experiment, Artisanal Knowledge, and Emerging Science in Wijck's Circles," traces the circulation of alchemical ideas in the artist's social and intellectual milieu. Wijck's collectors in Haarlem included wealthy brewers and textile magnates, as well as at least one practicing silversmith. These professionals would have had direct ties to alchemy through distillation, dye-making, and the assaying and tinting of metals. Wijck's most notable patron in London, John Maitland, Duke of Lauderdale, was part of an intellectual circle that included George Villiers, the Duke of Buckingham, the diarist Samuel Pepys, and Sir Robert Moray, all of whom were instrumental in the early years of the Royal Society of London for Improving Natural Knowledge, founded by charter in 1660. It is no coincidence that Wijck's time in London corresponds to the growing fashion for alchemy in the Restoration court of Charles II.

The sixth and final chapter, "The Artist in the Laboratory, the Alchemist in the Studio," focuses on Wijck's paintings as objects created in an experimental workshop. Recent technical analysis (including X-ray fluorescence) performed on several paintings by Wijck has yielded new data on his usage of alchemically created pigments. This supports my assertion that representations of laboratory processes within art are informed by the knowledgeable practices of artists. Wijck's construction of alchemy as an artisanal discipline links the artist's observation of nature to alchemy's empirical explorations of the natural world. This chapter identifies parallels between period representations of the

studio and Wijck's alchemists, and argues for alchemy's centrality to Wijck's artistic identity. Ultimately, I position Wijck not merely as a recorder of alchemical process—nor as a fully fledged alchemist—but as an artist whose works straddles the nexus of artisanal and scientific knowledge.

Wijck returned again and again to the subject of the alchemist at work. Alchemy's close ties to artistry made it uniquely suitable as a subject for painterly experiment, and Wijck took full advantage of its possibilities. His paintings offer a lens by which to freshly contemplate the painter's knowledge of experimental and empirical disciplines, and in turn their role in generating that knowledge. In this way, Wijck's created world offers us the chance to understand the very real, but largely vanished world that made it.

Chapter 2

THOMAS WIJCK IN HAARLEM

Few pictures are more qualified to situate Thomas Wijck in his home city of Haarlem than a drawing of a weaver at his loom lit by vivid daylight streaming through an open window. The *Weaver's Workshop* (Figure 4, Rijksmuseum, Amsterdam) depicts an enormous harness loom, a type used to produce the fine linen cloth for which Haarlem became famous in the first quarter of the seventeenth century. A weaver appears amidst the contraption's inner workings, but it is the loom—architecturally imposing, subtly shaded in a light ink wash and rendered in all its mechanical details—that dominates the composition and is the work's true subject. Wijck's interest in representing the specificity of the loom is underscored by a second, more focused drawing of its complex shuttle mechanism (Figure 5, Rijksmuseum, Amsterdam). The production of images of weavers and weaving in Haarlem—including works by Wijck, Cornelis Bega, Gillis Rombouts, Cornelis Decker, and numerous others—speaks to the city's growing textile trade, but also to local artists' innovative adaptations of past trade imagery to suit an expanding and shifting market. As Linda Stone-Ferrier has demonstrated, while a limited number of weavers appear in stock trade images of the sixteenth century, including Jost Amman's woodcut illustrations of over 100 early modern professions in Hans Sach's 1568 Das Ständebuch (The Book of Trades), representations of Haarlem's weavers were unusually

detailed and numerous, and almost universally presented the work of weaving in a virtuously positive light.¹⁴ Wijck's depiction of the industrious, illuminated weaver participates in this local propagandistic tradition, and suggests the deep impact of Haarlem's uncommonly large-scale production of labor imagery on the young artist. Personal experience may also have contributed to the specificity of his images: Wijck had family ties to the Haarlem textile industry through his marriage to a cloth merchant's daughter.

Yet the *Weaver* also points to Wijck's modernity. His interest in spaces of work in specific tools and practices of tradesmen and artisans—demonstrates both conscious selectivity of subject and a concern for "modern" life. Though preceded by Amman's images of virtuous tradesmen (each standing as a generalized depiction of his profession), Wijck's weaver is less universal and more individual; he is also more deeply connected to the period and community in which the work was produced. It represents local industry, local technology, and local concerns, and responds to local tastes: an image not timeless but utterly of the moment. His choice of subject speaks to forming conceptions of modern painting later codified by the Dutch painter and art theorist Gérard de Lairesse. De Lairesse's *Het Groot Schilderboeck (The Great Book of Painting)*, published in 1710, devotes a full chapter to arguing the division between the "antique" and "modern" modes. While the former is concerned with history, and requires the painter to work in a suitably classical or grand style, the latter is expressed by the painter's personal choice of new,

¹⁴ Linda Stone-Ferrier. *Images of Textiles: The Weave of Seventeenth-Century Dutch Art and Society*. (Ann Arbor: UMI Research Press, 1985): 59-64.

particular, and contemporary themes. As de Lairesse writes, the continually changing urban mileu offers an especially diverse and useful array of fresh subjects for the artist:

...as the city life is peculiar to us, with its daily occurences of assemblies, pastimes, family affairs, and other particulars... so it is the more easy for a painter to make such subjects his practice.¹⁵

In noting that "we get in time richer in those inventions by daily occurance,"¹⁶ De Lairesse connects close observation of life and society to painters' increasing use of nontraditional themes. These themes, he suggests, offer artists greater freedom for their own inventions, particularly in the choice of "accessories" such as objects and tools, costumes, and settings.¹⁷

Haarlem painters were central to the rapid expansion of artistic subject matter during the seventeenth century. Wijck's selectivity of subject—and his attention to distinctive "accessories" such as the weaver's loom or the distillation vessels of the alchemist—actively participated in this expansion. Though many of his themes have earlier counterparts in the pictorial tradition, his unusual treatments shift meaning and offer new models with distinctly modern interpretations. His *Kitchen Interior* (Figure 6, Walters Art Museum, Baltimore) may at first be taken by contemporary viewers as an image of humble domestic work—yet it bears little resemblance to inviting family scenes like those painted by Pieter de Hooch, or to the suggestive, punning kitchens of Gerrit

¹⁵ Gerard De Lairesse. *A Treatise on the Art of Painting in All its Branches*. W. M. Craig, translator. (London: Edward Orme): 119.

¹⁶ Ibid: 120-121.

¹⁷ Lisa Vergara. "Antiek and Modern in Vermeer's 'Lady Writing a Letter with Her Maid'." *Studies in the History of Art* 55, Symposium Papers XXXIII: Vermeer Studies (1998): 246-247.

Dou, Gabriel Metsu and others, in which comely young cooks and serving maids display poultry, sausages, and their own alluring glances. Instead, Wijck's cook and assistant are both men, indicating that this is a professional rather than home kitchen. At left, a young cook appears to fold dough at a table before a window, while his companion scours a basin. The serene space, infused by the cool light of early morning, and industrious workers set to their tasks, all seem to emphasize the orderly continuity of daily labor. Yet the scene itself is more workmanlike than moralizing or *gezellig* (loosely, "homely," a contemporaneous Dutch term expressing the inviting social warmth of the family living space and hearth).¹⁸ Large barrels in the foreground, and an enormous wooden tub at center, highlight high-volume cookery, a scale of production that dwarfs domestic routines.

Wijck's choice to depict men, rather than women, as the occupants of the kitchen was an unusual one. Many kitchen scenes offered moralizing images of women's conduct in such spaces, such as the negative exemplar shown in Nicolaes Maes' *The Idle Servant* (Figure 7, National Gallery, London). Where men do appear, they are typically shown as higher-status individuals in the kitchen hierarchy: "cooks" rather than "kitchen maids." David Teniers the Younger's *Kitchen Interior* (Figure 8, Wilanów Palace, Warsaw) shows an older man in apron and cap standing before the hearth, one hand raised as he speaks to a younger woman carrying a jug. In the foreground, a second young woman performs the dirty, time-consuming task of butchering meat. While not clear-cut, the

¹⁸ Mariët Westermann. *The Amusements of Jan Steen: Comic Painting in the Seventeenth Century*. (Zwolle: Waanders, 1997): 318.

man's seniority and both women's links to menial service (carrying jugs, cutting away fat and bone) supports a reading of this kitchen as male-run. In reality, such mixed kitchens were most often dominated by men, who were tasked with performing more "complex" duties including flavoring soups and setting menus, while women provided necessary yet tedious labor.¹⁹ By presenting men alone, Wijck breaks with the pictorial tradition, shifting his scene away from moralizing instruction as well as from overt representations of gender hierarchies.

Unlike Jan Steen's lively double portrait, *The Baker Arent Oostwaard and his Wife, Catharina Keizerswaard* (Figure 9, Rijksmuseum, Amsterdam), Wijck's *Kitchen Interior* does not identify its cooks either by their individual identities or their specific products (baked goods, meat, fish, or fowl). Instead it shares a mundane reality of urban life: cities needed cooks, not only to provide service for inns and taverns but to support public festivals and private feasts, including those in the packed social calendars of the militias and civic guilds.²⁰ Despite the anonymity of his cooks, Wijck presents a specifically urban and modern viewpoint, a glimpse into life that would have at once been utterly familiar and refreshingly new to his audience—for scenes of this type were, as I have noted, rare. This sensitivity to the "peculiar" qualities of contemporaneous life, as described by de Lairesse, marks Wijck as a distinctively modern painter, one who was

¹⁹ Solomon H. Katz and William Woys Weaver. *Encyclopedia of Food and Culture*. (New York: Scribner, 2003): 546.

²⁰ Many of the typical feasts and feast-days observed by the Dutch are noted by Simon Schama in "The Unruly Realm: Appetite and Restraint in Seventeenth Century Holland." *Daedalus* 108, No. 3 (1979): 118-119.

poised to enter a competitive painting market armed with the advantages of selectivity and specialization.

Wick's most notable innovations in subject matter emerge from his least-studied pieces: his paintings of alchemical workrooms. As I will demonstrate in the next chapter, a pictorial tradition for alchemy was in place from the fifteenth century, and numerous artists of the seventeenth century (including many of Wijck's peers and colleagues) painted the subject at least once. But Wijck's continual return to alchemy as a subject over three decades, and his unusual choices in its presentation, marks its importance to his career and artistic identity. Indeed, it is his alchemical works that were most lavishly praised by period critics for their ingenuity and wit,²¹ qualities associated with the novel and original.

Wijck's images of alchemical laboratories are also images of workshop labor. His demonstrated interest in the tools and practices of artisanal labor and the work of tradesmen adds a complex dimension to his representations of alchemy, as it was considered both a theoretical and practical discipline. This conceptual marriage of theory and practice was shared by painting, and thus his interest comes sharply into focus when contextualized within Haarlem's vibrant artistic community. Haarlem's culture of experiment in genre provided rich ground for artists seeking to develop distinctive pictorial brands within a growing market. Wijck's subtle, serious treatment of alchemy as

²¹ "... alle zoo geestig van hem bedagt, kunstig geschikt... dat dezelve Kunst een hooger prijs verdient, dan zij thans gelden mag." Arnold Houbraken. *De groote schouburgh der Nederlantsche konstschilders en schilderessen, Book Two*. (1976 Photographic Reprint of the 1753 Second Edition.) (Amsterdam: B.M. Israël Amsterdam, 1976): 16.

an artisanal discipline was an intentional adaptation of an established pictorial tradition to a fresh and distinct visual mode. Wijck's success demonstrates not only the viability of alchemy as a subject for art in the open market, but also Wijck's ability to build a professional reputation as a painter of alchemists specifically.

Within this chapter, I will profile Wijck's early life and training in Haarlem, situate him in the context of his peers and colleagues, and establish his importance to the city's artistic community. Wijck was a respected painter and a leader within the guild, whose works were valued by the city's collectors. His consistently high reputation in art criticism and biographies of the eighteenth and early nineteenth centuries demonstrates an enduring popularity. Despite this, his alchemical scenes have remained understudied until now. Alchemy's reputation as occult folly during the nineteenth and early twentieth centuries long clouded the interpretation of alchemical imagery. As a result, the frequent omission of Wijck from the Dutch art-historical canon has left a hole in our understanding of his works' contributions to, and complications of, early modern formulations of alchemy, artistry, and labor. This chapter serves as a foundation for a new re-evaluation of his alchemical scenes through the lens of artisanal work, beginning with their emergence from artistically experimental Haarlem.

Life in Haarlem

Thomas Adriaenz Wijck was born in the village of Beverwijck, north of Haarlem, where his family's surname is thought to have originated. Though no baptismal records have been found regarding either Thomas, or his sister, Maritgen, it appears that the

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Wijck family was Catholic.²² The seventeenth-century painter and biographer of artists, Arnold Houbraken, provides Wijck's date of birth as 1616.²³ It is not known when exactly Wijck began his training as a painter. It can be assumed that formal training began during his mid-teens, as was frequently the case. The regulations of the Haarlem Guild of Saint Luke stated that an aspiring painter must spend three years training as an apprentice, but it was commonplace for periods of study in the studio of a master to last as long as seven to nine years.²⁴ Wijck petitioned the Haarlem Guild of Saint Luke for membership in August of 1642, indicating that his training was complete, and therefore likely placing his date of birth before 1621. He was admitted to the guild in January of 1643, after fulfilling the guild board's request for proof of citizenship and the payment of his fees. The profession of his father, Adriaen, was not recorded. Letters provided to the guild by Wijck in November of 1642, requesting a postponement of their demands for citizenship papers, indicate that Wijck's parents were alive at that time, and still residing in Beverwijck.²⁵

²² Irene van Thiel-Stroman has noted that the Reformed baptism of a Thomas (Cornelisz) in Beverwijck in 1621, which was formerly connected to Thomas Wijck, almost certainly refers to another individual who remained a resident of Beverwijck through the 1650s. In addition, Wijck's children were baptized as Catholics. Cited in Notes 5, 15-16, "Thomas Adriaensz Wijck." *Painting in Haarlem 1500-1850: The Collection of the Frans Hals Museum.* (Ghent: Ludion Ghent, 2006): 348.

²³ Arnold Houbraken, *De groote schouburgh*, 16-17.

²⁴ Maarten Prak. "Guilds and the Development of the Art Market during the Dutch Golden Age." *Simiolus: Netherlands Quarterly for the History of Art* 30, No. 3/4 (2003): 244.

²⁵ As Wijck was not born in Haarlem, citizenship requirements may have stipulated an extended period of service in the employ of a Haarlem master, delaying his entry into the guild as an independent. Hessel Miedema. *De Archiefbescheiden van het St. Lukasgilde te Haarlem, 1497-1798.* (Alphen aan den Rijn: Canaletto, 1980): 560, 565-566, 578.

Wijck's training as an artist most likely took place in the studio of the respected Haarlem painter Adriaen van Ostade. Houbraken states that Van Ostade, like his older contemporary Adriaen Brouwer, was a student of Frans Hals, ²⁶ though this remains unconfirmed.²⁷ Van Ostade had been accepted to the guild as a master in 1634, and Wijck would have been among his earliest pupils. Van Ostade's younger brother, Isaac, also studied in the workshop of the elder during this period.²⁸ It is clear that Wijck was firmly settled in Haarlem no later than December of 1642, though he was likely residing there several years earlier in order to have successfully completed an apprenticeship under Van Ostade. Documents and drawings support Wijck's presence in the Van Ostade studio for an extended period: after the death of Adriaen, a vast number of finished and unfinished studio drawings, paintings, and prints were acquired by Cornelis Dusart, a late pupil of Adriaen. Numerous sketches and prints by both Isaac and Wijck were listed in Dusart's 1704 inventory, alongside the work of Adriaen.²⁹

In May of 1644, Wijck married Trijntgen Adamsdr, daughter of the cloth merchant Adam Adamsz de Reijger and Cornelia Jansdr. The de Reijger family was likely also Catholic, as Thomas and Trijntgen's wedding took place before the city aldermen in Haarlem. Marriage by city officials was common for Catholics in the

²⁶ Arnold Houbraken, *De groote schouburgh*, 348-349.

²⁷ Among others, Wayne Franits questions this connection in his landmark text *Dutch Seventeenth-Century Genre Painting*. (New Haven: Yale University Press, 2004): 41-42.
²⁸ Bernhard Schnackenburg has suggested a later birth date for Wijck, 1620, which would place him as a closer contemporary of Isaac, who was born in 1621. "Die Anfänge von Thomas Adriaensz. Wyck (1620-1677) als Zeichner und Maler." *Oud Holland* 106, Issue 3 (1992): 144.

²⁹ Pieter Biesboer. *Collections of Paintings in Haarlem 1572-1745*. (Los Angeles: Getty Research Institute, 2001): 301, 310.

Northern provinces, as the Dutch Reformed Church no longer held marriage as a sacrament. Catholics were afforded the ability to conduct a public civil marriage outside of the Protestant church, with the option of a private religious ceremony held afterwards.³⁰ Relatively little is known of their early life in Haarlem, as Wijck is absent from public records for a nearly nine-year period between the date of their wedding in 1644 and Wijck's appearance as a witness in a debt case in April of 1653. It is likely that Wijck's travels to Italy took place early in this period, a journey that connected him with other Dutch émigré painters. Multiple scholars have suggested that his route took him through Rome and Naples, a notion supported by his many sketches of identifiable Italian monuments.³¹

In 1653, Wijck reappears again in city records, arranging the funeral of his widowed sister.³² Three of his and Trijntgen's children appear in city or baptismal records: Jan, born in or around 1645; Cornelia, baptized in 1657; and Adam, baptized in 1661. The name of a fourth child—whose death was recorded in 1656—is unconfirmed by documents.³³ The English engraver, antiquarian, and artists' biographer George Vertue, writing in the first quarter of the eighteenth century, noted the existence of

³⁰ Charles H. Parker. *Faith on the Margins: Catholics and Catholicism in the Dutch Golden Age*. (Cambridge: Harvard University Press, 2008): 61.

³¹ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347. See also Ludovica Trezzani. "Thomas Wijck." *The Grove Dictionary of Art: From Rembrandt to Vermeer, 17th Century Dutch Artists.* Jane Turner, ed. (New York: St. Martin's Press, 2000.)

³² Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347.

³³ Ibid: 347.

another younger son, also called Thomas, whom he claims was born in Haarlem in 1652 and died at an unspecified date in Richmond.³⁴

Haarlem, in the first half of the seventeenth century, was still enjoying a period of remarkable peace, growth, and prosperity. This had begun nearly seventy years earlier, following the city's liberation in 1577. The successful Dutch rebellion against Spain had a brutal cost: a siege by Spanish troops between 1572-1573 and four years of occupation had left Haarlem decimated, with a population of only 18,000. The recovering city appealed to the newly formed Dutch Republic for aid, and received over one million guilders to begin a plan of expansion and building that included new hospitals and almshouses, additions to the town hall, and new market buildings. By 1622, Haarlem's population had doubled, thanks largely to a wave of immigrants fleeing either religious persecution or economic stagnation—blockades and trade embargoes—in the Southern Netherlands. While some arrived as impoverished refugees, many came as skilled laborers or investors seeking new opportunities in a growing urban center. Between 1580 and 1620, hundreds of houses were constructed in the southern and southwestern areas of the city to accommodate the new arrivals.³⁵

The Wijck family, however, appears to have been centered in the "old" quarter of the city, close to the market square and the Grote Kerk, formerly Saint Bavo's. Guild documents give the painter's address as the Kleine Houtstraat, south of the Grote Kerk

³⁴ George Vertue, *Note Books*, Vol. V. (Facsimile reprint of the 1930-55 edition printed for the Walpole Society by J. Johnson at the University Press, Oxford.) (London: Reprinted for W. Dawson, 1968): 43.

³⁵ Biesboer, *Paintings in Haarlem*, 1-4.

and just west of the River Spaarne, for the years between 1658 and 1660.³⁶ This neighborhood in the heart of the city was predominately Catholic.³⁷ Before the new Republic's confiscation of Catholic properties by the Dutch Reformed Church, the cathedral of Saint Bavo had served as the regional bishop's seat and the center of local religious community. After 1581, the public practice of Catholicism was banned within the Dutch Republic, but Haarlem Catholics continued to worship in private homes or clandestine churches. Until the early 1600s, when a new flood of Mennonite and Dutch Reformed immigrants arrived from the south, Catholics continued to represent a majority of the population, particularly among the wealthy patrician class. Catholics were banned from holding public office and from outward displays of religious affiliation, a situation that left many faithful vulnerable; though some degree of tolerance was often "purchased" from local officials through bribery or private deal-making.³⁸ Locally, enforcement of religious regulations concerning Haarlem's substantial Catholic population appears to have been relatively relaxed: even large-scale clandestine churches constructed in brewery warehouses in the 1630s were quietly tolerated by officials.³⁹

Wijck's Catholic confession may have therefore embedded him into a close-knit community centered in one area of the city, where he lived and worked for much of his life. He may have shared this religious affiliation with his teacher, Van Ostade, who

³⁶ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 348.

³⁷ Gabrielle Dorren. "Communities within the community: aspects of neighbourhood in seventeenth century Haarlem." *Urban History* 25, No. 2 (1998): 177.

³⁸ Charles H. Parker. *Faith on the Margins: Catholics and Catholicism in the Dutch Golden Age*. (Cambridge: Harvard University Press, 2008): 10-12.

³⁹ Biesboer, *Paintings in Haarlem*, 12-13.

married a wealthy Catholic woman from Amsterdam in 1657.⁴⁰ Wijck's Vision of Saint *Dominic* (Figure 10, Private Collection) seems to support the identification of the artist as a Catholic receiving patronage from Catholics. The Vision of Saint Dominic shows the founder of the Dominican order experiencing a vision in which he receives a Gospel and shepherd's staff from the outstretched hands of the apostles Peter and Paul. Through a curtained archway, the saint can be seen dedicating two new members of his order as missionaries. The Dominican order was one of several missionary orders active in the Netherlands during the seventeenth century, following the Dutch Rebellion and the new nation's adoption of Calvinism. The Vision of Saint Dominic conforms to decorative programs expressing Catholic desires to return the Netherlands to the spiritual leadership of Rome, and the active work of priests and fraternal orders within Dutch communities to strengthen believers and gain converts.⁴¹ As Xander van Eck has demonstrated in his studies of paintings connected to Dutch clandestine churches, the religion of the artist did not determine patronage in every case, yet a substantial majority of commissions for Catholic spaces were awarded to Catholic artists.⁴² The intensely missionary bent of the Vision of Saint Dominic may indicate that artist and patron were members of an interwoven faith community. Other paintings more securely attributed to Wijck do appear

⁴⁰ Walter Liedtke. *Dutch Paintings in the Metropolitan Museum of Art, Vol. I.* (New Haven: Yale University Press, 2007): 524.

⁴¹ Xander van Eck. "From Doubt to Conviction: Clandestine Catholic Churches as Patrons of Dutch Caravaggesque Painting." *Simiolus: Netherlands Quarterly for the History of Art* 22, No. 4 (1993 - 1994): 219-220.

⁴² Xander van Eck. "The Artist's Religion: Paintings Commissioned for Clandestine Catholic Churches in the Northern Netherlands, 1600-1800." *Simiolus: Netherlands Quarterly for the History of Art* 27, No. 1/2 (1999): 70-94.

in the collections of prominent Catholic families, supporting the likelihood of extended patronage circles for Catholic artists.

The Kleine Houtstraat was also one of the city's foremost textile districts, where high-quality shops catered to a wealthy clientele.⁴³ Records indicate that Wijck and his wife owned a store in this neighborhood, though its precise location and nature is not noted.⁴⁴ Owing to the nature of his wife's familial occupation, it may have indeed been a textile shop: Trijnten's involvement with the business also suggests that she may have brought the store into the couple's marriage, or else acted as the primary supervisor of this side of the family's affairs. An invoice provided by the Haarlem Guild of Saint Luke in September of 1660, to Trijntgen, notes that five pounds and two stuivers were paid "to the wife of Thomas Wijck for delivered goods."45 At several times between 1660 and 1677, Trijnten also took on sole management of the family finances. Legal documents provided by Wijck to the city in March of 1663, in connection with his first planned voyage to England, places Trijntgen fully in charge of his affairs, profits, investments, and rent collection.⁴⁶ This was not an unusual situation: many Dutch women managed household affairs, and many artisans' wives acted as sellers or shop managers for their husbands. This division of labor between spouses—a scenario in which a craftsman

⁴³ Biesboer, *Paintings in Haarlem*, 4.

⁴⁴ It may be that Wijck's home and shop were in the same building or side-by-side, such arrangements being common during the period.

⁴⁵ "...aen Tomis Wijck syn vrou van gelevert goet." Quoted in Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347.

⁴⁶ Ibid: 347.

produced goods and a wife sold them—was a highly traditional one.⁴⁷ Despite many precedents for this gendered division of labor, Dutch women's particularly high visibility in the public marketplace provided a subject of commentary for foreign visitors, a curiosity from which the stock character of the "ruthlessly competent Dutch businesswoman" later emerged in period dramas.⁴⁸

Wijck's choice to represent weavers is not surprising, given his family connections to the Haarlem textile industry, and that industry's dominance over the city's economy in the first half of the seventeenth century. Yet his images of weavers and alchemists are connected by more than the theme of labor: both alchemy and the textile industry shared extensive chemical knowledge, specifically in processes for bleaching and dyeing. Haarlem catered to an international luxury market for fine linens, silks, wools, and damasks, producing fabric and finished goods for export to Germany, France, and England. Between 1610 and 1643, roughly four thousand looms were in operation, with nearly 12,000 people engaged in production.⁴⁹ Bleaching grounds extended far outside the city walls, in areas where poor or swampy soil had made farming untenable. Haarlem's environmental conditions were ideal for bleaching: its damp meadows kept cloth pliable and moist during the bleaching cycle, while proximity to sandy dunes near the shore could help dry finished fabrics quickly.⁵⁰ The "Haarlem technique" of

⁴⁷ Elizabeth Alice Honig. "Desire and Domestic Economy." *The Art Bulletin* 83, No. 2 (2001): 304.

⁴⁸ Ibid: 304.

⁴⁹ Biesboer, *Paintings in Haarlem*, 5.

⁵⁰ Linda Stone-Ferrier. "Views of Haarlem: A Reconsideration of Ruisdael and Rembrandt." *The Art Bulletin* 67 (1985): 419-420.

bleaching gave the area a special prestige, and cloth from other regions was often brought to the city for processing.⁵¹ Bleaching linen cloth involved dipping the fabric in a bath of lye, then rinsing and exposing it to the sun to dry slowly while lightening further. Additional mixtures and rinses containing soap, sour milk or buttermilk, and willow ash were part of the prized (and proprietary) Haarlem method. Bleaching was a process that required expert knowledge of chemicals, and Haarlem bleachers were renowned for producing cloth that was snowy-white but not harsh to the touch. Symbolic links between alchemy and bleaching are suggested by an emblem showing washer-women and textile bleaching (Figure 11) in a 1582 edition of the *Splendour Solis* (British Library, Harley MS 3469), a lavishly illustrated allegorical alchemical treatise. The process of laving strips of cloth out to bleach in the sun was thought to mirror alchemical purification through fire.⁵² References to alchemical processes as *opus mulierum* (literally "women's work") pointed to the mundane aspects of laboratory procedure, as well as to the necessary virtue of diligence, yet here the connection also serves as a reminder of the reality that many chemical industries—including textile processing—employed women. In both a literal (chemical) and rhetorical sense, Haarlem's busy bleaching fields were an essentially alchemical industry.

Haarlem's other primary industry was brewing: the city produced beer in enormous quantities, acting as a supplier for the majority of the Northern provinces. More than one hundred breweries were in operation in Harlem during the 1620s, though

⁵¹ Biesboer, *Paintings in Haarlem*, 6.

⁵² M. E. Warlick. "The Domestic Alchemist." *Emblems and Alchemy*. Alison Adams, Stanton J. Linden, ed. (Geneva: Librairie Droz, 1998): 40-42.

this period of explosive growth turned to decline after the middle of the century.⁵³ Many of the city's wealthy brewers owned homes along the Spaarne River, close to the city center. Their breweries and warehouses were also located on the river, further down and to the east, along bustling water routes for easy shipping.⁵⁴ Wijck, too, lived along the river for a period in the 1670s. Sometime during the 1660s, Wijck and his family had relocated from their house on the Kleine Houtstraat to a nearby street just below the Grote Kerk, now known as the Oude Groenmarkt. After the sudden death of his mother-in-law in 1674 and his subsequent return from a second stay in England, the painter seems to have moved his family into her house, close to the Gravestenenbrug over the Spaarne River. A document from 1676 identifies him as "Thomas Wijck, painter, on the Spaarne."⁵⁵

His mother-in-law's substantial debts seem to have placed the Wijck family on slightly shakier financial ground. A document of July 1676 promises payment of 1,000 guilders owed by Wijck to the heirs of Catharina Versangh. In May of 1677, Wijck held an auction of paintings, having been granted permission by the guild and paid their fiveguilder fee. That same year found the family renting a small house on the Lange Beginestraat for 130 guilders per year. Wijck apparently also provided three paintings as

⁵³ Biesboer, *Paintings in Haarlem*, 5.

⁵⁴ Ibid: 4; see also Gabrielle Dorren. "Communities within the community: aspects of neighbourhood in seventeenth century Haarlem." *Urban History* 25, No. 2 (1998): 176-177.

⁵⁵ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 348.

collateral. Only a few months later, the painter died. He was buried in the Grote Kerk on August 19, 1677. An auction of his estate was held in September of 1677.⁵⁶

Genre Painting and Artistic Training in Haarlem

Wijck's specialization in, and repetition of, alchemical imagery may represent an intentional strategy for self-differentiation within the art market of his day. He was not the only Haarlem painter to depict alchemical work—yet his alchemical scenes vastly outnumber those of his peers. His adoption of alchemy as a recurring motif may have been part of an attempt to form an artistic persona around concepts of the mastery of nature and painterly skill in imitation. Alchemy shared close ties to the work of artists through the making and manipulation of raw materials, yet it also shared disciplinary concerns for mimesis and genesis, and the transformation of natural things into objects of beauty and value. In such a context, alchemy was eminently suitable as a personabuilding tool for the painter.

Roughly ninety paintings have been attributed to Wijck, with several dozen more considered to be either by a close follower or period copies by members of his circle. Nearly one hundred drawings or sketches, and approximately two dozen etchings, are also attributed to Wijck's hand.⁵⁷ Alchemists represent approximately one-third of his total output, at roughly thirty-four paintings. His repeated (and innovative) treatments of

⁵⁶ Ibid: 348

⁵⁷ I have compiled this approximation through research in the RKD's databases, as well as museum collections internationally. As there is no catalogue raisonné, and Wijck signed only a portion of his attributed works, attributions remain uncertain in many cases.

alchemical themes appear to be a bid for the formation of a professional "brand" or identity within the marketplace, yet his other works also demonstrate his modernity through their selectiveness and attention to contemporary life. As noted above, his images of weavers and scenes such as the *Kitchen Interior* highlight the particular qualities of urban life and labor in Haarlem. Other paintings showcase his international travels and a sustained interest in Italianate and Mediterranean scenes, such as his View of the Bay of Naples with Orientals and an Antique Statue (Figure 12, Ham House, Richmond-on-Thames). Other themes show his close attention to the work of his contemporaries, such as his etchings illustrating vignettes from the ribald Spanish novella La vida de Lazarillo de Tormes (The Life of Lazarillo de Tormes), a subject also explored by the Dutch Italianate painter Leonaert Bramer around 1646. These etchings demonstrate his willingness to adopt and expand upon earlier pictorial traditions, as similar themes were previously popularized in Wijck's youth by Frans Hals and the Caravaggisti. Overall, Wijck's choices of subject matter, whether in Haarlem or abroad, marks him as a thoroughly modern painter concerned with developing a distinctive body of work.

Wijck's unusual choice of alchemy as a mode for artistic self-differentiation is less surprising when considered within the rapidly expanding (and diversifying) market for genre in Haarlem during the first half of the century. The taste for what contemporary writers such as de Lairesse called "modern"⁵⁸ scenes— featuring contemporary men and women in recognizable settings—grew exponentially during this time. Haarlem's striking

⁵⁸ Gerard De Lairesse. A Treatise on the Art of Painting in All its Branches. W. M. Craig, translator. (London: Edward Orme): 119.

innovations in genre painting were facilitated by a number of interconnected factors: one was the arrival in the north of large numbers of Flemish and Flemish-trained artists fleeing wartime violence and dire economic straits in the southern Netherlands. These artists-including David Vinckboons, Esaias van de Velde, and Willem Buytewechdrew on popular subjects that had dominated Flemish painting since the time of Pieter Bruegel.⁵⁹ Merry companies, garden parties, and peasant revelries offered viewers pleasurable scenes of leisure. A changing political situation may also have contributed to the local taste for genre: in 1618, a wealthy group of brewers gained control of the Haarlem's governing boards, bringing with them an upper-middle-class aesthetic that sought to differentiate itself from the conservative regents of the previous generation. Their patronage of stylistically and thematically modern artists such as Frans Hals and Jan Miense Molenaer corresponds to a dramatic rise in genre paintings' appearance in Haarlem inventories between 1620 and 1650.60 Haarlem's reputation for innovation in genre themes during the first quarter of the seventeenth century was eventually surpassed only by Amsterdam.⁶¹

Haarlem's innovations in genre subjects did not only derive from Flemish precursors, but from Italian models disseminated by the return of the Utrecht-centered Dutch Caravaggisti during the second decade of the seventeenth century. Caravaggesque painting, and its associations with the picaresque novel and "low" figural types, was carried north from Rome by Dirck van Baburen, Gerrit van Honthorst, and Hendrick ter

⁵⁹ Franits, Dutch Seventeenth-Century Genre Painting, 18-20, 27-29, 53-55.

⁶⁰ Biesboer, *Paintings in Haarlem*, 22.

⁶¹ Franits, Dutch Seventeenth-Century Genre Painting, 17.

Brugghen, who adapted its chiaroscuro effects as well as its subject matter. Among these themes were rustic musicians and merry drinkers shown half-length, as in Dirck van Baburen's Flute Player of about 1620 (Figure 13, Gemäldegalerie, Berlin). This motif was successfully popularized in Haarlem by Frans Hals, whose Jester with a Lute (Figure 14, Louvre, Paris) of about 1623-1624 demonstrates similar use of a shadowed neutral background and warm highlights in his portrayal of a gaudily dressed performer.⁶² Further developments can be observed in the work of Judith Leyster, a respected female painter registered with the Haarlem guild in 1633.⁶³ Leyster's *Young Flute Player* (Figure 15, Nationalmuseum, Stockholm) transforms the picaresque comedy of Hals into youthful introspection. Leyster's husband, the painter Jan Miense Molenaer, often focused on music and merrymaking: his Children Making Music (Figure 16, Wawel Castle, Kraków) presents raucous laughter in a tavern-like interior. The relationship between the works of these three painters—their continual imitation and adaptation of themes—is characteristic of the competitive and quickly moving marketplace for images in Haarlem during this period.

A broadening open market for paintings, and mounting competition as populations and guild memberships swelled, contributed to increased specialization and the development of new themes.⁶⁴ Jan de Vries and Ad van der Woude have highlighted this proliferation in terms of both "product" and "process" innovation. The former term

⁶² Pieter van Thiel. "The Haarlem School." *Painting in Haarlem 1500-1850: The Collection of the Frans Hals Museum*. (Ghent: Ludion Ghent, 2006): 27-28.

⁶³ Irene van Thiel-Stroman. "Judith Leyster." *Painting in Haarlem 1500-1850: The Collection of the Frans Hals Museum*. (Ghent: Ludion Ghent, 2006): 223-226.
⁶⁴ Prak, "Guilds and the Development of the Art Market," 240.

³⁷

refers to the expansion of pictorial subject matter, the latter to new techniques and styles, both of which offered patrons and buyers a greater range of choices.⁶⁵ Haarlem's development of imagery relating to weavers and textiles offers one strong example of these shifts, and it was one in which Wijck himself participated. His *Interior of a Weaver's Cottage* (Figure 17, National Gallery of Ireland, Dublin) shows household work and the tradesman's loom occupying the same modest space. As Linda Stone-Ferrier has noted, this conception of weaving presented it as humble but eminently respectable, a highly regionalized craft rooted in Dutch notions of virtuous labor and the sanctity of the family home.⁶⁶ While it draws on past images of work and family, Wijck's scene also responds to the growth of Haarlem's textiles market and an expanded interest in weaving imagery. The painting's modernity is connected to its specificity, as it highlights a local and contemporaneous industry, and demonstrates Wijck's ability to specialize within an increasingly competitive and sophisticated market.

Outside of Haarlem, an example of such subject-matter innovation is the oeuvre of the Leiden painter Quirijn van Brekelenkam. Van Brekelenkam's output was abundant, and the diversity of his subjects indicates his desire to appeal to a broad sector of the marketplace for genre pictures. While Van Brekelenkam, like Wijck, was a Catholic, and produced a small handful of images of saints for his Catholic clientele, he is

⁶⁵ Jan de Vries and Ad van der Woude. *The first modern economy: success, failure, and perseverance of the Dutch economy, 1500-1815.* (Cambridge: Cambridge University Press, 1997): 343. This idea was first put forward by J. Michael Montias. "Cost and Value in Dutch Art." *Art History* 10 (1987): 93-105.

⁶⁶ Linda Stone-Ferrier. *Images of Textiles: The Weave of Seventeenth-Century Dutch Art and Society*. (Ann Arbor: UMI Research Press, 1985): 59-64.

best-known for his textile workers, spinners, shopkeepers, and vegetable sellers, all of whom are shown practicing their trade in a praiseworthy fashion.⁶⁷ His numerous images of tailors and other respectable tradesmen laboring in their bright, industrious storefronts transformed existing trade imagery to capitalize on new urban ideals and economic relationships. Such images blended older ideas regarding labor, and new forms of commerce, into new and modern scenes presenting an inventive approach to urban genre imagery.⁶⁸ Van Brekelenkam's naturalistic scenes appealingly modeled contemporaneous urban situations and figures engaged in familiar behaviors. Their attraction to elite collectors may have rested in part on a fashionable modernity of subject; but also on the imagery's celebration of Dutch prosperity and market innovations.

The success of the genre painters was one component of an artistic Golden Age for Haarlem that had begun a generation before. In the late 1570s and early 1580s, an influx of Flemish artists—and the return of locals, such as Cornelis Cornelisz van Haarlem, whose parents had fled the Spanish invasion—reinvigorated its artistic reputation. The erudite painter and playwright Karel van Mander settled in Haarlem in 1578; Hendrik Goltzius arrived in 1577.⁶⁹ Around 1584, these three artists collaborated in forming a drawing academy with the intention of promoting the arts, instituting a kind of "best practices" within the artistic community, and providing for the education of young

⁶⁷ Walter Liedtke. *Dutch Paintings in the Metropolitan Museum of Art, Vol. I.* (New Haven: Yale University Press, 2007): 101.

⁶⁸ Alison Kettering. "Men at Work in Dutch Art, or Keeping One's Nose to the Grindstone." *The Art Bulletin* 89, No. 4 (2007): 704.

⁶⁹ Biesboer, *Paintings in Haarlem*, 20.

painters.⁷⁰ While their experiment was only in operation for a few short years, the model they provided for Haarlem's artistic community was an important one. Over forty years later, during the reorganization of the guild in 1631, its new charter incorporated an unusually detailed section on joint drawing sessions and anatomical exercises for artists, as well as demonstrations and lectures "for the benefit of the interested layman, the guild members and guests."⁷¹ The Haarlem guild's attention to the training of painters was unusually direct: E. Taverne has suggested that this may represent a "minor academy."⁷² Artists in nearby cities were interested in the educational programs championed in Haarlem. Philips Angel's famous encomium of 1642, directed to his fellow artists in Leiden, remarks positively on Haarlem's embrace of drawing after the sculpted nude, as encouraged by Goltzius and Cornelisz and as continued by artists such as Pieter de Grebber.⁷³ Cornelisz himself apparently provided the guild with plaster casts and other models from which study drawings could be made.⁷⁴

The Haarlem guild's activities also demonstrated a new emphasis on drawing from life. Naturalism as an artistic mode was linked to notions of modernity that stressed observation of life—particularly contemporaneous life. As de Lairesse suggested, painters received inspiration and strengthened their representations by studying urban life

⁷⁰ Franits, *Dutch Seventeenth-Century Genre Painting*, 17.

⁷¹ Quoted in E. Taverne. "Salomon de Bray and the Reorganization of the Haarlem Guild of St. Luke in 1631." *Simiolus: Netherlands Quarterly for the History of Art 6, No. 1* (1972-1973): 53.

⁷² Ibid: 53.

⁷³ Ibid: 53.

⁷⁴ Ibid: 55.

closely.⁷⁵ Naturalism in subject matter was also connected to naturalism as a mode of painting. This could be either a praiseworthy or questionable approach, since charges of simply imitating nature (with all its potential for dirt and ugliness) were often leveled at painters of "low" or comic modern genre scenes.⁷⁶ Yet many artists, including leading masters in Haarlem, paid increasing attention to drawing from life, particularly where the figure was concerned. Goltzius, Cornelisz, and Van Mander have long been associated with the courtly international Mannerism exemplified by the sinuous and theatrical work of Bartholomeus Spranger.⁷⁷ Yet each of these so-called Mannerists also demonstrated keen interest in the study of nature and drawing from the model. As Marjolein Leesberg has demonstrated, drawing "from life" at the Haarlem academy likely referred to the use of plaster casts, bronzes, and other classicizing models to capture the anatomy of the nude, though it also appears that limited studies of live models may have been introduced by Goltzius following his return from a tour of Italy in 1591.⁷⁸

The pilgrimage undertaken by Goltzius was increasingly fashionable for aspiring Northern artists, a tradition in which Wijck would partake a generation later. One of those inspired by an Italian voyage was the painter Frans Badens, whose return to Amsterdam around 1597 brought back more than sketches: his adoption of a new, "glowing" manner

⁷⁶ Claus Kemmer. "In Search of Classical Form: Gerard de Lairesse's "Groot Schilderboek" and Seventeenth-Century Dutch Genre Painting." *Simiolus: Netherlands Quarterly for the History of Art* 26, No. 1/2 (1998): 92-93.

⁷⁵ Gerard De Lairesse. *A Treatise on the Art of Painting in All its Branches*. W. M. Craig, translator. (London: Edward Orme): 120-121.

⁷⁷ Huigen Leeflang. "The Life of Hendrik Goltzius (1558-1617)." *Hendrik Goltzius: Drawings, Prints & Paintings.* (Zwolle: Waanders, 2003): 16.

⁷⁸ Marjolein Leesberg. "Karel van Mander as a Painter," *Simiolus: Netherlands Quarterly for the History of Art* 22, No. 1/2 (1993 - 1994): 23-24, *n*.106.

of painting human flesh, achieved with the layering of warm, reddish-toned underpainting and lightly scumbled effects over top, inspired his contemporaries to imitation. This lifelike ruddiness contrasted against what Van Mander called the "stony" or "fishy" skin tones prevalent in Dutch painting of the previous generation. This technique was embraced by Goltzius in his transition from engraving to painting in 1600, and is evident in the warm tones of his *Danae* of 1603 (Figure 18, Los Angeles County Museum of Art, Los Angeles).⁷⁹

Beyond the nude, Haarlem was also emerging as a center for naturalistic landscape. Stylistic innovations introduced by Goltzius, as well as his close friend the marine painter Hendrick Vroom, visualized landscape as continuing space. In and around 1603, Goltzius produced drawings of the countryside outside of Haarlem, including his *Dune Landscape* (Figure 19, Museum Boijmans, Rotterdam), completed in pen using brown ink. The horizon has been lowered to emphasize the spreading sky overhead and the continuity of land below. The marine paintings of Vroom, such as his *Dutch Man-of-War and Fishing Boat in a Breeze* (Figure 20, National Maritime Museum, Greenwich), likewise lowered the horizon to depict the sea as an open and continual expanse.⁸⁰ Goltzius's drawings were among the earliest so-called "pure" landscape, for their lack of narrative as well as their topographical faithfulness.⁸¹ While quasi-naturalistic landscapes

⁷⁹ Paul Taylor. "The Glow in Late Sixteenth and Seventeenth Century Paintings." Looking through Paintings: The Study of Painting Techniques and Materials in Support of Art Historical Research. Erma Hermens, ed. (London: Archetype, 1998): 162-165.
⁸⁰ Margarita Russell. "Seascape Into Landscape." Dutch Landscape: The Early Years, Haarlem and Amsterdam, 1590-1650. (London: National Gallery, 1986): 63-65.
⁸¹ Michiel C. Plomp. "The Beauty or the Different Guises of Nature." Hendrik Goltzius: Drawings, Prints & Paintings. (Zwolle: Waanders, 2003): 174, 200-201.

had long accompanied images of the seasons or religious and mythological figure groupings, the creation of more overtly Dutch landscape imagery emerged as a phenomenon of the Haarlem school.⁸²

This new attention to the depiction of living flesh, as well as to naturalistic landscape and local topographies, participated in a broader artistic shift that emphasized the value of working *naer het leven* (from life), a term frequently used by Van Mander in combination with *natuerlijck* (naturalistic). These terms often appeared in descriptive praise of works that were "naturalistic" in their depictions of animals, plants, human figures, and even everyday objects. Yet the claim of working *naer het leven* encompassed not only the means of a work's production—indicating that the image in question faithfully reproduced a sight observed by the artist—but a work's convincing effect on a potential viewer, whether its subjects were literally "drawn from life" or simply approximated it skillfully.⁸³ Terms such as *naer het leven* serve to emphasis artists' mastery not only over effects and appearances, but over nature itself. I will explore deeper connections between painting, naturalism, and alchemy in the final chapter.

Wijck's training, if indeed he entered the studio of Van Ostade between 1630 and 1634, began shortly after the Guild's landmark reforms. He was surely conscious of the changes within the guild and aware of its attitudes towards drawing from nature. Without documentation, it is still possible to speculate on the general substance of Wijck's

⁸² Christopher Brown. "Introduction." *Dutch Landscape: The Early Years, Haarlem and Amsterdam, 1590-1650.* (London: National Gallery, 1986): 21-22.
⁸³ Charlie Gallery, 1986).

⁸³ Claudia Swan. Art, Science, and Witchcraft in Early Modern Holland: Jacques de Gheyn II (1565-1629). (New Haven: Cambridge University Press, 2005): 36-40, 50.

training through period evidence. While the guild actively regulated the taking of apprentices, including how many apprentices a master could take on at one time, and the required minimum duration of their terms, guild charters rarely addressed the content of their education in the studio. In Haarlem, a minimum three-year apprenticeship was followed by an independent working period of at least one year, after which a painter could apply for membership as a master.⁸⁴ Contracts between the apprentice's family and the instructing master sometimes sketched a vague picture of duties and courses of study, but more often they merely affirmed that the master would provide a full and suitable education without holding back any of the "secrets" or "mysteries" of his trade.⁸⁵

Drawing was one of the necessary skills that apprentices could expect to learn. Beginning students typically copied from images of the human body, in whole or part. William Salmon's 1685 *Polygraphica*, a treatise on the arts of painting, color-making, and alchemy, includes several pages of mixed anatomical studies of lips, noses, and eyes (Figure 21, CHF) for drawing students to copy. A more systematic approach is provided by the Utrecht engraver Crispin van de Passe, in his model-book *Van 't light der teken en schilderkonst*: pages of studies provide multiple attitudes and angles for hands, feet, eyes, and facial expressions. Students later drew from sculptures or plaster casts, and advanced students might progress to live models. Drawing from life is the subject of the

⁸⁴ Prak, "Guilds and the Development of the Art Market," 243.

⁸⁵ For a thorough examination of artists' training in the Netherlands during this period, see John Michael Montias. *Artists and Artisans in Delft: A Socio-Economic Study of the Seventeenth Century*. (Princeton: Princeton University Press, 1982). For examples of contract clauses see Prak, "Guilds and the Development of the Art Market," 244.

frontispiece illustration of Van de Passe's model book (Figure 22), which shows students drawing the seated goddess Minerva, patron and inspiring muse to artists.⁸⁶

These stages in the painter's education appear in Theodor Galle's engraving after Jan van der Straet (better known as Johannes Stradanus) of the "invention" of oil paint in the studio of Jan van Eyck, titled *Color Olivi* (Figure 23). This image, part of the *Nova Reperta*—a series celebrating the "new inventions" and innovations of the early modern era, ranging from the "discovery" of the New World to the art of distillation—shows Van Eyck's idealized workshop bustling with apprentices. At right, a young boy seated on a bench repeatedly copies features seen in drawing manuals. At left, a slightly older student draws on a tablet before a plaster bust. While attempting to glean factual details about the operation of a seventeenth-century painter's workshop from a constructed image is necessarily problematic, Ernst van der Wetering has endorsed the usefulness of the *Nova Reperta* as a source in interaction with other period reports that confirm its contents. As he concludes, the relative mobility of painters and the continuity in methods and materials across borders suggests an "international uniformity"⁸⁷ in certain baseline studio practices, such as the instruction of apprentices in drawing.

Beyond drawing, the *Color Olivi* offers other clues to workshop training: apprentice painters were also thoroughly educated in the preparation and handling of paints and pigments. In the center of the engraving, an older and more advanced assistant

⁸⁶ H. Perry Chapman. "A Hollandse Pictura: Observations on the Title Page of Philips Angel's *Lof der schilder-konst.*" *Simiolus: Netherlands Quarterly for the History of Art* 16, No. 4 (1986): 239.

⁸⁷ Ernst van der Wetering. *Rembrandt: the Painter at Work*. (Amsterdam: Amsterdam University Press, 1997): 140.

prepares a palette for the master whose painting dominates the center of the composition. Far to the rear right of the scene, two journeymen or studio assistants grind pigments on flat slabs, using a hand-held tool known as a *muller*. This process is repeatedly described in artists' handbooks ranging from Cennino Cennini's fifteenth-century *Il Libro dell' Arte* (commonly translated as *The Craftsman's Handbook*), to the seventeenth-century *Polygraphica* and its contemporaries. Cennini's text outlines the process of grinding colors in detail, offering suggestions not only on the handling of certain pigments, but on the equipment that is best suited for the purpose:

There are various kinds of slabs for grinding colors, such as porphyry, serpentine, and marble. Serpentine is a soft stone and is not good; marble is still worse, for it is too soft. But porphyry is best of all... get one of those which are not so very much polished, and a foot or more in width, and square. Then get a stone to hold in your hand, also of porphyry, flat underneath, and rounded on top in the shape of a porringer, and smaller than a porringer, shaped so that your hand may be able to guide it readily, and to move it this way then that, at will. Then take a portion of this black, or of any other color, the size of a nut; and put it on this stone, and... crush this black up thoroughly... grind this black for the space of half an hour, or an hour, or as long as you like; but know that if you were to work it up for a year it would be so much the blacker and better a color.⁸⁸

Grinding and mixing pigments—sophisticated material science and demanding menial labor in roughly equal measure—were part of the painter's knowledge base, but the demanding labor of grinding itself was frequently reserved for servants or

⁸⁸Cennino D'Andrea Cennini. *The Craftsman's Handbook: The Italian "Il Libro dell' Arte."* Translated by Daniel V. Thompson, Jr. (New York: Dover Publications Reprint, 1933, Digital Edition): 612-613.

journeymen rather than apprentices.⁸⁹ Drying and spoiling were concerns, so individual batches of pigments were ground and prepared as needed; small amounts could be preserved in pig's bladders, or stored in containers surrounded by cool water, in an effort to prevent hardening and loss.⁹⁰ Pigments themselves were typically purchased from apothecaries or druggists, occasionally from a specialized dealer in artists' colors or a dye-maker who also served other industries (such as cloth merchants or potters).

Beyond pigments, the title of *Color Olivi* references the medium that made luminous colors possible in painting. Oil had emerged during the sixteenth century as the dominant mode for easel painting, but was associated particularly closely with Northern artists: Giorgio Vasari's widely circulated *Lives of the Most Excellent Painters, Sculptors, and Architects* attributed the "invention" of oil paint to the Flemish master Jan van Eyck.⁹¹ Though this attribution is now thought to be apocryphal, it was based in period accounts of Van Eyck's acknowledged skill and inventiveness. Oil as a medium was a key facet of Northern painters' identity, underlying Northern claims of artistic authority and excellence. Its transparency, fluidity, and handling were uniquely suited to the differentiation of textures and the depiction of light—qualities central to Dutch theories of art that posited painting as a "mirror of nature."⁹² But oil, as a product of

⁸⁹ Peter M. Lukehart. "Delineating the Genoese Studio: Giovani accartati or sotto padre?" *Studies in the History of Art* 38, Symposium Papers XXII: The Artist's Workshop (1993): 47.

⁹⁰ Van der Wetering, *Rembrandt: the Painter at Work*, 146.

⁹¹ Giorgio Vasari. Julia Conaway Bondanella and Peter Bondanella, trans. *The Lives of the Artists*. (Oxford: Oxford University Press, 1991): 187.

⁹² Thijs Weststeijn. *The Visible World: Samuel Van Hoogstraten's Art Theory and the Legitimation of Painting in the Dutch Golden Age.* (Amsterdam: Amsterdam University Press, 2008): 269-272. For a nuanced exploration of the ways in which van Hoogstraten

distillation, carries with it links to alchemical processes. Philips Angel's 1642 statement that artists are the "imitators of life"⁹³ rested partially on their ability to manipulate oil (and alchemically produced solvents such as turpentine). Such a statement positions artists in the generative role of creator and master of the natural world, and in turn also as a rival of the alchemist, who sought to unlock nature's secrets. The inclusion of oil painting within the *Nova Reperta*—side-by-side with other images devoted to innovations in distillation, medicine, conquest, and scientific instrumentation—indicates the art's high regard and cultural importance. Yet it also highlights oil painting as a form of technology, the outcome of chemical knowledge.

In addition to his work as a painter, Wijck also etched. Artists' manuals offered recipes for the resins used to cover the copper plates, as well as the acid baths required to "bite" or etch the artist's designs. The most common acid was *aqua fortis*, "strong water," now known as nitric acid—a solution also used by alchemists to corrode and separate metals. A seventeenth-century Venetian painter's book—some of it copied from Gian Paolo Lomazzo's sixteenth-century artists' treatise, then in wide circulation—gave the recipe for etching with *aqua fortis* as follows:

Pulverize verdigris, sal ammoniac, and galls of Istria, and put the powder into strong vinegar, and after beating it continually with a spoon for four

made use of illusion as a device for persona-forming, particularly within the environment of the early modern court system, see Celeste Brusati. *Artifice and Illusion: The Art and Writing of Samuel Van Hoogstraten*. (Chicago: University of Chicago Press, 1995). ⁹³ Philips Angel. Translated by Michael Hoyle, commentary by Hessel Miedema. "Praise of Painting." *Simiolus: Netherlands Quarterly for the History of Art* 24, No. 2/3 (1996): 244.

hours, pour it over the suspended plate (but if you have to engrave on iron, instead of the sal ammoniac, put it to some corrosive sublimate).⁹⁴

Considering that acids might vary widely between batches, etchers needed a sophisticated understanding of chemical properties that could affect their results. Wijck's education in painting and etching would have afforded him an intimate knowledge of pigments, oils, solvents, acids, and other compounds which were continually being created, used, altered, and refined by the artist in the course of his labors.

Wijck likely learned to etch in Van Ostade's studio. Van Ostade is thought to have etched and printed his own plates: less than two months after his death in May of 1685, his etching plates, numbering 50 in total, were offered for sale by his son-in-law.⁹⁵ Like Rembrandt, perhaps the best known example of the seventeenth-century painteretcher, Van Ostade often worked and re-worked compositions, producing multiple states of the same plate.⁹⁶ There is strong evidence that the two etchers, working at roughly the same time—Rembrandt beginning slightly earlier, around 1628, and Van Ostade thought to have begun around 1634—were conscious of the other's work and mutually influential. Both were highly selective in their representation of genre subjects: despite Van Ostade's ties to weaving through his father, and the subject's noted popularity in

⁹⁵ Leonard J. Slatkes. "A Contribution regarding the Editions, Plates, and Most Significant Copies of the Etchings of Adriaen van Ostade." *Adriaen van Ostade: Etchings of Peasant Life in Holland's Golden Age.* (Athens: Georgia Museum of Art, 1994): 15.

⁹⁴ Mary P. Merrifield. *Medieval and Renaissance Treatises on the Art of Painting*, (Mineola: Dover Publications, 1999): 666-668.

⁹⁶ S. William Pelletier. "Adriaen van Ostade's Etchings: An Introduction." *Everyday Life in Holland's Golden Age: The Complete Etchings of Adriaen van Ostade*. (Amsterdam: Museum Het Rembrandthuis, 1998): 12.

Haarlem, Van Ostade never represented the practice.⁹⁷ Of the trades and types which Van Ostade and Rembrandt did choose to portray, both selected a few very specific professions—ratcatcher, spectacle salesman, and quack— which were among the "itinerant" trades seen in earlier labor imagery such as the *Standebuch*. Their choices and exclusions appear to have overlapped in so many instances as to present a more than coincidental linkage, indicating that the artists enjoyed a conscious rivalry and mutual appreciation.⁹⁸

No catalogue raisonné exists for Van Ostade, but several hundred paintings are attributed to his studio. Like Molenaer, Van Ostade was best known for his scenes of peasant drinking parties and rustic life. The most direct source for these themes can be found in the work of the popular Flemish-born émigré painter Adriaen Brouwer. Brouwer, who worked in Haarlem between 1625 and the early 1630s,⁹⁹ also specialized in rough and tumble peasants, taverns, smokers, and other "low" types. Van Ostade's works of the 1630s and early 1640s emulate Brouwer; however, his later works demonstrate a shift in perceptions of the poor. In his *Peasant Family in a Cottage* (Figure 24, Private Collection), the home portrayed is humble and the clothing of the peasants plain, but the warmth of domestic life is the painting's focus. Van Ostade's detailed description of the brushed dirt floor, straw baskets, and subtle play of daylight from an open window create a newly meditative and positive vision of the rural poor as dignified,

⁹⁷ Linda Stone-Ferrier. "Inclusions and Exclusions: The Selectivity of Adriaen van Ostade's Etchings." *Adriaen van Ostade: Etchings of Peasant Life in Holland's Golden Age*. (Athens: Georgia Museum of Art, 1994): 22.
⁹⁸ Lick 24, 26

⁹⁸ Ibid: 24-26.

⁹⁹ Franits, Dutch Seventeenth-Century Genre Painting, 35.

if simple, folk. Van Ostade's shifting representations after the 1640s participated in a general trend towards "civilized" or refined themes in Dutch painting.¹⁰⁰ Such images show a sympathy to the Dutch working classes that is comparable to Wijck's serious treatments of workers and their environments, though Wijck's obvious interest in the habits and materials of the artisanal laborer is even more marked.¹⁰¹

Van Ostade was a master of the *schilderachtig*, a descriptor used for a subject or manner of representation considered "picturesque," though the latter term does not quite suffice to capture the former's ineffable embrace of the asymmetrical, unusual, "natural," and wild. As Boudewijn Bakker has observed, *schilderachtig* had a number of interpretations within the early seventeenth-century art-theoretical writings of Karel van Mander, encompassing both references to painters' ideal behaviors (respectable and praiseworthy) and concerns regarding the representation of nature in an artful, detailed, and skillful manner. However, it appears that the term was more widely in use to describe motifs "worthy" or "appropriate" to painting, often in the context of landscapes.¹⁰² *Schilderachtig* was commonly applied to depictions of nature in its variation and diversity—but rather than simply a term of decorum or suitability, it was used to praise painters whose selective judgment focused on the unique, unusual, and visually

¹⁰⁰ Ibid: 136-138.

¹⁰¹ For a recent discussion of class markers and the representation of labor—and poverty—in Dutch painting, see Ronni Baer, "Labor" and "The Indigent." *Class Distinctions: Dutch Painting in the Age of Rembrandt and Vermeer*. (Boston: MFA Publications, 2015): 210-245.

¹⁰² Boudewijn Bakker. "Schilderachtig: Discussions of a Seventeenth-Century Term and Concept." *Simiolus: Netherlands Quarterly for the History of Art* 23, No. 2/3 (1995): 149-156.

appealing, even to the point of depicting things that were old, ugly, worn, and well-used. The drawn and etched landscapes of Rembrandt, focused on decrepit aging windmills, worn fence-posts, and gnarled trees, were considered *schilderachtig* for their attention to detail, their harmonious and natural-seeming asymmetry, and their description of surface and texture. Rembrandt's selectiveness, however, was not limited to his choice of what to depict: he also chose what *not* to depict. Linda Stone-Ferrier has demonstrated that Rembrandt's etchings of the surrounding Amsterdam countryside intentionally omitted signs of recent development, such as newer windmills, technologies, and buildings.¹⁰³ His rustic subjects were carefully chosen, edited, and emphasized.

A selective focus on the rustic and *schilderachtig* also characterizes Van Ostade's etching *The Barn* (Figure 25), dated to about 1647, a scene that Clifford Ackley has called a "radical" conception of genre imagery for its naturalism and absence of narrative.¹⁰⁴ Though a female peasant appears at lower right, bent double over her task, the work's true emphasis is on the spacious barn interior, the textured beams and ragged ropes, the sharp and finely captured contrast of shadow and sunlight filtering through the slatted walls, the diverse surfaces, and ragged edges of things. Van Ostade has placed tools and containers—rakes and jugs, barrels and cartwheels—at the scene's periphery, highlighting the barn as a space of productive, if humble, labors. Less radical than

 ¹⁰³ Linda Stone-Ferrier. "Rembrandt's Landscape Etchings: Defying Modernity's Encroachment." *Art History* 15, No. 4 (1992): 414-417.
 ¹⁰⁴ Cited in catalogue, #59-63, *Adriaen van Ostade: Etchings of Peasant Life in*

Holland's Golden Age. (Athens: Georgia Museum of Art, 1994): 132.

emphatically *schilderachtig*, this etching embraces its "low" subject matter as an exercise in painterly description and selectivity.

Van Ostade's *schilderachtig* focus on the unique, worn, humble, and unusual appears to have provided a strong model for Wijck, particularly in his choice of subject matter. In etchings produced during and shortly after his early career travels to Italy, Wijck pays close attention to crumbling ruins, overgrowth, and spaces of daily work. This can be observed in *The Well* (Figure 26, Metropolitan Museum of Art, New York), one of a set of four etched landscapes set among Italianate ruins. Like *The Barn*, the scene decentralizes its single human figure in favor of focusing on a rectangular well surrounded by buckets and basins, evidence of the well's necessity and continual use. Wijck lavishes attention onto the plain materials of his scene: weathered and cracked stucco walls reveal bricks and beams in his fine, slightly vibrating alternating line patterns. An abandoned saddle at lower right speaks to weary hours of travel and the role of the well as rest-stop and gathering place. The well's role in both daily domestic tasks and within cultures of travel and trade-even its Biblical appearances as spaces of revelation or communication—designates it as a "border zone" between interior and exterior social worlds, between the home and community. Here, too, its simple utility is contrasted by the almost monumental quality it carries as the center of Wijck's composition and the core matter of the etching. Ostensibly an urban landscape, it would seem that Wijck's true subject in this particular image was actually a familiar space of work. A second etching from the same set, A Colonnade (Figure 27, Philadelphia Museum of Art), focuses on the crumbling grandeur of the eponymous colonnade, vine-

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covered and decaying, surrounded by humbler buildings of stucco and brick. Wijck's small figures tend to their animals or rest on broken column-ends, while in the distance a busy harbor is signaled by a profusion of lightly indicated ships' masts. Wijck's careful rendering of stucco walls, gently sloping scrubland, and airy, hovering clouds is categorically *schilderachtig* in its keen attention to texture, broken edges, rugged ground, and an asymmetrical composition that works to suggest an observational naturalism. Concerns for the spaces and objects of labor, as well as the effects of time, use, and wear on familiar objects, would remain central to Wijck's production of paintings over the course of his career.

Wijck's Success and Reputation

Building on the example of his teacher Van Ostade, whose focus on rustic and *schilderachtig* subjects helped to establish his artistic identity, Wijck produced a body of works that were distinctive and, ultimately, desirable. Wijck appears to have enjoyed success during his lifetime, and surviving documents support the idea that demand for Wijck's paintings in his home city was relatively high. Analysis of painting collections in Haarlem, and the valuations of paintings in period inventories, reveals that Wijck's paintings were collected and assessed in numbers comparable to, or even at times exceeding, other better-known painters of that region. In a study conducted by Pieter Biesboer for the Provenance Index of the Getty Research Institute, profiling 112 archival inventories from Haarlem during the period 1572-1745, twenty-nine paintings by Wijck appeared under the general category heading of "genre scenes." This is in contrast to the

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number of genre scenes listed for Cornelis Bega (14 paintings), Dirck Hals (18 paintings), Judith Leyster (9 paintings), Karel van Mander (7 paintings), Isaac van Ostade (16 paintings), Esaias van de Velde (14 paintings), and Philips Wouwerman (19 paintings). Wijck is exceeded in number by Frans Hals (38 paintings), Jan Miense Molenaer (83 paintings), his teacher Adriaen van Ostade (58 paintings), and Cornelis Dusart (a staggering 160 paintings).¹⁰⁵

In the same table, comparing the valuations of genre paintings, Wijck's highestvalued work was placed at 26 guilders. This can be compared to the highest-valued work listed for Karel van Mander (at 5 guilders), Judith Leyster (3 and 1/3 guilders), Frans and Dirck Hals (20 and 16 guilders, respectively), Pieter Codde (10 guilders), and Adriaen Brouwer (10 guilders). Likewise, Wijck's lowest valuation—4 and 1/10 guilders exceeds the lowest values assessed to works by Cornelis Dusart, Frans and Dirck Hals, Jan Miense Molenaer, and Adriaen van Ostade.¹⁰⁶ A household inventory completed in 1707, for the estate of the wealthy Haarlem merchant Jean la Clee, lists more than fortyfive paintings, many by notable local artists such as Jacob van Ruisdael, Frans Post, and Jan Miense Molenaer. The highest-valued works in Clee's collection—by a wide margin—were two pairs of seaports produced by Thomas Wijck, listed at 36 guilders per set.¹⁰⁷ Though the sample size of works considered here is limited, this data suggests that Wijck was an artist of some status in Haarlem, whose works were desired and collected. In several inventories, multiple works by Wijck appear, indicating a particular interest by

¹⁰⁵ Biesboer, *Paintings in Haarlem*, 37.

¹⁰⁶ Ibid: 37.

¹⁰⁷ Ibid: 98.

certain patrons.¹⁰⁸ I will explore Wijck's individual patrons and their ties to Haarlem community and industry in greater detail in the fifth chapter.

An inventory of the stock of the Amsterdam kunstkooper (art dealer) Johannes de Renialme, taken after his death in 1657, reveals that Wijck also enjoyed success outside Haarlem. De Renialme was among Amsterdam's most prominent art dealers, enjoying the patronage of the city's most sophisticated connoisseurs. Among the many works by Rembrandt, Jan Lievens, Hercules Segers, and Gerrit Dou listed in the posthumous inventory, appears "Een rots" (a rock) by "Thomas Wyck,"¹⁰⁹ likely indicating that the picture was a mountainous landscape scene. The painting is valued at 72 guilders. While this is much less than the highest valuation—a work by Rembrandt listed at 1500 guilders—roughly two-thirds of the paintings listed were valued at or below 72 guilders, indicating that Wijck's work was priced above average. Other paintings valued at 72 guilders include a head of Jesus by Jan Lievens, several landscapes by Philips Koninck, a landscape by Hercules Seghers, and a single work of an unknown subject by José de Ribera. Wijck's painting was valued higher than any single work by Jan Steen or Andries Both, and exceeded values assigned to several small works and *tronies* by Gerrit Dou, Rembrandt, and Lievens.¹¹⁰ The presence of a high-value work by Wijck in the inventory of a leading Amsterdam dealer by 1657 indicates that Wijck had already achieved a good

¹⁰⁸ Ibid: 400-401.

 ¹⁰⁹ Abraham Bredius. Künstler-Inventare: Urkunden zur Geschichte der holländischen Kunst des 16ten, 17ten und 18ten Jahrhunderts, Vol. 1. (Leiden: M. Nijhoff, 1915): 232.
 ¹¹⁰ Ibid: 231-237.

reputation by this point, and that the market for his paintings extended outside of Haarlem into the circles of respected collectors.

Wijck's prominent role in the Haarlem Guild of Saint Luke is further evidence of his artistic reputation. After entering the guild as a master in 1642, Wijck served as guild warden four times, in 1657, 1668, 1671, and 1676. He was also twice appointed to the position of dean, in 1660 and 1669.¹¹¹ As Maarten Prak has demonstrated, in his study of Dutch "Golden Age" artists' guilds, these leadership positions were typically reserved for the foremost masters of the city's artistic community. Prak notes that during the first quarter of the seventeenth century, the deanship of the newly formed Utrecht Guild of Saint Luke was held by Paulus Moreelse (four times) and Abraham Bloemaert, while the guild board was primarily staffed with other painters of high reputation, including Adam Willaerts, Joost Droochsloot, and Gerard van Honthorst. Similarly, in Delft and Haarlem, the city's most prominent names appear repeatedly in the list of guild leadership positions. Prak concluded, "In Haarlem the painters with a reputation of being an 'outstanding master'... were far more likely to become board members than those with a mediocre reputation."¹¹² Wijck's former master, Van Ostade, served as dean of the guild at least once, in 1662-1663.¹¹³ In addition to his reputation as a painter, it appears that

¹¹¹ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347.

¹¹² Prak, "Guilds and the Development of the Art Market," 245.

¹¹³ S. William Pelletier. "Adriaen van Ostade's Etchings: An Introduction." *Everyday Life in Holland's Golden Age: The Complete Etchings of Adriaen van Ostade*. (Amsterdam: Museum Het Rembrandthuis, 1998): 8.

Wijck was also considered a good judge of paintings: in May of 1669, he was called upon to assess pictures in the estate of Hendrickjen Marcelis.¹¹⁴

Wijck's Biographies, 1700-1900

Biographies of Wijck that appeared in the decades after his death offer further evidence of his success as a painter and his high standing in the Haarlem artistic community. Both at home in the Dutch Republic and abroad, he was recognized by critics and connoisseurs for his talent, but also for his inventiveness and creativity. These particular qualities were most often linked to descriptions of his representations of alchemists. Such evidence supports my assertion that Wijck was conscious of, and intentionally developed, his reputation as a painter of laboratories.

The first known biography of Wijck appeared in Arnold Houbraken's threevolume masterwork *De groote schouburgh der Nederlantsche konstschilders en schilderessen (The Great Theatre of Dutch Painters)*, published in 1718 to 1721. Houbraken begins Wijck's entry by describing Haarlem in the first half of the seventeenth century, noting that the city produced a remarkable abundance of good painters, among whom the "ingenious"¹¹⁵ Wijck could be counted. Houbraken extols the painter's work as "witty, artfully suitable, solidly drawn, bold… [and] luminous."¹¹⁶ He goes so far as to challenge artists who believe themselves more praiseworthy. Wijck's

¹¹⁴ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347.

¹¹⁵ "Den vernufteling Tomas Wyk." Arnold Houbraken, *De groote schouburgh*, 16. ¹¹⁶ "Die alle zoo geestig van hem bedacht, konstig geschikt, vast getekend, vet... en gloeiende." Ibid: 16.

entry in the *Great Theatre* is the fourteenth biography of the second volume, appearing shortly after those of Gerrit Dou, Joachim von Sandrart, and Bartholomeus van der Helst, but before Govert Flink, Philip Wouwerman, Jan Baptist Weenix, Jan Both, and Paulus Potter. While Wijck's entry does not include a portrait, the length of his biography is approximately equal to other, better-known painters, including Dou, as well as Jacob van Ruisdael and Gabriel Metsu, whose entries appear in the third volume.

Houbraken also lists a wide number of Wijck's subjects, beginning with his Italian landscapes and market pictures, harbor scenes, images of sculptors and merchants, and women taking goods to market. He follows by describing Wijck's alchemical pictures in greater detail, remarking on the inventiveness and specificity of Wijck's "laboratories... with their furnaces, crucibles, pans, glasses... a multitude of tools."¹¹⁷ He particularly praises Wijck's wide variety of intricately depicted still-life elements and his handling of their diverse textures and effects of light. While Wijck's other subjects are mentioned positively, Houbraken acclaims the alchemical scenes above all, stating that their compositions are well-executed and their details are "all so wittily painted by him, artfully suitable."¹¹⁸ Houbraken is also obviously conscious of alchemy's ambivalent reputation, for the next line contains a subtle joke at alchemy's expense: he remarks that "this art earns a higher price, than the monies they can make," ¹¹⁹ meaning that while Wijck's pictures of alchemy could command high fees, alchemists themselves toiled

¹¹⁷ "Laboratorien... met hun fornuizen, kroezen, pannen, glazen... menigte van gereedschappen." Arnold Houbraken, *De groote schouburgh*, 16.

¹¹⁸ "... alle zoo geestig van hem bedagt, kunstig geschikt." Ibid: 16

¹¹⁹ "...dat dezelve Kunst een hooger prijs verdient, dan zij thans gelden mag." Ibid: 16.

without benefit. Houbraken's statement places art above alchemy in the pantheon of artisanal pursuits, and Wijck above the alchemists as the supremely successful master of imitation (in his depictions of life) and transformation (of art into wealth). Such a description provides evidence for Wijck's success in creating an artistic identity that centered thematically on the representation of alchemy, yet relied literally on painterly skill. Houbraken's reference to Wijck's handling as "luminous" also reminds the reader of the artist's virtuosity with oil paint. As noted above, oil's intrinsic qualities of transparency and glow were key to Dutch painters' claims to mastery over the imitation of nature—yet oil also holds close ties to alchemy through the art of distillation.

Wijck's good reputation, and the inventiveness of his alchemical scenes, were echoed in biographies produced abroad in England. In the second decade of the eighteenth century, George Vertue, the engraver and antiquarian, composed a set of famous "notebooks" of art that he encountered in England's great houses. Vertue remarked repeatedly on Wijck's pictures, and provided a brief biographical sketch for both Wijck and Wijck's eldest son, Jan, who had become a notable painter of battle scenes and landscapes. Vertue's entry for Wijck reads:

> ...Wyke painter father of John Wyke was born at Harlem about 1616 as Houbrake seems to point out and was 20 or 25 before he travelld to Italy. Staid there some years. 7 under or in his own country return to his own country lives there. Till K Charles 2nd return by Harlem and the appearance of the restoration might tempt him amongst others. To come to London to see the Glorys [sic].¹²⁰

¹²⁰ Vertue, *Note Books*, Vol. V, 43.

Vertue elsewhere compliments Wijck's panoramic representations of London, stating that "Mr. Wyke painted the view of the fire of the City of London several times very well."¹²¹ Another painting, this time of the city before the devastating fire of 1666, is singled out by Vertue for particular praise: "a View of London from the Southwark side & River of Thames... close to the River better expressed. And more visible than any other view—I have seen—the whole extremely neat and curiously painted [sic]."¹²² But it was not only Wijck's landscapes and scenes of London that attracted Vertue's attention. In one of his earliest mentions of Wijck, Vertue identifies him as a painter of "sea ports havens... & labarotories [sic]."¹²³ An unidentified painting of a "chymist" is later praised as a "capital picture by old Wyke,"¹²⁴ beside Vertue's rendering of Wijck's signature. Vertue notes that a growing fascination with alchemy within the English court was connected to Wijck's subject matter: "by Prince Rupert & Boyles great reputation of chemistry. The King also had his Labortory. At court this might be the takeing mode or humor. And therefore Wyke made such pictures as represented those amusements [sic]."¹²⁵ Once again, this suggests Wijck's continued success at crafting a distinctive artistic identity around his alchemical works. Close association between Wijck's pictures and the prevailing interests at court sheds light on the heightened demand for his alchemical works.

¹²¹ Vertue *Note Books*, Vol. I, 106.

¹²² Vertue, *Note Books*, Vol. V, 43.

¹²³ Vertue. *Note Books*, Vol. IV, 45.

¹²⁴ Ibid: 115.

¹²⁵ Vertue. *Note Books*, Vol. V, 43.

The later English art historian and antiquarian Horace Walpole included a profile of Wijck in his 1762 Anecdotes of Painting in England, much of which was drawn from Vertue's complex and somewhat disorganized manuscripts. Walpole echoes Vertue's praise when he calls Wijck an "admired painter of sea-ports, shipping and small figures."¹²⁶ He includes Vertue's positive estimation of a painting by Wijck that Vertue saw in the collections of the Duke of Devonshire-the View of London from Southwark, (Figure 28, Chatsworth House). Walpole identifies this picture as "the best view [Vertue] had seen of London." 127 Elsewhere, Walpole expands on Vertue's remarks in his assessment of Wijck's work as a printmaker, celebrating Wijck's manner of etching as having "much spirit and ... good taste." 128 Walpole states outright that Wijck's "best pieces were representations of chymists and their laboratories," (emphasis mine) and echoes Vertue in his references to the elite's taste for alchemy during Wijck's time in England: "Vertue supposed ingeniously [that these] were in compliment to the fashion at court, Charles II and Prince Rupert having each their laboratory."¹²⁹ For roughly a century following Wijck's death, it appears that his high reputation and his association with alchemical themes remained intertwined.

Walpole's biographical sketch of Wijck was frequently repeated and adapted in English art-historical texts of the nineteenth century, including Michael Bryan's 1816 *A Biographical and Critical Dictionary of Painters and Engravers*. Bryan's praise for

¹²⁶ Horace Walpole. *Anecdotes of Painting in England, Vol. III* (1828 reprint). (London: The Shakespeare Press, 1828): 266.

¹²⁷ Ibid: 266.

¹²⁸ Ibid" 266.

¹²⁹ Ibid: 266.

Wijck is unstinting: "His pictures are well composed, his coloring warm and transparent, and his pencil is bold and free."¹³⁰ Both Walpole and Bryan's texts note that Wijck's etchings have become increasingly rare, and thus more desirable, since the artist's death. Thomas Wilson's 1828 *A Catalogue Raisonné of the Select Collection of Engravings of an Amateur* also cites Walpole in his brief biography of Wijck, whom he terms "one of the best painters of his time."¹³¹

Wijck is also presented in numerous English biographies as a teacher of successful masters, including his own son, Jan. In his early eighteenth-century notebooks, Vertue recognized Wijck as the teacher of the respected portraitist and landscape painter John van der Vaart, claiming that Van der Vaart studied under Wijck in England rather than in their shared home city of Haarlem.¹³² A handful of later nineteenth- and early twentieth-century English sources also identify Wijck's possible students: Matthew Pilkington's 1824 *A General Dictionary of Painters* likewise claims Van der Vaart as a student of Wijck's who enjoyed modest success abroad.¹³³ *The World Wide Encyclopedia and Gazetteer*, published in London in 1908 and declaring itself a "dictionary of arts, sciences and literature," identifies the painter and printmaker John van Hutchenberg, also born in Haarlem, as Wijck's former apprentice.¹³⁴ *The Picture Collector's Manual* of

¹³⁰ Michael Bryan. A *Biographical and Critical Dictionary of Painters and Engravers, Volume II.* (London: Carpenter and Son, 1816): 625.

 ¹³¹ Thomas Wilson. A Catalogue Raisonné of the Select Collection of Engravings of an Amateur. (London, 1828): 225. (Harvard University Fine Arts Library, Digital Copy)
 ¹³² Vertue, Note Books, Vol. V, 177.

¹³³ Matthew Pilkington. A General Dictionary of Painters, Vol. II. (London: Thomas McLean, 1824): 404.

¹³⁴ William Harrison De Puy,ed. *The World-Wide Encyclopedia and Gazetteer*. (New York: The Christian Herald, 1908): 3250.

1849, also published in London, provides a brief biography of Wijck above shorter biographies of those considered to be his pupils, imitators, and disciples: his son Jan, Adrian Oudendyck, John van der Vaart, John Wootton, and Henry Martin Zorg.¹³⁵ Aside from the training of his son Jan—which Wijck undoubtedly supervised, as the young artist accompanied him on his voyages to England and remained behind there as a successful adult master¹³⁶—no documents substantiate the presence of these individuals as apprentices in Wijck's studio.

Within his lifetime and for more than a century afterwards, it appears that Wijck's reputation remained high, and that his alchemical pictures remained a point of particular interest and appreciation for connoisseurs and art theorists. Statements such as Walpole's that claimed Wijck's "best pieces" were laboratory scenes serve to emphasize Wijck's success at making and maintaining an artistic identity for himself based around his virtuosic representations of a transformative art.

Wijck in Contemporary Scholarship

Despite Wijck's apparent importance to his artistic community within Haarlem, and the praise and attention he received from eighteenth- and early-nineteenth-century art

¹³⁵ James R. Hobbes. *The Picture Collector's Manual, Vol II*. (London: T&W Boone, 1849): 356.

¹³⁶ Jan Wijck's connections with his father's patrons remained strong even after the latter's departure: the son even completed an inventory of the pictures held at Ham House in or close to 1679. I will discuss Jan Wijck further in the fifth chapter, which deals with Wijck's travels and patrons in greater depth. For details of this inventory see Alastair Laing. "Fitting Pictures to Rooms." Christopher Rowell. *Ham House: 400 years of collecting and patronage.* (New Haven: Yale University Press, 2013): 408.

critics, he has received relatively little scholarly attention from modern historians of art. The omission of his popular alchemical scenes from most modern scholarship is likely connected to alchemy's previously low status within the history of science and its popular associations with mysticism and occultism. Examinations of natural philosophy and Dutch painting—such as those centering on Vermeer's Astronomer and Geographer have historically focused on the more "legitimate" sciences of cartography and geography, mathematics, optics, astronomy, and physics.¹³⁷ Perhaps not incidentally, map-making and optics are also the fields of investigation Svetlana Alpers suggests are central to the "worldview" and modalities of Dutch art in her landmark text, The Art of Describing.¹³⁸ Dutch art has long been analyzed and appreciated in terms of the visual or optical, emphasizing a secular, scientific, "naturalistic," and rationalizing tendency. This is to the detriment of artists whose works do not fit comfortably within this model. Wijck's modernity in his selection of subject matter also offers a challenge to arthistorical narratives centered on the so-called essential "conventionality" of Dutch genre painting. His attention to urban artisanal work (a subject famously absent from much Dutch art¹³⁹) and experimental empiricism places him outside many traditional frameworks of analysis.

¹³⁷ For example, Robert D. Huerta's *Giants of Delft: Johannes Vermeer and the Natural Philosophers* (Lewisburg: Bucknell University Press, 2003) includes chapters on the artist's relationship to figures such as Antonie van Leeuwenhoek, Christiaan Huygens, and Galileo Galilei, and the use of optical instruments, maps, and the empirical observation of celestial bodies.

¹³⁸ Svetlana Alpers. *The Art of Describing: Dutch Art in the Seventeenth Century*. (Chicago: University of Chicago Press, 1983.)

¹³⁹ For an overview of the "problem" of labor in Dutch art, see Kettering, "Men at Work," 694-714.

The sparse literature that does include Wijck has tended to position him as either a lesser-known outlier of the Dutch Bamboccianti (in light of his travels to Rome) or one among many painters for whom alchemical subjects were a moralizing genre exercise. The former approach is exemplified by the work of Ludovica Trezzani and Wijck's limited inclusion in the 1983 exhibition and catalogue, The Bamboccianti. In a brief biography of Wijck, Trezzani states that the painter is "best known" for his Roman themes, though late in life he produced genre paintings in the Dutch mode that were "completely independent of his Italianate works."¹⁴⁰ Trezzani does not mention the possibility of Wijck's apprenticeship with Van Ostade, and attributes much of his style and developments to the influence of other Dutch Italianate painters, particularly Andries Both, Jan Asselijn, and Pieter van Laer: "Through examples of Van Laer's work... Wijck learnt to structure his characteristic views of courtvards and small squares."¹⁴¹ Bernhard Schnackenburg complained of this myopic, Italy-centric view of Wijck in a 1992 essay, yet restricted himself primarily to Wijck's early output of rustic scenes in the studio of Adriaen van Ostade, emphasizing the period which he describes as a "transitional" phase between his earlier genre imagery and his Italianate mode and the lingering traces of his exposure to the examples of Adriaen and Isaac.¹⁴²

While it is true that Italianate pictures as a class present a substantial body of imagery across Wijck's career, alchemy represents the single subject portrayed by Wijck

¹⁴⁰ Trezzani, "Thomas Wijck," 396.

¹⁴¹ Ibid: 396.

¹⁴² Bernhard Schnackenburg. "Die Anfänge von Thomas Adriaensz Wyck (um 1620-1677) als Zeichner und Maler". *Oud Holland - Quarterly for Dutch Art History* 106, No. 3 (1992): 152.

most frequently. Yet his alchemical works have received virtually no serious attention. They have periodically appeared as briefly treated examples or illustrations in contemporary texts on alchemy during the seventeenth century; among them Petra Schramm's *Die Alchemisten*, which introduces a chapter with a laboratory by Wijck, describing it as a "fanciful scene" with a picturesque and "romantic" disposition.¹⁴³ C.R. Hill's early essay, "The Iconography of the Laboratory," which devotes the bulk of its attention to the work of David Teniers the Younger, offers a single sentence regarding Wijck's "curious, almost theatrical interiors with their 'philosophical clutter'... much influenced by the Italianate style of Pieter van Laer."¹⁴⁴ Lawrence Principe's recent monograph, The Secrets of Alchemy, offers two images by Wijck essentially as counterpoints to the bitingly satirical alchemical pictures of Pieter Bruegel the Elder and Adriaen van de Venne, asserting that "Wijck... produced paintings in which the chymist is a figure of good morals rather than bad ones."¹⁴⁵ Elsewhere, the subject of the alchemist in Dutch art is discussed entirely without mention of Wijck or his numerous alchemical pictures. Wayne Franits' landmark text, Dutch Seventeenth-Century Genre *Painting*, treats the subject of the alchemist with a single example by the Haarlem painter Cornelius Bega, whom Franits notes depicted an alchemist "at least four times,"¹⁴⁶ in comparison to over thirty known alchemical pictures by Wijck.

¹⁴³ Petra Schramm. *Die Alchemisten: Gelehrte, Goldmacher, Gaukler: ein dokumentarischer Bildband.* (Taunusstein: Edition Rarissima, 1984): 44.

¹⁴⁴ C. R. Hill. "The iconography of the laboratory." *Ambix* 22, No. 2 (1975): 108.

¹⁴⁵ Principe, Secrets of Alchemy, 185.

¹⁴⁶ Franits, *Dutch Seventeenth-Century Genre Painting*, 140.

Among the few texts to address Wijck's alchemical pictures in any depth, Jane Russell Corbett's 2004 essay, "Seeing Things: *The Alchemist and Death* by Thomas Wyck," focuses on a single, highly unusual scene, in which a magical or spiritual practice is depicted. It is the only known image of this type in Wijck's career, but has prompted problematic assumptions regarding his moral or spiritual associations with alchemy. Corbett treats this unique image again in a 2006 essay, "Convention and Change in Seventeenth-Century Depictions of Alchemists." Despite Corbett's observation that the scene is uncharacteristic of Wijck's more subtle treatments and that the figures "bear little resemblance to the stock character repeated in the majority of Wijck's alchemy scenes," she goes on to conclude that "it is clear that Wijck is concerned with mystical aspects of alchemy."¹⁴⁷

Wijck's high reputation during his lifetime and immediately after, his leadership of the Haarlem guild, and his importance to Dutch and English art of the later seventeenth and eighteenth centuries, are rarely addressed by contemporary scholars. As noted above, Wijck was once believed to be the teacher of several internationally successful Dutch and English masters. But even a mention of these potential connections has been stripped from Wijck's contemporary biographies. The emphasis on Wijck as an imitator or follower of better-known members of the *Bamboccianti*, or else of his famous teacher Van Ostade, has effectively rendered invisible Wijck's own role as a teacher or his potential importance to successive generations of artists.

¹⁴⁷ Jane Russell Corbett. "Convention and Change in Seventeenth-Century Depictions of Alchemists." *Art and Alchemy*. Jacob Wamberg, ed. (Cophenhagen: Museum Tusculanum Press, 2006): 259-260.

One of the few places in which any mention of Wijck's influence can be found is in discussion of the eighteenth-century English painter Joseph Wright of Derby (1734-1797). Wright's association with the British Enlightenment—through the intellectual circles of the Lunar Society and their interest in empirical observation and industrialization—has contributed to the reception of his paintings as overtly "scientific" or science-minded. The framing of Wright as a painter of science placed against an impression of Wijck's pictures as "romantic" or "mystical," as they have been described by contemporary writers, parallels the rigid (and largely invented) conceptual divisions between "rational" chemistry and "irrational" alchemy that eventually emerged in the late eighteenth century. Wright's 1768 An Experiment on a Bird in an Air Pump (Figure 29, National Gallery, London) is one among many works that showcase Wright's connections to new technologies and emerging theoretical principles. But Wright (like many Enlightenment figures, including Robert Boyle,¹⁴⁸ one of the refiners of the air pump apparatus which Wright represented) was also deeply interested in alchemy. He is known to have viewed alchemical paintings by Wijck in situ at Ham House, the former home of Wijck's patron John Maitland, First Duke of Lauderdale. Wright was also likely familiar with Wijck's seascapes and other genre scenes from visits to additional collections in London and nearby Kent.¹⁴⁹ Documents of sale from the estate of Wright's close friend and patron, John Leigh Philips, further suggest that Wright may in fact have previously owned a painting by Wijck titled *The Laboratory* (Figure 30, Musée des

¹⁴⁸ Moran, *Distilling Knowledge*, 146-147.

¹⁴⁹ Benedict Nicholson. *Joseph Wright of Derby: Painter of Light*, Vol. I. (New Haven, Yale University Press, 1968): 52-53, 78.

Beaux-Arts, Caen)¹⁵⁰ in which a scholarly alchemist sits in a warmly lit workroom amongst scattered books, notes, and distinctive alchemical vessels and earthenware jars. Wright's treatment of an alchemical experiment in his 1771 The Alchemist Discovering *Phosphorus* (Figure 31, Derby Museum, Derby) strongly resembles Wijck's compositions in the warm tonality of its directed light, the arrangement of the architectural space—dominated by archways—and an emphasis on the tools, texts, and equipment of the alchemical workshop. Wright's inclusion of common elements from Wijck's pictures, including the apothecary's jar, globe, and books placed on the alchemist's overflowing table, is joined by an adaptation of one of Wijck's unusually shaped earthenware vessels at lower right—a wide jug with a tapering base and straw netting handles. This close attention indicates his interest in, and appreciation for, Wijck's detailed description of equipment. Benedict Nicolson has examined Wright's accuracy in depicting the alchemical apparatus in use, noting that the painter consulted with the physician and amateur natural philosopher Matthew Turner to better understand the processes and principles that he planned to depict.¹⁵¹ The attention devoted to Wright's scientific interests, and the manner in which the artist incorporated contemporaneous theory and practice, provides a stark counterpoint to the lack of investigation of Wijck, ostensibly one of Wright's major influences.

¹⁵⁰ J. Wallis. *Joseph Wright of Derby, 1734-1797.* (Derby: Derby Museum and Art Gallery, 1997): 69.

¹⁵¹ Nicholson, Joseph Wright of Derby, 118.

Though Wijck was celebrated in his own time and held in high regard for more than a century after his death, his impact and accomplishments have been largely forgotten or obscured by contemporary scholarship. His treatments of alchemists have shared a similar fate, and as a result modern viewers long regarded these images through a lens clouded by myth and assumption. As Lawrence Principe has noted, increasing professionalization of chemical work, and the establishment of new academies of science at the end of the seventeenth century, contributed to alchemy's scapegoating as a failed and fraudulent product of a bygone (pre-Enlightenment) era.¹⁵² Yet scholarly reevaluations of alchemy as a serious discipline, and of the connections between alchemy and art-making, have opened new avenues to the art historian. Sven Dupre's recent assertion that "what we now know as the visual and decorative arts are prominent manifestations of alchemy's material... processes"¹⁵³ demonstrates the extent to which alchemy and art are now considered essentially intertwined. Within this new vision of the artistic and alchemical, Wijck appears as a vital point of contact whose images hold powerful clues to the seventeenth-century painter's understanding of alchemy—and his own practice—as both "science" and art.

Wijck's unusual, innovative scenes of alchemy, however, are also connected to his many other representations of domestic and artisanal work. They draw from images of labor produced in Haarlem before, and during, his lifetime. Haarlem's role as a center for genre experimentation, and Haarlem artists' use of selectivity in subject matter as a tool

¹⁵² Principe, Secrets of Alchemy, 86-89.

¹⁵³ Sven Dupre. "Making Materials: The Arts of Fire." *Art & Alchemy*. (München: Hirmer, 2014): 84.

for market success, both undoubtedly contributed to the formation of the young Wijck's artistic identity. Though his images present a discipline that was often hermetic and solitary, it is clear Wijck was deeply embedded within his own community and responsive to contemporaneous artistic models.

In the following chapter, I will explore the construction of personas for the alchemist in art and literature, focusing on the satirized alchemist who appeared in plays and paintings as well as the real alchemists whose treatises carried their theories to broader audiences. Much like representations of "quack" physicians during the same century, images of alchemy frequently condemned the *misuse* of alchemy in the hands of ignorant or deceitful individuals, without necessarily condemning its principles. Anxieties about a changing global marketplace and the need for professional bona fides underscored certain negative and skeptical views regarding alchemists, who operated outside of both the university system and traditional guilds. Larger questions, such as whether or not humankind had the right to infringe on the creative powers of nature and the divine, provoked more existential and spiritual concerns regarding alchemy. Yet many of alchemy's central tenets—the growth of metals within the earth, the possibility of material transformation, the usefulness of chemicals and minerals as medicines for the body—were widely embraced by both scholarly and unlettered audiences. A paradoxical embrace of alchemy's potential, and rejection of its moral and economic pitfalls, characterizes the broad range of responses to alchemy, and indeed of other developing empirical disciplines.

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Chapter 3

FOLLY VERSUS EXPERTISE IN ALCHEMICAL IMAGERY

Pieter Bruegel the Elder's *The Alchemist*, engraved after 1558 by Philips Galle and published in Antwerp by Hieronymus Cock (Figure 32), is the most often-cited origin point for the imagery of the alchemist that flourished in the North during the following century.¹⁵⁴ The print shows an alchemical worker in ragged clothes whose labors before the furnace consume his family's last coins. His futile and destructive actions are observed by a scholarly figure seated at a lectern, whose text mockingly warns *alghemist*—literally "all is waste," a vulgar Dutch pun that implies fruitless effort.¹⁵⁵ The influence of this print was widespread, and elements of Bruegel's design re-emerged numerous times in Dutch art of the seventeenth century.

Though influential, this print has been overly emphasized in scholarship as a kind of *prima materia* ("first matter," ¹⁵⁶ an alchemical term signifying the vital ingredient from which all materials derive) that underlies all images of alchemy. This interpretation roots the representation of alchemy in satire. In reality, Bruegel's print was neither the first representation of alchemy nor the only visual commentary on alchemical practice.

¹⁵⁴ Nadine M. Orenstein. "The Alchemist." cat. 60-61, in *Pieter Bruegel the Elder: Drawings and Prints*. (New Haven: Yale University Press, 2001): 170-172.

¹⁵⁵ Principe, Secrets of Alchemy, 183.

¹⁵⁶ Linden, *Alchemy Reader*, 13.

Opposing views that supported and championed alchemy were also prevalent in literature and imagery. Competing with Brueghel's image of the failed pauper-alchemist were images produced by the Flemish artist Jan van der Straet, better known to his international patrons as Johannes Stradanus. Stradanus's design for the engraving *Distillatio* (Figure 33), included as part of the *Nova Reperta*, as well as his painting in oils, *Il Laboratorio dell'Alchimista (An Alchemist's Laboratory)* (Figure 34, Palazzo Vecchio), present the alchemical workshop as a productive space maintained by an expert master and his competent assistants. Created between 1570 and 1580, these images offer an alternative vision of a legitimate and beneficial alchemy that produces substances linked to increased health, commercial success, and natural philosophical inquiry.

Strikingly, *Distillatio* was also printed in Antwerp, roughly twenty years after Bruegel's image of the poor alchemist and his suffering family. Both of these prints were produced for the open market and were likely collected across disciplinary and social boundaries. While the *Nova Reperta*'s focus on emerging technologies indicates its appeal to an elite and erudite audience, the quality of the engraving of both *Distillatio* and *The Alchemist*, and their shared origin point, also makes it possible that they were produced for an overlapping market.¹⁵⁷ It is therefore apparent that the enduring popularity of Bruegel's satire of the *chrysopoetic*, or gold-making, alchemist should be considered in counterpoint to the depiction of distillation workshops as profitable and

¹⁵⁷ While information on the distribution of the prints is limited, publication and dissemination of the *Nova Reperta* was the responsibility—and the right—of its publishers, the Galles of Antwerp. It was re-issued in at least four editions between 1591 and 1638. Lia Markey. "Stradano's Allegorical Invention of the Americas in Late Sixteenth-Century Florence." *Renaissance Quarterly* 65, No. 2 2012): 393.

industrious. The tradition of the alchemical scholar-expert runs firmly parallel to the pictorial tradition of the alchemical fool or fraud. These insistent visual statements of alchemy's productivity and usefulness provide direct competition to the idea of alchemy's falsity.

The divide between these two notions of the alchemist—fool and expert indicates the diverse and occasionally polemical views of alchemy in the visual and popular cultures of the period. Responses to alchemy ranged on a spectrum from those who dismissed it outright, to those who enthusiastically believed in its possibilities. Neither pole can be considered "correct," whether in their era or in our own, for alchemy was both a failure and a success: a set of tools and theories that yielded vast bodies of new chemical and scientific knowledge, while failing to deliver on loftier promises of "perfection" or immortality. Alchemy's role as an emerging empirical discipline (albeit one rooted in ancient theories) likely contributed to the instability of its reputation and the struggles of its practitioners to gain legitimacy in the public sphere. Its multifaceted nature also meant that at times a single individual might express skepticism for alchemical theory even while embracing knowledge gained by alchemical work. This is demonstrated by the writings of the German assayer Lazarus Ercker. Within a single text, he criticizes the pursuit of gold and states his disbelief in transmutational alchemy, but admits that the "very excellent, ancient, and useful art" of assaying originated "like all the other arts that work with fire... as an outgrowth of alchemy."¹⁵⁸ Ercker's ambivalence demonstrates the wider ambivalence of the early modern reception of alchemy. Present-

¹⁵⁸ Quoted in Nummedal, Alchemy and Authority, 35.

day historians of science stress that alchemy during the seventeenth century was not one singular alchemy, but instead many *alchemies*. ¹⁵⁹ These alchemies encompassed theories and practices almost as varied as their practitioners. Neither Bruegel's ragged achemical fool nor the bustling industry of the *Nova Reperta*'s distillation workshop, considered in isolation, can fully characterize the practice of alchemy or its reputation during the early modern period. The two prints in interaction, however, provide a glimpse of the way in which alchemy was conceived of and understood: not as a singular moral or social absolute, but as a set of practices and processes that could be used for gain and glory, or else misused in pursuit of the same ends.

This chapter traces the emergence of major types—fool, fraud, expert, and scholar—through early modern art and literature. Each emerged roughly simultaneously, and was attached to a point on a continuum of public opinion. The first is the alchemical fool, whose ignorance inadvertently brings ruin on himself and those closest to him.¹⁶⁰ The alchemical fool is often shown with his family, whose poverty invites sympathy, but also moral censure. The second, and most loathed, is the alchemical fraud. He may have a genuine knowledge of alchemy that has been turned to evil ends, or else no true

¹⁵⁹ Nummedal, *Alchemy and Authority*, 14. See also Lawrence Principe and William Newman. "Some Problems with the Historiography of Alchemy." in *Secrets of Nature*. (Cambridge: MIT Press, 2001): 419.

¹⁶⁰ I use the male pronoun throughout this section, though it is true that women were sometimes alchemists themselves. They participated in the running of alchemical households, wrote experimental recipe books, and appeared in the pantheon of alchemy's legendary origin figures. Yet the overwhelming majority of alchemists presented by paintings, prints, literature, and theater of this time appeared solely as men. The four "figures" of the alchemist I discuss—fool, fraud, expert, and scholar—are discussed here in terms of their constructed male representations, rather than as real-life practitioners.

knowledge at all. The fraudulent alchemist often spouts obfuscating alchemically tinged nonsense to hide his ignorance. The third type I term the alchemical "expert." He is typically shown as the master of a busy, working laboratory. Images of the alchemical expert often emphasize commercial activity and production on a large scale. The fourth type is the alchemical scholar. Much like his counterpart in other scholastic disciplines, the alchemical scholar may be portrayed in a positive or mildly ambivalent way, a symbol of the life of the mind on one hand, or hermetic isolation on the other. Both the alchemical scholar (when genuine) and the alchemical expert represent serious visions of alchemy as a discipline worthy of study and investigation.

These alchemical types are often characterized by their relationship (or lack thereof) to gold-making. Though alchemy was far more than attempts at transmutation, the quest for gold through the art of the fire was an evocative (and polemical) subject and received much attention from artists. In the pictorial tradition, where alchemy is characterized by gold-making, it is typically also characterized by greed, delusion, duplicity, and poverty. Gold-makers are fools or frauds, deceiving themselves with false dreams of glory or enticing others into debt and despair. Yet where alchemy is characterized by other processes—distillation, assaying and other metallurgical work, and medicine—its representations are frequently more positive, or at least ambivalent. Distillers, assayers, and others often appear as experts and workshop leaders, while their counterparts in medicine and pharmacy are sometimes shown as scholars and authorities. This essential split between gold-makers and practitioners of alchemy's other "applied" arts is visible even in the difference between the early works of Bruegel and Stradanus.

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Crucibles, coins, and other signs of metalworking regularly appear in paintings by Wijck's peers, yet Wijck does *not* make use of these common tropes surrounding the gold-maker. An alternative pictorial tradition for alchemy and positive images of alchemists engaged in distilling and other practices—such as the serious experts of Stradanus and Teniers—are therefore particularly vital for any discussion of Wijck's paintings.

Beyond satirical or artisanal representations, this chapter also deals with alchemists' constructions of a functional "persona." While alchemy's reputation for secrecy is somewhat deserved, many practical treatises—such as Walther Hermann Ryff's *Destillier Buch (Distillation Book)*—circulated recipes, advice, and instruction for an audience of tradesmen and artisans, often in the vernacular.¹⁶¹ Much like parallel developments in medicine, where Galenic traditions from antiquity were challenged by new, experimental methodologies, these new alchemical texts often relied on ancient and medieval pedigrees to establish their authority even as they insisted on a new spirit of experimentation and first-hand witness that privileged the hands-on practitioner. The alchemist was far from the only early modern "expert" who offered a target for satire and scorn: fraudulent physicians, merchants, and tradesmen of all kinds appear peppered throughout genre imagery and period literature. Perhaps unsurprisingly, the sharpest condemnations of alchemical fraud appeared in the writings of alchemists, the population most eager to dispel myths, soothe potential patrons, and legitimize their own practice.¹⁶²

¹⁶¹ Nummedal, Alchemy and Authority, 35.

¹⁶² Ibid: 48-49, 62-63.

Fool Versus Expert: Competing Early Visions of Alchemy

Pieter Bruegel's Alchemist (Figure 32) is a humorously moralizing vision of the alchemical workroom as a den of folly and ruin. At left, a gangling-limbed alchemical worker in a knotted apron, cap, and ragged gaiters sits before an enormous hearth. With his left hand, he uses a pair of tongs to tend a crucible over a fire that billows smoke, while with the right he drops a single round coin into a second crucible. Behind him, a woman—likely his wife—holds open an empty purse, her hand poised to catch coins that will not appear. Behind her, three children play in an empty cupboard, one with a cooking pot on its head, signifying the family's poverty and eventual starvation. The family is joined by a fool crouched on the floor at center. He wears a donkey-eared cap and works a pair of hand bellows, heating an overturned crucible that wastefully spills out its contents. At right, a scholarly figure in a long robe and cap sits at a wooden lectern, gesturing at the chaotic scene as he points to a page in his open book. Further back, a bare and broad window opens onto a scene of the future, as the alchemical worker and his family are accepted into a humble poorhouse by a matron. Below the print, an accompanying motto in Latin condemns the folly of an alchemical quest for the Philosopher's Stone, while lamenting the fact that such pursuits are found "everywhere":

They must be ignorant of the situation, who suffer and labor after stones. Their search for the rare and precious stone is itself a worthless thing discovered everywhere. The four elements are stuffed into this smoke-filled business, such as is found everywhere, and also nearby.¹⁶³

¹⁶³ Translation mine. The Latin inscription reads, "debent ignari res ferre et post operari ius lapidus cari vilus sed deniq rari unica res certa vilis sed ubiq reperta/ quatuor inserta naturis in nube referta nulla mineralis res est ubi principalis sed talis qualis reperitur ubiq localis." Nadine M. Orenstein has translated this as, "The ignorant should suffer things and labor accordingly. The law of the precious, cheap but at the same time rare stone is

A copy of this print (Figure 35, Rijksmuseum, Amsterdam), engraved in the first quarter of the seventeenth century by Claes Jansz. Visscher II, bears a similar inscription:

The alchemist, very much reviled, seeks fine gold and treasures. What he had is now gone. He takes the four elements, yet gains nothing. His labors spoiled and fortunes ruined, this poor man's life ends at the poorhouse.¹⁶⁴

The later edition also carries numerous additional inscriptions in both Latin and Dutch that act as labels. The comically oversized distillation vessel found behind the alchemical worker's head appears as "Aqua Magistralis," literally "teacher's water," a distilled remedy that appeared in period medical-alchemical literature as a treatment for the "French disease," or syphilis.¹⁶⁵ A notation above the furnace lists the three key elements of the "Lapis," a reference to the Philosopher's Stone: "Mineralis, Animalis, Vegitabilis," or mineral, animal, and vegetable, indicating the organic and inorganic mixture thought to hold the key to this universal, perfected matter. The worker before the fire is labeled "Pieter Pover" (Peter Pauper), indicating that this is no alchemical expert but an untrained man whose efforts will be ultimately fruitless. The scholar-like man at right is labeled "Doctor Loshooft," literally meaning "loose-head," a mocking name

the only certain, worthless but everywhere discovered thing. With four natures stuffed into the cloud it is no mineral that is unique somewhere but is of such a kind as to be found everywhere." *Pieter Bruegel the Elder: Drawings and Prints*. (New York: Metropolitan Museum of Art, 2001): 170.

¹⁶⁴ Translation mine.

¹⁶⁵ "Aqua Magistralis pro iis qui occulté morbo Gallico curari desiderant," listed in the index of a 1667 publication compiling the works of Zacuto Lusitano. *Zacuti Lusitani, medici, & philosophi praestantissimi*... Lugduni: Sumptibus Ioannis Antonii Huguetan, filij, & Marc Antonii Rauaud., M. DC. XLIX.

indicating empty-headedness or mental instability. Without this label, the "Doctor" may resemble a more ambiguous narrator gesturing instructively to the satire's audience. With it, however, this Doctor becomes the fraudulent alchemist himself, one who usurps the authority of a scholar in order to deceive an unwitting assistant. The books on his podium are inscribed with the names of past alchemical authorities: Hermes, Geber, Albertus, *Raymodus*, referring respectively to Hermes Trismegestus, the Pseudo-Geber (once associated with Jābir ibn Hayyān), Albertus Magnus, and Raymond Lull, four founding personalities in alchemy's mythologized canon. His own open book bears the vernacular caption "al ghemist," a Dutch pun meaning "all is waste" that may indicate either a condemnation of the entire art, or else his misuse and appropriation of past wisdom to suit his false ends. The stool upon which the deceitful Doctor sits is also labeled "Vanitas," perhaps a warning against the search for worldly gold and glory, or a more spiritual warning against usurping the powers of creativity. As a whole, the image denigrates the misleading false alchemist, his foolish follower, and their attempts—even the materials piled beneath the furnace are labeled "lutum sapientia," or "mud wisdom," a final and damning joke at the expense of a discipline that claims to seek a purified matter.

Though Bruegel's scene is remarkable for its incorporation of alchemy into an independent genre scene designed for a broad public market, it was not the first depiction of an alchemist in print. Half a century earlier, depictions of alchemists as scholar-experts appeared in Northern encyclopedic texts. The existence of such images signals alchemy's status as a legitimate discipline within certain educated spheres. Among the earliest representations is a small woodcut of an alchemist tending a fire that appeared in the

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Margarita Philosophica, an encyclopedia published in Freiburg in 1503 (Figure 36). The text's author, Gregorius Reisch, was the confessor of Maximilian I and a Carthusian prior. The encyclopedia's diverse subject matter encompassed the standard university curriculum of the early Northern Renaissance—including philosophy and rhetoric, mathematics, and astronomy—as well as childbirth, religious subjects, music, transmutation, and chemical experimentation.¹⁶⁶ The simple design shows an alchemist in fine robes holding a set of bellows with which he controls the flames beneath a crucible. Behind him sits a distillation vessel topped with an alembic. The orderly room and direct, iconic presentation underscores the text's informative purpose. The alchemist appears fashionable and worldly, dressed in the same slit sleeves and cap as a scholarly mathematician from the same text (Figure 37), indicating a serious approach to both disciplines. This early representation of a scholar at home in the laboratory marks one of the earliest constructions of the alchemist. This alchemist is a figure of wisdom and work that predates later, better-known images of alchemical fraud and folly.

Alchemical texts often provided detailed images of the workshops and processes that they described. A 1518 edition of a treatise attributed to the thirteenth-century Dominican bishop and natural philosopher Albertus Magnus, the *Liber Mineralium Alberti Magni*, included a woodcut illustration of an alchemist (or an assistant) tending a fire within a large furnace (Figure 38). A distillation vessel with an alembic rests on top of the furnace. A shallow dish sits ready to receive the liquid that would condense on the

¹⁶⁶ Arthur Greenberg. *From Alchemy to Chemistry in Picture and Story*. (Hoboken: Wiley-Interscience, 2007): 94.

vessel's lid and run out of the elongated spout. While such processes were common for medicinal preparations (including mercury-based purgatives), distillation was also used to "purify" inorganic materials for transmutation. A later text on mining, assaying, and mineral chemistry, Lazarus Ercker's Aula Subterranea, first published in Prague in 1574,¹⁶⁷ shows not a single alchemist, but a busy workshop. The scene of an assaying laboratory (Figure 39, CHF) shows four workers engaged in tending furnaces and heated vessels of ores. Labor appears to be divided between the more menial tasks of the young assistants—one of whom, at far left, grinds with a large mortar and pestle—and the assessing work of the more finely dressed adults, one of whom checks the temperature and readiness of the fire at far right. These individuals fall into the category of "alchemical experts." Rather than hermetic scholars performing isolated experiments, these experts are at the center of a commercial workshop engaged in large-scale production. The print's graphic, linear style conveys clearly the essence of the metallurgical processes (assaying, smelting, calcination, and cementation) that the text describes. But the image devotes a great deal of attention to the tools and equipment of the laboratory, placing the portable furnaces and stills front and center. Groupings of tools, like the tongs and pokers leaning against the far right wall, suggest the movement of workers from station to station. These details evoke a more dynamic notion of the laboratory than the solitary chamber of the scholar-alchemist seen above in the Margarita Philosophica.

¹⁶⁷ Greenberg, From Alchemy to Chemistry, 10.

The title page of Hieronymous Brunschwig's 1512 *Liber de Arte Distillandi* (Figure 40, CHF) also emphasizes equipment and process by foregrounding the tools of distillation in one complex (if fanciful) apparatus. Liquid heated to vapor in the cucurbits at bottom would rise through the pipes and condense in the long-necked receptacles above: this operation, however, is rendered improbable by the labeled "cooling tower" of cold water at center, which would cause the vapor to cool and immediately return to the bottom.¹⁶⁸ Despite this artistic license, the image treats the mechanics of the operation and the alchemical vessels with great detail. And, as in several of the images above, the alchemists are finely dressed as in the height of fashion. The slit sleeves and plumed hat of the man at right may strike contemporary viewers as unlikely to be found in a laboratory, but when paired with the well-dressed scholar at left, the image functionally conceptualizes the distilling chemist as both serious intellectual and materially successful expert. This image offers an early mingling of the identities of "expert" and "scholar."

This dual portrayal is also evident in the depiction of a distillation laboratory in the *Nova Reperta*. Designed by Stradanus while in the employ of the Medici court in Florence,¹⁶⁹ the *Nova Reperta* was an unusual and urgently modern project. Though it draws on sources within past trade imagery, early encyclopedic collections, and images of "curiosities" and discoveries circulated by broadsheet, its focus on contemporaneous invention marks its of-the-moment modernity. Alchemy's inclusion in such a project

¹⁶⁸ Lawrence Principe and Lloyd De Witt. *Transmutations: Alchemy in Art*.
(Philadelphia: Chemical Heritage Foundation, 2002): 7.

¹⁶⁹ Lia Markey. "Stradano's Allegorical Invention of the Americas in Late Sixteenth-Century Florence." *Renaissance Quarterly* 65, No. 2 (2012): 392-393.

demonstrates its vitality and possibility (and broad public interest in its outcomes). The engraving Distillatio (Figure 33), however, was not Stradanus's first treatment of the theme. In 1570 the artist had produced a painting in oil titled *Il laboratorio* dell'alchimista ("An Alchemist's Laboratory") (Figure 34, Palazzo Vecchio) for the Florentine *studiolo* of Francesco I, Grand Duke of Tuscany. The painting shows a young laboratory assistant at the center, holding a glass receiver filled with liquid. A younger boy works at a mortar and pestle below. At left a large press used for organic materials sits before an enormous, multi-headed central still. The alchemist appears as a bespectacled scholar at right, pointing upward in an instructive gesture. It has been suggested that Stradanus's model for the alchemist was Josef Goodenhuyse, a Flemish botanist known in Florence as Giuseppe Benincasa, and that the attentive worker directly beside him, heating liquid in a pan over a small portable furnace was none other than his real-life patron, Francesco I. The painting appeared among a small collection of scenes by other painters presenting "productive activities and useful inventions," ranging from wool mills to glassworks.¹⁷⁰ The image's celebration of new technologies and their potential is obvious, even as it also relies on tropes of the scholar and the open book to cement alchemy's textual authority and antique precedent. Stradanus's composition emphasizes both theory and practice through a subtle division: one side of the image deals largely with the "known"—in the form of printed books, and the placement of an

¹⁷⁰ Luigi Cerruti, Gianmarco Ieluzzi, and Francesca Turco. "Changing Identity and Public Image: A Sociosemiotic Analysis of Famous Chemical Laboratory Pictures."*Proceedings of the 6th International Conference on the History of Chemistry* (Louvain: Peeters Publishers, 2008): 725.

established authority—while the opposite half seems to focus on the "new"—in the form of experimental labor.¹⁷¹ Though Wijck painted roughly a century later than Stradanus, they are connected through this shared concern for new explorations and empirical investigation.

Stradanus's engraving of a similar scene, *Distillatio* (Figure 33), shows a seated alchemist who wears a pair of spectacles and examines a heavy text. His mature assistant points to an open page. This alchemist closely resembles that in the painting, thought to be Josef Goodenhuyse, though their physiognomies differ slightly in the width of the face. The alchemist and his assistant's attention to the open book may represent adherence to written instruction and antique principles, or else a moment of deviation from source material, as real-life experimental practices often collided with theory.¹⁷² Though the alchemist resembles the beardless, robed scholars seen in other depictions, he wears the same apron across his lap as all the other members of the workshop, emphasizing his manual engagement with the enterprise. The workshop itself is spacious and grand, allowing the print to show multiple stages in the distillation process within a single scene. At front, a young assistant grinds herbs (likely for medicinal use) and grain (for alcohol) in a large mortar with the aid of a pestle attached to a spring-arm. At the center a massive still empties condensed vapors into multiple long-necked retorts, and at right, a "hooded" still known as a *rosenhut*¹⁷³ sits above a smoking furnace. Details such as the large framed painting on the wall at left, the number of assistants, and the

¹⁷¹ Ibid: 725.

¹⁷² Ibid: 727.

¹⁷³ Greenberg, From Alchemy to Chemistry, 144.

cavernous stone architecture of the laboratory itself, suggest the wealth and status of the alchemist or his unseen patrons. The prosperity and productivity of the workshop is evident, demonstrating what the historian of chemistry John Read called "ordered and affluent activity."¹⁷⁴ The engraving's text alludes to the creative and productive endeavors of the workroom and its pure and precious output: "In igne succus omnium, arte, corporum / Vigens fit unda, limpida et potissima." ("In the juice of the fire, by art, these bodies/ become a stream of water, pure and most powerful.")

The *Nova Reperta*'s inclusion of distillation among the century's "discoveries" aligns with the vision of alchemy held by Stradanus's patron, Francesco I, who commissioned alchemically themed works alongside other technological and material innovations of the period. This speaks to the regard in which the art was held, placing it alongside the refining of gunpowder, the development of the printed book, water-powered mills, the iron clock, voyages to the Americas, and the "invention" of painting in oils. The elevation of alchemy in this context is not surprising, as alchemy held a privileged, if occasionally precarious, position within many European courts during the sixteenth and seventeenth centuries. As most mining operations were controlled and operated by nobility during this period—in German-speaking territories, mines were held almost exclusively by the many scattered princes of the Holy Roman Empire—alchemists were frequently consulted in the hopes of gaining additional revenues. Banking dynasties such as the Medici family turned to alchemy and alchemists in hopes of improving and generating additional currency, or of determining when fraud had been perpetrated. More

¹⁷⁴ Quoted in Greenberg, Ibid: 104.

esoteric desires were also served by the presence of court alchemists, whose work appealed to erudite nobles educated in Aristotelian natural philosophy, as in the widely documented scientific, experimental, and occult interests of the Holy Roman Emperor Rudolf II.¹⁷⁵

Despite some simplification and exaggeration, *Distillatio* provides a clear and detailed description of alchemical work. Other images within the *Nova Reperta* used the language of symbols and allegory to carry the print's message, as in an image of the "discovery" of the Americas (Figure 41). In this scene Amerigo Vespucci "wakes" a female personification of the Americas rising from her slumber in a nearby hammock, a poetic visual metaphor. Descriptions of the alchemical process itself often relied on metaphorical signs. These signs might include the phoenix, a creature capable of renewing itself through fire; the egg, symbolizing a sealed alchemical vessel; the hermaphrodite, signaling dual-natured matter; and many more. Depictions of alchemists, however, rarely relied on visual metaphors to communicate their subject. Instead, images such as *Distillatio* (and its predecessors in the printed texts discussed above) typically reinforced the relationship between alchemical practitioner and alchemical practice, signifying that an alchemist could be most securely recognized by his laboratory.

The conflict between alchemy's status as a "great discovery" within the *Nova Reperta*, and its public mockery in printed satire, was not unique: other developing disciplines, particularly medicine, suffered the same paradoxical treatment in art. A satirical print after Bruegel's design, *The Stone Operation* (Figure 42), was produced in

¹⁷⁵ Nummedal, Alchemy and Authority, 73-74.

the year following *The Alchemist*. This print was executed by Pieter van der Heyden and published once again by Hieronymous Cock. Both images play on the folly of seeking stones, one found in false medicine, the other at the bottom of a crucible. In *The Stone Operation*, a "quack" doctor holds a rock aloft to an eager crowd. This is the stone that he has supposedly just pulled from the head of his buffoonish patient. A fool crouched beneath the table gives the game away: the admired "surgeon" is a fraud. At the same time, in the background, small figures carrying wheat towards a mill refer to Flemish proverbs relating mills to madness.¹⁷⁶

Bruegel's image of the cheating doctor participates in a broader skepticism regarding the expertise of physicians and other empirics—among them alchemists and *iatrochemists* (makers of chemical medicines). In the case of alchemy, this skepticism was tied not only to an absence of professional bona fides generated by organizations such as guilds or universities, but to the opacity of empirical and alchemical knowledge more generally. Until the second half of the seventeenth century, the majority of universities did not have a formal place for alchemy or chymistry within their courses of study.¹⁷⁷ Likewise, no guild structure supported (and regulated) alchemists. Unlike artists, metalworkers, or even tailors and butchers, aspiring alchemists could not count on a regularized system of apprenticeship and mastery. The source for empirics' proprietary knowledge was not only revered ancient treatises, but first-hand observation and experimentation. Such experiments might be relatively untested or hard to replicate, and

 ¹⁷⁶ Nadine M. Orenstein. "The Stone Operation," cat. 78. *Pieter Bruegel the Elder: Drawings and Prints*. (New Haven: Yale University Press, 2001): 193-194.
 ¹⁷⁷ Principe, *Secrets of Alchemy*, 86.

their results might challenge long-held maxims. As a result, credentials lay in question. The generation of this "secret" knowledge, and a lack of recognizable systems of evaluation (guild registers, university degrees), meant that potential clients were largely left on their own when seeking the services of empirical practitioners. Identifying cheating merchants or craftsmen was one task; identifying fraudulent empirics, another.

Empirics' possession of secret knowledge made them desirable within the marketplace, even while secrecy itself cast doubt on the truth of their results. This socalled secret knowledge was circulated throughout Europe in the form of "books of secrets," recipe literature that claimed to reveal paths to health, wealth, beauty, and happiness. These texts traded on the popularity of encyclopedic medieval treatises, such as the *Secretum Secretorum (Secret of Secrets)* of the pseudo-Aristotle, while incorporating new approaches from the emerging disciplines of empiricism. Among the most influential was the 1555 *I Secreti* of Alessio Piemontese, a nom-de-plume of the Venetian humanist Girolamo Ruscelli. Ruscelli claimed that this work was the result of investigations conducted within an informal "academy" of erudite humanist friends—an early scientific society.¹⁷⁸ "Secret" knowledge encompassed both concepts of revelation of truth—as in the cosmological secrets of the universe—as well as more prosaic access to closely guarded technical processes and practices that belonged to experts or expert

¹⁷⁸ William Eamon and F. Paheau. "The Accademia Segreta of Girolamo Ruscelli: A Sixteenth Century Italian Scientific Society." *Isis* 75 (1984): 330-340.

communities. The term itself might refer to a product, or more broadly to the type of productive knowledge possessed by a limited few.¹⁷⁹

Proprietary recipes for tonics, purgatives, and salves occasionally resulted in lucrative fame for their originators, who relied on the printing industry to circulate claims of their success and potency. Pamphlets, flyers, broadsheets, and other materials each promised their own truth and usefulness while decrying the falsehoods of their competitors. This glut of information worked to create problems of trust, as boundaries between "quack" and "expert" were often blurred. New empirical knowledge arrived as curiosity, entering a marketplace already crowded with dubious fact. Rather than emerging from the reassuring framework of classical sources, many "secrets," such as those of the *I Secreti*, claimed to spring from the work of empirics, surgeons, alchemists, apothecaries, and others laboring at the border of established, accepted knowledge.¹⁸⁰ Lacking the means by which to patent their recipes, or the degrees and guild memberships held by other experts, many empirics published collections of secrets to assert their authority. Legitimate practitioners engaged in self-promotion to build clientele and demonstrate the advancement of their skills, while supposed "quacks" might indeed rise to the level of public approbation. This was the case for the former "mountebank" eye surgeon William Read, knighted in 1705 by Queen Anne and

¹⁷⁹ Elaine Yuen Tien Leong and Alisha Michelle Rankin. "Introduction." Secrets and Knowledge in Medicine and Science, 1500-1800. (Burlington: Ashgate, 2011): 12.
¹⁸⁰ William Eamon. "How to Read a Book of Secrets." Secrets and Knowledge in Medicine and Science, 1500-1800. (Burlington: Ashgate, 2011): 26.

appointed as the royal oculist.¹⁸¹ It was difficult, if not impossible, to fully separate the world of "true" secrets from false ones. Particularly for the less educated, the difference between learned societies, mountebanks, and empirics was not only hazy, but at times "indistinguishable."¹⁸² Theatricality, curiosity, and flimsy or nonexistent bona fides all clouded the issue— leaving many skeptical and wary of developing empiricism in its many modes.

In addition to expressing anxieties about secret knowledge and professional bona fides, images also satirized obsessions with material wealth in the realms of trade and commerce. Another print engraved by Van der Heyden after Bruegel, *The Merchant Robbed by Monkeys* of 1562 (Figure 43), mocks a traveling salesman as he slumbers by the roadside, unaware of the monkeys that ransack his goods, steal his treasure, and urinate in his hat. The merchant's lack of vigilance is underscored by the presence of spectacles, indicating shortsightedness, and a pair of dice lying abandoned at the foreground implies further vices of gambling and wastefulness.¹⁸³ Mocking images of diverse occupations were popular staples in satirical prints from the sixteenth century onward. Hans Holbein's 1538 *Pictures of Death* wittily conveyed the equalizing force of mortality by showing a skeletal incarnation of death touching the lives of all individuals within early modern society, from noblemen to tradesmen and artisans, farmers and "fools." In facing death, many of the supposedly upright and virtuous members of the

¹⁸¹ Hugh Ormsby-Lennon. *Hey Presto!: Swift and the Quacks*. (Newark: University of Delaware Press, 2011): 93.

¹⁸² Ibid: 108.

¹⁸³ Nadine M. Orenstein. "The Merchant Robbed by Monkeys," cat. 95. *Pieter Bruegel the Elder: Drawings and Prints*. (New Haven: Yale University Press, 2001): 219-221.

classes that Holbein represents reveal cowardice and moral bankruptcy. But popular collections of trade imagery did not always have a satirical purpose: Hans Sachs' 1568 Ständebuch (Book of Trades), accompanied by Jost Amman's woodcut illustrations of the professions, appeared as an entry in the developing "social cosmography" category of printed books. With a few distinct exceptions, these straightforward and positive depictions of artisans and experts in their working environments catalogued the activities around which early modern society revolved.¹⁸⁴ The co-existence of both positive and negative trade imagery during this period is not especially puzzling: condemning fraudulent or foolish practitioners does not necessarily entail condemning the practice itself. Conflicting early modern attitudes towards things as diverse as wealth, leisure and play, religion, and love have already been explored by scholars in a variety of disciplines; similar attitudes towards work appear as no great surprise. Texts such as Sachs' offered a message alongside their iconic images of hard-working and industrious tradesmen, namely a "model of moral behavior"¹⁸⁵ that demanded honest dealings, quality labor, and devotion to God rather than to acquired wealth. Straying from the path of honest work and humble devotion made one a target for the satirists.

¹⁸⁴ One major exception to the "straightforward" and positive depictions of the *Book of* Trades is the entry for the "Jew," evidence of common early modern ethnic and religious prejudices. Benjamin A Rifkin. "Introduction to the Dover Edition." The Book of Trades. (New York: Dover Publications, 1973): xx.

¹⁸⁵ Kettering, "Men at Work," 698.

Alchemists Both "False" and "True"

The favorite target of the satirists was not the distiller, but the gold-maker. Though the term "alchemy" encompasses a wide range of practices, from dye-making to the production of chemical medicines, its best known yet most polemical association was with transmutation and chrysopoeia. It is this aspect—alchemy's relationship to gold that informs many sixteenth-century satires of alchemy and alchemists, most of which center on fraudulent gold-making. As I note above, scenes of distillation and other practical arts of the fire were often positive or neutral, while images of attempted goldmaking are typically characterized by poverty, greed, moral failure, and delusion. This may be due to the broad skepticism in which transmutation specifically was held (even by general supporters of alchemy), or to gold's centrality to the early modern marketplace, and pressing concerns about fraud and currency devaluation.

Images of, and references to, alchemical fraud relating to gold-making were numerous and scathing. Yet such references are absent from Wijck's paintings of alchemical themes. Instead, as I will demonstrate in chapter four, his images offer idealized scholar-artisans, experts, and masters. This indicates that his interest in alchemical themes departs from conventional satirical sources. It also echoes the work of alchemists to legitimize their own practices, and separate their work from fraud. Besides mockery in the arts, there were also harsh real-world consequences to false chrysopoeia, including broken contracts, fines, imprisonment, and death. For practitioners, reputation was an urgent matter. Alchemists responded to claims of false dealings vehemently in their writings, even offering suggestions to their readers for identifying cheats and fools.

Yet their texts also offer a glimpse of the ideal alchemist, whose skill and knowledge were praiseworthy and whose dealings were upright. In the following section, I present these extremes: the stock character of the false alchemist, who appeared in many places, and the idealized alchemist, who existed primarily within the pages of alchemists' own writings. Their striking contrast lends depth to Wijck's choice to omit chrysopoetic work from his painted laboratories.

The relationship between gold-making, fraud, and foolishness is evident in Bruegel's scene, where an alchemist squanders the family's last coin. Their poverty is made visible by the empty purse his wife holds. The hooded fool located beside her may be drawn in part from an earlier scene of the workshop found in Sebastian Brant's famous satire, *The Ship of Fools*. Brant's scathing condemnation of "quite deceptive alchemy" was accompanied in the 1506 edition with a woodcut of alchemists in fool's caps, complete with bells and pointed ears (Figure 44, CHF). The image shows an alchemist stirring a ladle in a basin that rests over a furnace, while the text reveals that this is a scene of trickery rather than of experiment: "Pure gold and silver doth it yield/ But this in ladles was concealed."¹⁸⁶ The alchemist pictured deceives his client by stirring a substance using a hollowed ladle, likely plugged with easily melted wax, in order to secretly add precious metals to an otherwise worthless mixture. Far from a deluded fool himself, this early formulation of a false alchemist uses a distortion of "material knowledge" to commit outright fraud.

¹⁸⁶ Edwin H. Zeydel, translator. *The Ship of Fools by Sebastian Brant*. (New York: Dover Publications, 1962): 392.

This same treachery was described more than a century earlier in the *Canterbury Tales* of Geoffrey Chaucer, whose *Canon Yeoman's Tale* spins a tale of one clergyman deceiving another. In the tale, the yeoman describes a series of demonstrations in which the duplicitous canon tricks a priest by melting pre-existing gold and silver secretly into his alchemical preparations. Once again, this is achieved by means of a hollow stirrer sealed with wax:

> And for a contenaunce in his hand he bar An holwe stikke - taak kep and be war! -In the ende of which an ounce, and namoore, Of silver lemaille put was, as bifore Was in his cole, and stopped with wex weel For to kepe in his lemaille every deel. [*sic*]¹⁸⁷

The yeoman goes on to mock both the deceitful canon—who is paid handsomely for his "knowledge"—and the greed of the delighted priest. But the tale is not a blanket denigration of alchemy and the genuine adept. The yeoman's knowledge of alchemical theory (and indeed, the author's) is obviously vast: the first portion of his recounting describes the use of quicksilver, arsenic, mercury, alkali, and other substances, the means of heating and processing them, as well as the manipulation of "spirits" and "bodies" and the pursuit of the life-giving elixir known as the philosopher's stone. At the tale's end, the yeoman rails against those who deceive *themselves* in their rush to attain gold and glory. The yeoman offers a recipe for the philosopher's stone that he attributes to the thirteenth-century alchemist and physician Arnold of Villanova. He then warns that only the truly enlightened will ever master alchemy's secrets:

¹⁸⁷ Geoffrey Chaucer. *The Works of Geoffrey Chaucer*. Alfred William Pollard, ed. (London: Macmillan and Company Limited, 1913): 256.

Lat no man bisye hym this art for to seche, But if that he th' entencioun and speche Of philosophres understonde kan; And if he do, he is a lewed man. For this science and this konnyng," quod he, "Is of the secree of secrees, pardee. [sic]¹⁸⁸

Gold and greed appear again and again as cornerstones of alchemical satires in period literature. As Tara Nummedal has suggested, framing the alchemist as a dishonest seller of false goods and false knowledge does more than associate the alchemist with centuries-old moral anxieties regarding money and earthly possessions. Such a treatment positions the fraudulent alchemist as a type of fraudulent *merchant*, in an era of emerging commercial economies. Problems of worth, price, and work (in contrast to investment or speculation) and the shifting development of the global marketplace contributed to the unease that colored these early modern satires. These tensions contributed to the growing perception of the false alchemist as a deluded seeker or seller of "get rich quick" schemes and double-dealings.¹⁸⁹

The significance of the alchemist in early modern economic issues was, however, unique: in the thirteenth through fifteenth centuries, many European monarchs had found their treasuries—and their supply of coinage made from precious metals—incapable of keeping up with inflation, and turned to experimentation with debased or diluted coinage for relief. At times these monarchs also turned to alchemists, hoping to multiply their limited resources. In response, competing nations frequently issued edicts against foreign

¹⁸⁸ Geoffrey Chaucer. *The Works of Geoffrey Chaucer*. Alfred William Pollard, ed.

⁽London: Macmillan and Company Limited, 1913): 259.

¹⁸⁹ Nummedal, *Alchemy and Authority*, 59-61.

or itinerant alchemists as well as harsh laws against alchemical counterfeiting, while simultaneously continuing to issue licenses for the practice of alchemy within their own borders exclusively at the command of the crown. The inherent contradictions of banning alchemy for the masses while retaining its services at court speaks more to a desire to *control* alchemical production than to condemn it.¹⁹⁰

Anxieties regarding the practitioners of alchemy and their qualifications were also in play. Alchemy as a professional discipline was in some sense at a disadvantage, in comparison to other crafts and practices that were guided and upheld by guilds, university curriculums, and other organized bodies. Guilds tended to stabilize markets for their members, set professional standards, and provide support to the sick and injured in their ranks. The unfixed and socially mobile position of alchemists could therefore be a drawback. But for some, it also opened alternate—even unusual—pathways to success. Alchemists might gain access to political, economic, and social power through wealthy (often noble) employers. Potential alchemists might be drawn from a wide pool of society and from diverse professions. Physicians, apothecaries, clerics, and tradesmen are all known to have practiced alchemy in some form. The abundance of vernacular alchemical texts—with prefaces addressed to "lay people, men as well as women" or to "alchemists, barbers, apothecaries and households"-indicates the broad reach of alchemy across boundaries of gender, class, and profession.¹⁹¹ As a result, alchemists inhabited an unusually fluid, yet precarious sphere. They were not alone in these social ambiguities:

¹⁹⁰ Ibid: 152.

¹⁹¹ Moran, *Distilling Knowledge*, 55.

doctors, inventors, and other empirics shared the problem of expertise and authority in their own emerging disciplines. In her work on the natural scientists of the Royal Society, Barbara Benedict has referred to these non-guild "protoprofessional classes" as "an amorphous group resented from both above and below."¹⁹² Her recognition of the tensions between non-elite "experts" and the ground they occupied is useful for an understanding of alchemists, who might have emerged in one sphere and risen to occupy another. The potential for abuse in such a system by greedy fortune hunters—in the form of false or nonexistent bona fides, and the uneasy categorization of the alchemist into a professional class—appears to have been at the forefront of many satirists' concerns.

Skepticism regarding the problem of alchemical expertise sometimes centered on alchemists' use of opaque language. The desire of alchemical authors to protect their proprietary knowledge contributed to public perceptions of alchemists as false experts. This anxiety permeates Ben Jonson's comic play *The Alchemist*, first performed in London in 1610 by the King's Men.¹⁹³ Within the play, three con artists—one a servant posing as a sea captain, the second a trickster playing alchemist and soothsayer, and the third a prostitute playing a genteel noblewoman—weave a web of lies that rely on the complex symbolic languages of alchemy. From the outset, it is apparent that their "alchemy" is a fraudulent invocation of alchemical jargon and obscuring language meant to distract and fool—a process of altering appearance rather than substance. The nominal

¹⁹² Barbara M. Benedict. *Curiosity: A Cultural History of Early Modern Inquiry*. (Chicago: University of Chicago Press, 2001): 47.

¹⁹³ Charles Montgomery Hathaway. "Introduction," to Ben Jonson's *The Alchemist*. (New York: Henry Holt and Co, 1903): 12.

alchemist is the wittily named Subtle (in reference both to his machinations and to "subtle bodies," an alchemical term referring to the spirits or natures of substances). In the first act, Subtle is accused, by the false captain Face, of having held a vast number of failed professions, all of them based in trickery:

> FACE: When all your alchemy, and your algebra, Your minerals, vegetals, and animals, Your conjuring, cozening, and your dozen of trades, Could not relieve your corps with so much linen Would make you tinder, but to see a fire; I gave you countenance, credit for your coals.¹⁹⁴

The character of Subtle may have been informed by the real-life exploits of the erstwhile (and repeatedly prosecuted) London doctor, astrologer, magician, and alchemist Simon Forman, well-known during Jonson's lifetime. Forman's illegal practice of medicine gained him the negative attentions of the city's physicians, while his production of love potions and his supposed quest for the philosopher's stone gained him local infamy.¹⁹⁵ Whatever his source, it is apparent that Jonson, like Chaucer before him, wrote with a more than cursory knowledge of alchemy. His inclusion of alchemical terminology and his knowledge of transmutation's underlying principles are evident throughout. In the second act, as Subtle and Face prepare to con a money-hungry knight—the aptly named Sir Mammon—the knight's servant, Surly, accuses the alchemists of false speech. The complex and symbolic language of alchemical treatises, Surly suggests, is little more than window dressing:

SUR. What else are all your terms, Whereon no one of your writers 'grees with other?

¹⁹⁴ Ben Jonson. *The Alchemist.* H.C. Hart, ed. (London: De La More, 1903): 5.

¹⁹⁵ Hathaway, "Introduction," *Ben Jonson's The Alchemist*, 97-99.

Of your elixir, your lac virginis, Your stone, your med'cine, and your chrysosperm, Your sal, your sulphur, and your mercury, Your oil of height, your tree of life, your blood, Your marchesite, your tutie, your magnesia, Your toad, your crow, your dragon, and your panther; Your sun, your moon, your firmament, your adrop, Your lato, azoch, zernich, chibrit, heautarit, And then your red man, and your white woman, With all your broths, your menstrues, and materials, Of piss and egg-shells, women's terms, man's blood, Hair o' the head, burnt clouts, chalk, merds, and clay, Powder of bones, scalings of iron, glass, And worlds of other strange ingredients, Would burst a man to name?

To which Subtle, never at a loss for words, responds:

SUB. Was not all the knowledge Of the Aegyptians writ in mystic symbols? Speak not the scriptures oft in parables? Are not the choicest fables of the poets, That were the fountains and first springs of wisdom, Wrapp'd in perplexed allegories?¹⁹⁶

Intentional obfuscation and misdirection on the part of the fraudulent alchemist is a cornerstone of alchemical satires. Yet despite the obvious construction of these narratives and the broad persona of the "con man" alchemist as a stock type, there is a grain of truth within: the specialized and secretive practices of alchemy could indeed, at times, cause confusion for non-adepts and even among the initiated.

One part of the confusion that surrounded alchemical texts was alchemical writers' adoption of an extensive vocabulary of symbols that represented raw materials, compounds, and processes central to their art. Pictograms and hieroglyphics, as well as

¹⁹⁶ Jonson, *The Alchemist*, 152

astrological signs, were commonly used to represent the seven primary metals (gold, silver, tin, mercury, copper, iron, and lead) and might appear alone or in combination. As Stanton J. Linden has noted, early modern alchemists' adoption of these symbols has been misunderstood in subsequent centuries as having mystical (or mystifying) aims. Yet their symbolic tables are in fact precursors to later forms of scientific notation that now seem familiar and rational.¹⁹⁷ In some cases, the use of these symbols may have served as an effective form of shorthand. Annotations on a copy of one late seventeenth-century text, the *Polygraphice* of William Salmon (CHF, Rare Book Collection), demonstrate the note-taker's familiarity with alchemical signs and the practicality of their use: in multiple annotations, the reader uses the planetary symbol for mercury as a handy replacement for the "philosophical mercury" or "spirit of mercury" that was refined from the raw metal in the laboratory. "Right plain and easy if so much [mercury] be used," one note reads. Another complains: "I wish he had told the way of coloring glass by [mercury] into a gold color."¹⁹⁸ This pragmatic usage in the workshop may also have had a screening effect for non-initiates in the art, for whom this symbolic language would not have been easily accessible.

Keeping precious and even potentially hazardous knowledge out of the hands of non-practitioners appears to have been a concern for many alchemical writers. Professional pride and reputation were at stake, as well as deeper concerns for "truths" and "secrets." The *Libellus de Alchimia*, attributed to the thirteenth-century natural

¹⁹⁷ Linden, Alchemy Reader, 21.

¹⁹⁸ William Salmon. *Polygraphice*. (London: Printed for Thomas Passinger at the Three Bibles and Thomas Sawbridge at the Three Flower de Luces, 1685): 524, 232.

philosopher and theologian Albertus Magnus, warned the aspiring alchemist that "the worker in this art must be silent and secretive... if many know, the secret in no way will be kept, and that when it is divulged, it will be repeated with error."¹⁹⁹ This protective silence was often framed as an "enlightenment" that denied access to the uninitiated. Reading an alchemical text provided surface access to terms and principles, but understanding its metaphorical language was not a given. Elias Ashmole's midseventeenth-century *Theatrum Chemicum Britannicum*, a compendium of the works of John Dee, George Ripley, and other luminaries of British alchemy, framed alchemical opacity in explicitly religious language: "to the Elected Sons of Art; unto you it is given to know the mysteries of the Kingdome of God; but to others in parables, that seeing they might not see, and hearing they might not understand."²⁰⁰ These alchemical "parables" are precisely what Surly complains of in *The Alchemist*, when he angrily decries the hidden meanings behind the "tree of life," "red man," and "white women" of the adepts.

Authors of alchemical texts further warned their hopeful audiences of the possibilities of failure in any alchemical undertakings not equipped with the proper learning, materials, and attitudes. The works of the Pseudo-Geber, late medieval texts linked to the corpus of the eighth-century polymath Jabir ibn Hayyan, stressed the many ways in which a would-be alchemist might fall short of his goals, mainly locating these pitfalls in personal shortcomings. The *Summa perfectionis magisterii* (*Of the Sum of Perfection*) rails against those too stubborn to accept the tenets of alchemical theory,

¹⁹⁹ Linden, Alchemy Reader, 103.

²⁰⁰ Ibid, 223.

those too changeable to stand fast in their beliefs, the "witless" and "common," and finally those "slaves, loving money" whose greed denies them the fruits of true alchemical mastery.²⁰¹ The friar and philosopher Roger Bacon's thirteenth-century *Radix Mundi (The Root of the World)* is even more direct: "If you that are searchers into this science, understand these words and things which we have written, you are happy, yea, thrice happy; if you understood not what we have said, God himself has hidden the thing from you."²⁰² Here a failure of comprehension or mastery lies ultimately with the divine.

Bacon's notion of a practitioner whose results are "corrupted" by impurity, or held back by divine judgment, also appears in sixteenth-century theatre. In Robert Greene's 1589 comic play, *Friar Bacon and Friar Bungay*, Bacon himself appears as an alchemist who fails to achieve his results—not due to intentional deception, but to a moral lapse. Though the play centers on a fictional incident, Bacon's works on art, nature, and the emerging sciences were well known in the sixteenth century, and a number of alchemical tracts attributed (spuriously) to Bacon also circulated under his name during this time (among them the famed *Speculum Alchemiae*). Bacon was also popularly—though not accurately—associated with occultism and magic.²⁰³ Within Greene's play, there is a marked emphasis on gold, as it changes hands and provides temptation, but ultimately it is not plain greed that troubles Bacon. His triumph in the final act is nearly thwarted by his previous use of dark magic and communications with

²⁰¹ Ibid: 82-83.

²⁰² Quoted in Linden, Alchemy Reader, 122.

²⁰³ Lynn Veach Sadler. "Alchemy and Greene's Friar Bacon and Friar Bungay." *Ambix*22, No. 2 (1975): 111-113.

demons: a corruption of "true" alchemy. Here even Bacon, a true adept, falls short of the integrity required for alchemical perfection. As Lynn Veach Sadler writes, "A prerequisite for the attainment of the Philosopher's Stone is that the alchemist himself must be above reproach."²⁰⁴ Only a "purified" Bacon is able to resolve the play's tumultuous politics with a prophetic revelation of the Golden Age to come.

Playwrights, poets, and artists were not the only ones who "exposed" ideas of alchemical fraud or introduced criticisms of fraudulent alchemists to a literate public. Alchemists often referenced alchemical frauds, tricks, and illusions in their writings, typically by warning the reader to choose wisely when seeking the services of an expert. The sixteenth-century German physician and alchemist Heinrich Khunrath, best known for his *Amphitheatrum Sapientiae Aeternae* (*Amphitheater of Eternal Wisdom*), also penned a vernacular treatise with the verbose title, "*Heartfelt warning and admonition from a faithful devotee of the truth to all true enthusiasts of the natural transmutational alchemy, which necessitates close attention because of the roguish tricks of the wicked chymists."²⁰⁵ The text cites no less than forty-six different types of tricks and cheats used by false alchemists, including the hollow stirring rod used in Chaucer's tale, as well as double-bottomed vessels and bogus glassware, and the use of altered raw materials. Clients, the author insists, ought to check an alchemist's bona fides, test the quality of the materials provided with the help of a respectable assayer, and purchase any raw materials*

²⁰⁴ Ibid: 123.

²⁰⁵ "Treuhertzige Wahrnungs-Vermahnung eines Getreuen Liebhabers der Warheit an alle wahre Liebhaber der Naturgemassen Alchymiae Transmutatoriae, dass wegen der Bubischen Handgriffe der betriegerischen Arg-Chymisten gute Affacht vonnothen." Nummedal, Alchemy and Authority, 63.

or workshop goods from a variety of reputable sources. Those so-called alchemists who intended to cheat their victims were, in Khunrath's words, "evil... everyone who sees one should spit at him."²⁰⁶ Another German writer, the charismatic Paracelsian physician Leonhard Thurneisser, took pains in his 1583 Magna Alchymia to distinguish between four distinctive "types" in the pantheon of false alchemists, all with their own characteristics deceptions. The first of these presents as a wealthy and well-dressed individual whose success draws others into the scheme; the second is a poorly dressed vagabond who claims to have fallen on hard times, but who possess a secret that can reverse fortunes. The third and fourth types are variations of the same: both are excessively secretive and will demand increasing amounts of gold and silver and laboratory materials, with which they eventually abscond, leaving the customer high and dry.²⁰⁷ In both texts, the authors' expertise positions them as true authorities in the matter, whose noble crusades for the exposure of fraud lends credence and weight to their own practice of alchemy. This strategy strengthens not only their personal reputations, but the reputation of alchemy as a discipline whose ranks are effectively policed from within. These attacks on fraud were one major way in which alchemists managed to craft a public "persona" for the discipline, one not rooted in satirical representations.²⁰⁸

For alchemists of the early seventeenth century, reputation was a matter of increasing urgency, as a series of spectacular public executions of accused alchemical frauds took place between 1575 and 1606 across the Holy Roman Empire. Nine

²⁰⁶ Ibid: 69.

²⁰⁷ Ibid: 66-67.

²⁰⁸ Ibid: 70-71.

alchemists engaged in service to German-speaking courts were beheaded, burned, hung, or quartered during this period, typically for failing to deliver on agreements made in contracts. Curiously, several of these cases reveal that when alchemists were condemned to die for their failures, facility with the alchemical arts—and alchemy's ultimate viability—was not necessarily the issue at stake. The 1597 hanging of the "runaway" Georg Honauer, an alchemist who unsuccessfully fled the service of Duke Friedrich I, was spurred by the Duke's firm belief that Honauer had withheld his most valuable knowledge, violating a contract which promised otherwise.²⁰⁹ Alchemists then, could die not only for gross incompetence or intentional fraud, but for a failure to deliver on promises whose results were considered altogether possible. Here, alchemy as a discipline or a set of practices appears to have been evaluated independently of the success or failure of a single practitioner. The highly public nature of these executions, and their widespread recitation in print after the fact, put pressure on alchemists to divorce themselves from the failures of their peers and to continue to stress that alchemy was a legitimate and honorable practice.

The counterpoint to the false or failed alchemist was the "ideal" alchemist, another concept explored to its fullest extent in the writings of alchemists. Returning to the corpus of the Pseudo-Geber, we find a passage within the *Summa Perfectionis (Sum of Perfection)* that constructs a thorough picture of the individual the author feels is bestsuited for alchemical work. Soundness of body and mind—in preparation for the physical and mental exertions of the laboratory—is one key aspect. The alchemist must be

²⁰⁹ Ibid: 156.

constant and good-tempered, virtuous, and blessed by God. Vital traits are intelligence and keen perception—yet the author is also quick to promote the values of practicality and industriousness, and a hands-on familiarity with experimental workshop practices. "Art," Pseudo-Geber writes, "is aided by ingenuity and likewise ingenuity by art."²¹⁰ An emphasis on artisanal skills and expert labor also appears in the writings of the physicianalchemist Thurneisser, who takes pains in his Magna Alchymia to describe the smelly, cramped, often dirty and hazardous conditions in which alchemists and their assistants might be expected to work. By cataloguing these dangers, the author highlights the necessary internal qualities of hardiness, dedication, and diligence required to see the work completed. As Thurneisser explains, paired with high morals and devotion to God, as well as vast knowledge of metals, mining and assaying, and alchemical theories, the aspiring alchemist of good character would also be marked by humility, plain words, and simple dress: a perfect contrast to the flashy frauds the author would go on to vilify.²¹¹ In short, the ideal alchemist is one part scholar, immersed in a world of technical study and lofty theoretical concepts, and another part artisan—at home in the laboratory, skilled and sure-handed.

The complex and contradictory attitudes towards alchemy demonstrated by early modern artists and authors are evidence of a continuing fascination with alchemical practices and practitioners. This specific fascination with alchemy overlaps with a mounting interest in empirical investigators and their novel discoveries. Alchemy's ties

²¹⁰ Quoted in Nummedal, Alchemy and Authority, 45.

²¹¹ Nummedal, Alchemy and Authority, 65-66.

with mining, metalworking, color-making, and distillation placed it firmly within the sphere of other recognizable and classifiable trades; but its experimental practices and theories also fundamentally linked alchemy to the investigation of nature, a category whose boundaries were less concrete and continually expanding. While alchemical authors frequently traced the history and origins of their art to ancient authorities—most commonly Aristotle and Plato—in an effort to legitimize their practices, alchemical texts of the sixteenth and seventeenth centuries put forward a wealth of new ideas and theories based on expanding knowledge regarding the mechanics of the world, some of it gained from first-hand observation and experimentation. In addition to workshop traditions and published treatises, learned societies and less formal networks of interested amateurs helped to circulate theoretical and practical knowledge of the emerging sciences. In England, these processes are exemplified by Robert Fludd, George Starkey, and Robert Boyle, all three of whom were practicing experts and major contributors to alchemical publishing between 1600 and 1690; the latter two were members of the Invisible College, an informal London society dedicated to experimentation that anticipated the formation of The Royal Society of London for Promoting Natural Knowledge.²¹²

But curiosity—of the type that led to the pursuit of experiments and the discovery of new or previously limited knowledge—was considered a double-edged sword. The modern configuration of curiosity as a positive virtue was still under development; older models that linked curiosity to insatiable desire, greed, and sin continued to influence

²¹² See William R. Newman and Lawrence M. Principe. *Alchemy Tried in the Fire: Starkey, Boyle, and the Fate of Helmontian Chymistry*. (Chicago: University of Chicago Press, 2002.)

public perceptions of experimental practices. Historically, curiosity was linked by many theologians to the sin of lust, a visual sin in which things seen were things desired. Myths and religious narratives (Pandora's box, Eve's apple, Orpheus's backwards glance) reinforced notions that seeking new information was an inherently dangerous prospect.²¹³ Even beyond a purely moral or religious framework, curiosity might remain suspect. As Neil Kenny writes, "Curiosity could be seen as either... an anti-social or a social activity."²¹⁴ The impulse that linked one to investigate the world might be the same impulse that drove collectors to isolate themselves amongst the objects of their fascination. The curious could create new, useful, and desirable knowledge; or else be driven to folly and fruitless distraction. Critics of enterprises such as the Royal Society put forward a vision of their endeavors as follies driven by pride and a frivolous obsession with novelty for the sake of novelty, of overabundant curiosity at work. Thomas Shadwell's 1676 comic play, The Virtuoso, lampooned the members of the Royal Society, even their famous air-pump experiments. The tale centers on the wealthy but hopelessly foolish Sir Nicholas Gimcrack, who allows a succession of scientific frauds and fakes to delude him. Like Johnson's The Alchemist of sixty years earlier, Shadwell delivers a moral lesson against "the cunning man who preys on learned fools."²¹⁵ The charges that past satires had leveled at the alchemists—greed and duplicity,

²¹³ See Peter Parshall. "Introduction: art and curiosity," *Word and Image* 11, No. 4 (1995): 327-331.

²¹⁴ Neil Kenny. *The Uses of Curiosity in Early Modern France and Germany*. (Oxford: Oxford University Press, 2004): 181.

²¹⁵ Barbara M. Benedict. *Curiosity: A Cultural History of Early Modern Inquiry*. (Chicago: University of Chicago Press, 2001): 46.

obtuse language veiling concealed ignorance, tricks and sleights with bogus equipment are much the same ones laid at the feet of the practitioners of the "new" science.

Public attitudes towards alchemy were mixed, and underwent numerous shifts over the course of the sixteenth and seventeenth centuries. Beyond narratives of trickery and trade, moral debates also surrounded the transformative art, at the root of which was often an uncertainty regarding whose province transformation actually was. Did transformation and transmutation belong to God alone, or was it humankind's right to imitate or even usurp "natural" processes? Could man achieve transmutation without the help of greater powers—either divine or demonic? This anxiety permeated the text of the Historia von D. Johann Fausten, an anonymous work that first appeared at the Frankfurt book fair in 1587. The book was among the first prose novels written in German, and told the tale of a brilliant but corrupt student who engages the help of the devil to gain knowledge, wealth, and power, including the ability to transmute gold. At the end of his bargain, Faust's damned soul is dragged to hell. While the novel was a work of fiction, a historical figure of similar name was thought to have lived in Saxony, and was mentioned negatively several times by early sixteenth-century Lutheran reformers, including Philip Melanchthon.²¹⁶ Scenes within the anonymous novel narrate battles between lions and dragons, the appearance of a man cloaked in fire with emanating rays, and the devil taking the form of a gryphon—all reminiscent of the alchemical metaphors commonly used in theoretical alchemical texts, and which the satirists cuttingly imitated. The result

²¹⁶ Helen Watanabe O'Kelly. "Saxony, Alchemy and Dr. Faustus." *The Golden Egg.* (Glienicke/Berlin, Cambridge: Galda & Wilch Verlag, 2002): 31-32.

of these startling tableaus is Faust's attainment of transmuted gold and silver. The novel implies this is an act of witchcraft that violates the authority of nature. As Helen Watanabe O'Kelly concludes, "The narrator of the *Historia* is convinced that these processes can only be the work of the devil."²¹⁷

The Faust story is closely tied to the German territories and the cradle of Lutheran reform, and might lead us to conclude that alchemy was an art condemned by the faithful. Yet Martin Luther praised alchemy on multiple occasions, for both the usefulness of the art and the language with which alchemists veiled and revealed their "truths." In his so-called *Table Talk*, a book of ruminations and informal essays first published in 1566, Luther reveals a close familiarity with both alchemical realities—laboratory processes and methods—and alchemical metaphor, when he states:

The science of alchymy I like very well, and indeed, 'tis the philosophy of the ancients. I like it not only for the profits it brings in melting metals, in decocting, preparing, extracting, and distilling herbs, roots; I like it also for the sake of the allegory and secret signification, which is exceedingly fine... for, as in a furnace the fire extracts and separates from a substance the other portions, and carries upward the spirit, the life, the sap... even so God, at the day of judgment, will separate all things through fire.²¹⁸

Luther's reconciliation of alchemical and Biblical metaphor stands in counterpoint to the story of Faust, and confirms that religious viewpoints towards alchemy and transmutation could indeed vary widely.

Fraudulent (or heretical) alchemists were popular targets in print, theatre, and art,

while idealized alchemists were primarily found in the writings of alchemists or

²¹⁷ Ibid: 36.

²¹⁸ Quoted in Linden, *Alchemy Reader*, 22.

alchemical sympathizers. It was gold-making above all other alchemical practices that was most closely associated with deceit, greed, and fraud; it is not surprising that goldmaking was so often discussed and disputed in the arts as well as in life. For the alchemical community, it seems, failed distillation was dispiriting; failed gold-making, dangerous. The *Chymische Hochzeit Christiani Rosencreutz* (*Chemical Wedding of Christian Rosenkreutz*), published in 1616 and likely penned by the Lutheran utopianist Johann Valentin Andreae, put forward an allegorical "judgment" of false alchemists by category—first, those fools who deceived only themselves, and second and more terribly, those who worked knowingly to deceive others—concluding that the latter "deserve to be sundered from decent folk and severely punished."²¹⁹ The complicated, at times ambivalent relationship between the alchemical community and the practice of metallic transmutation was echoed in the reception of alchemy throughout a broader public: the demand for alchemical products such as dyes and medicines boomed, even as skeptics decried the folly of seeking riches at the bottom of a crucible.

Given the ubiquity of chrysopoetic themes in the arts, Wijck's omission of goldmaking and metallurgical work from his paintings seems to confirm that for him, alchemy was not defined by its potential relationship to greed and fraud. Unlike popular literature, plays, and—as I will now demonstrate—the paintings of his peers, chrysopoetic labor is absent from Wijck's laboratories. Instead, alchemy is represented by distillation, scholarly work, and the making of other alchemical products, such as pigments and medicines. In the following section, I explore alchemy in the paintings of

²¹⁹ Quoted in Nummedal, Alchemy and Authority, 162.

Wijck's contemporaries in Haarlem and beyond, establishing their use of satirical themes, or their pointed departures, in order to better contextualize his unusual choices.

Painted Alchemists in the Seventeenth-Century Netherlands

By Wijck's time, conventions for the representation of alchemy were wellestablished. Fires and crucibles signaled attempts at gold-making, while hungry wives and children suggested the impossibility of alchemical success. Yet the anxieties regarding alchemical *fraud* discussed above were represented in Dutch and Flemish painting much less often than concerns regarding alchemical *folly*. Seventeenth-century artists who borrowed elements from Bruegel and the satirical pictorial tradition typically did so selectively. Rather than taking from Bruegel the fraud in the robes of a false scholar, or the mocking fool in a jester's cap, most artists adopted only the vignettes of the alchemist and his family. This choice provided a subject of greater pathos and emotional immediacy, in keeping with broader trends in Dutch art that increasingly eschewed overt didactic approaches in favor of more seemingly naturalistic constructions.

Yet a handful of painters—including Wijck, Teniers, and Bega—chose to create unusual representations of alchemy that challenged it the Bruegelian pictorial tradition. Their images offer interpretations of alchemy centered on its utility and economic potential (Teniers), or else explore its status as an artisanal and/or experimental discipline (Bega and Wijck). Wijck and Teniers typically present alchemy in a positive, virtuous light, while Bega's paintings capture some of the period's ambivalence towards

alchemical practices. All three looked beyond Bruegel in developing subtler visions of alchemical work.

In the following section, I present the contrast between seventeenth-century alchemical paintings developed largely from Bruegel's themes, and those diverging into a new and thematically modern mold. The subject of alchemy was one that painters often experimented with, though few painted it as frequently as Wijck or Teniers. The choice of many artists to produce essentially conventional alchemical scenes provides a useful counterpoint for the artistic departures of a few. Likewise, Teniers and Bega provide essential contexts for Wijck's development of an artistic identity as a painter of alchemists. Teniers' production of a self-portrait as an alchemist, in addition to his many alchemical scenes, was likely connected to his role within a cosmopolitan (and scientifically curious) court culture. By contrast, Bega's encounters with alchemy probably took place in the workshops of his father and uncle—both of whom were metalsmiths versed in the arts of the fire. Wijck was intimately connected to artisanal practices in his home city of Haarlem, but also traveled within elite court circles in England, where alchemical experimentation flowered. This section will set the stage for a deeper understanding of his turn to alchemy as a means for shaping an artistic identity.

Positive, negative, and even ambivalent images of alchemy produced during the seventeenth century do share at least one characteristic: they model a realism that extends not only to light and shadow, form and surface, but also to the equipment and processes artists elected to show. Distillation, assaying, transmutation, and other arts utilized the tools that painters described with care. Even the most foolish and self-deluding alchemist

were sometimes presented in the midst of distillation apparatuses or metalworking implements that mirror the period's real technology. As noted, the alchemists' hungry, distressed families also take on a more human quality than their comic predecessors. The labels that once identified "Dr. Loose-head" and "mud-wisdom" in Bruegel's scene would look out of place in many of these later works, indicating a shift in tone, and potentially a change in the desires of audiences for less openly didactic messaging. But the messaging does remain. Taken as a whole, these scenes model distinctly varied cultural attitudes towards alchemy that ranged from respectful curiosity to outright mockery. Painted as a peasant, the alchemist dreaming of gold becomes foolish. Painted as a craftsman in a busy workshop, he becomes the subject of admiration and interest.

The "seeming" realism of these scenes is key: painters neither perfectly replicated the world around them, nor did they fully obscure it. During the first half of the twentieth century, many interpretations of Dutch art echoed Eugène Fromentin's view of its painters as "transcribers" of the everyday world. Fromentin proposed a view of Dutch art as a window of life, a mode that was purely naturalistic and visual. A correction to this approach was put forward by Eddy de Jongh and other art historians during the 1960s and 1970s. De Jongh argued that these seemingly naturalistic pictures were actually encoded. "Reading" a painting was therefore an act of interpretation that connected pictures to emblem-books, poems, plays, advice manuals, and other textual and cultural sources. In turn this view was later challenged by Svetlana Alpers, who suggested a re-focusing on the painting as object, particularly regarding its role as a maker of meaning rather than a receptacle for prior knowledge. Dutch paintings' emphasis on perception, optical effects,

and visualization was revived, not as a simplistic return to "naturalism," but as an acknowledgment of artists' sophistication regarding their medium and its shaping of sight.²²⁰ The naturalistic appearance of Dutch and Flemish pictures has undoubtedly contributed to the controversy over their reception. Their descriptions of surfaces, textures, light, and other ephemeral effects correspond to period art theorists' championing of the study of life, indicating the primacy of depicting the natural world. Yet paintings also carry (and shape) social values distinctive to the culture in which they were produced. Mariet Westermann, in her study of the comic painter Jan Steen, acknowledges the pleasures of his pictures, yet also highlights their "overburdened" quality as bearers of social values, morals, and cultural and textual references. Likewise, they can also be understood as exercises in wit, play, and experiment.²²¹

Wit and experiment are central to Adriaen van de Venne's 1630 image of an alchemist at the fire, titled *Rijcke-Armoede* (*Rich Poverty*). Painted in sepia-toned monochrome, it demonstrates a masterful handling of light and shadow (Figure 45, CHF). However, Van de Venne's use of *brunaille* for such a humble subject is also an intentional play with tone that adds a witty dimension to the scene. Use of grisaille or *brunaille* palettes had evolved from the decoration of the exterior wings of multi-part altarpieces, and were originally employed in the depiction of "elevated" subject matter. Connoisseurs appreciated the special skill of artists working in these limited palettes, and

²²⁰ Mariet Westermann. "Taking Dutch Art Seriously: Now and Next?" *Studies in the History of Art 74, Symposium Papers LI: Dialogues in Art History, from Mesopotamian to Modern: Readings for a New Century* (2009): 258-260.

²²¹ Mariet Westermann. *The Amusements of Jan Steen: Comic Painting in the Seventeenth Century*. (Zwolle: Waanders Publishers, 1997): 9-14.

Van de Venne spent the majority of his life working for an elite and cultured clientele in the Dutch Republic's capital at The Hague. His use of a limited palette emphasized his tonal mastery and virtuosity in painting, while the evident irony embodied in works such as *Rijcke-Armoede*—a specialized and sophisticated method utilized for a "low," satirical subject—added a clever and humorous quality to his compositions.²²²

The title of "rich poverty" may imply that the alchemist, shown working with crucible and tongs, is a foolish man whose work with gold ironically amasses no wealth. Yet other elements of the painting suggest the possibility of alternate interpretations. Though shown in humble circumstances, the alchemist's equipment is specialized and portrayed with a degree of accuracy. At right, the bottom vessel or *curcurbit* topped with a long-stemmed alembic is of a type that frequently appeared in the illustrations of alchemical treatises on distillation and vaporization.²²³ Van de Venne's broad education and facility with Latin, and his involvement with the family's successful publishing business,²²⁴ open the question of whether or not he would have encountered alchemical treatises or theories first-hand or in print, as he moved within intellectual and courtly circles. Thus the alchemist's "rich poverty" might also relate to a wealth of knowledge or experimental experience that is undervalued, or has simply not yet yielded a return. Such a common professional complaint—undervalued labor and skill—would not be unique to alchemy, and might offer viewers a point of sympathy for the painting's subject.

²²² Franits, *Dutch Seventeenth-Century Genre Painting*, 88.

²²³ Principe and De Witt, *Transmutations*, 17.

²²⁴ Franits, *Dutch Seventeenth-Century Genre Painting*, 87-88.

Other objects within *Rijcke-Armoede* are drawn directly from a different artistic source: Bruegel's satirical Alchemist of a century prior. The oversized distillation apparatus to the left rear of the picture is of an unmanageable and unlikely size, and also appears beside the hearth in Bruegel's print. More borrowed elements—including the makeshift table resting on a barrel, and the open-handed gesture of the alchemist's wife make clear Van de Venne's use of Bruegel as a model.²²⁵ Yet Van de Venne has transformed Bruegel's overt didacticism into a more intimate scene focusing on the anguish of the family and the single-minded work of their patriarch. Gone is the scholarly interlocutor who appears as a fraudulent overseer and manipulator. Also absent is the jester-like fool. Outside forces and influences have been reduced, to emphasize the poor alchemist's own personal myopia—and potentially to encourage pathos and sympathy. Van de Venne's weathered alchemist, surrounded by broken equipment and an anguished family that begs his attention, seems to see only the crucible and tongs that he carefully holds. Like the materials consumed in the flames before him, the alchemist is consumed by his efforts, no matter how fruitless they may be.

The Haarlem painter Adriaen van Ostade, Wijck's teacher, painted at least one alchemical scene that echoes the tone of Van de Venne's. Van Ostade's 1661 *An Alchemist* (Figure 46, National Gallery, London) centers on a hardworking but ultimately failed alchemist whose efforts have so far yielded nothing, and whose pathetic situation invites the viewer's sympathy as well as censure. The humble pauper-alchemist, in ragged, stained clothes and a peasant's plain leather cap, heats a crucible over the hearth.

²²⁵ Principe and De Witt, *Transmutations*, 18.

Only one text is visible among the piles of cracked vessels and debris that surround him. This solitary, neglected book—like the absence of texts altogether in Van de Venne's picture, above—suggests that the alchemist has little theoretical or textual knowledge to draw on. While it should be noted that the absence or neglect of texts does not necessarily indicate a lack of skill in the real-life practices of materials-based workshop or laboratory traditions, as mentioned above, the presence and absence of texts affects the interpretation of the alchemist's social standing, education, and intellectual acuity. But like Van de Venne's *Rijcke-Armoede*, Van Ostade's work shows signs of its appeal to an erudite audience, not through the use of a sophisticated *brunaille* palette, but through his inclusion of a fragment of Latin on a scrap of paper seen below the alchemist's stool. Clearly legible, the torn page states "oleum et operam perdis" ("oil and work is wasted"). This motto is both a literal reference to the burning of oil lamps, and a more poetic reminder of fruitless work in which one loses both "time and trouble."²²⁶ The quote's relevance is made apparent by the state of the barn-like interior that the alchemist shares with his family. The phrase echoes a proverb found in the letters of Cicero, and also appears in the work of the Roman poet Plautus. But a more contemporaneous use of the same quote can be found in the De Re Metallica (On the Nature of Metals) of Georgius Agricola, a 1556 treatise on mining, assaying, and theories of metallic growth.²²⁷ Though Agricola's text is openly skeptical of chrysopoetic alchemy and condemns fraudulent

²²⁶ Corbett, "Convention and Change," 256.

²²⁷ Christopher Brown, *The National Gallery Lends Dutch Genre Painting: an exhibition organised in conjunction with the Arts Council of Great Britain.* (London: The National Gallery, 1978): 22.

alchemists, he does not dismiss the skills of alchemical workers in the separation and purification of metallic ores, nor the importance of past alchemical texts in generating and expanding knowledge of minerals. Agricola's text also explores certain theories of metallic generation within the earth's crust to which many alchemical writers also subscribed.²²⁸ Agricola's use of *oleum et operam perdis* within the *De Re Metallica* refers to those miners who hope to succeed in their craft without a prior grounding in the theories of natural philosophy that might lend meaning and context to their observations.²²⁹ This use of the phrase provides a witty and ironic contrast to Van Ostade's alchemist, who is seen to proceed in his questing without the guidance of textual expertise.

Other elements in Van Ostade's *An Alchemist* reinforce a reading of this ragged alchemist as one whose endeavors are doomed to failure. At left, far to the rear of the humble interior, the alchemist's wife can be seen wiping the bottom of her youngest child while two more play close by. This scatological act appears as a sign of mockery in numerous other Dutch scenes of domestic life that satirize or condemn other nearby behaviors. In Gerrit Dou's 1652 *The Quack* (Figure 47, Museum Boijmans, Rotterdam), a mother cleans her child beneath a makeshift stage, upon which a fraudulent physician attempts to woo a crowd into trying his wares. The juxtaposition of literal excrement with the execrable lies of the quack provide the scene's comic relief and moral lesson. The popularity of this satirical motif may stem in part from Johan de Brune's 1624

²²⁸ Nummedal, Alchemy and Authority, 35.

²²⁹ Georgius Agricola. *De re metallica*. Translated from the first Latin edition of 1556 by Herbert and Lou Hoover. (New York: Dover Publications, 1950): 5.

Emblemata. There, an image of a mother wiping her child's soiled bottom is accompanied by the dour message, "what is life, but shit and stink?"²³⁰ Van Ostade's alchemist wastes both time and effort, and the presence of actual waste comments directly on his harmful and foolish actions.

Another painter of the Haarlem school, Richard Brakenburgh, depicts his alchemist as an irresponsible leader of a teeming household in An Alchemist's Workshop with Children Playing (Figure 48, CHF). Brakenburgh, who is thought to have spent time in Van Ostade's studio,²³¹ shows the squalor in which the alchemist's seven children play. Their untidy dress and unruly behavior lends pathos to the appeal of the alchemist's wife. Her gesture towards the boy playing with a pair of bellows on the floor suggests that the son emulates the father—as a fool whose labors gain nothing, the alchemist now has guided his own children onto the same path. As Lawrence Principe has noted, with this vignette of childish mimicry, Brakenburgh's composition has simultaneously quoted and transformed Bruegel's by replacing the jester-hooded fool with the alchemist's own son.²³² The sentimental, heavily moralizing tone of the work is subtly underscored by the presence of devotional objects placed in the domestic environment, including a panel painting of the Madonna and Child and a crucifix placed on a shelf. The pairing of the irresponsible alchemist-father with the Christian ideal of motherhood and family makes clear his moral failings as a parent and provider.²³³

²³⁰ Simon Schama. *The Embarrassment of Riches*. (New York: Knopf, 1987): 481-482.
²³¹ Irene van Thiel-Stroman. "Richard Brakenburgh." *Painting in Haarlem*, *1500-1800*:

the Collections of the Frans Hals Museum. (Ghent: Ludion Ghent, 2006): 115.

²³² Principe, Secrets of Alchemy, 185.

²³³ Principe and De Witt, *Transmutations*, 19.

The Dutch painters of alchemical scenes described above—Van de Venne, Van Ostade, and Brakenburgh—were contemporaries or close peers of Thomas Wijck. Van Ostade was Wijck's teacher, while Brakenburgh was a fellow pupil in the same studio. With the exception of Van de Venne, these artists were also long-term residents of Haarlem. Other Haarlem painters who produced alchemical scenes include Hendrick Heerschop, whose The Alchemist's Experiment Takes Fire (Figure 49, CHF) shows a scene of experiment gone wrong, accompanied by the familiar, vulgar sight of a mother wiping a child's bottom. The alchemist's shocked expression and the flying fragments of glass produce a primarily comedic image that provokes laughter more than moral outrage. Egbert van Heemskerck the Elder, born in Haarlem and a member of the guild there after 1664,²³⁴ produced images of alchemists in chaotically cluttered workshops, including his Alchemist in His Study (Figure 50, CHF). Alchemy was evidently a popular subject for painting in Haarlem, though the approaches of painters differed considerably. All of the above scenes drew heavily on the pictorial tradition headed by Bruegel, yet they transform his motifs to offer scenes of greater pathos, sympathy, naturalistic emotion, or comedy.

To the south, Flemish painters also made use of Bruegel as a starting point for alchemical scenes. Yet once again, most artists elected to borrow and transform rather than directly imitate.²³⁵ The Flemish painter Matthias van Helmont produced several

²³⁴ Irene van Thiel-Stroman. "Egbert Jaspersz van Heemskerck I." *Painting in Haarlem 1500-1850: The Collection of the Frans Hals Museum*. (Ghent: Ludion Ghent, 2006): 195-196, 349.

²³⁵ Bruegel's impact on the arts of the Southern Netherlands can hardly be overstated. For Bruegel's impact on the proliferation of genre painting, see Larry Silver's *Peasant Scenes*

scenes of alchemists that appear distracted and foolish, their laboratories in states of exaggerated disarray and chaos. In Van Helmont's An Alchemist at Work (Figure 51, CHF), the alchemist's appearance closely resembles Bruegel's pauper-alchemist in the distorted physiognomies of his elongated nose and sharpened chin. He likewise wears humble clothing, a simple tunic and vest tied at the waist. The barn-like atmosphere of the alchemist's workroom is enhanced by the mess of raw materials and broken objects that surround him, including a pile of straw in which a large dog curls and the clumsy half-barrel that the alchemist employs as a chair. Van Helmont has shifted Bruegel's deluded alchemist into a figure of full-blown bewilderment: his alchemist reaches under his cap to scratch his head with an open-mouthed expression of total incomprehension. Faint smoke from an untended fire rises to the rear of the picture, but the alchemist does not seem to notice. As he contemplates a glass vial of liquid, the alchemist's many scattered books appear to offer no help. The presence or absence of books in alchemical pictures of this type provides another means by which to analyze the representation of the alchemist. As Jan Bialostocki has noted, the inclusion of books and manuscripts within early modern images of scholars and readers does not always signal education, wisdom, or scholarly erudition. Rather, the behavior of the reader in concert with the presence of books offers the viewer a clue as to their signification: abundant texts paired with foolish readers may in fact signal the lack of wisdom or learning, an over-reliance on dogmatic text over critical thought, understood as a gap between *reading* and *knowing* that no

and Landscapes: the Rise of Pictorial Genres in the Antwerp Art Market. (Philadelphia: University of Pennsylvania Press, 2006.)

amount of written words could bridge.²³⁶ This directly parallels the warnings of alchemical writers such as Ashmole, who warned his readers that while many might aspire to alchemy, most would remain among the un-elect who "seeing… might not see, and hearing… might not understand."²³⁷ Though Van Helmont's alchemist has abundant resources from which to draw upon, it appears his conclusions will remain empty.

A second painting by Van Helmont, *An Alchemist at Work* (Figure 52, CHF) shows a bearded alchemist seated before a hearth. He scratches his head and peers closely at the book before him with an air of mild irritation. Perhaps the secrets of the "great work" elude him, or else he has become exhausted by the often grueling, mentally and physically taxing, smoke-filled drudgery of experimental pursuits to which alchemical authors often referred.²³⁸ Broken pieces of crockery lie scattered on the floor, and no fire warms the hearth. For the moment, the fire that drives industry or inquiry remains unlit. Tendrils of loose straw also weave between the objects on the floor—this is most likely an iconographic indicator of the alchemist's folly, the signal of a fruitless effort and a worthless result. The worthlessness of straw or chaff was a commonplace expression by this time; centuries earlier the theologian Thomas Aquinas had derided his own writings as "so much chaff," while Martin Luther refused the authority of the New Testament Epistle of Saint James by calling it a "strawy" episode. Straw also might be seen to carry a harsher meaning—frequent Biblical references to wheat and chaff linked virtuous souls

²³⁶ Jan Bialostocki, "Books of Wisdom," in *The Message of Images*. (Vienna: Irsa, 1988): 42-63.

²³⁷ Quoted in Linden, *Alchemy Reader*, 223.

²³⁸ Nummedal, *Alchemy and Authority*, 65-66.

to wheat and sinners to straw. The gathering of wheat and burning of straw was therefore understood as a reference to judgment and damnation.²³⁹ Van Helmont's images of alchemy pass a judgment not unlike Brakenburgh's: in both *An Alchemist at Work* and *An Alchemist's Workshop with Children Playing*, the alchemist's failure is not only financial or theoretical, but social and moral.

While Van Helmont's alchemical scenes continued to draw on the pictorial tradition helmed by Bruegel, the most prolific Flemish painter of alchemical scenes— David Teniers the Younger— produced works that appear to align more closely with the pictorial tradition formed by Stradanus. Teniers' numerous images of the laboratory show alchemists as large-scale workshop leaders and successful experts. His highly positive inclinations towards alchemy are also evidenced by his late self-portrait in the guise of an alchemist (Figure 53, Alte Pinakothek, Munich).²⁴⁰ The artist shows himself as a bearded, elderly man with an alert expression, who contemplates a small glass vial. Behind him is a busy workshop resembling those seen in his many alchemical paintings. It is likely that Teniers was introduced to alchemy in his career at court within elite, educated circles, where alchemical theories and experiments held prestige. His works connect alchemy not only with experiment and economic productivity, but with deeper concepts of imitation, artistry, and creative genius.

²³⁹ Marjorie O'Rourke Boyle, "Chaff: Thomas Aquinas's Repudiation of His Opera Omnia." *New Literary History* 28, No. 2 (1997): 383-399.

²⁴⁰ The work is signed and dated to 1680. Franz V. Reber. *Catalogue of the Paintings in the Old Pinakothek, Munich*. Translated by Joseph Thacher Clarke. (Munich: Knorr & Hirth, 1890): 181.

Teniers, who was likely trained by his father, is documented as an independent master by 1632. He enjoyed close friendships with Peter Paul Rubens and the Bruegel family, most notably Jan Bruegel I, whose daughter Anna he married in 1637. Teniers headed a sizeable workshop and produced paintings both for the thriving Antwerp art market, as well as for a number of royal patrons. By 1647, Teniers was employed in the service of the Archduke Leopold Wilhelm in Brussels.²⁴¹ The majority of his alchemical works date from this period through the 1680s. Demand for Teniers' alchemical pictures appears to have been high—more than three hundred surviving works attest to the popularity of this particular theme.²⁴²

Leopold's older first cousin, the Holy Roman Emperor Rudolf II, was widely famed for his alchemical obsessions and his keeping of a laboratory for personal experiments. Rudolf was a famed patron of both natural philosophy and art, who supported Tycho Brahe and Johannes Kepler as well as the experimental painters Giuseppe Arcimboldo and Bartholomeus Spranger.²⁴³ Leopold, too, was a passionate patron of the arts and a voracious collector, but he was also recognized as a patron by prominent figures within the natural philosophical and experimental communities. The 1650 *Musurgia Universalis (Universal Music)*, a text that compared the world's structure and organization to musical harmonies, penned by the polymath and scholar of alchemy Athanasius Kircher, was dedicated to Leopold. A dedication to Leopold also appears

²⁴¹ Jane P. Davidson, *David Teniers the Younger*. (Boulder: Westview Press, 1979): 3-5.
²⁴² Ibid: 38.

²⁴³ For a more complete look at Rudolf's numerous pursuits in the natural sciences (and the occult), see Peter Marshall. *The Magic Circle of Rudolf II: Alchemy and Astrology in Renaissance Prague*. (New York: Bloomsbury, 2009).

within Kircher's *Eygptian Oedipus*, an encyclopedic volume on the history and esoteric knowledge of ancient Egypt, which included references to alchemy's mythical founder, Hermes Trismegestus.²⁴⁴ Like Stradanus, who created an image of his patron Francesco I, Grand Duke of Tuscany, in the company of his court alchemist, Teniers was likely introduced to alchemy in a cosmopolitan court environment by patrons whose personal interests encompassed both alchemy and art. It may be that Teniers' prominent role within a courtly culture, where alchemical ideas so frequently circulated, contributed to his evident fascination with alchemical work, his witty and sophisticated play with ideas of artistic and alchemical imitation, and his representations of alchemists as serious, scholarly men.

Teniers' *Interior of a Laboratory with an Alchemist* (Figure 54, CHF) shows a spacious room equipped with two large hearths, over which hoods and chimneys direct the smoke of experiments in progress. In the background, two assistants fill and examine small glass vials. At the foreground, the alchemist pauses with bellows in hand while tending to a small crucible over a pile of hot coals. No less than three long-necked distillation apparatuses surround the alchemist. At his feet, a pile of books—one open for reference—sit scattered amongst other implements, such as a small coal shovel and various glass vessels. A large grinding wheel and an anvil at left suggest metalwork and other physical tasks. At the foreground, a wax candle melted to a nub may be a conventional sign of time's passage, or a comment on diligence: a worker "burning"

²⁴⁴ Paula Findlen. *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy.* (Oakland: University of California Press, 1994): 383-384.

through the night. The hourglass nearby may likewise evoke passing time, but it was also used for monitoring experimental stages. The master himself gazes down at the small dog and overturned coals—and the tiny mouse who climbs between them—with an expression of thoughtful concern. This distracted alchemist, turning momentarily from the work at hand, was a trademark of many of Teniers' alchemical pictures, and may in fact be directly drawn from his earlier images of St. Anthony. Teniers' images of St. Anthony disrupted by demons in his meditations may in turn have been a type drawn from Hieronymous Bosch's iconic *Wayfarer* (Figure 55, Museum Boijmans, Rotterdam).²⁴⁵ In Bosch's image, a humble traveler looks over his shoulder at a snarling dog, allowing himself to be distracted by the cares of the world and turning him from the upward path of "virtue" at right. Teniers' adoption of this motif in his alchemical paintings—and the prominent positioning of the grindstone—may represent a gentle admonishment against distraction and towards diligence.

Yet overall, Teniers' picture seems to emphasize the productivity of the laboratory and its inhabitants. The alchemist's plain and slightly disheveled appearance his top buttons undone, his fine robe loosely tucked into his belt, and his simple white worker's cap—may be a sign of his complex mental labor and imaginative capacities.²⁴⁶ The large shop shows signs of ongoing work, including an assistant at rear with a mortar and pestle, and a half-emptied basket of charcoal. While this scene lacks the bustle of

²⁴⁵ Principe and De Witt, *Transmutations*, 16.

²⁴⁶ Rembrant's "coarse, careless" appearance in self-portraits was discussed by contemporaries as evidence of his total immersion in the studio. H. Perry Chapman. *Rembrandt's Self-Portraits: A Study in Seventeenth-Century Identity.* (Princeton: Princeton University Press, 1990): 96-97.

Stradanus's *Distillatio*, the size and variety of the workshop's equipment emphasizes its commercial potential. Like Stradanus's authoritative distiller, Teniers' alchemist is no peasant, but the head of a complex enterprise that employs multiple assistants. The distinction between his dress and the rougher clothes of his helpers reinforces his authority and success as a master. Other similarities between print and painting include Teniers' prominent placement of books alongside equipment: as noted in the beginning of this chapter, such pairings emphasize the established theoretical and textual aspect of alchemical work as well as developing experimental aspects. Despite differences in composition and action, Teniers' overall formulation of alchemy aligns closely with that of Stradanus. Teniers' rejection of the foolish persona popularized by Bruegel indicates that he may have had an alternative source to draw from, and Stradanus offers the most likely possibility.

Teniers also produced a number of openly satirical images that played with notions of alchemy, art, and imitation. An eighteenth-century French print by the engraver Pierre Francois Basan, *Le Plaisir des Fous* (Figure 56, CHF) reproduces a lost painting of a monkey-alchemist tending an experiment over a hearth. Though the little workshop seems orderly and well-stocked, the animal-alchemist cuts a ridiculous figure in a lace ruff and a gaudily plumed hat. The absurd imagery might suggest the foolishness of alchemical pursuits. Yet alchemy was not the only art that Teniers mocked in this manner—other *singeries* depicted sculpting and painting monkeys, ape-artists who wield chisel and brush.²⁴⁷ The conceit that these latter images evoke, man's attempted "aping"

²⁴⁷ Davidson, David Teniers the Younger, 40.

of nature,²⁴⁸ is also highly relevant to alchemy: an art that famously performs its own imitations. Rather than a broad condemnation of alchemy or a jab at its practitioners, Teniers may have included alchemy amongst his other "apes of nature" as a comment on alchemy's goals of purifying, perfecting, or surpassing the products of the natural world, a goal as high and noble as it is potentially dangerous. In this light, the mockery of Teniers' *singeries* seem gently self-lampooning rather than derogatory.

Teniers' *Self-Portrait as an Alchemist* (Figure 53, Alte Pinakothek, Munich) is especially resonant in light of his *singeries*, as it connects directly to ideas of imitation and creation. His fine, fur-trimmed robe and cap, the chain visible at the neck of his robe, and the coins scattered on the table top, all speak to the success Teniers enjoyed in the second half of his life, through the patronage of Archduke Leopold Wilhelm and his successor, Don Juan José of Austria.²⁴⁹ Behind a curtain pulled to one side, in a laboratory similar to the one that appears in *Alchemist with Book and Crucible*, a trio of assistants tends a fire and examines another stoppered glass vial. Teniers' choice to represent himself as an alchemist may recall for his viewers the numerous alchemical pictures produced by his workshop, and the popularity they enjoyed in the marketplace. Yet it also speaks to the links between art and alchemy that his *singeries* evoke—the basic sympathies of two disciplines that explored and mimicked the workings of the natural world in pursuit of perfection. In the image of an alchemist, Teniers evokes the skillful imitations of nature that he performs as an artist, while as an artist, Teniers

²⁴⁸ Principe and De Witt, *Transmutations*, 13.

²⁴⁹ Davidson, *David Teniers the Younger*, 29.

transforms his materials and himself into a polished final product. Teniers' understanding of alchemical theories and materials may have emerged organically from his knowledge of experimental workshop processes and the use of alchemically produced pigments²⁵⁰— a point of alchemical engagement for artists that I will explore in depth in the following chapters—but his time in the courts of Leopold and Don Juan offer a possible alternative. Alchemy's presence and influence in European courts, particularly in Hapsburg courts, many within German and Flemish territories, is well-documented. Alchemy represented more than an intellectual fascination for these rulers: the technologies of alchemy, and their potential to reinvigorate flagging wartime economies, added urgency to more theoretical interests.²⁵¹

While Teniers' interest in alchemy may have come from exposure to alchemical ideas in elite circles, it is also closely connected to his work as an artist. This connection also seems evident in the life and works of Cornelis Bega. Born and trained in Haarlem, Bega was Wijck's contemporary, and is known to have been a student of Van Ostade. He was called the latter's "first and best pupil" by Houbraken.²⁵² Bega's striking image of an alchemist alone in his workshop, *The Alchemist* of 1663 (Figure 57, Getty Museum, Los Angeles) appears at first glance to be another scene of dirt, failure, and chaos indicating the alchemist's squandered resources. Yet its emphasis is on labor rather than the pathos

²⁵⁰ Jane P. Davidson suggests as much, going so far as to suggest that owing to his documented interest in the subject, Teniers may have even produced his own pigments alchemically. Ibid: 39.

²⁵¹ Nummedal, *Alchemy and Authority*, 73-75.

²⁵² Quoted by Irene van Thiel-Stroman. "Cornelis Bega." *Painting in Haarlem, 1500-1800: the Collections of the Frans Hals Museum.* (Ghent: Ludion Ghent, 2006): 100.

and poverty of the alchemist's suffering family. It speaks to artisanal effort and material knowledge—processes often themselves undervalued, or yielding little wealth. Bega's representation of alchemy also shares similarities to Teniers', in its observation of the broad ties between alchemy and artistry.

In *The Alchemist*, no wailing wife or hungry children are presented for the viewer's pity. Alone in his workshop, the alchemist appears more hermetic and solitary. Bega's alchemist, in a plain black cap and vest, is rumpled and covered in dust. His fallen stocking and bared knee may connect to images of dissolute living, yet it may also link Bega's alchemist to stories of the "wandering adept," skilled alchemists whose unremarkable and humble appearance might hide seemingly supernatural talents—much as base lead was believed to hold the potential of transmutation into gold.²⁵³ This notion of transmutation and hidden worth is carried through by the alchemist's actions and the materials that lay close at hand: on the floor a small crucible heats in a brazier, while the alchemist carefully weighs his scales and selects a small chunk from a paper packet of red matter in a box at right. The presence of this vivid red matter—at the center of a relatively monochromatic image—signals the possibility that this alchemist, no matter his dishevelment, may have actually achieved the triumphant final stage of the "great work." The philosopher's stone, an ultimate tool for purification, both of base metals and the human body, was described by alchemical writers as a red substance, stone, or elixir produced in the final "red stage" or *rubedo*. Mixed with impure lead or tin, or incorporated into the production of chemical medicine, the red philosopher's stone was

²⁵³ Principe and De Witt, *Transmutations*, 25.

thought to have the power to produce gold or to purify and perfect that with which it was joined. The white chunks of matter loosely wrapped in paper and cloth at bottom right may also represent an earlier "white" or *albedo* stage in the same process, resulting in the less pure "white" philosopher's stone.²⁵⁴

Equipment and objects in Bega's alchemical workshop bear signs of long labor. The distillation apparatus that rests on the floor has deep cracks across the curcurbit, and the mortar sitting on the hearth at left is missing a large chunk of the rim. Broken glass and ceramic vessels at right lie in a heap. But looking deeper, Bega's image may not be simply a mocking vision of one whose efforts are wasted. Instead, the alchemist's possession of the white and red matter suggests that his solitary, secretive labors may not have been in vain. The glimpses of workshop practices that the image provides are also notable for their explicit suggestion that the making and viewing of images was part of the work of alchemy. The texts and papers sitting before the alchemist appear well-worn and used, and illustrations within the text are visible. A print or drawing of an alchemical still and portable furnace has also been tacked to the wall at right, suggesting that this alchemist might have relied on printed images as sources for experiments, or else designed and recorded experimental processes visually in the form of drawings. Unlike Van Ostade's alchemist, who lacks the guidance of alchemical scholars in his vain quest, Bega's alchemist looks to images and texts of alchemy for guidance. Not only that: Bega's painting further opens the possibility of alchemist as image-*maker*, as he is shown

²⁵⁴ Principe, Secrets of Alchemy, 124.

to have taken notes, made drawings, and created or recorded new knowledge gathered in the midst of process.

A second laboratory scene by Bega, *The Alchemist* (Figure 58, National Gallery, Washington, DC), also focuses on a solitary alchemist in a humble workroom. Though once again he is surrounded by broken vessels and dressed in plain clothing, he is not dirty or ragged, but rather wears a workman's protective vest and gaiters. He holds a pair of tongs and works a fire. A ceramic distillation vessel topped with a glass alembic sits at his elbow, dripping liquid onto a red cloth that acts as a filter. Like the alchemist in Bega's Getty painting, this alchemist sits in the presence of books and folios of papers: on the wall at right, he has pinned up an illustration (either printed or drawn) of an alembic similar to the one he has constructed below.²⁵⁵ This explicit reinforcement between textual or printed alchemical sources, and the actual practice of alchemy within the workshop, provides a glimpse of the ways in which these may have been understood to interact. Bega's alchemist may not have yet achieved success, but his efforts are not shown as comic fumbling. Instead, he appears to work diligently from established sources (though of course, those sources may be misleading or impenetrably coded).

Though the content of the texts and images Bega portrays here are unreadable, one word does appear clearly: "SILICON," seen on the label of a large earthenware apothecary's jar at upper right. The text, read at an angle, is likely part of the word

²⁵⁵ Arthur Wheelock. "Cornelis Bega/The Alchemist/1663," *Dutch Paintings of the Seventeenth Century*, NGA Online Editions, http://purl.org/nga/collection/artobject/161648 (accessed June 29, 2015).

Basilicon, a common unguent applied topically to relieve pain.²⁵⁶ The vessel indicates that this alchemist is involved with iatrochemistry and the making of medicines, and potentially engaged in the search for the universal panacea. Yet Bega's choice to present a vessel with the label "BASILICON" is also particularly interesting in light of Basilicon's ingredients, nearly all of which were substances quite well-known to painters. An influential medieval medical tract, the Inventarium Sive Chirurgia Magna (The Inventory or Great Work of Surgery) written by Guy de Chauliac around 1363, provides twelve different recipe variations for Basilicon. The work was translated in many vernacular languages and re-published through the seventeenth century. One 1580 French edition lists *cire* (wax), *mastic* (resin, used in varnishing), *verd de gris* (verdigris, likely as a drying agent), terebinthine (turpentine), litharge (lead oxide, similar to massicot), and galban (resin) as ingredients used in making Basilicon.²⁵⁷ These key materials could also be found in painter's workshops, demonstrating the substantial overlaps between artisanal and alchemical knowledge sets. The prominence of the jar and its clear legibility (in contrast to the other texts he included) indicates Bega's desire to highlight this particular substance, perhaps because of its obvious utility as a workshop product, or because he was conscious of its relationship to his own materials. I will explore painters' materials and their relationship to alchemy more closely in the final chapter of this project.

²⁵⁶ Identified by Lawrence Principe. Wheelock, Ibid

²⁵⁷ Guy de Chauliac. Laurent Joubert, translator. *La Grand Chirurgie*. (Lyon: Estienne Michel, 1580): 674-676.

Bega's images are among the few in which the products of alchemical labor are central to the depiction of the art (rather than the tools). While crucibles, alembics, and hearth fires commonly appear in alchemical images, less frequent is the appearance of experimental results such as the philosopher's stone, or named medical compounds such as Basilicon. This is in keeping with the moralizing tone of many images whose alchemical fools waste oil, effort, and time. The contrast between Bega's conception of the alchemist and those of his immediate peers and contemporaries raises questions regarding Bega's knowledge of, or sympathies with, alchemical practice. Bega, in addition to being the grandson of the painter Cornelis Cornelisz van Haarlem, was also the son of a silver- and goldsmith, Pieter Jansz Begijn, and nephew of the engraver and silversmith Dominicus Jasz Begjin. This situation does not appear to have been an unusual one for Haarlem's established artistic families: the painters Willem Claesz Heda and Pieter de Grebber also counted silversmiths among their immediate kin.²⁵⁸ The likelihood that Bega encountered alchemical ideas in the workshops of his father and uncle is strong. Links and overlaps between metalsmiths and alchemists were common, owing to their joint expertise in minerals and techniques for assaying, tinting, and refining ores. These "kindred arts"²⁵⁹ were considered closely connected, and texts on alchemy often referred explicitly to the work and knowledge of metalsmiths—and vice versa. Bega's emphasis on the material products of alchemy makes visible the practical,

 ²⁵⁸ Irene van Thiel-Stroman. "Cornelis Bega." *Painting in Haarlem, 1500-1800: The Collections of the Frans Hals Museum.* (Ghent: Ludion Ghent, 2006): 100-101.
 ²⁵⁹ Nummedal, *Alchemy and Authority*, 33.

rather than purely theoretical, ties between the workshop traditions in which he was raised, and those that he depicted.

Paintings of alchemists produced in the Dutch Republic during the seventeenth century often drew upon the pictorial tradition established by Bruegel, even as they transformed his broad motifs to suit their own century's more naturalistic tastes. Van de Venne and Van Ostade shifted moral censure to sympathetic pathos in their depictions of poor alchemists whose hard (but misguided) work yields no reward, while Brakenburgh emphasized religious feeling and familial duty over mockery. Further deviations from Bruegel's satirical tone can be found in the paintings of Teniers and Bega. Teniers envisioned the alchemist as master, potentially drawing on the serious treatments of alchemy produced by Stradanus, while Bega's alchemists are shopworn but diligent artisanal types. Competing visions of alchemy thus ultimately emerge from paintings of the period: on one hand, folly, and on the other, expertise. Successful alchemists were experts, masters, qualified by both knowledge and effort to run a thriving workshop. By contrast, unsuccessful alchemists were shown as diligent but delusional—lacking true ability, and dreaming of riches that would never arrive.

The shift from fraud to delusion in images of alchemy may mark a similar shift in alchemy's popular perception, particularly where alchemy relates to dreams of transmuted gold. Though scathing responses to fraudulent alchemists run as a continual current through literary fiction and theater, as well as through the writings of alchemists

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themselves, this anger does not seem to have found a similarly broad expression in painting. It appears that here, anger and anxiety were transformed into sympathy and pity. While Thomas DaCosta Kaufmann identifies these and other images of alchemy as visualizations of a lasting thread of anti-alchemical thought amongst Northern artists and artistic communities,²⁶⁰ the majority of artistic representations remain markedly less condemnatory than their counterparts in literature.

Substantial differences in the treatment of alchemy from artist to artist mirror alchemy's reception across society, marked by both widespread interest and deep ambivalence. It was entirely possible for artists working in the same time and place such as Van Ostade, Bega, and Brakenburgh—to produce distinctly different visions of alchemical work as alternately pitiable, humbly respectable, and morally neglectful. It also appears to have been possible for a single work—such as Van de Venne's sophisticated *Rijcke-Armoede*—to present multiple and plural interpretations of alchemy as fool's errand or undervalued art. As I have observed, the range of representations of alchemy is also likely connected to increasing specialization and diversification in the paintings market as a whole.

Alchemy's relationships to other growing industries during this period may have contributed to its shifting depictions in the arts. In Flanders, the paintings of Teniers represent a major single source of alchemical imagery; but no other city in the Dutch Republic appears to have produced alchemical scenes in such volume and diversity as

²⁶⁰ Thomas DaCosta Kaufmann. "Kunst und Alchemie." *Moritz der Gelehrte—Ein Renaissancefürst in Europa*. (Eruasberg: Edition Minerva, 1997): 370-77.

Haarlem during this period. It may simply be that a broad interest in alchemy already evident within greater Dutch and Northern European society was also evident in Haarlem, and combined there with the proliferation of new genre subjects to produce such a volume of alchemical scenes. Yet Haarlem's unique situation may have shaped the degree to which alchemical imagery found expression and audience. As I noted in the first chapter, Haarlem was largely a city of tradesmen—brewers and vintners, textile workers, dyers, and other artisans engaged in manufacture of goods. Neither a court center nor the home of an established medieval university (Haarlem famously refused the founding of a formal university in 1560²⁶¹), much of the city's elite bourgeoisie class was comprised of successful tradesmen, business owners, and merchants. The interactions of such individuals with alchemical ideas may well have been along more practical than theoretical lines. In the fifth and sixth chapters of this project, I will more fully address Wijck's exposure to alchemical ideas both at home and abroad.

Though the painted scenes of Van de Venne, Van Ostade, Brakenburgh, and Van Helmont may be less merciless towards alchemy's practitioners than the *Canon Yeoman's Tale* or the *Historia von D. Johann Fausten*, some of them do provide a negative view of alchemy as a pursuit that impoverishes families. In such a context, the serious and respectable artisan appearing in Wijck's Rijksmuseum *Alchemist* (Figure 1), discussed in the first chapter, offers a striking point of departure from these norms. In the following chapter, I will present Wijck's treatments of alchemists as scholars, artisans,

²⁶¹ Pieter van Thiel. "The Haarlem School." *Painting in Haarlem 1500-1850: The Collection of the Frans Hals Museum*. (Ghent: Ludion Ghent, 2006): 16.

and heads of households, identifying the places where his visualizations of alchemy align with, and notably break from, the pictorial traditions discussed here. Though never before addressed as a coherent body of images, Wijck's works provide a vision of alchemy as a discipline engaged with artistry, experiment, interaction, and communication: a pursuit that is not simply an esoteric mystery or a fraudulent farce, but a vital and productive piece of the early modern marketplace, and the early modern world.

Chapter 4

WIJCK'S ALCHEMICAL ARTISANS

Dutch and Flemish seventeenth-century paintings vary by considerable degrees in their treatments of alchemists as potentially pitiable, diligent, deluded, wise, foolish, and so on. Yet even amongst this diversity, the works of Thomas Wijck stand curiously apart. Unlike Van Ostade's pauper-alchemist or Brakenburgh's irresponsible parent, Wijck's alchemists are framed as scholars, artisan-experts, and respectable family men. The domesticity of Wijck's scenes also makes them distinct from Teniers's and Stradanus's visions of the alchemical workshop as a space of professional industry distinctly separate from home life. Though serious and skilled, Wijck's alchemist-artisans are not in the employ of a prince or leading a workshop of dozens, as shown in Stradanus's painting, *Il* Laboratorio dell'Alchimista. Instead, their work often takes place in hybrid domesticexperimental spaces, in the context of both workshop and home: a scenario intimately recognizable to countless other early modern artisans, including metalsmiths and textile workers, but also artists. The respectability and domestic harmony of his alchemical workrooms openly challenges the pictorial tradition by presenting the laboratory in the context of the familiar, as well as socially and economically vital, artisanal workshop.

Wijck was also highly concerned with the materials of the alchemical workshop. But by omitting references to gold-making, he largely sidesteps the themes of greed and

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duplicity found in many popular depictions of alchemical fraud. Instead, he includes colored powders and raw matter that closely resemble pigments, dyestuffs, and other practical products manufactured by chemical work during the period. In this, his closest counterpart is Bega, whose paintings depict coarse red matter (potentially pigment or a sign of the *rubedo* stage) as well as the unguent *Basilicon*, both understood to be products of alchemy, but also linked to the materials of artists. Scholarly treatments of Bega's alchemists have consistently noted his familial relationships to goldsmiths, whose knowledge closely bordered alchemy.²⁶² Wijck's exposure to alchemy through his training, travels, and connections may likewise have provided information about alchemical work, although his own profession's ties to alchemy may have been sufficient for his development of "respectable" alchemy as a major theme. This concern for the material once again connects his alchemists firmly to the mode of the early modern artisan, a mode adopted by few other painters.

In the following sections, I analyze three major aspects of Wijck's alchemists family man, artisan, and scholar—as they appear and reoccur in his oeuvre. In many of Wijck's paintings, these three aspects merge. This effectively crafts the alchemist as an engaged member of society and household manager, whose workshop is the site of experiment and study but also of productive work. Such a persona aligns closely with the ideal alchemist presented by alchemical writers, discussed in the previous chapter, but also with the qualities of the ideal artist and artisan found elsewhere in images of the

²⁶² Arthur Wheelock. "Cornelis Bega/The Alchemist/1663," *Dutch Paintings of the Seventeenth Century*, NGA Online Editions,

http://purl.org/nga/collection/artobject/161648 (accessed June 29, 2015).

period, and more generally with qualities considered praiseworthy in seventeenth-century Dutch society. This chapter will also examine a rare addition to the typical alchemist persona presented by Wijck: the "foreign" alchemist that appears in *An Alchemist in Eastern Dress* (Figure 72, Ham House, Richmond-upon-Thames). This exoticized alchemist may be connected to Wijck's employment at the English court, where certain foreign themes were in vogue.

In presenting his alchemists as artisans, however, Wijck does not neglect alchemy's scholarly or philosophical dimensions. Though shown amidst working equipment and apprentices, his alchemists are typically paired with books, globes, pen and ink, and other signs of learning and communication. Manual labor is most often shown performed by assistants rather than by the master, who instead supervises or reads from his papers. Wijck's depictions of alchemy maintain a dual emphasis on the material (artisanal) and intellectual (scholarly) dimensions of alchemical work. Even his depictions of mess shares this double focus, as he continually pairs scattered papers with used or dirtied vessels, suggesting that textual study and experimental thought were as key to alchemical practice as any alembic or cucurbit. Mess may also be key to Wijck's depiction of alchemical practitioners as experimental empirics, engaged in a quest for natural secrets that did not come easily, quickly, or neatly.

Duality is key to Wijck's vision of the alchemist as a hybrid figure, a scholarartisan, but also to an understanding of Wijck's own stake in the matter. As noted in chapter two, posthumous biographies emphasized his "witty" and "ingenious" alchemical scenes, showing that he was closely associated with the theme. Below, I will demonstrate

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the likelihood that he produced alchemical scenes across three decades—long enough to indicate that his interest in the subject was personal and sustained. As a painter, and particularly as a painter in oils, Wijck was connected to a legacy of experiment in workshop process, as well as concerns for *mimesis*, naturalism, and material transformation. The discipline of painting, like alchemy, encompassed both intellectual creativity and manual-material labor. While the work of alchemists and painters might be considered artisanal, both alchemists and artists claimed a special status owing to their creative powers. Art theory in the Dutch Republic repeatedly emphasized the need for literate, educated painters who were cognizant in recent developments in mathematics, anatomy, history, and other intellectual fields considered essential to the creation of art. Such studies, it was argued, would benefit not only the literal crafting of paintings, but the construction of the artist's high character—and by extension lead to the elevation of the painterly art with an "eternal, memorable crown of honor."²⁶³ These directives closely echo the writings of alchemists discussed in the third chapter, who promoted the practice (and perception) of a respectable and virtuous alchemy.

Alchemy also shared deeper connections (and rivalries) with art-making that centered on the replication of nature. Practitioners of both arts argued that their work was not merely imitative, but generative, and in competition with Nature.²⁶⁴ While the achievements of art and alchemy relied on manual endeavor, true alchemical adepts—the chosen few who would become legend—like the most distinguished artists, were thought

²⁶³ Angel (Hoyle and Miedema), "Praise of Painting," 242.

²⁶⁴ Deeper connections between art and alchemy, and the legacy of artistic-alchemical experimentation embodied by Jan van Eyck, will be more fully explored in chapters 5-6.

to possess (or have access to) divine genius. These qualities of genius and inspiration were thought to distinguish alchemists, and artists, from the ranks of other craftsmen and laborers who may have shared their material knowledge. Wijck's formation of an artistic and economic identity around alchemical themes indicates his desire to explore this curious territory, and perhaps ultimately to demonstrate art's superior claims to knowledge of the natural world.

In addition to iconographic and contextual readings of Wijck's images, this chapter will establish, for the first time, a rough chronology of his alchemical scenes. This chronology makes visible subtle changes in his treatment of alchemy over time: his earliest paintings primarily model scholarly and domestic themes, while later works also increasingly emphasize alchemy's material products and commercial viability. This may be connected both to his changing concept of alchemy and to the time he spent in England, connected to the circle of Charles II—a locus for growing alchemical industries and empirical investigation.

Chronology

Wijck's alchemical paintings have traditionally been dated to between 1660 and 1677, the last decade and a half of his life. Though a number of works are signed, the majority are undated. Despite this lack of documentation, my observations of considerable shifts in Wijck's style has lead me to conclude that he produced alchemical scenes across roughly three decades (1645-1677). This new chronology challenges the long-held notion that his production of alchemical scenes began late in his lifetime, after

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his arrival in London and exposure to the alchemical circles of Charles II. The limitation of Wijck's interest in alchemy to his English period originated in the reports of George Vertue, who stated that "The King also had his Labortory. At court this might be the takeing mode or humor. And *therefore Wyke made such pictures as represented those amusements* [emphasis mine]."²⁶⁵ Vertue's words were repeated by Walpole,²⁶⁶ and they have continued to cloud the chronology of Wijck's alchemical subject matter.²⁶⁷

A reexamination of Wijck's stylistic development indicates that alchemical imagery represented a recurrent and important subject within Wijck's oeuvre for virtually his entire career and that Wijck produced many of of his alchemical works in Haarlem. Those works that are likely among his earliest images of alchemy, including *An Alchemist at Work, with a Mother by a Cradle Beyond* (CHF) and *The Scholar* (CHF), are datable to between 1645 and 1650, during the first decade of his time as an independent master in Haarlem. Works likely dating from the next decade (1650-1660) include *The Alchemist* (Rijksmuseum, Amsterdam) and *The Alchemist in His Study with a Woman Making Lace* (CHF). Works of his middle period (1660-1670) include *The Alchemist* (Staatliches Museum, Schwerin), *The Alchemist* (Mauritshuis, The Hague), *Alchemist and Family* (CHF) and *An Alchemist in his Study* (CHF). His latest works, produced in England between 1670 and 1677, include *The Alchemist* (CHF), *An*

²⁶⁵ Vertue, *Note Books*, Vol. V, 43.

²⁶⁶ Walpole, Anecdotes of Painting in England, 266.

²⁶⁷ In her biography of Wijck, Ludovica Trezzani describes his early works as Italianate, and states that "In his *last years* Wijck produced works closely linked in style and subject-matter to Dutch genre painting... completely independent of his Italianate works." [Emphasis mine.] Trezzani, "Thomas Wijck," 397.

Alchemist (Ham House, Richmond-upon-Thames) and An Alchemist in Eastern Dress (Ham House, Richmond-upon-Thames).

One of Wijck's earliest alchemical works suggests the influence of time spent in Italy and Naples at the start of his career. His absence from documents in Haarlem between 1644 and 1653 indicates that his travels and return took place during this period.²⁶⁸ *An Alchemist at Work, with a Mother by a Cradle Beyond* (Figure 59, CHF) demonstrates exposure to specifically Neapolitan models, and may have been produced during his travels or shortly after his return to Haarlem. This work emphasizes the quiet harmony of the alchemist's family life, while foregrounding the materials of his art.

The tonality and light effects of *An Alchemist at Work, with a Mother by a Cradle Beyond* is shared by *Washerwoman in a Courtyard* (Figure 60, National Museum, Warsaw), which can be dated to about 1645.²⁶⁹ Both resemble slightly earlier images produced by Neapolitan Caravaggists during the first third of the seventeenth century. *Washerwomen in a Courtyard* shows a limited palette of muted ochres, with highlights of warm brownish-red, pale blue, and cooler areas of white and grey toned with green. Fragmentation of the highlights that distinguish the face and shoulder of the two young women right of center, and the painterly, sketch-like manner in which they are formed, correspond to Wijck's style in *An Alchemist at Work, with a Mother by a Cradle Beyond*. Both works demonstrate tenebrist qualities that emphasize deep shadow and directional light, with highly localized points of reflection that are flake-like and individuated. The

²⁶⁸ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347.

²⁶⁹ Trezzani, "Thomas Wijck," 396.

influence of Andries Both on these early works has been suggested by Ludovica Trezzani, yet Both's warmer tones and more linear handling are demonstrated in *Travelers by a Well* (Figure 61, National Gallery of Victoria, Melbourne). Both's work does not model as strongly the fragmented light and cool, greenish undertones displayed in Wijck's pictures. Instead, the "flickering" and fragmented chiaroscuro light effects of the Neapolitan Caravaggists may have been a source of the punctuated highlights that appear in his early works. Such effects can be seen in Bernardo Cavallino's 1635-1640 *Adoration of the Shepherds* (Figure 62, Herzog Anton Ulrich Museum, Brunswick), a work that shares a painterly, sketch-like softness in its execution. While Wijck's Roman travels and the influence of the *Bamboccianti* on his work have been emphasized, less has been made of the possible influence of Naples on his development.²⁷⁰

A second early picture, *The Scholar* (Figure 63, CHF), indicates stylistic influences closer to home. Though it also has a strong chiaroscuro effect, in the contrast between the light of the window and the retreating shadow of the alchemist's workroom, its palette is warm and brown rather than cool and grey-green. A limited palette of earth tones was used by many Haarlem artists between 1630 and 1650, the so-called "monochromatic" phase in Dutch genre painting.²⁷¹ Dirck Hals' *Woman Tearing a Letter* of 1631 (Figure 64, Mittelrheinisches Landesmuseum, Mainz) demonstrates the warm, nearly *brunaille* tonality popular during this period. Wijck's use of a limited palette of

²⁷⁰ Among the few scholars to highlight Wijck's Neapolitan connections is Marcel Röthlisberger, who identified Filippo Napoletano's c. 1620 *A Mill* as a significant source for Wijck's frequent use of a courtyard and arch motif. "Around Filippo Napoletano." *Master Drawings* 13, No. 1 (1975): 24-25.

²⁷¹ Franits, *Dutch Seventeenth-Century Genre Painting*, 33.

earth tones, punctuated by pale highlights of blue and grey, was also undoubtedly influenced by the works of his teacher, Adriaen van Ostade, and in turn by the popular style of Adriaen Brouwer. Van Ostade's paintings of the late 1630s displayed an overall light-brown tonality highlighted by areas of cream, pale blue, and pink, a palette also used by Brouwer during his Haarlem period.²⁷² Van Ostade's *Peasants in a Tavern* (Figure 65, Alte Pinakothek, Munich) also models a sketchy, unfinished quality in his delineation of features and the edges of his forms. This softness is exhibited in *The Scholar*. The humble interior and dilapidated atmosphere, monochromatic brown tonality, and almost blurred handling of the face place this work in Wijck's early Haarlem milieu, before 1650.

Later works produced between 1650 and 1660 demonstrate Wijck's transition away from monochromatic tonalities to a brighter and more diverse palette. They also show changes in his handling of form, and further development of his major themes of scholarship, domesticity, and artisanal work. Wijck's Rijksmuseum *Alchemist* (Figure 1), likely produced between 1650-1655, shares a limited ochre palette with the earlier *Scholar*, but displays a tighter and more highly finished handling in its description of the figures. Shifts over time between a dryer, sketchier brushwork and a more tightly controlled, smoother final effect are also demonstrated in the works of Jan Miense Molenaer and Judith Leyster between 1630 and 1640, corresponding to broader trends in Haarlem and Amsterdam.²⁷³ A general lightening of Wijck's palette, and the increasing

²⁷² Ibid: 42.

²⁷³ Franits, *Dutch Seventeenth-Century Genre Painting*, 45-50.

use of vivid highlights and saturated areas of color, can be observed in *An Alchemist in His Study* (Figure 66, CHF), and *The Alchemist in His Study with a Woman Making Lace* (Figure 67 CHF), both of which likely date from the end of the 1650s or early 1660s. Two additional pictures, *The Alchemist* (Figure 68, Staatliches Museum, Schwerin), and another also entitled *The Alchemist* (Figure 69, Mauritshuis, The Hague) show heightened detail in their description of papers and vessels scattered across the laboratory's floor. These may date from the early to mid 1660s, as Wijck's palette continues to brighten and diversify. The latter pictures include increasingly vivid color highlights in their depiction of powders and raw materials spilling out from basins and mortars. The Schwerin *Alchemist* shows a young apprentice at work using a grinding stone, a concrete detail of the many tedious manual labors required to sustain alchemical (and artisanal) success. While domestic and scholarly themes are never removed from Wijck's alchemical scenes, these additional themes of material work and productivity can be seen to increase in prominence.

Brighter tonalities and crisper handling mark Wijck's late style. *An Alchemist* (Figure 70, Ham House, Richmond-upon-Thames), produced during his first stay in England around 1672, demonstrates a tight handling of form and an overall lighting that is even and diffused. There remains little evidence of Wijck's early deep chiaroscuro effects. This shift towards a lightened palette and crisper form was a general trend in Dutch art of the late 1650s and 1660s: in Haarlem the work of Cornelis Bega demonstrates the new pairing of "low" subject matter with bright color and increasingly finished execution. His *Saying Grace* of about 1663 (Figure 71, Rijksmuseum,

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Amsterdam) shows a peasant family in a rustic interior, yet the handling of his forms is crisp and linear, and great care has been devoted to the expression of the textures of cloth, ceramics, and flesh. Heightened aesthetic concerns for the fine rendering of fabric, hair, skin, and household objects has been linked to the impact of the widely imitated Leiden *fijnschilder*, Gerrit Dou, as well as to modish scenes of courtly love produced by Gerard ter Borch around the middle of the century.²⁷⁴ Beyond Haarlem, Wijck's travels to England during the 1660s may also have impacted his shift towards a brighter, more linear and finished style. The decline in popularity of tenebrist light effects after the 1640s, and the English court's taste for a brighter palette, corresponded to similar developments in the Netherlands. The Utrecht painter Gerrit van Honthorst underwent a stylistic shift during his time engaged in England as a court painter for Charles I and his circle. Honthorst and his contemporaneous competitors in London—notable among them Orazio Gentileschi—adopted a lighter, fashionable "blonde" tonality in numerous works, and reduced the depth of contrast between shadow and highlight.²⁷⁵

The extreme contrast in color and handling between Wijck's late paintings, and the muted forms of *An Alchemist at Work, with a Mother by a Cradle Beyond* demonstrates his participation in the mid-seventeenth century's shifting tastes for brighter, crisper genre images with a widened palette. Both the Ham House *Alchemist*

²⁷⁴ Franits, Dutch Seventeenth-Century Genre Painting, 138-140.

²⁷⁵ Leonard Joseph Slatkes. "Bramer, Italy and Caravaggism." *Leonaert Bramer, 1596-1674: a Painter of the Night.* Frima Fox Hofrichter, ed. (Milwaukee: Patrick and Beatrice Haggerty Museum of Art, Marquette University, 1992): 16. See also Keith Christiansen, Judith Walker Mann, et al. *Orazio and Artemisia Gentileschi*. (New York: Metropolitan Museum of Art, 2001): 234.

and a second picture, *An Alchemist in Eastern Dress* (Figure 72, Ham House, Richmondupon-Thames), were produced for Wijck's English patron, John Maitland. They have both remained *in situ* since their installation between 1670 and 1673. Bills for craftsmen at Ham House were issued in 1673 for the fixed over-door and over-mantle frames that would have housed the newly installed pictures.²⁷⁶

In addition to their changed tonalities and handling, Wijck's late works demonstrate a lessened emphasis on domestic themes. Works produced during the 1670s appear to increasingly foreground workshop production and laboratory materials, often restricting family vignettes to the far background or eliminating them altogether. Very early works such as An Alchemist at Work, with a Mother by a Cradle Beyond, modeled the alchemist as a family man and household leader. Such representations continue in Wijck's pictures of the 1650s, including the warmly domestic Rijksmuseum Alchemist. Even certain later paintings such as the Alchemist and Family (Figure 73, CHF), likely produced in the mid to late 1660s, are centered on the alchemist's wife and children as they prepare a meal together, indicating harmony between alchemical inquiry and family life. Yet late paintings of the 1670s, such as the Ham House Alchemist, bear few traces of domestic life. Instead, they emphasize alchemical products: colored powders spilling out of basins or ready to be ground in the mortar. In certain paintings, the alchemical apparatuses depicted are increased in number and complexity. This is true of *The* Alchemist (Figure 74, CHF), another late work, that is filled with a profusion of vessels of different types and sizes. While domestic themes do not entirely vanish from Wijck's

²⁷⁶ Lang, "Fitting Pictures to Rooms," 410-411.

treatment of alchemy, their waning presence may indicate shifting tastes on the part of his patrons, or his own changing interests. Wijck's work in England for the court of Charles II, where alchemy was not only a productive enterprise but an elite pastime, may have contributed to his downplaying of domestic themes and increased attention to the details of laboratory process.

In the following sections, I explore Wijck's major personas for the alchemist family man, artisan, and scholar—bearing in mind that these are interconnected aspects of his vision. Wijck's images emphasize qualities of respectability, through depictions of domestic life; artisanry, through depiction of materials and processes; and scholarship, through depictions of books and tools of study, as well as through Wijck's vision of experimental work. As themes of domestic harmony are among the earliest to appear in his alchemical scenes, I begin with the alchemist as paterfamilias.

The Alchemist as Paterfamilias

When accompanied by family members, particularly wives and children, scenes of alchemical study also express period ideas of household management, gendered labor, and the ordering of social micro- and macrocosms. Wijck's linking of alchemical and domestic activities indicates a vision of alchemy's useful and proper contributions within broader society. His diligent alchemists and their respectable families offer a direct challenge to the moral satires originated by Bruegel, and continued by Van Ostade and Brakenburgh, by transforming the stock figures of the disregarded wife and hungry, neglected children into pleasant scenes of domestic harmony. These images build

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parallels between the productive daily labor of the household and the work of the alchemist. The importance attached to home life by the Dutch carried implications not only for personal happiness, but for national and cultural prosperity.

Domestic harmony is on full display in his mid-period Alchemist and Family of about 1660 (Figure 73, CHF), an image that downplays the materials of the alchemist's trade in order to focus on the family kitchen. The alchemist is glimpsed only through an arched alcove that leads the eye to a smaller chamber beyond. A similar foregrounding of a family group appears in Hendrik Sorgh's *Family of Eeuwout Prins* (Figure 75, Historical Museum, Rotterdam), where the patriarch Prins is seen through a small doorway that serves to highlight the privacy necessary to his scholarship. Similarly, Gerard ter Borch's scene of humble urban labor, The Grinder's Family (Figure 76, Staatliche Museum, Berlin), brings a vignette of mother and child to the foreground while the grinder works at the rear. This "reversal" may connect to older Netherlandish genre paintings that placed familiar domestic elements at the foreground while distancing scenes of narrative or religious weight, as in works by Pieter Aertsen and Joachim Beuckelaer. Much like Aertsen's *Meat Stall*, however, the forward placement of the family only *appears* to obscure the scene's alchemical themes.²⁷⁷ Forward emphasis on the domestic harmony of the family unit challenges the Brugelian trope of the

²⁷⁷ As Kenneth Craig established in 1982, Aertsen's placement of abundant food to the foreground and the Flight into Egypt at the rear appears as an intentional statement on the gap between the "spiritual food" offered by Christianity and the earthly foods consumed by the body. Kenneth M. Craig. "Pieter Aertsen and The Meat Stall." *Oud Holland* 96, No. 1 (1982): 7.

impoverished family and reinforces the image of the alchemist as responsible paterfamilias and alchemy as a respectable profession.

The reality of alchemical work frequently found its practitioners making use of domestic spaces or whatever facilities were available to them, including barns, sheds, and kitchens. A model of labor that blended artisanal work with domestic needs was well-established. The Dutch economy, like its neighbors in Europe, was dominated by "household" production, in which the family unit or the home produced goods and services for sale. Shifts that consolidated and increased production, or incorporated previously independent producers in mass workshops or large farms, were a feature of the expanding capitalist marketplace, even though many artisans still lived and worked in close proximity to their families.²⁷⁸

Wijck's emphasis on the domestic also provides a direct link to period alchemical theory. Alchemical texts both allegorical and instructive were replete with allusions to "women's work" and the more mundane tasks associated with the pursuit of the Philosopher's Stone. The multi-stage process required to attain alchemical perfection, known as the *magnum opus* or "great work," was sometimes referred to by a second title: the *opus mulierum* (literally "women's work").²⁷⁹ Phases of this specialized, secret process were paired rhetorically with common household tasks: distillation with washing and boiling, fermentation with cooking and food preparation, and so forth. Such

²⁷⁸ Ibid: 170-171.

²⁷⁹ Jayne Elisabeth Archer. "Women and Chymistry in Early Modern England: The Manuscript Receipt Book (c. 1616) of Sarah Wigges." *Gender and Scientic Discourse in Early Modern Culture*. (Burlington: Ashgate, 2010): 195.

connections both symbolically veiled and familiarized the work of seeking the stone. For the educated and uninitiated alike, these references may have aided in demystifying obscure stages of labor; for those already engaged in such tedious, demanding work, they may have offered specifically instructive parallels. The German physician Michael Maier's landmark alchemical emblem book, the *Atalanta Fugiens* of 1617, incorporates an emblem demonstrating these common links. The epigram below emblem three, showing a woman burning wood to boil water for laundering (Figure 77), reads: "Don't you see how a woman is accustomed to cleaning dirty laundry/ by pouring hot water over it? Follow her example... the water washes the precipitation [away]."²⁸⁰ Here the women's effort to clean and purify her linens corresponds to alchemical purification through distillation, sublimation, and heat.

Beyond such texts, women's participation in, and contributions to, alchemical endeavors were widespread, if frequently undocumented.²⁸¹ The production of home remedies and tonics, as well as cosmetics, dyes, and other products was largely the province of women, while many artisanal trades—including metalworking, brewing, and other arts infused with chemical knowledge—relied upon the support, experience, and abilities of female family members. Alchemy as practiced within the domestic sphere bordered cookery and medicine. It involved the creation and circulation of recipes for

²⁸⁰ Quoted in Ibid: 196.

²⁸¹ See Meredith K. Ray's *Daughters of Alchemy: Women and Scientific Culture in Early Modern Italy*, (Cambridge: Harvard University Press, 2015) for a deeper exploration of the many contributions of women to alchemy, particularly in the realms of iatrochemistry and medicine (and the causes of women's relative obscurity within modern alchemychemistry scholarship).

ailments as diverse as gout and childbirth pain. Books dealing in alchemical processes, as well as "books of secrets," were occasionally penned by female authors, such as the Secreti della Signora Isabella Cortese of 1561,²⁸² or the unpublished manuscript of recipes compiled by the early seventeenth-century Englishwoman Sarah Wigges.²⁸³ Women were also occasionally discussed in male-authored alchemical texts as particular repositories of secret knowledge, as they were inhabitants of a "mysterious" women's culture and possessed supposedly "mysterious" bodies (sites of reproductive and generative power). Ortensio Lando's unusual sixteenth-century anthology of women's correspondences—the Letters of Many Valorous Women—comments favorably on the many recipes and methods his subjects exchanged, even while sometimes displaying a sexist condemnation of their failures to "keep secret" the secret knowledge they had previously received from others.²⁸⁴ Far from being marginal figures within alchemy, women were at the center of a domestic alchemy focused on practical applications for healthy living. The philosophical and scientific writings of Margaret Cavendish, a seventeenth-century English duchess, emphasize these currents in her declaration that Nature itself is a "good housewife," and her assertions that the diligence, patience, and conscientiousness of women mark their suitability for demanding and complex alchemical endeavors: "I am confident, Women would labour as much with Fire and Furnace, as men."285

²⁸² Ibid: 139.

²⁸³ Archer, "Women and Chymistry in Early Modern England," 191.

²⁸⁴ Ray, *Daughters of Alchemy*, 67.

²⁸⁵ Archer, "Women and Chymistry in Early Modern England," 195.

While the "good housewife" of the Alchemist and Family is not shown as an alchemical experimenter, she demonstrates the virtue of diligent work and provides a positive model for her children. Dressed in shawl, apron, and kerchief, she prepares a meal by slicing and peeling onions and carrots into the basin on her lap. Unpeeled vegetables sit at her feet. By her side, the family's oldest child, a boy, wears an apron and offers a bowl for his mother's inspection. A second, younger, female child plays on the floor at center left, waving a spoon with a small basin at her feet, as if emulating her mother's domestic labors. The family hearth at left serves as both cooking fire and alchemical furnace, on which a linked glass alembic and retort stand distilling. This duality may have been viewed by an initiated audience as a reinforcing reference to "women's work." The scene is interwoven with alchemical and household objects: texts and treatises lie on the floor at left and silver tableware at right, while overhead on the wall hang letters and baskets, and beside them, a stuffed iguana suspended from the rafters. A small shelled turtle hangs beside it by a string. Though stuffed iguanas appear in several works by Wijck, the presence of the turtle is uncommon. The turtle's marked significance within a domestic context—as an animal said to carry its home on its back is supported by a popular Dutch emblem penned by the humanist writer Roemer Visscher, illustrated with the image of a turtle (Figure 78). The emblem, titled "T'huys best," ("home is best"), relates the mythical origin of the turtles' and tortoises' shell through the fable of the god Jupiter and the tortoise, the only animal not in attendance at Jupiter's wedding feast. When questioned about their absence, the tortoise expressed a desire to remain home rather than to travel, replying "Oost / West / 'thuys best" ("East,

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West, home is best"). For this response the tortoise was promptly cursed by the god to carry a home on its back eternally.²⁸⁶ The turtle may be understood simultaneously as an object that references activities in the natural sciences—including specimen collection and anatomy—as well as domestic bliss and the period's elevation of the home as a place of peace and retreat.

Wijck's decision to represent both children as mirroring their mother's diligent work stands in direct contrast to the poignant chaos of Brakenburgh's An Alchemist's Workshop with Children Playing (Figure 48, CHF). There, the alchemist's children emulate his hopeless pursuits by playing with a crucible and brazier of their own, demonstrating not only professional but moral catastrophe on the part of a parent. The importance placed on the orderly home, and the virtuous conduct of the individuals dwelling within, is a deeply engrained thread in Dutch art and literature of the period. This double condemnation—economic and domestic—of Brakenburgh's alchemist is particularly damning. More than a professional disgrace, his alchemist endangers the stability and continuity of family and community by failing to communicate necessary virtues or to provide a suitable education to their young. Wijck's alchemist, instead, is a paterfamilias whose family enacts rituals of harmony, domesticity, and orderly labor. His painted household is a functioning unit whose behaviors demonstrate the virtues of cooperation, obedience, and attentiveness. While his scenes of alchemical workrooms blended with living spaces and kitchens do appear highly cluttered, they nevertheless

²⁸⁶ Roemer Visscher. *Sinnepoppen*. L. Brummel, ed. (Martinus Nijhoff: The Hague, 1949): 98.

communicate a sense of purposeful work, eschewing dramatic family conflicts for scenes in which family members labor side-by-side.

Harmony in the home was believed to stem from women's diligent work and watchful care—qualities also expected of the alchemist hoping for success in a complex experiment. Yet among alchemy's ancient mythological founders was at least one legendary woman: Mary the Jewess, a prominent Alexandrian alchemist who is often associated in literary traditions with Mary, the sister of Moses. She was long credited with the invention of the *bain-marie* or Mary's bath, an insulating water bath used during distillation to regulate a slow, steady flow of temperature between heat source and vessel.²⁸⁷ An apparatus fitting this description appears at the right forefront of *The* Alchemist (Figure 79, Fitzwilliam Museum, Cambridge), where a large copper basin can be seen encircling a smaller vessel. To the left, an oversized earthenware jar with a bulbous top sits beside a colored glass alembic connected to a receiver. The alchemist, bearded and dressed in a black, fur-trimmed robe, turns in the direction of the viewer and gazes downward as if to survey the progress of his experiment. Beyond a hanging curtain, seen over the shoulder of the alchemist, a young woman sits working in the light of an open window. Though she has previously been identified as a "womanservant,"²⁸⁸ supported by the appearance of her plain dress and work apron, she more likely represents a member of the alchemist's household, possibly his wife. Her hair is pulled

²⁸⁷ Ian Michael Plant. Women Writers of Ancient Greece and Rome: An Anthology. (Norman: University of Oklahoma Press, 2004): 130-131.

²⁸⁸ Sir Sidney Colvin. *A Descriptive Catalogue of the Pictures in the Fitzwilliam Museum*. (Cambridge: Cambridge University Press, 1902): 221.

back beneath a light-colored cap, and she holds a bundle of cloth in her lap, indicating she may be engaged in sewing or mending.

This pairing of a diligent woman beside a studious, serious alchemist would have established the two as harmoniously reinforcing models of virtuous behavior. The motif of a woman sewing carries strong moral associations with the supposedly "feminine" virtues of diligence, docility, and domesticity. Popular texts circumscribing the good behavior of women and praising the virtues of wives, which circulated widely within the Dutch Republic during the sixteenth and seventeenth centuries, included some by contemporaneous authors—most notably the poet Jacob Cats, whose 1625 *Houwelyck* (*Marriage*) was re-published in more than twenty-one editions²⁸⁹—and others drawn from older sources, for example the translated Conjugalia Praecepta (Rules for *Marriage*) compiled by the Greek historian Plutarch in the first century CE.²⁹⁰ A direct association between diligence and needlework is also demonstrated by pedagogical imagery found in moralizing texts such as Johan van Nyenborgh's Toonneel der ambachten (Book of Trades), which paired an image of young girls sewing with a caption reading "if one accustoms them to working / they will stay industrious."²⁹¹ The diligence of the alchemist's wife may in turn mirror of the behavior of her husband, who turns from his book to gaze downward at his experiment, as if obeying the instructions of the alchemical authors who stress the necessity of constant attentiveness to those individuals who pursue chemical success.

²⁸⁹ Franits, *Paragons of Virtue*, 5-6.

²⁹⁰ Ibid: 77.

²⁹¹ Quoted in Franits. Ibid: 26.

The motif of domestic handiwork also appears in *The Alchemist in His Study with* a Woman Making Lace (Figure 67, CHF), dating to the mid-1650s. The space bears markers of a comfortable middle-class existence, such as the hanging birdcage, decorative blue-and-white china plates, and the framed painted portrait head that hangs on the wall at upper left. The woman in the foreground is likely the alchemist's wife. She wears a plain white cap and sits on a turned wooden chair, balancing a small wooden lace-making board upholstered in cloth on her lap. Thread was wound across bobbins or needles embedded in the fabric surface, creating intricate lace patterns for the decoration of clothing and household goods. By the middle of the seventeenth century, lace-making as a household pursuit for women had largely overtaken the once more common art of embroidery, as lace trims and cuffs could more easily be replaced from season to season as fashions changed. Aside from the adornment of family goods, lace-making was seen as a virtuous and suitable occupation for women, one that provided additional income and supported dowries. Small platforms or sewing-boxes of the type Wijck represents were used as supports for lace-making during this period, and a similar example can be found in The Lacemaker (Figure 80, Kunsthistorisches Museum, Vienna), attributed to Gabriel Metsu.

Wijck's lace-maker rests her cheek on one hand, as if the repetitive act of making bobbin lace has been set aside for a brief period of rest. Her attention seems to drift, as if inviting the viewer to speculate on her thoughts. This posture is the classic pose of melancholy, a powerful mental and emotional state often linked to madness and genius in men, and lovesickness in women. Laurinda Dixon's exploration of melancholy and

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lovesickness in Dutch genre paintings of women identifies common tropes that usually appear in such works: the inclusion of an erotic motif, such as a small painting or statuette of cupid, the presence of a physician (sometimes young and handsome, other times foppish and comical), and a burning ribbon or string—thought to alleviate and release lovesickness's symptoms.²⁹² All are absent from Wijck's scene, indicating that the source of her melancholic pose may be less romantic than contemplative and inwardlooking. The notion of absorption in one's work has frequently been associated with Johannes Vermeer's Lacemaker (Figure 81, Musée du Louvre, Paris), dating to about 1670. As Arthur Wheelock writes, the delicate work of Vermeer's lacemaker, head bent closely over her pins, carries a "total absorption in her task" that provokes an "equal intensity" in the viewer.²⁹³ Yet Vermeer's image—highlighting the inner emotional or psychological world of his female subject—was an unusual one, as few paintings of the period stressed introspection or serious reflection in women outside of a religious or devotional context.²⁹⁴ Images of women sleeping, or dozing with closed eyes, were by contrast a more common sight, a commentary on the need for virtuous vigilance and the proscribed female role of "guardian" of the home and moral exemplar.²⁹⁵

²⁹² Laurinda S. Dixon. Perilous Chastity: Women and Illness in Pre-Enlightenment Art and Medicine. (Ithaca: Cornell University Press, 1995): 1-10.

²⁹³ Arthur K. Wheelock. Johannes Vermeer. (Washington: National Gallery of Art, 1995): 176.

²⁹⁴ Mariet Westermann. "Costly and Curious, Full of pleasure and home contentment: Making Home in the Dutch Republic." Art & Home: Dutch Interiors in the Age of Rembrandt. (Zwolle: Waanders Publishes, 2001): 72.

²⁹⁵ Franits, *Paragons of Virtue*, 68-69.

Rather than a comment on housekeeping and women's moral authority, however, Wijck's melancholic lacemaker may instead act as an important counterpoint or parallel to the work of her husband—a comment on the melancholic turn that could be experienced by scholars and hermetic thinkers. Melancholy's connection to artists and art-making—stemming from the passion with which they pursued perfection, and the imaginative genius that could easily turn to madness²⁹⁶—also offered risk for deep thinkers and philosophers, alchemists included. The hermetic solitude of alchemical work was thought to spur melancholy in its practitioners; conversely, it was also believed that melancholic individuals bore a special partiality to esoteric pursuits, including alchemy, astrology, or magic.²⁹⁷ Melancholy in an alchemist's wife may therefore offer a negative mirror of his resistance to melancholy amidst productive work, or darkly point to the likelihood of her husband falling into a similar state. It may also suggest that the alchemist's immersion in study has reduced his neglected wife to despair; however, the room's cheerful lighting and the relative prosperity of the couple's surroundings leave room for ambivalence.

The gendered separation of the alchemical couple's pursuits, plainly indicated by the tools and implements of their respective behaviors, was well-established in Dutch scenes of family life, as well as within joint portraits. Michiel van Musscher's 1669 *Portrait of Michiel Comans II and his wife Elisabeth van der Meersch* (Figure 82,

²⁹⁶ Piers Britton. "*Mio malinchonico, o vero... mio pazzo*: Michelangelo, Vasari, and the Problem of Artists' Melancholy in Sixteenth-Century Italy." *The Sixteenth Century Journal* 34, No. 3 (2003): 655-656.

²⁹⁷ Noel L. Brann. "Alchemy and Melancholy in Medieval and Renaissance Thought: a Query into the Mystical Basis of their Relationship." *Ambix* 32, Issue 3 (1985): 137.

Rijksmuseum, Amsterdam) displayed the couple firmly within the distinct identities of "painter" and "housewife" through their proximity to, and handling of, either professional or household implements.²⁹⁸ At left, Elisabeth is shown seated with a book and a pillow for needleworking, close beside a basket of mending and the couple's pet dog—a traditional animal symbol of fidelity and faithfulness. At right, Michiel stands before an unfinished painting on an easel, holding the palette and brushes by which he made his living. The room itself blends domestic living space and studio in its juxtaposition of furniture, paintings and prints, flowers, and discarded slippers. The work's clear gender division aligns with developing Dutch notions of the ordering of the home and family life. Rhetorical ideals that strictly separated the "inside" world of women and children within the home from the "outside" world of men's commerce and governance were increasingly expounded in literature and art. Interior scenes of women's domestic worlds at times appeared to build the house itself around them, as in Pieter de Hooch's Woman *Receiving a Bread Basket from a Boy* (Figure 83, Wallace Collection, London), where the vignette of a woman at the threshold accepting a delivery from a smiling child is watched from afar by a neighbor, another woman, neatly framed by the doorway boundary of her own domestic space. Women's labor, while at times circumscribed by such borders, was considered necessary: wives were indispensable helpmeets, and their labor supported the proper functioning of the family's business and trade. Bourgeois Dutch homes were conceived of as social microcosms in which a benevolent husband acted as head and

²⁹⁸ Franits, Paragons of Virtue, 62.

'governor' in a more public sense, while the household was capably managed by a wife from within.²⁹⁹

Wijck's constructions of domesticity and labor would have appeared familiar to a broad audience, yet they may also have appealed specifically to individuals versed in alchemical thought. As noted above, frequent links between women's domestic labor and alchemical processes indicate that the "harmonious coexistence"³⁰⁰ of alchemy and family life within Wijck's painting carried an additional layer for interpretation. Initiated viewers would have been afforded the opportunity to draw connections between the preparation of food and the heating of the family hearth, and the work of distillation and tending the fires of experiment. The diligent labor of the alchemist's wife, and the pleasant and respectful behavior of his children—potentially modeling preferred qualities of the apprentice or student adept—would likewise have stood as examples for imitation and parallels to the alchemist's own "ideal" practices.

In other paintings by Wijck, alchemists guide and observe their apprentices much as their wives guide and guard their children. In *An Alchemist at Work, with a Mother by a Cradle Beyond* (Figure 59, CHF), the alchemist's wife, with her tasseled sewing cushion in her lap and her sleeping infant beside her, has been shifted to the background. In the foreground, the alchemist oversees the work of a youthful assistant who may be an apprentice or even a son: he appears to be sealing an earthenware apothecary's jar while

²⁹⁹ Mariet Westermann. "Costly and Curious, Full of pleasure and home contentment: Making Home in the Dutch Republic." *Art & Home: Dutch Interiors in the Age of Rembrandt*. (Zwolle: Waanders Publishes, 2001): 56-63
³⁰⁰ Michael McKeon. *The Secret History of Domesticity: Public, Private, and the Division of Knowledge*. (Baltimore: Johns Hopkins University Press, 2006): 213.

the alchemist looks on over his shoulder. As in previous images, the boundary between alchemical and domestic space appears somewhat blurred. Wijck has made use of subtle lighting to separate them, creating visually but not architecturally separate regions. To the rear, daylight streams through the window to illuminate mother and child, while the alchemist and assistant work in the darker foreground. The connected room that they inhabit suggests a lived overlap of labors, duties, and demands.

Wijck's choices in crafting virtuous alchemical households place his paintings at a distance from other images that present male-occupied laboratories devoid of women and children. The few women that do appear in the background of Teniers' alchemical workrooms appear as domestic servants, or else as customers accompanying a male spouse. Although Wijck's paintings model a serious and expert alchemy similar to that communicated in the works of Teniers, his distinct creations of hybrid domesticalchemical spaces indicate that he was neither an imitator nor a close follower. Rather, it seems highly likely that in seeking sources or stimulus from which to draw on, Wijck may have looked outside of alchemical painting altogether, finding models in trade imagery and earlier paintings and prints of artisanal labor, of the type that provided inspiration to contemporaries such as Quirin van Breckelenkam. In the latter's painted scenes of tradesmen's workrooms, the blending of older trade imagery with new idealizing images of the orderly bourgeois household resulted in images that presented male and female labor side-by-side and in thematic cooperation.³⁰¹ In Van Breckelenkam's Shoemaker's Shop (Figure 84, Norton Simon Museum, Pasadena), a

³⁰¹ Kettering, "Men at Work," 703-704.

bearded shoemaker sits at work beside his wife inside an orderly and light-filled shop. The productive labor of husband and wife mutually reinforce concepts of order, civic responsibility, and household prosperity. Likewise, Wijck's choice to depict alchemical practitioners at home with their families positions alchemy as a respectable pursuit and the alchemist as a productive member of a greater community.

Despite associations of alchemy with secrecy and esotericism, many alchemists expressed in their writings concern for the balancing of household life and professional endeavors. Notable among them was Andreas Libavius, the German alchemist and physician whose *Alchymia Triumphans* ("Alchemy Triumphant") of 1607 set aside a portion of its pages to the design and explanation of an ideal alchemist's home, incorporating living space as well as rooms for study and practical work. While reserving private workspace for secretive pursuits such as the quest for the philosopher's stone, ³⁰² this home, far from a hermetic retreat, would allow the alchemist to manage his household, interact with his family, and welcome guests and visitors. As Libavius explains, the alchemist's social standing and contributions to a greater community were of the utmost importance, second only to the pursuit of perfection in one's art. Only by such means could the practice of alchemy gain standing and credence:

We wish the chymist neither to neglect the usual pursuance of his duties... merely languishing among hidden ovens, but rather that he cares for human intercourse in the civil community and by means of an honorable family makes his profession [of chemistry] known.³⁰³

³⁰² Nummedal, *Alchemy and Authority*, 120.

³⁰³ Quoted in Bruce Moran. *Andreas Libavius and the Transformation of Alchemy*. (Sagamore Beach: Science History Publications, 2007): 54-55.

Here alchemy's establishment as a respectable discipline—and the alchemist's elevation to civic pillar and reputable artisan-takes place through the formation of a space in which public and private identities closely cooperate. The presence of a family emphasize the importance of social bonds and the contributions of wives to the maintenance of orderly households. The alchemist seen to act as a respectable head of household in turn legitimizes the profession he practices. While Wijck's exposure to the ideals of Libavius and his contemporaries is unknown, the promotion of the artisan as idealized "family man" in trade imagery was extant in other genre works of the same period. While the majority of images glorifying the bourgeois household as a place of domestic retreat were markedly absent of men³⁰⁴—with the exception of genre-style portrait scenes in which entire families gathered to make music or read aloud—images of commercial workshops often included the tradesman's wife and children, emphasizing the respectability and social conformity of its proprietor. As Alison Kettering writes, in her assessment of the "workshop" paintings of Quirin van Brekelenkam: "The woman's presence assures the viewer that the operation is family run, that the artisan is a paterfamilias, and that he... is both respectable and trustworthy."³⁰⁵ Wijck's alchemists, accompanied by their families, may be seen to embody both domestic and professional virtues.

The motif of the alchemist and family appears to have been present in Wijck's work throughout his career, evidenced by the distinct shifts in style from his very early,

 ³⁰⁴ Perry Chapman. "Home and the Display of Privacy." Art & Home: Dutch Interiors in the Age of Rembrandt. (Zwolle: Waanders Publishes, 2001): 134-141.
 ³⁰⁵ Kettering, "Men at Work," 702.

heavily tenebrist *An Alchemist at Work, with a Mother by a Cradle Beyond*, to the diffused brightness and crisper handling of the later *Alchemist in His Study with a Woman Making Lace* and the *Alchemist and Family*. Wijck's dual vision of alchemy and domesticity was central even to his earliest depictions of the subject. His inclusion of the domestic partially aligns him with the production of alchemical scenes within Haarlem, as the majority showed alchemist's struggling families to produce pathos—yet Wijck directly resisted the notion, transforming an established pictorial tradition to create images of responsible family leadership.

The Alchemist as Artisan

When the alchemist is joined by an assistant, scenes of laboratory work take on new dimensions relating to alchemy's productivity and commercial potential. The training of apprentices and the management of day-to-day labors were concerns shared across studios, laboratories, and workshops of the early modern period. Wijck's images of alchemists and their assistants can in many ways be viewed as entries in a continuum of genre imagery relating to the practice of trades. They present a respectable, responsible alchemy overseen by an expert master and enacted by attentive young assistants. They model accepted social hierarchies by representing cross-generational teaching, apprenticeship, and the division of labor between master and apprentice. These images of "professional" alchemy also reference alchemy's products, in the form of colored powders and raw matter, as well as processes (grinding, sifting, mixing) by which these materials were refined for the market. Wijck's artisanal vision of alchemy enters the

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discipline into dialogue with other commercial arts and trades, crafting an argument for alchemy's familiarity and utility to society.

While these images in a sense "open" the laboratory, they are not, however, transparent. Neither was the practice of alchemy: the opacity of alchemical prose was legendary, as noted in the previous chapter's examination of false practitioners. Metaphor and allegory were frequent tools of the alchemist, who sought to veil proprietary knowledge from outsiders and ensure that only the diligent succeeded in interpretation. Yet this secrecy closely echoes the concealment practices of artists, whose working habits and preferred materials were regularly kept secret from peers and competitors. While, unlike alchemists, artists enjoyed the protection, regulation, and community of a guild, individual artists jealously guarded the methods and recipes that were key to success and rendered their work distinctive. As Marc Gotlieb has noted, Vasari's account of the "invention" of oil painting by Jan van Eyck does more than simply connect the discovery of materials to alchemy: its framing confirms that both studio and laboratory were sites of "esoteric research concealed from outsiders."³⁰⁶ This concealment was at work even in artists' images of themselves and their own studios, as in Gerrit Dou's Self-Portrait of about 1665 (Figure 85, Metropolitan Museum of Art, New York). Though shown with palette and brushes in hand, Dou also surrounds himself with signs of his erudition (the book) and his commercial success (the illusionistic ledge, a pictorial element in which he specialized). The studio behind him recedes into darkness, indicating

³⁰⁶ Marc Gotlieb. "The Painter's Secret: Invention and Rivalry from Vasari to Balzac." *The Art Bulletin* 84, No. 3 (2002): 469-470.

that this scene conceals as much as it purports to reveal about Dou's habits and talents. Likewise, Wijck's constructions of alchemical workrooms, paralleling other painters' images of studios, present a highly constructed vision of alchemy that projects idealized values and virtues onto the alchemist and his practice.

The space of the laboratory, like the practice of alchemy, was a relatively liminal one, neither a space of pure labor nor of pure study. It was, however, fairly fixed in its relationship to chemical inquiry. The term "laboratory," originating in the Latin laborare, meaning labor or manual toil, appears to have been most closely associated with alchemical and chemical work, albeit not always of an "experimental" character. As Ursula Klein notes, use of the term laboratory rose to early popularity in Germanspeaking territories during the sixteenth century, where it referred "exclusively"³⁰⁷ to sites of alchemical inquiry, and was widely adopted. Laboratories were spaces in which the exacting work of assayers and metallurgists—smelting, coloring, and working ores and minerals—was performed. Later usage of the term incorporated the production of medicines, both chemical and organic, and the creation of dyes and pigments, as well as distillation and fermentation. Rather than an all-encompassing term that broadly included the many diverse pursuits of emerging empirical disciplines, such as optical experiments, anatomy and dissection, and so forth, the laboratory was understood as a place inextricably and concretely linked to the demands and materials of *alchemical* practice.

³⁰⁷ Ursula Klein. "The Laboratory Challenge: Some Revisions of the Standard View of Early Modern Experimentation." *Isis* 99, No. 4 (2008): 770.

While An Alchemist (Figure 70, Ham House, Richmond-upon-Thames) does not necessarily reveal secret knowledge, it does capture some of the specificity of process that marked laboratory work. For experiments, timing was crucial. This is reflected by Wijck's inclusion of tally marks, shown chalked above the wooden boards of the mantle at right, as well as on the far wall. These likely indicate record-keeping of the chemical work in progress. Their resemblance both to alchemical notation and elemental symbols in common circulation during the seventeenth century³⁰⁸—as well as to merchant's marks and other symbolic shorthand devices—may be incidental. The inclusion of this small but crucial detail, denoting time-keeping and hours spent in experiment, indicates Wijck's subtle sensitivity to workshop habits. The laboratory shown in the Ham House Alchemist seems to be commercial or professional rather than domestic, a contrast that may be connected to its audience of English elites familiar with Charles II's establishment of dedicated laboratory spaces at court. Behind the assistant at center sits a large hearth containing at least three small access doors for separate ovens. Such a construction would be able to support multiple processes, each using varying degrees of heat and carefully controlled fires. This apparatus is larger and more complex than the domestic-type hearths seen in the CHF Alchemist and Family (Figure 73) or The Alchemist in His Study with a Woman Making Lace (Figure 67), indicating that this is a larger workshop with a greater volume of production.

³⁰⁸ See the chart of signs included in Basil Valentine's *The last will and testament of Basil Valentine, monke of the Order of St. Bennet.* (London: Printed by S. G. and B. G. for Edward Brewster, 1671) (Neville Rare Book Collection, Chemical Heritage Foundation). The double-barred cross appears in the forms for "precipitare" or precipitation, as well as in other signs representing vitriol.

The Ham House *Alchemist* also models the division of laboratory work between the scholarly, expert guidance of the alchemist and the manual efforts of his assistant—a division familiar to any individuals in Wijck's time who had studied with a master or taken on an apprentice (or journeyman) themselves. The assistant at center is busy scooping red matter bare-handed from a large basin. The assistant's clothing—a white undershirt and brown smock—is simple but not ragged or torn, and his gaze remains attentively on the task at hand. The apprentice's proximity to the glowing fire in the hearth behind him, and his place among the many vessels of his labor, suggest his involvement with the daily activities of the workshop and his material knowledge. The assistant does not look to the alchemist for guidance, nor does the alchemist watch him closely, despite his young features and lack of facial hair. His independence suggests a more advanced age, perhaps a young man in his late teens. He may represent a journeyman type similar to the *laborant*, a term referring to those who performed manual tasks within a professional or commercial laboratory.

Alchemical writers who described the ideal qualities of the alchemist-scholar also devoted time to the preferred virtues of their shop assistants. Qualities of sturdiness, moral and emotional constancy, and discretion were prized. But while an alchemist's training could take one of many directions—owing to the discipline's diversity and lack of university bona fides—it appears that workshop labor was frequently performed along set organizational lines. During the sixteenth and seventeenth centuries, terms such as *laborant* (from the Latin *labore*) were widely used in contracts to indicate a laboratory worker—an individual who performed set duties for pay—whose work was primarily

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concrete and "entrepreneurial"³⁰⁹ rather than philosophical or experimental. Contracts from the Stuttgart laboratory of Duke Friedrich I of Württemberg provided separate classifications for *alchemists*, a term roughly analogous to "master," and *laboranten*, understood as a position of support and assistance.³¹⁰ Alchemists were autonomous operators, expected to innovate and adapt recipes, present new projects, and perform research, while *laboranten* were mainly expected to carry out their duties as instructed. As Tara Nummedal observes, this division of expectations placed both greater freedom and greater stress upon alchemists, who were expected to deliver new methods and successful experiments, while simultaneously shifting the responsibility of failure away from the task-oriented work of the *laboranten*. The work of the *laboranten* was steady if not lucrative, while the greater risks undertaken by alchemists held the potential for far greater reward.³¹¹

These common divisions of workshop labor would have been familiar to Wijck, as early modern artists and artisans regularly employed journeymen assistants. While many of the activities of artisanal studios were collaborative, feats of innovation—and guarantors of product quality—were typically ascribed to the master and his established workshop "brand." Wijck's *An Alchemist* expresses just such a division: while the alchemist interacts with the written word and its intellectual and creative implications, his

³⁰⁹Nummedal, Alchemy and Authority, 66.

³¹⁰ Terms such as *laborant*, referring to journeyman-like figures within the alchemical laboratory, were common not only in German-speaking territories but across Europe. Terms such as these appear in contracts and documents from the Prague workshops of Vilém of Rožmberk, and the laboratories of the Collegio Romano (led for a time by Athanasius Kircher). See Nummedal. Ibid: 132-133. ³¹¹ Ibid: 130-131.

assistant confidently manages the difficult and time-consuming material labor that was required for the smooth operation of the laboratory. In this formula, the alchemist acts as a representation of the mental and imaginative labors of alchemy, as well as the workshop's public face, while his assistant demonstrates the hands-on technical aspect. Wijck's central placement of the assistant and his engagement with the products of alchemy, balanced against the left-hand grouping of the alchemist and his desk and the vessels at right, produces a centered meditation on alchemical work and its varied dimensions.

The space of the Ham House *Alchemist* appears to be solely devoted to alchemical labors, rather than shared between domestic and professional needs. There is no evidence of the preparation of food and no furniture beyond the table, chair, and trunk at left. In reality, many practicing alchemists and natural philosophers found themselves experimenting in domestic spaces, or else in whatever space was available to them. This included Samuel Hartlib, the German-born British polymath, and his colleague Robert Boyle, both natural philosophers connected to the Royal Society of London for Improving Natural Knowledge. In 1653, despairing of government funds for the establishment of a dedicated laboratory facility for chemical pursuits, Hartlib established a makeshift "national laboratory"³¹² inside his own kitchen. In a letter to Boyle, Hartlib calls the space "a goodly laboratory; yea, such a one, as men affirm, they have never seen

³¹² J. Andrew Mendelsohn. "Alchemy and Politics in England 1649-1665." *Past & Present* 135 (1992): 51.

the like, for its several advantages and commodiousness."³¹³ The requirements of such a space were determined by their uses: the need for controlled fire necessitated a hearth, and good ventilation was preferable.

Separate laboratories, however, particularly commercial ones, were not unfamiliar. As noted above, the term "laboratory" signaled chemical work as well as experimental practices. Laboratories might be sites dedicated to innovation, but they were also increasingly associated with artisanal and industrial efforts that produced alchemically originated products for public use. The eighteenth-century *Encyclopédie* of Denis Diderot and Jean le Rond d'Alembert, and the *Universal Lexicon* of Johann Heinrich Zedler, came to define the term respectively as a "closed and covered place... [containing] chemical equipment" and a "labor or workhouse... [of] chemical work."³¹⁴ Wijck's choice to depict the alchemist and his assistant in a dedicated space does not simply speak to the notion of a laboratory as a reserved space for "pure" experiment or study, but also to developing ideas of the laboratory as a commercial endeavor. In this light, Wijck's inclusion of a young assistant suggests the multi-generational continuation of an alchemical business, in addition to the scholarly endeavors of a single alchemist.

Indeed, this conclusion is supported by documentary evidence provided by Wijck's son, Jan. As I will discuss in the following chapter, Wijck's success in England was shared by Jan, also a painter. Like his father, Jan was considered a good judge of paintings. In 1680, he was called upon by Elizabeth Maitland, the Duchess of Lauderdale

³¹³ Ibid: 51. Originally *The Works of the Honourable Robert Boyle*, ed. Thomas Birch, 6 vols. (London, 1772), vi, p. 79, Hartlib to Boyle, 28 Feb. 1653/4.
³¹⁴ Klein, "The Laboratory Challenge," 771.

and the wife of Wijck's patron John Maitland, to perform a comprehensive inventory and evaluation of paintings at the Maitland estate, Ham House. In this valuation, Jan refers to *An Alchemist* by the title *A Chymists Shop* [sic].³¹⁵ Though no customers are in sight, the title itself suggests a productive economic dimension to alchemical inquiry.

In a discussion of artisanal and scholarly labors, it is almost inevitable that Wijck's scenes would bring to mind the painter's workshop that produced them. For like alchemists, artists worked in the midst of their process, inside cluttered workshops among cracked jars and stained rags, old props, solvents, etched plates, and paint-smeared easels. And indeed Wijck's paintings of alchemy also incorporate images, mirroring the many interactions between artisans and image-making, whether in the course of work or the interpretation and communication of process. In the Schwerin Alchemist (Figure 68), several prints appear pinned to the wall, above the hearth and beside the desk: this positioning subtly underscores the importance of images to both material and intellectual labor. These prints include texts, which suggests they may be pages from illustrated books or manuals. They resemble the symbolic alchemical cosmologies found in alchemical treatises authored by Robert Fludd, Basil Valentine, Michael Maier, and others. Yet for their secrecy and obscurity, such images may also connect to broader interpretive image traditions found in emblem and print culture of the period. Alchemists were not the only writers to obscure or veil their lessons behind poetic language, nor the only ones to take pleasure in deciphering meaning.

³¹⁵ Jacob Simon. *Picture Frames at Ham House*. (London: National Trust Publications, 2014): 26.

One print, appearing at upper right in the Schwerin Alchemist, displays a circular compass-type diagram surrounded by a framing box. Compass-like or divided circular diagrams in alchemy frequently expressed foundational concepts regarding the arrangement and balance of universal forces, as in the illustrated title page of Robert Fludd's 1618 alchemical and cosmological manifesto, Utriusque Cosmi, Maioris scilicet et Minoris, metaphysica, physica, atque technica Historia (The metaphysical, physical, and technical history of the two worlds, namely the greater and the lesser) (Figure 86, CHF). The illustration places a nude male at the center of the microcosm, surrounded by an outer ring representing the macrocosm, indicating humanity's central place in the operations of the universe. A second image, the twelfth illustration of the 1613 Sive Aureliae Occultae Philosophorum (Figure 87) attributed to Basil Valentine, diagrams a star-like arrangement at the center of a circle, ringed with the poetically instructive alchemical motto Visita Interiora Terra Rectificando Invenies Occultum Lapidem ("Visit the interior of the earth, find and rectify the hidden stone"). Wijck's inclusion of printed images that conform to these patterns-however ambiguous their subjects ultimately remain—speaks to the importance of images in alchemical communities. The symbolic language that contained their proprietary secrets—and offered a target for ridicule among the skeptical and uninitiated—extended to a symbolic pictorial language evidenced by the work of Fludd, Valentine, Michael Maier, and other alchemical authors who combined word and image.

Yet there is a deeper tie between alchemical imagery and the "reading" of images during this period, particularly in the northern Netherlands. The Dutch taste for studying

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and interpreting emblems and the popularity of emblem books such as those by the humorist and poet Jacob Cats has been well-documented.³¹⁶ These practices intersected closely with alchemical cultures in the works of Goossen van Vreeswijck. Van Vreeswijck, a miner and metallurgist employed by William III in the second half of the seventeenth century, illustrated his diverse alchemical treatises with emblems taken directly from the pages of Cats' 1618 Silenus Alcibiadis sive Proteus, a collection of humanist and mythological emblems centered on the transformative figure of Proteus, god of rivers. Van Vreeswijck's wholesale adoption of Cat's previously published images, albeit with the addition of alchemical symbols superimposed over various elements of each scene, demonstrates not only the suitability of Cats' widely familiar images as mnemonic devices for the aspiring adept, but the ways in which emblem culture in general and alchemical "trade secrecy" related to one another.³¹⁷ As noted in the second chapter, there was an enduring tradition of alchemical emblems, such as those showing washer-women and fabric bleaching in the Splendour Solis (British Library, Harley MS 3469), that relied on familiar imagery to veil complex alchemical processes. But an interest in interpreting complex visual and textual elements in concert was hardly limited to alchemy. Rather, it was part of broader cultural proclivities towards wit, secret

 ³¹⁶ For a thorough examination of emblems and emblem culture as they correspond to Dutch art, see Eddy de Jongh's *Questions of Meaning: Theme and Motif in Dutch Seventeenth-Century Painting*. Michael Hoyle, trans. and ed. (Leiden: Primavera Pers, 2000). While de Jongh's iconological method has undergone criticism since the original publication of this work in 1995, his evidence and observations remain compelling.
 ³¹⁷ Bernhard F. Scholz. "Alchemy, Metallurgy and Emblematics in the Works of Seventeenth-Century Dutch 'Bergmeester' Goossen van Vreeswijck (1626-after 1689)." *Emblems and Alchemy: Glasgow Emblem Studies, Vol. 3*. Alison Adams and Stanton J. Linden, eds. (Glasgow: University of Glasgow, 1998): 5-22.

knowledge, and the pleasurable challenge of interpretation. Rather than an isolated phenomenon solely within alchemy, one that did not relate to contextualizing literary, artistic, and social habits, or that was employed only as a deceptive "smokescreen" for alchemy's shortcomings, alchemy's symbolic visual languages can be viewed as parallel and corresponding traditions of interpretation, analysis, and contemplation.

Wijck's alchemists work seriously, guide their apprentices, and are generally presented as mature and responsible men engaged in the pursuit of knowledge and, presumably, the production of some useful goods. Peeling away the references to goldmaking or melodramatic appeals to family poverty that permeated the work of his contemporaries, Wijck's alchemical workrooms appear chaotically organized, but not barren or ragged: busy, dirty, and cluttered, but not disreputable. In short, Wijck's images of alchemy treat alchemists as early modern artisans: productive figures whose expertise relied on both hand and intellect, whose work was often laborious and time-consuming, whose arts of making were somewhat concealed by the insularity of the workshop, and whose reputations depended less on high rank or social standing than on personal habits and upright dealings. As established, alchemy's shaky popular reputation was matched by a vociferous public demand for its products: it would hardly be the only early modern occupation heavily lampooned in imagery yet widely practiced in actuality, as a brief survey of "quack" paintings or satirical dentistry prints would quickly indicate. Though Wijck's paintings do not idealize the alchemical workspace—instead, they elect to include its clutter-they do seem to offer an "ideal" alchemist, one who acts as head of workshop, or head of household, with the proper authority and attentiveness, or else one

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who works in solitude with a disciplined and hermetic focus. They seem to suggest that if alchemy were practiced in such a way, it would indeed be a praiseworthy art.

The Alchemist as Scholar

Alchemy was widely considered a secret art. Though over time this secrecy became linked to occult or magical practices, the opaque language used by early modern alchemists was often in service of trade secrecy. Alchemical opacity acted as a screen that kept hard-earned techniques, theories, and recipes out of the hands of the uninitiated. Albertus Magnus's suggestion that alchemists should seek out working space within "a special house, hidden from men"³¹⁸ is connected to the valuable proprietary knowledge possessed by the adept. Working in secret, one could conceal success as well as failure, withhold expertise, and safeguard demand within the market. The isolation of alchemists in Wijck's paintings may also parallel their social realities, as alchemists belonged neither to guilds nor to university departments. The transmission of their knowledge relied on print, or on individual relationships with apprentices or collaborators.

Alchemists' practical needs for privacy were tied to the demands of process: this was equally true for other artisans, including painters. Early in the fifteenth century, Cennino Cennini recommended retiring to a private, well-lit room to draw, so that no interruptions could "inconvenience" the work in progress.³¹⁹ This advice was echoed in

³¹⁸ Quoted in Linden, Alchemy Reader, 103.

³¹⁹ Michael Cole and Mary Pardo. "Origins of the Studio." *Inventions of the Studio, Renaissance to Romanticism.* (Chapel Hill: University of North Carolina Press, 2005): 15.

Franciscus Junius's 1638 The Painting of the Ancients, a treatise expounding antique lessons for the modern painter. Junius suggests "retired and solitary places," where "Phantasie bestirreth itselfe most [sic]."³²⁰ This solitude fed creativity: both alchemists and artists required room for rumination and mental privacy (even secrecy) in their work. While solitude was connected to melancholy, and the dangers of becoming lost in one's imagination, it was considered necessary for the true work of the mind. The late sixteenth-century Italian alchemist Flavio Girolamo, defending against charges of alchemical melancholy, invoked Aristotilean links between genius and melancholy, and argued that remaining in isolation during the pursuit of the great work allowed the alchemist to "[conceal] lofty things in his mind" and escape distractions that jeopardized experimental process.³²¹ Similar concerns are evident in the emergence of the artist's studio as a space of retreat and intellectual engagement, rather than merely as a space of labor. In turn, this developing notion of studio privacy was linked to experimental concerns—including the growth of life drawing and the artist's study of nature. Leonardo da Vinci suggested that artists wishing to better understand natural things ought to engage with them in solitude, in order to deepen their engagement and prevent "injury" to a distracted mind.³²² Such beliefs aligned artists' contemplative studies to those of natural philosophers and scholars.

³²⁰ Franciscus Junius. *The Painting of the Ancients*. (London: Printed by R. Hodgkinsonne, 1638): 23.

³²¹ Noel L. Brann. "Alchemy and Melancholy in Medieval and Renaissance Thought: a Query into the Mystical Basis of their Relationship." *Ambix* 32, Issue 3 (1985): 128.
³²² Christopher S. Wood. "Indoor-Outdoor: The Studio Around 1500." *Inventions of the Studio, Renaissance to Romanticism*. (Chapel Hill: University of North Carolina Press, 2005): 37-38.

The Scholar (Figure 63, CHF), one of Wijck's earliest alchemical scenes, carries an atmosphere of solitude that both models and invites contemplation. Here, the alchemist sits at a desk beside a window. His right hand rests near the edge of an opened book, and others sit nearby. Beside the largest volume—whose pages are dog-eared from use—rests a blue and white earthenware jar covered by blue cloth, as well as a large terrestrial globe. The directional daylight that enters the scene from the left-hand window is warmly toned and illuminates best the small corner of the room in which the alchemist's work and papers are gathered. The room itself is comfortable yet humble: the wooden-beamed ceiling is low and flat, crossed by an arch at the top of the composition. In combination with the staircase at left that curves upward and away, these elements provide both invitation and barrier. This architectural framing device that mimics a reallife frame works to remind the viewer of the solitary state of the alchemist's workroom and the viewer's place outside it, yet draws the eye inward. In the same fashion, the alchemist's state seems both to warn against disruption while inviting the viewer's interest: thus we contemplate him as he contemplates his work.³²³

The painting's warm tonality, compositional inwardness, and intimacy of scale and detail exude an atmosphere of peaceful reflection reminiscent of older Northern images of Saint Jerome in meditation, particularly Albrecht Dürer's *Saint Jerome in his Study* (Figure 88). Wijck's single man engaged in attentive reading within the hermetic isolation of a study evokes these archetypical images of holy scholarship, though overt

³²³ For Michael Fried's landmark study on the mechanics of absorption, see *Absorption and theatricality: painting and beholder in the age of Diderot*. (Berkeley: University of California Press, 1980).

references to religious devotion have been omitted. Identification of the figure as an alchemist, rather than a more generalized scholar, relies largely on the presence of the earthenware jars at his left and right. These jars are of a type produced in the Netherlands, usually Delft, during the seventeenth century and commonly used by apothecaries for the preparation and preservation of "simples," medical remedies, tonics, pills, and purgatives.³²⁴ Both the organic remedies of the apothecary and the chemical medicines produced by alchemists might be stored in such vessels. While Wijck's scholar is shown focusing on his books and papers, he also sits besides markers of empirical investigation, namely the first-hand knowledge gained through the manufacture of medicines. This work may have been among the earliest images of alchemy in Wijck's career. The apothecary's jar demonstrates a material link between alchemy and making, yet it is a less prominent element than the scholar's books (and the attention he pays them). Later pictures by Wijck shift subtly over time to show more marked references to alchemical products, in the form of colored powders and raw materials.

Alchemical writers during the early modern period described the ideal adept as an individual who demonstrated mastery over *both* the intellectual and physical aspects of alchemy. Failure in alchemical pursuits could result either from a lack of study, or from a refusal to engage with one's materials in the demanding atmosphere of the laboratory. Success could only come from a union of those spheres. Gabriel Plattes, in his 1655 *A*

³²⁴ Tim Huisman. *Delft Apothecary Jars: A Descriptive Catalogue*. (Leiden: Museum Boerhaave, 2005): 10-11.

Caveat for Alchemists, outlined six "secrets" for the aspiring alchemist, beginning with textual study and concluding in the harnessing of fire:

He that hath not gathered a Concordance, by reading of books... is not fit to practice this noble Art... Fourthly, he must know the reason and manner of refixing his bodies when he hath them volatil, by this secret way of dissolution... Sixthly, he must know the fire and the regiment therof... I wish every man to consider what a hazard he undergoeth, if he meddle without the knowledge of these six secrets, for so much as he may very well faile, though he have them, I mean, though he have the Theorick, yet he may fail in the Practick.³²⁵ [sic]

As observed in the previous chapter, certain alchemical paintings, including those by the Flemish artist Matthias van Helmont, make use of books to signal an ironic comment on the fundamentally worthless quest for transmuted gold and secret knowledge. The central figure of Van Helmont's *An Alchemist at Work* (Figure 52, CHF) peers in confusion at a text that will, quite obviously, never yield to him its mysteries. Other paintings include a single, ragged book—as in Van Ostade's *An Alchemist* (Figure 46, National Gallery, London)—or omitted books altogether, as in Van de Venne's *Rijcke-Armoede* (Figure 45, CHF). The idealized marriage of written theory and engaged practice evident in the aspirations of the alchemists were not realized in such scenes. In contrast to these images, Wijck's painted alchemical scholars model both intellectual investigation and empirical practice.

Wijck's solitary alchemist seems to obey the instructions of many alchemical writers to maintain isolation and privacy during the course of experiments. More than the revelation of esoteric secrets was at stake: allowing visitors and outsiders to witness the

³²⁵ Quoted in Linden, Alchemy Reader, 200-201.

process of alchemy was to open that process to criticism and scrutiny. Those who did not understand the lengthy and demanding labors of alchemical work would inevitably become skeptical of its efficacy. As Albertus Magnus wrote: "They will ask you from time to time, 'Master, how are you succeeding?'... and, not being able to wait for the end of the work, they will say that, it is nothing, it is trifling, and the like."³²⁶

Seeking isolation during the course of experiments did not preclude alchemists from also providing separate demonstrations of successfully mastered techniques, whether in the laboratory or in public spaces, for the benefit of potential patrons or fellow investigators. In fact such demonstrations were often used as "auditions" or tests for aspiring alchemists seeking patronage in court circles.³²⁷ Members of alchemical communities exchanged knowledge in the form of letters and publications, and even offered their secret remedies and practices to patients and students (though often in exchange for payment or other tangible rewards). The disruption of work by patrons' visits, and the need to perform for these elite guests, was also a facet of artistic practice. Artists were conscious of the tension between their need to display skill and invite business, and the potential for interruption brought to them by curious patrons and *liefhebbers* (art lovers or connoisseurs). Among the most famous expressions of this tension was an account by Pliny, widely recirculated in art literature from the sixteenth century onward, of Alexander the Great's visit to the studio of Apelles. According to Pliny, Apelles instructed the ruler to refrain from speaking about painting, since even the

³²⁶ Quoted in Linden, *Alchemy Reader*, 103.

³²⁷ Nummedal, Alchemy and Authority, 104-109.

most junior color grinders found his ideas laughable.³²⁸ Contrasts between the knowledgeable artist and his interested but ignorant guest highlight the need for private workspace; yet the tale's long afterlife also seems to communicate artists' continued yearnings to have their expertise acknowledged.

Another picture, *The Alchemist* (Figure 74, CHF), shows a solitary alchemist who appears to have kept busy during his self-isolation. Cracked and discarded vessels litter the floor. Their presence indicates the hours, days and weeks spent in preparation, execution, and revision of laboratory procedures. Broken vessels and failed attempts were common, and setbacks anticipated: Albertus Magnus insisted that the alchemist engaged in such tasks must "not grow weary, but persevere to the end."³²⁹ In Wijck's scene, at least one experiment is ongoing: distillation, which begins with the heating of a substance in a base vessel known as a curcubit. Upon this is placed an alembic, the vessel shown with a rounded top and long spout. Vapor rises and condenses on the lid, runs down the spout, and is captured in the dish below. The origins of distillation have been traced as far back as Hellenistic Alexandria: both written descriptions and drawings of alembics and curcurbits survive from this period.³³⁰ This process of refinement also had philosophical dimensions, as demonstrated by an anonymous allegorical dialogue on alchemical theory, penned in the first or second century CE and likely originating in Greco-Roman Egypt:

The waters, when they come, awake the bodies and the spirits which are imprisoned and weak. For they again undergo oppression and are enclosed

³²⁸ Christopher S. Wood. "Indoor-Outdoor: The Studio Around 1500." *Inventions of the Studio, Renaissance to Romanticism.* (Chapel Hill: University of North Carolina Press, 2005): 38.

³²⁹ Quoted in Linden, *Alchemy Reader*, 103.

³³⁰ Forbes, R. J. A Short History of the Art of Distillation. (Leiden: EJ Brill, 1970): 18-25.

in Hades, and yet in a little while they grow and rise up and put on divers glorious colors... 331

Reference to "Hades" and "oppression" invoke the heat of the fire and the sealed distillation vessel respectively. Later authors in the Arab world referred to the products of distillation—the pure, evaporated liquids—variously as "souls," "spirits," and "tinctures."³³² Distillation was employed not only for medicinal purposes, such as the preparation of extracts from organic materials or plant and animal matter, but for the reduction of diverse substances to a "pure" or base state, making it possible to combine altered matter in new ways.³³³ Maintaining steady heat for time-consuming experiments such as distillation required skill and judgment as well as frequent observation, sometimes over the course of days or weeks.

Due to its brighter tonalities and crisper handling, the CHF *Alchemist* was likely produced after 1665, potentially separating it from the CHF *Scholar* by more than a decade. The few vessels present in the *Scholar* stand in contrast to the diverse array of equipment scattered on the floor in the CHF *Alchemist*. This seems to demonstrate Wijck's growing concern for accurately depicting laboratory apparatus as well as products and raw materials. In particular, his depiction of these vessels corresponds closely with imagery in contemporaneous alchemical manuals as well as in older texts. A 1545 Latin translation of the works of the Pseudo-Geber contains a detailed woodcut of

³³¹ Anonymous. "Dialogue of Cleopatra and the Philosophers." Cited in Linden, *Alchemy Reader*, 45.

³³² Forbes, A Short History of the Art of Distillation, 38.

³³³ Principe, *Secrets of Alchemy*, 37-38. See also Greenberg, *From Alchemy to Chemistry*, 143-158.

two long-necked alembics and cucurbits, one of which is being heated in a water bath over a furnace (Figure 89). These illustrations were reprinted in subsequent editions, including a 1678 English translation published in London.³³⁴ Systematically categorized diagrams of the many possible types and shapes of alembics and cucurbits (Figure 90) also appear as woodcut illustrations in the 1597 *Alchemia* of Andreas Libavius,³³⁵ a German professor and alchemist. Libavius's landmark publication—a "textbook-like"³³⁶ attempt to compile, synthesize, and clarify the alchemical texts of preceding generations—was part of Libavius's larger desire to legitimize alchemy and bring the discipline within the established framework of university curriculum. Libavius championed both the philosophical investigation of alchemy and a strong reliance on the experiential and empirical practices of artisans in the workshop and laboratory, acting in his writings as "a strident voice insisting upon the amalgamation of philosophy and artisanal know-how."³³⁷ This particular view of the alchemist as scholar-artisan, equally at home with text and crucible, aligns closely with Wijck's representations of the subject.

While it is not possible to state with certainty that Wijck encountered Libavius's text, or the many thematically similar works published immediately before and during his lifetime, the accuracy with which he depicts the equipment of distillation opens the possibility that Wijck may have looked to such publications in crafting his

³³⁴ E. J. Holmyard, ed. *The Works of Geber*. Richard Russell (1678 translator). (Reprint. London: J.M. Dent & Sons, Ltd: 1928): v. For illustration, see page 102.

 ³³⁵ Andreas Libavius. Alchemia. Die Alchemie des Andreas Libavius; ein Lehrbuch der Chemie aus dem Jahre 1597. (Reprint. Weinheim: Verlag Chemie, 1964): Plate 46.
 ³³⁶ Moran, Andreas Libavius, 2.

³³⁷ Ibid: 300.

representations of alchemical processes. Conversely, it may be Wijck's knowledge of artists' materials and processes, as well as knowledge gained in the workshops of other artisanal practitioners engaged in chemical work, that allowed him to depict the distillation apparatus with such fidelity. Beyond the alchemical workshop, distillation was also used to produce resins, wood and seed oils, turpentine for thinning and dissolving paints, and the strong acids (aqua fortis, "strong water," and aqua regia, "royal water") by which etchers produced their plates. Other recipes called for pulverized wood and seeds that could be used to produce walnut and linseed oils, the painter's familiar stock-in-trade. As noted in the previous chapter, other artists such as Adriaen van de Venne also carefully depicted distillation equipment with great detail, even within the context of satires. Wijck's painting lacks the overt mockery of Van de Venne's Rijcke-Armoede, and notably absent is the alchemist's starving family. Rather, Wijck's scholarly alchemist works diligently as his experiment progresses in the foreground. While the accuracy demonstrated in Van de Venne's equipment created an ironic contrast to the raggedness and ineptitude of his alchemist, the specificity of Wijck's representations contribute to the grounded seriousness of his scene. Such details may even have been noted by an audience familiar with alchemical precepts: as I will demonstrate in the following chapter, a number of his patrons were involved with alchemy and emerging chemistry. To such individuals, Wijck's studious alchemist could have reinforced personal inclinations and attitudes, or reminded them of their own challenges and triumphs in the context of the workroom.

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Other paintings of the period also provide accurate representations of the tools of natural philosophical study, including Johannes Vermeer's Astronomer (Figure 91, Musée du Louvre, Paris) and *Geographer* (Figure 92, Städelsches Kunstinstitut, Frankfurt), both dated to about 1668-1669. Contemporary scholarship has frequently drawn personal connections between Vermeer and the scholarly disciplines that these paintings treat, arguing that the painter may have received advanced mathematical and optical training, perhaps even at the hands of a licensed surveyor or natural philosopher. The identity of Vermeer's sitter has been heavily speculated upon, with some suggesting the Dutch polymath and 'father' of microbiology Anthony van Leeuwenhoek as both potential model and patron.³³⁸ The technical devices with which Vermeer's geographer and astronomer are surrounded-terrestrial and celestial globes, compass, astrolabehave been recognized as real, if somewhat outdated, instruments of the period. The celestial globe visible in the study of the Astronomer was modeled on the circa 1600 globe produced in the Amsterdam workshop of mapmaker Jodocus Hondius, while the terrestrial globe seen in the *Geographer* was the work of his son, Hendrick.³³⁹ Yet, as Klaas van Berkel has pointed out, Vermeer's omission of certain "up-to-date" instruments, such as the telescope, prevents these images from being read as purely "documentary" constructions of the methods of seventeenth-century empiricism.³⁴⁰

³³⁸ Kees Zandvliet. "Vermeer and the Significance of Cartography in His Time," in *The Scholarly World of Vermeer*. (Zwolle: Waanders, 1996): 65-66.

³³⁹ Arthur K. Wheelock Jr. "Geographer." *The Public and the Private in the Age of Vermeer*. (London: P. Wilson, 2000): 190.

³⁴⁰ Klaas van Berkel and Ton Brandenbarg. *The Scholarly World of Vermeer*. (Zwolle: Waanders Publishers, 1996): 23.

Wijck's images of alchemy are equally constructed. Yet his emphasis on materials and equipment not only identifies his subject as alchemy, but establishes the demanding nature of alchemical inquiry, and provides evidence of the duration and many possible outcomes of experiments. When compared with the refined, uncluttered atmospheres of the *Astronomer* and *Geographer*, and their locations within an overtly idealized bourgeois home, Wijck's alchemists appear to embody a humbler vision of empirical study. They inhabit a world of scholarly contemplation that is never far removed from the mess, toil, and experiment of the laboratory.

The physiognomy of Wijck's alchemists, however, bear a closer resemblance to Vermeer's middle-aged natural philosophers than to the majority of the white-bearded workshop masters seen in the alchemical works of Teniers or the ungainly peasant types populating the works of Bruegel, Van de Venne, and Van Ostade. By selecting positive physiognomic features, and presenting the alchemist at a robust age, Wijck departs from the pictorial tradition and affirms his alchemists' respectability. The unusual, closely cropped composition of *An Alchemist in his Study* (Figure 66, CHF) places emphasis on facial features, expression, and costume. Shown in an intimate, three-quarters' length view, Wijck's alchemist is a bearded man in middle age, finely dressed and neatly groomed, whose unexaggerated features bear an expression of thoughtful reflection. This appears to be a common type for Wijck: men with similar features, robes, and facial hair may be found in the CHF *Scholar* and Rijksmuseum *Alchemist*, among others discussed in this chapter. No evidence remains regarding Wijck's use of models. It is possible that the same man may have served as a model for multiple scenes, yet it is unlikely that this

painting, or the others that bear a similarly featured alchemist, was intended to represent an identifiable individual. Instead, it presents a clear vision of the alchemist as a robust man in the prime of life, health, and mental faculties.

An Alchemist in his Study captures its subject in a momentary pause. In one hand he holds an unfolded document whose contents he may have recently been absorbing. A file of notes strung from the shelf above offers further evidence of the alchemist's study (these may be recipes, commentaries, experimental notes, diverse fragmentary accumulations of scholarship). Yet these papers may also contain letters. This would suggest a network of knowledge-producers, and knowledge consumers, in which he was presumably immersed. This scholar paused in reading or writing by the interruption of a viewer shares similarities with An Alchemist in His Laboratory (Figure 93, CHF), produced by an unknown follower of Gerrit Dou. This latter alchemist is a man of advanced years, with a lined face and greying temples. Dressed in a fine fur robe and seated at a table, the alchemist turns to regard the viewer with a quill in hand. In the background, earthenware jugs and glass vials suggest he may be involved with distillation or the making of medicines. A pen-case and inkwell sit at his elbow. The single sheet of paper on which he writes may be a letter, evidence of correspondence between the alchemist and his colleagues, patrons, or patients. The exchange of letters between alchemical experts and those eager to know alchemy's secrets—or those likewise engaged in experiments of their own—was a defining feature of many early modern empirics' careers. The famed Paracelsian physician and alchemist Leonardo Fioravanti received letters from across Italy and Europe, asking for cures and advice: in

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1570, Fioravanti published a collection of letters and his answers in a volume titled *The* Treasury of Human Life. Among his many correspondents were fellow physicians, surgeons, and apothecaries interested in the best new means for producing chemical medicines.³⁴¹ In many ways, the formation of these extended networks of empirical investigators—an informal "Republic of Letters" sharing data between a vast array of practitioners—heralded the more formalized communications of Enlightenment-era publishing circles. Alchemists and natural philosophers wrote lengthy treatises to share their findings, but also used other popular print vehicles for advertisement and education. In the Netherlands, trade catalogues, newspapers, and pamphlets were used by empirics to promote new knowledge and advances in medicine, horticulture, and optics. In the 1650s, the anatomist Lodewijk de Bils circulated printed advertisements for his "museum" of preserved corpses, inviting students of anatomy and art to visit and conduct research, while simultaneously offering to share the secret of his new and proprietary wax-preservation technique with investors for a considerable fee.³⁴² In the context of these expanding networks of communication, Wijck's portrayal of an alchemist engaged with letters corresponds to the realities of alchemical investigation and its place amongst other emerging scientific disciplines.

Other images make reference to additional behaviors considered characteristic of scholarship during this period. Among these is the collecting of natural specimens, often

³⁴¹ William Eamon. *The Professor of Secrets: Mystery, Medicine, and Alchemy in Renaissance Italy*. (Washington: National Geographic Books, 2010): 221-226.
 ³⁴² Dániel Margócsy. "Advertising Cadavers in the Republic of Letters: Anatomical Publications in the Early Modern Netherlands." *The British Journal for the History of Science* 42, No. 2 (2009): 188-190.

in the form of preserved plant species and taxidermy animals. In the case of anatomists (and artists) these specimens might even extend to preserved human remains, organs, and skeletons.³⁴³ The display of such specimens (both in images and in reality) demonstrated claims for expertise in emerging botanical and zoological disciplines, but it can also be connected to more esoteric forms of knowledge. In particular, reptiles were connected to serpents and dragons, with all the power and curiosity that entailed. In Wijck's *The* Alchemist (Figure 69, Mauritshuis, The Hague), a stuffed reptile, likely an iguana, has been suspended from the ceiling, where it would have acted as a visible display of the alchemist's interest in naturalia to any prospective clients. Stuffed reptiles of varying degrees of anatomical accuracy are found in other scenes of alchemists, apothecaries, and medical professionals within Dutch and Flemish genre painting, a "stock" object that acted as either a suggestion of erudition or else the comic mimicry of such a quality. They are found throughout the alchemical paintings of Teniers: as Jane Davidson has observed, Teniers frequently and precisely depicted the Cyclura or "ground iguana," a range of species native to the Caribbean and Bahamas islands. Teniers' painted representations of *Cyclura* specimens are among the earliest visual evidence for their presence in European collections and the transmission of textual reports—such as the 1608 publication of Edward Topsell's compiled bestiary, The History of the Four Footed *Beasts, Serpents and Insects*—into the realm of genre painting. The inclusion of these specimens within alchemical scenes speaks not only to an older tradition of specimen-

³⁴³ For a more detailed look at anatomical study practices and the depiction of preserved human remains in Dutch art, see Julie V. Hansen. "Resurrecting Death: Anatomical Art in the Cabinet of Dr. Frederik Ruysch." *The Art Bulletin* 78, No. 4 (1996): 663-679.

keeping in the realm of established natural philosophy, but an influx of new zoological information arriving from the "New World" and a corresponding interest within emerging scientific communities.³⁴⁴ Yet the alchemical significance of reptiles and iguanas was also manifest in their appearance: a close physical resemblance to "serpents" and an imagined correspondence to "dragons," both heavily featured in allegorical alchemical writings, carried special importance. Both symbolic meaning and experimental uses existed for reptilian "dragons," whose bodies might be processed into oil for medicinal, artisanal, or apotropaic compounds.³⁴⁵ Wijck's and Teniers' alchemists, then, display objects with a dual purpose. Like emblems or opaque alchemical texts, these "dragons" invited interpretation. They could be read as signs of esoteric knowledge, or as markers of more practical, medicinal applications. They sat at the border of practitioners in two elite spheres of knowledge. They were valued by both natural philosophers seeking up-to-date collections of *naturalia*, as well as alchemical adepts looking to possess powerful secrets.

Wijck's scholarly, idealized alchemists represent a cross-section of his development as a painter, from the early, almost *brunaille* CHF *Scholar* to the bright, more crisply handled CHF *Alchemist in his Study*. They demonstrate that Wijck's vision of alchemy was, from the start, concerned with both material and intellectual aspects, though his concern for the detailed depiction of laboratory equipment—particularly for

³⁴⁴ Jane P. Davidson. "I am the poison dripping dragon: Iguanas and their Symbolism in the Alchemical and Occult Paintings of David Teniers the Younger." *Ambix* 34, No. 2 (1987): 63.

³⁴⁵ Davidson, "I am the poison dripping dragon," 76.

distillation vessels—seems to have expanded over time. This shift may represent Wijck's growing familiarity with alchemy and laboratory processes, as both his work in Haarlem and travels abroad frequently brought him into contact with new sources and communities involved in chemical work. It may also be linked to the desires of Wijck's erudite patrons, who will be discussed in the next chapter.

Wijck's alchemists are shown engaged with both well-established and contemporaneous behaviors of scholarship: they appear as genuine natural philosophers and collectors of knowledge. They offer their viewers private visions of experimental and intellectual labors that suffer no distractions from the task at hand. This contemplative retreat marks them as not merely artisan-tradesmen, in the vein of Van Brekelenkam's diligent tailors, but as artisan-scholars. Their need for privacy is not simply to protect proprietary trade knowledge, but to ensure that their engagement with nature—and nature's secrets—is deep and focused. In this aspect, alchemy is connected to artistry via an imaginative or experimental dimension of its process. This is particularly true for those artists working *naer het leven*, or studying from life. Natural knowledge, it seems, did not reveal itself to a crowd.

The "Foreign" Alchemist

The majority of Wijck's alchemists resemble the figure depicted in the CHF *An Alchemist in his Study* (Figure 66): a man in early middle age, light-skinned and bearded, wearing the sober clothing of a scholar. In certain rare images, this familiar type is replaced by an individual in distinctively "Eastern" costume. This is exemplified by a late

work, An Alchemist in Eastern Dress (Figure 72, Ham House, Richmond-upon-Thames), dating to about 1672. The alchemist at center wears a deep red robe striped with black, belted at the waist, and topped with a long vest-like outer coat with short sleeves. Barefaced, rather than bearded, he also wears an unusual black pointed hat with split peaks, and a knotted yellow cloth around his neck. Similar clothing may be found on Turkish merchants elsewhere in Wijck's oeuvre. This unusual costume choice likely connects to several factors: first, the work was produced for John Maitland, Duke of Lauderdale, who commissioned other scenes of foreign travel and regions abroad from Wijck during the same period. Wijck's familiarity with Naples, a major port connecting East and West, may have contributed to Maitland's selections and Wijck's formulation of an "Eastern" vision of alchemy. The history of alchemy itself is linked to these points of exchange, as many of its central texts transitioned from the Arab world to the Latinate West during the medieval period. Wijck's foreign alchemist may communicate period ideas regarding the origin point of alchemy, yet may also be linked to his patron's political interests, as Maitland shared ties to the English territory of Algiers and its booming global trade empire.

Wijck signals the identity and nationality of the Easterner in the Ham House *Alchemist* through dress. The brightly colored striped robe belted at the waist, and topped with a long-vest like garment, can also be seen on the standing man in Wijck's *Mediterreanean Harbor Scene with "Oriental" Merchants* (Figure 94, Private Collection). A second variation—once again a striped and belted robe, this time covered by a long-sleeved coat—is worn by the central seated man in his *Merchants from Holland*

and the Middle East Trading in a Mediterranean Port (Figure 95, Private Collection). These figures, alternately referred to as "oriental," "foreign," or "eastern," may indeed represent individuals in Turkish costume, as evidenced by seventeenth-century Middle Eastern-originating images of Turkish clothing, such as the anonymous Iranian Portrait of a European Gentleman in Turkish Dress (Figure 96, The Museum of Islamic Art, Qatar). The vividly striped garment, belted and worn beneath an outer coat, closely resembles the styling of Wijck's figures. The accuracy of Wijck's depictions may indicate his familiarity with pictorial examples, or else real encounters with such costumes during his travels across the Mediterranean region. It is also possible that Wijck encountered real Eastern garments while at home in Haarlem or visiting nearby Amsterdam: foreign merchants and dignitaries conducted business abroad, and were occasionally adopted as a subject by artists. Emanuel de Witte's Courtyard of the Old *Exchange in Amsterdam* (Figure 97, Museum Boijmans van Beuningen, Rotterdam) shows at bottom left a turbaned man in a brightly colored robe and sash belt, who closely resembles the types of "foreign" merchants Wijck also produced.

The *Alchemist in Eastern Dress* is not the only point at which Wijck deviates from his typical costumes: the Mauritshuis *Alchemist* (Figure 69) wears an unusual, vivid red coat trimmed with gold braid and gold-embroidered buttonholes. Yet this red coat connects to other cloaks worn by soldiers and merchants in Dutch genre paintings of a slightly earlier period, and thus does not distinguish the alchemist as a foreign or Turkish practitioner. Though neither the red coat with gold trim and buttons left draped on a chair in Nicolas Maes' 1656 *The Listening Housewife* (Figure 98, Wallace Collection,

London), nor the bright red coat of the gambling young dandy in David Teniers' 1647 *Gambling Scene at an Inn* (Figure 99, Wallace Collection, London), provide an exact stylistic match for Wijck's garment, they offer examples of a common type that may have provided Wijck's inspiration. Yet another potential source can be found in Rembrandt's 1654 *Portrait of Jan Six* (Figure 100, Six Collection, Amsterdam), and the vivid red cloak shown draped across the wealthy merchant and playwright's shoulders. Another painting by Wijck shows a third variation in costume: the *Alchemist* (Figure 101, Hermitage Museum, St. Petersburg) contains an alchemist in a belted yellow robe and a wound, turban-like hat in red in black. The setting of the latter work aligns closely with the workshop and materials seen in the Schwerin *Alchemist*, down to the gesture and posture of the alchemist's assistant, and may be contemporaneous.

In representing an alchemist in Eastern dress, Wijck may have been working to evoke alchemy's traditional associations with Arabic sources and the hybrid Greco-Egyptian figure of Hermes Trismegestus. This ancient and legendary individual was drawn from diverse mythological sources and formed into alchemy's greatest authority, a contemporary of Moses, who embodied divine wisdom. Papyrus recipe books dating to the third century CE demonstrate the earliest traces of alchemical technologies, including instructions for working and coloring metals, creating false gemstones and true dyes. Despite the fictions surrounding Hermes Trismegestus, this evidence confirms the importance of early Greco-Egyptian alchemy. During the same period, the work of Zosimos, a practicing alchemist living in the Egyptian city of Panopolis, offers a glimpse of early alchemy's more experimental and theoretical practices: Zosimos recorded not

only a vast range of devices for distillation and metallurgy, but principles for transmutation and an expressed belief in the "spirit" of metals.³⁴⁶ Yet the eventual transmission of Greco-Egyptian alchemy into the Arabic-speaking world, and its later transmission to the Latinate West, created textual disruptions that largely obscured these origins for many early modern authors. By the tenth century, the founder of alchemy was widely considered to be the fictional Egyptian sage "Hermes Trismegestus,"³⁴⁷ the "Thrice-Greatest." The primary work bearing his name, the *Emerald Tablet*, was believed to have been inscribed on an ancient piece of stone discovered beneath a subterranean crypt—while in reality, it was most likely an invented eighth-century text mimicking older Greek examples.³⁴⁸ The *Emerald Tablet* reads, briefly, as follows:

Truth! Certainty! That in which there is no doubt! That which is above is from that which is below, and that which is below is from that which is above, working the miracles of one thing. As all things were from one. Its father is the Sun and its mother the Moon. The Earth carried it in her belly, and the Wind nourished it in her belly, as Earth which shall become Fire. Feed the Earth from that which is subtle, with the greatest power. It ascends from the earth to the heaven and becomes ruler over that which is above and that which is below.³⁴⁹

The earliest recorded copy of the text of the Emerald Tablet appears in a ninth-

century Arabic text, the Book of the Secret of Creation, a compilation produced by an

unknown author working under a pseudonym.³⁵⁰ Alchemy's close association with

³⁴⁶ Principe, Secrets of Alchemy, 10-11, 15-17.

³⁴⁷ Here I follow Lawrence Principe's spelling for "Trismegestus," rather than the alternative "Trismegistus."

³⁴⁸ Principe, Secrets of Alchemy, 30-31.

³⁴⁹ Translated from Arabic to English by E. J. Holmyard, "The Emerald Tablet," *Nature* 112 (1923): 525-526. Quoted in Principe. Ibid: 111.

³⁵⁰ Principe, *Secrets of Alchemy*, 31.

Eastern scholarship continued after its reception into the Latinate West, to such a degree that many early eleventh- and twelfth-century Latin authors of alchemical texts masked their identities with Arabic pseudonyms in order to gain "authenticity" and establish expertise. The best-known of these were the works of the Pseudo-Geber, an enormous corpus of medieval Latin texts attributed to the eight-century Persian polymath, astronomer, and physician Jābir ibn Hayyān. "Geber" not only borrowed the name of this respected figure, but in many places attempted to imitate the structures of Arabic grammar and certain archaic phrasings.³⁵¹

Curiously, however, Wijck's *Alchemist in Eastern Dress* may also contain a reference to more localized technological advances, particularly the competition between the Dutch and English to perfect the pendulum clock. On the right-hand wall above the alchemist's globe and desk hangs a clock with a suspended weight below it. This clock may be of the simple "lantern" type that represented the majority of domestic clocks in England and the Netherlands during this period, yet the time of this painting's creation— between 1670 and 1673—may indicate Wijck's inclusion of the new and advanced pendulum clocks that entered the London market shortly before. The design for the short pendulum clock was credited to the Dutch polymath Christiaan Huygens, dating to about 1656, and Dutch and English production began in earnest during the following decade, amounting to a small-scale "race" to develop an improved clock with increasingly precise measurement of minutes and seconds. Such clocks were more than accessories for a luxury market: they offered a precision tool for the work of the astronomer. Huygen's use

³⁵¹ Principe, Secrets of Alchemy, 55.

of the clock in astronomical observation is well-documented, following the practices of Tycho Brahe and Galileo Galilei in the prior century. By 1676, the Royal Observatory, located in Greenwich, England, had been fitted with two large-scale long-pendulum clocks used for astronomical calculations. ³⁵²

Wijck's inclusion of a clock, placed directly above the celestial globe and beside a map pinned to the same wall, may indicate that this particular alchemist was closely engaged with observations of the heavens, likely for astrological divining, but potentially also for astronomical recording. Alchemical texts posited relationships, both symbolic and actual, between the planets and other celestial bodies and the metals they were thought to govern: the sun and gold, the moon and silver, Saturn and lead, Mars and iron, Mercury and 'quicksilver,' and so on. Certain theories put forward the possibility that the influence of the planets affected the "growth" of metals within the earth: Tycho Brahe, who also performed chemical experiments on the grounds of his observatory, referred to alchemy as "terrestrial astronomy."³⁵³ This statement relates closely to the supposed "origins" of alchemy, as Brahe's "terrestrial astronomy" mimics the phrasing of the *Emerald Tablet*. Wijck's unusual image may stress the esoteric dimensions of alchemy, and its connections to astronomy and astrology. The presence of a pendulum clock would also have prevented its contemporaneous viewers from mistaking this image of "modern"

³⁵² David S. Landes. *Revolution in Time: Clocks and the Making of the Modern World*.
(Cambridge: Harvard University Press, 2000, Revised Edition): 116-121. See also Clare Vincent, "European Clocks in the Seventeenth and Eighteenth Century." *Heilbrunn Timeline of Art History*. (New York: The Metropolitan Museum of Art, 2000) http://www.metmuseum.org/toah/hd/clck/hd_clck.htm (October 2003).
³⁵³ Quoted in Principe, *Secrets of Alchemy*, 111.

yet foreign alchemy for an image of *historical* alchemy, as it was believed to have originated in the East.

The authority of earlier Arab alchemical authors—and their medieval imitators persisted into the sixteenth and seventeenth centuries, and an alchemist in Turkish costume would surely have conjured up these associations for initiated viewers. Yet by the sixteenth century, the work of foreign alchemists also carried the possibility for xenophobic and nationalistic anxieties: threats of currency devaluation and counterfeiting by other national powers drove many sovereign states to ban the practice of alchemy by outsiders, and to provide licenses only to those who worked under the supervision of their own government or crown.³⁵⁴ This fear permeates a report penned by the diplomat and Christian convert Leo Africanus, who traveled to Northern Africa at the behest of Pope Leo X. Africanus's notes, published in 1526, describe the odorous, chaotic workrooms of Moroccan alchemists in disdainful detail, condemning their inhabitants as both deluded fools and dangerous frauds: "their chiefest drift is to coin counterfeit money [sic]."³⁵⁵ An Alchemist in Eastern Dress shares many compositional similarities with the serious and essentially positive representations of alchemy that Wijck locates more firmly within the conventions of Dutch genre painting, yet the potential identification of the man as Eastern and foreign complicates its reception. As evidenced by the English laws that banned foreign alchemists while supporting the work of alchemists under the decree of the

³⁵⁴ Nummedal, Alchemy and Authority, 151-152.

³⁵⁵ Quoted in Principe, Secrets of Alchemy, 50.

crown, behaviors acceptable on a local or national scale are not always favorably regarded when presented in foreign contexts.

This work's foreign motifs may stem in part from its context, as a commissioned piece for Ham House, the estate of John Maitland, Duke of Lauderdale. Maitland and his wife, Elizabeth Murray, were intimate friends of Charles II and his queen, Catherine of Braganza. The Portuguese-born Catherine's dowry had included sizeable lands abroad, including the port of Tangier on the coast of Northern Africa, a territory now known as Algiers. The acquisition of Tangier in 1662 had provided the English with a strategic base for naval operations, but also a lucrative center for trading in spices, textiles, sugar, dyes, and other products in high demand. For the English, Tangier became a locus of fascination and a symbol of growing empire.³⁵⁶ Waves of building and re-decoration at Ham House during the 1670s included the installation of a private closet for Catherine, installed with a series of harbor scenes and Neapolitan vistas produced by Wijck, many featuring figures in foreign costume. ³⁵⁷ Wijck's unusual image of a Turkish-garbed alchemist may have been one piece of a greater project to affirm and display the friendship between the Maitlands and the family of Charles II. The work makes use of Wijck's trademark subject matter, yet communicates additional themes of alchemy's Eastern origin as well as England's rapidly expanding empire. Maitland's own

³⁵⁶ Linda Colley. *Captives: Britain, Empire, and the World, 1600-1850.* (New York: Knopf Doubleday, 2007): 24-25.

³⁵⁷ Christopher Rowell. "Parquetry and Marquetry Floors and the Carvings in the Queen's Apartment at Ham House." *Ham House: 400 Years of Collecting and Patronage*. (New Haven: Yale University Press, 2013): 85.

knowledge of alchemy, its popularity within the royal circle, and Wijck's embrace by the English elite, will be discussed in greater detail in the following chapter.

An Alchemist in Eastern Dress also demonstrates Wijck's cosmopolitan credentials, as an artist who had traveled widely and absorbed cultural, artistic, and geographic knowledge. His observations of the volcano shown across the Bay of Naples supported connections to natural philosophy, reinforcing existing themes in his images of alchemical laboratories. Ultimately, Wijck's foreign motifs serve to demonstrate his erudition and worldliness. They add a desirable dimension to his artistic persona as a painter of empirical and experimental themes.

Wijck's treatment of alchemy places him in the role of innovator instead of imitator. His deviations from a pictorial tradition that mocked alchemy—a pictorial tradition he was undoubtedly aware of—and the seriousness with which he typically represented alchemy and its practitioners, indicates his sophisticated understanding of the ways in which alchemy and art intertwined. Wijck's painted laboratories argue for a successful, responsible practice of alchemy not unlike the habits most praised by alchemists in their own writings. His images also echo the proto-industrial distillation laboratories of Stradanus created a century earlier, in their positive visualization of alchemy as a productive enterprise. Yet Wijck's paintings represent individual practitioners in small-scale workrooms that more closely resemble artisan's shops. The

result are images that stress not only alchemy's productivity, but its *social* utility and essential respectability.

This respectability, however, may seem somewhat challenged by Wijck's depictions of mess. Many scenes include scattered papers and vessels, but clutter reaches a dramatic crescendo in the foreground of his Schwerin *Alchemist* (Figure 68). At right, the multi-level hearth is piled with a cracked earthenware dish, an alembic resting crookedly on its side, an hourglass, strings and spoons; an oil lamp sits in a wall niche above. On the floor before the hearth is a woven market basket, a tall copper stand, and an enormous folio of papers that has been daubed with smears of red matter. Moving left, there are ceramic apothecaries' jars and a wooden box of tools, and colored matter in paper cones; the heavy shadow at far left somewhat veils the form of an oversized mortar and pestle, a copper basin filled with cloth and jars, a wooden bucket, and large bound books. Every available surface—two studded chairs against the wall at left, the alchemist's desk at center, the windowsill, shelves and wall cabinets—is covered in small vials, bundles of cloth, and yet more paper. Wijck's depiction of streaming daylight bathes the center and right of the scene, touching the upturned edges of folded paper and the rims of glazed jugs. At times this use of highlights serves to emphasize wear and breakage: a bright interior reflection on the spouted jug by the alchemist's right elbow is only visible through a long crack in its wall. Not confined to a single corner, or to the background, the mess is throughout and insistently foregrounded, suggesting that it is, indeed, key to understanding the picture as a whole.

As I note in the first chapter, most interpretations of mess as it relates to alchemy have regarded broken and discarded objects as unequivocally negative. Wayne Franits has described the display of cracked or merely heavily used objects in alchemical workrooms as "the tangible evidence of past experiments gone awry."³⁵⁸ Enduring notions regarding Dutch attitudes towards order and disorder and moralizing genre scenes have surely contributed to the broadly accepted conclusion that social and artistic attitudes towards alchemy were inherently disparaging, expressed through painting as images of disorganization and disaster. As Jane Russell Corbett writes, "It is difficult to respond to the general disorder of these workrooms as anything other than a negative comment."³⁵⁹

Wijck's alchemical mess distinguishes his images visually from other scenes of respectable artisans and makers, such as Van Brekelenkam's tailor shops. The storefront in Van Brekelenkam's *Interior of a Tailor Shop* (Figure 102, Worchester Art Museum, Worchester) is a neatly organized room with a swept-clean floor, and spare ribbons hung carefully on a line against the back wall. The inclusion of a small bucket at right, and a few barrels and bundles of cloth below the sewing platform, offers a nod to the artisanal nature of the space, yet these sparse objects barely register as clutter. Above all, the scene radiates a placid, orderly atmosphere that assures the viewer of the tailor's decency and competence. Yet as I have demonstrated, Wijck also presents signs of harmony within the alchemist's household and evidence for alchemists' serious engagements with texts,

³⁵⁸ Franits, Dutch Seventeenth-Century Genre Painting, 142.

³⁵⁹ Corbett, "Convention and Change," 254.

naturalia, and chemical products for the marketplace. Mess—even prominent mess cannot entirely dislodge such readings.

What it can do is complicate them. This complication, and the complex play of interpretation it requires, may have been a point of particular interest for Wijck's period audience. His painted laboratories were considered curious and "ingenious" by his biographers and critics: most notably, Houbraken called their details "wittily painted" and "artfully suitable."³⁶⁰ Houbraken noted a range of the objects typically shown by Wijck ("furnaces, crucibles, pans, glasses... a multitude of tools"),³⁶¹ a distinction that suggests other period viewers would have been equally able to identify individual vessels and apparatuses amongst a more general clutter.

Houbraken's description of specifically alchemical tools also underscores a simple yet central truth: alchemy is not tailoring. While it produced many useful goods for the market, economic productivity was not its only aim. Its workings were considered "dynamic and speculative,"³⁶² and its practitioners were engaged in seeking philosophical truths and natural secrets—truths that might upend human knowledge of matter, and in turn understanding of the material nature of the universe itself. Such endeavors do not always have clear ends, or even necessarily clear beginnings. This unbounded creative potential in alchemy is not unlike the creative labors of artists, whose imaginations or *fantasia* were at times considered dangerous for their curious, unbridled potential.³⁶³

³⁶⁰ Arnold Houbraken, *De groote schouburgh*, 16.

³⁶¹ Ibid: 16.

³⁶² Moran, *Distilling Knowledge*, 35.

³⁶³ Michael Cole. "The Demonic Arts and the Origin of the Medium." *The Art Bulletin* 84, No. 4 (2002): 625-629.

Alchemists and artists also shared concerns and challenges regarding the nature of imitation, the importance of first-hand empirical knowledge versus textual theory, and the formation (and elevation) of an identity within greater society. Both artists and alchemists were caught at the juncture of theory and practice: as Philips Angel stressed to the painters of Leiden, the elevation of art from "mere" craft to liberal discipline was an ongoing struggle that placed artists at odds with an unscrupulous market and indifferent (or skeptical) public. Artists pushed against the categorization of their work as a manual trade by its emphasizing creative and intellectual dimensions, and affirming that mind and hand were equally necessary to success.

A new interpretation of the mess on view within the Schwerin *Alchemist*, therefore, might take into consideration the alchemist's—as well as the artist's—ongoing creative endeavors. A book left open, as on the alchemist's desk, implies a future return to reading, or an unfinished thought. At center right, paper cones sit close to a shallow basin filled with blue matter: this may suggest someone was interrupted in filling them. Even the alchemist's gaze, over his right shoulder, implies pause and contemplation. He strokes his beard thoughtfully while his apprentice works on in the background. Labor both physical and mental—continues, even during this moment of reflection. Overall, the painting seems to communicate the long duration of alchemical work, the demands of process, and the curiously unfixed, unfinished quality belonging to alchemy's interrogations of nature. It may also demonstrate the passionate striving of the alchemist for nature's hidden truths—a driven search that could border on frenzy, the idiosyncratic workings of genius or adept. Wijck's scattered papers and cracked jars would indeed be

"artfully suitable" for such a narrative, and might further demonstrate a sophisticated understanding of his subject. For a period audience familiar with alchemy's speculative endeavors, mess and disarray could function as a means to generate dialogue on the goals and challenges of transformative arts. In turn, such responses might also prompt viewers to marvel at the skill of the painter in rendering intellectual concepts pictorially.

Wijck's formulations of alchemical subjects challenge the pictorial tradition by translating the stock figure of the alchemist into the mode of the experimental artistscholar. Within his paintings, much of alchemy's complex and unfamiliar language becomes the familiar visual language of the studio and workshop. Wijck's alchemists produce goods for the market, communicate and exchange with their peers, experiment, and perform deep scholarly work. In this context, their broken vessels and scattered books denote process, the natural "life-cycle" of skilled labor, as well as depths of theory and knowledge. It is through artisanal practice that Wijck is able to interpret and depict alchemy, and to communicate practices and concepts of alchemy to others. With the rare exception of his Eastern alchemist, Wijck's alchemists were middle-aged European men in scholarly dress, competent "masters" of an economic and social apparatus—the artisanal shop—that would have been intimately familiar both to Wijck and his audience. His hermetic practitioners are productive tradesmen, surrounded by diligent apprentices and members of a growing family.

Yet Wijck's alchemists are also creative and intellectual experimenters, whose solitude feeds (unfinished) innovation and the discovery of nature's inner workings. His emphasis on alchemists' hybridity as investigators and practitioners signals the modernity

of his approach to the subject. These images do not yield up all of alchemy's secrets for scrutiny: instead, like all paintings, they are a constructed reality, revealing some truths while concealing others. The omission of chrysopoetic work indicates Wijck's decision to turn aside from aspects of alchemy that invited criticism, and towards alchemy's functional and productive dimensions. Details of tally marks and pinned prints, broken vessels, and messy workrooms mark a concern for authenticity, but also for the unique nature of empirical experimental pursuits. Wijck's paintings "wittily" remind the viewer of the continued inquiry, seeking and searching that characterizes alchemical work. The result is a new vision of alchemy as an art that is useful, interesting, and beautiful to contemplate.

Strikingly, Wijck's alchemists most closely resemble the professional class of artists to which he himself belonged. In the following chapter I will explore origin points for his unique vision of alchemy, demonstrating his immersion in a network of artisans and patrons who were themselves engaged in alchemy on various levels, as well as his place within an artistic tradition that prized experimental material knowledge.

Chapter 5

ARTISTIC EXPERIMENT, ARTISANAL KNOWLEDGE, AND EMERGING SCIENCE IN WIJCK'S CIRCLES

Thomas Wijck's construction of alchemy as a scholarly-artisanal discipline speaks most directly to a personal knowledge of the materials of his own workshop, many of which originated within the laboratories of alchemists, apothecaries, and colormen. His practices as a painter-etcher, and the work of his peers, incorporated chemical knowledge that bordered on, or was itself, alchemical. In addition to overlapping studio knowledge, artists and alchemists shared a desire to elevate their professions above the status of craft or trade. In both cases, they worked to achieve these goals by emphasizing their intellectual and creative powers.

It is possible, however, that Wijck was also introduced more specifically to alchemical theory or literature by members of an extended intellectual, professional, or personal circle. Wijck's representations of alchemy frame the alchemist as scholarartisan, engaged with theory and texts—through both books and exchanged letters—as well as with workshop materials and processes. Alchemical writers of the same period stressed this dual mastery as a quality belonging to the ideal alchemist, who could grasp and conquer not only alchemy's complex tenets and symbolic language, but the demanding and skill-intensive practices of the laboratory.³⁶⁴ Though no documents remain to confirm whether or not Wijck read or interacted with such instructive texts, his portrayal of alchemy aligns closely with the positive self-fashioning attempts of alchemists.

This chapter examines the movement of alchemical ideas and practices within the social and intellectual circles that surrounded Wijck. Much like his painted representations, his experiences with alchemy straddled both textual-intellectual and workshop-based realms. More specifically, it becomes apparent that Wijck encountered alchemy in four distinct yet interconnected frameworks, each with its own set of practices and associations linked to a geographical location. First, in Haarlem, Wijck likely encountered alchemy as a metaphor-but also as a means-for engaging with artistic work that was experimental. This contact was made through the legacy of the celebrated painter, engraver, draftsman, and supposed alchemical adept Hendrik Goltzius (1558-1617). Goltzius's experimental artistic pursuits, viewed by his contemporaries and biographers as closely allied with alchemical concepts, provided the city's artists with a way to translate their own practices into alchemical terms—and vice versa. Second, Wijck encountered alchemy in Haarlem as a practical body of knowledge and techniques circulated within a community of artisans, many of whom engaged in chemical work and shared knowledge that bordered on the alchemical. Wijck's prominence in the Guild of Saint Luke, and his professional and personal connections, would have provided numerous opportunities for the exchange of recipes, materials, and knowledge. Third, it is

³⁶⁴ Nummedal, Alchemy and Authority, 65-66.

highly possible that through time spent in Rome and Naples, among communities of artists known for their esoteric practices, Wijck became aware of the mystical or occult dimension of alchemical thought. This is demonstrated by The Alchemist and Death (Figure 103, Bader Collection, Milwaukee), a highly unusual painting in his oeuvre that shares striking connections with Pieter van Laer's occult-inspired Self-Portrait with Magic Scene (Figure 104, Private Collection, New York). Fourth and finally, Wijck was surely exposed to new currents in alchemical thought amongst English elites during the Restoration, as his work for the household of John Maitland, first Duke of Lauderdale, placed him in direct proximity to the alchemy-fascinated circle of Charles II. Archival evidence reveals the presence of distillation equipment at Maitland's home, where both Wijck and his son Jan, also an artist, appear to have worked for extended periods. The professional connections of Jan in his work with surveyors and engineers further links both Wijcks to a network of urban artisans and technologists, many of whom participated in the activities of the Royal Society and were involved with experimental pursuits. Wijck's activity as a painter of alchemists during this period places him within a web of chemical inquiry.

Evidence for Wijck's encounters comes partially in the form of inventories that reveal his network of collectors and patrons. At home in Haarlem, Wijck's works surface in the collections of notable silversmiths, brewers, vintners, and textile merchants, all of whom held some knowledge of alchemy through their professions. In England, his prominent representation within the Maitland home speaks to the likelihood of encounters with other patrons and interested parties in court circles. Though the limited

evidence of collecting does not necessarily signify a personal relationship between artist and buyer, Wijck's visibility in inventories signals his status amongst patrons of painting in Haarlem and London, and a demonstrated desire for his work. In turn, the identities of those who collected his works may shed some light on Wijck's relationships and networks within his home city and abroad, and the types of knowledge he encountered in the course of his work and life. Investigations into the patronage of better-known figures such as Rembrandt and Vermeer have yielded fertile details regarding the artists' lives, commitments, and interests.³⁶⁵ Though Wijck was not a portraitist à la Rembrandt, nor does he appear to have formed an extended financial bond with a single patron as Vermeer did, closer attention to those who bought and displayed his works constitutes a new, tentative glimpse into the intellectual and social worlds of those who would choose to patronize a painter of alchemy, kitchens, and workrooms.

The diversity of Wijck's encounters with alchemy almost certainly informed his unusually subtle characterizations of alchemists as sober, scholarly, productive artisans. His paintings, remarkable within Haarlem's pictorial traditions in their serious and multilayered portrayals of alchemical work, come at last into clear focus when considered alongside Wijck's continued exposure to alchemical ideas and practices. This is not to say that Wijck's experiences with alchemy were highly unusual: early modern artists and artisans inhabited a world that was decidedly alchemical, both in its embrace of

³⁶⁵ For one of many such studies on Rembrandt, see Paul Crenshaw. *Rembrandt's Bankruptcy: The Artist, His Patrons, and the Art World in Seventeenth-Century Netherlands.* (Cambridge: Cambridge University Press, 2006). For Vermeer, see the landmark study by John M. Montias. *Vermeer and His Milieu: A Web of Social History.* (Princeton: Princeton University Press, 1991).

alchemical theories and in its use of alchemical materials and techniques. It is Wijck's continued *response* to alchemy, and his marked efforts to construct a representation of alchemy that defied established satirical precedents, that indicates a difference in the degree of his exposures to alchemy, a deeper personal interest in alchemy, a deeper interest amongst his specific patrons, or (more plausibly) a mixture of these three. Such differences confirm that these contacts with alchemy, made throughout the course of his life and across several international borders, were particularly meaningful ones. In the following sections, I explore Wijck's connections to alchemy in Haarlem, Rome, Naples, and finally London, as each city offered him a new lens by which to experience, process, and ultimately make use of alchemical knowledge.

Goltzius and Artistic Experiment in Haarlem

In 1617, shortly after the death of Hendrik Goltzius in Haarlem, an elegy appeared praising the artist and lamenting the city's great loss. This elegy also identified Goltzius as a serious practitioner of the alchemical arts. The eight-page *Elegia*, *ofte*, *Klagh Dichtse Twee-Spraek over de Doot des Alder-konst-rijcksten Heer Henricus Goltzius, in sijn leven Kloeck Schilder, Teeckenaer, ende Konstigh Plaet-snijderhas* (*Elegy, or Lament in Dialogue, over the Death of the Artful Master Hendrik Goltzius, and his life as a Valiant Painter, Draftsman, and Skillful Plate-Cutter*), was published anonymously. It takes the form of a dialogue between an "art-loving heart" (*konst-lievigh hert*) and one who is "zealous about art" (*ijverigh tot konst*). The author has since been identified as the Haarlem poet and member of the city's chamber of rhetoric Lucas Gijsbertsz. Aside from celebrating Goltzius's virtuosic talent and assuring his continued fame, the elegy also makes note of Goltzius's alchemical ambitions, openly praising his abilities as an adept: "*Een ondersoeker der Philosophalen Steen, wiert hy bevonden ook boven veel Alchemisten*" ("A seeker after the Philosopher's Stone, he was found to be above many alchemists").³⁶⁶

Legal documents support the elegy's poetic descriptions: testimony given in 1605 reveals that Goltzius was receiving training in alchemy from Lenaert Engelbrechtsz, who claimed to be able to make gold, and who bragged openly that he had in fact taught the chrysopoetic art successfully to Goltzius. Engelbrechtsz was more than a casual acquaintance, as Goltzius welcomed the alchemist into his private home, though their friendly relationship appears to have been short-lived. Allegedly, Engelbrechtsz boasted of owning half of Goltzius's estate, and planned to acquire the other half.³⁶⁷ The financial fallout of this arrangement is unclear, but it is apparent that the partnership was severed shortly thereafter. Beyond gold-making, Goltzius may have been involved in other alchemical projects, including distillation: accounts by Aernout van Buchel and Constantijn Huygens refer to experiments made by Goltzius, most notably an incident in which a glass vessel exploded and shattered, nearly costing the artist an eye.³⁶⁸ Knowledge of Goltzius's involvement with alchemy appears to have been widespread.

 ³⁶⁶ Lawrence W. Nichols. "Hendrick Goltzius – Documents and Printed Literature Concerning his Life," *Nederlands Kunsthistorisch Jaarboek* 42-43 (1991-1992): 111.
 ³⁶⁷ This is according to eyewitness testimony given by Jacob Matham, Henrick de Vroom, and a handful of Goltzius's neighbors, on August 1, 1608. Lawrence W. Nichols. Ibid: 104.

³⁶⁸ Van Buchel reports this story in a letter dated June 1605. Nichols, Ibid: 98.

The theme of Goltzius's alchemical mastery repeats frequently throughout biographies produced both within his lifetime and after his death. This includes his entry in the *Schilder-boeck (Painter's Book)* of Karel van Mander, a close friend. Walter S. Melion has thoroughly explored Van Mander's construction of Goltzius as a "Proteus or Vertumnus" of art, linking Goltzius's acts of art-making with the ancient deities of change and mutability. As Melion writes, for Van Mander, "[Goltzius] is great because of his range as a copyist—simply put, there is nothing he cannot reproduce."³⁶⁹ This mimetic skill extends not only to the natural world, but to the strategies and techniques of other artists. For Van Mander, Goltzius's capacity to imitate and adapt styles, as well as his ingenuity for materials, sets him above all others in his transformative abilities. It is this inventiveness and aptitude for materials, according to Van Mander, that most closely links Goltzius—Van Mander's contemporaneous 'modern' master *par excellence*—to the most revered artist of the Northern past, Jan van Eyck.

Van Eyck's enduring legend as the "inventor" of oil painting explicitly links his experimental practices to alchemy. These apocryphal claims were firmly established by Giorgio Vasari's widely circulated *Vitae* of 1550. Vasari's biography of Antonello da Messina, a Sicilian painter active a century earlier, begins by outlining the struggles of past Italian artists to create paintings that were luminous and richly colored, with smoother tonal blending. Egg tempera lacked "softness," according to Vasari, and could

³⁶⁹ Walter S. Melion. "Karel van Mander's "Life of Goltzius": Defining the Paradigm of Protean Virtuosity in Haarlem around 1600." *Studies in the History of Art* 27, Symposium Papers XII: Cultural Differentiation and Cultural Identity in the Visual Arts (1989): 121.

only be applied in quick strokes, "by the points of their brushes."³⁷⁰ Seeking a solution, da Messina supposedly traveled to the Flemish court and apprenticed himself to Van Eyck, who had invented a new method of using oil as a binder. Vasari attributes this landmark discovery to Van Eyck's boundless capacity for invention, describing his search through combination after combination of medium, varnish, and additive, and his eventual turn to alchemical distillation:

"and as his imagination continually worked to enrich the art of painting, it came to pass that while trying to find various kinds of colors, [Van Eyck] delighted in alchemy, and so set himself to discovering oils to paint and various sorts of things, as is common in persons of a sophisticated mind..."³⁷¹

The benefits of this discovery were manifold: the new method of using linseed or walnut oils created paints that were not only "gleaming" and rich but waterproof upon drying, easy to blend and satisfying to work.³⁷² As Vasari claims, Van Eyck's discovery of the slow-drying linseed oil, and other associated compounds for working oils and varnishes, was a direct result of Van Eyck's passion for alchemy and distillation, and his habit of conducting experiments to find new materials.³⁷³ Thus, Van Mander's connection of Goltzius to Van Eyck relies on a shared capacity for *inventie* or inventiveness, a concept that is closely tied not only to mental flights of imagination, but to technical adaptability

³⁷⁰ Vasari (Bondanella and Bondanella, trans.), *The Lives of the Artists*, 185.
³⁷¹ "…e con la frequente imaginazione che del continuo aveva di arricchire l'arte del dipignere, avvenne, dico, mentre che e' cercava di trovare diverse sorti di colori, dilettandosi forte della alchimia, e stillando continovamente olii per far vernice e varie sorte di cose, come suole accadere alle persone sofistiche." Translation mine. Giorgio Vasari, *Le Vite de' più eccellenti pittori, scultori, ed architettori*. Nell'edizione per i tipi di Lorenzo Torrentino - Firenze 1550.

³⁷² Vasari (Bondanella and Bondanella, trans.), *The Lives of the Artists*, 186.

³⁷³ Vasari, Le Vite de' più eccellenti pittori...

and a mastery of materials that allowed for achievement through experiment. For Van Mander, it is through Goltzius that the inventive spirit that granted Northern painting its highest achievements and most lasting fame was again illuminated.³⁷⁴

The works that Van Mander identified as Goltzius's most Protean masterpieces were the experimental "pen works" of his later years that blended painting, draftsmanship, and engraving in an innovative form. In his Without Ceres and Bacchus, Venus Would Freeze of 1600-1602 (Figure 105, Philadelphia Museum of Art), a closely cropped quartet of mythological beings gathering to warm the goddess of love. The work sits between painting and drawing—its canvas is traced with fine pen-lines and heightened with touches of color in the flesh and flames. Technical analysis has revealed the use of a pale blue-grey oil ground, onto which Goltzius drew with pen and ink, at times mimicking the work of a burin by scraping or dragging his pen to correct and alter textures. Highlights in oil were added in the final stages, contributing to an unusual surface quality that hovered between print, drawing, and painting.³⁷⁵ As noted in the second chapter, Goltzius was one among many Northern painters who adopted a luminous style in representing the nude shortly after 1600. The effect of Goltzius's glowing treatment of skin and flame not only communicates the heat of love and fire, but the evocation of living flesh made possible through the use of oil paint. Yet this particular pen-work was created only two years into Goltzius's career as an oil painter. Before 1600, he had exclusively produced prints and drawings. His transition to painting in oil—

³⁷⁴ Melion, "Karel van Mander's Life of Goltzius," 127.

³⁷⁵ Lawrence W. Nichols. "The "Pen Works" of Hendrick Goltzius. *Philadelphia Museum of Art Bulletin* 88, No. 373/374 (1992): 21-22.

the medium of Van Eyck—joined him to the illustrious and innovative heritage of Netherlandish art's most praised technique. This shift to painting was praised by Van Mander as the culminating moment of a continually inventive career: as Van Mander suggests, having already conquered the modes of drawing and design developed of every other great master, Goltzius would demonstrate the same ingenuity and adaptive spirit in his new medium, borrowing the brushstrokes of Raphael, Veronese, and Correggio in order to absorb and ultimately surpass them.³⁷⁶

Without Ceres and Bacchus, Venus Would Freeze was the same work that was said to have "astonished" the Holy Roman Emperor, Rudolf II, when it entered his collection before 1604. Rudolf II's legendary fascination with alchemy was matched by an equally obsessive interest in art, particularly the unusual, innovative, and unconventional. The pen work's incorporation into Rudolf II's *Kunstkammer*, a chamber of wonders devoted to both natural and man-made objects of fascination, speaks to its status as an experimental curiosity.³⁷⁷ Upon viewing the piece for the first time, Rudolf was reportedly unable to identify the materials used by Goltzius and sought the opinion of his advisors and art experts, marveling at the strangeness and novelty of Goltzius's hybrid surface. Van Mander's recounting of this story, highlighting Rudolf's dazed wonder before the glowing textures of the pen-work, appears to have intentionally mimicked older accounts of the surprise and astonishment expressed by contemporaries

³⁷⁶ Melion, "Karel van Mander's *Life of Goltzius*," 121.

³⁷⁷ Nichols, "The "Pen Works" of Hendrick Goltzius," 4.

of Jan van Eyck, upon viewing his luminous and lifelike surfaces for the first time and being unable to determine how his effects were created.³⁷⁸

Rudolf II's esteem for Goltzius is a feature of a second elegy published in 1620 by the poet, miniaturist, and courtier to the English court Balthazar Gerbier.³⁷⁹ Gerbier's Eer Ende Claght Dicht Ter Eeren van den lofweerdighen Constrijken ende Gheleerden. Henricus Goltius, Constrijken Schilder, Plaetsnijder, ende Meester van der Penne (A poetic elegy in honor of the praiseworthy artful scholar Hendrick Goltzius, artful painter, plate-cutter, and master of the pen) referred to Goltzius's place within Rudolf's famous "chamber," and constructed an imaginary funeral procession for the artist headed by Peter Paul Rubens and attended by many of Goltzius's Haarlem contemporaries. Among the imagined crowd was Goltzius's stepson, the engraver Jacob Matham, and Goltzius's brother-in law and former pupil, the naturalist and inventor Cornelis Drebbel.³⁸⁰ The text lingers on the inventiveness of Drebbel and his experimental pursuits in mechanics, chemistry, and optics, envisioning a scene in which Drebbel places a *perpetuum mobile* (perpetual motion) device on Goltzius's grave in tribute to the eternal motion of the latter's soul.³⁸¹ In reality, Drebbel had received a Dutch patent for a similar apparatus, consisting of a pump and perpetual motion clock, in 1598 (the same year of his marriage to Goltzius's sister).³⁸² Drebbel, who lodged in Goltzius's home, had come to study under

³⁷⁸ Melion, "Karel van Mander's Life of Goltzius," 124.

³⁷⁹ Lawrence W. Nichols. Ibid: 6.

 ³⁸⁰ David Freedberg. "Fame, Convention and Insight: On the Relevance of Fornenbergh and Gerbier." *The Ringling Museum of Art Journal* 1 (1983): 243-244.
 ³⁸¹ Ibid: 243.

³⁸² Michiel C. Plomp. "The Beauty or the Different Guises of Nature," in *Hendrik Goltzius: Drawings, Prints & Paintings*. (Zwolle: Waanders, 2003): 174, 171-172.

the master in the early 1590s and frequently engraved after Goltzius's designs. Drebbel's interests extended to alchemy and chemical work, and he published *Een kort Tractaet van de Natuere der Elementen* (A short treatise on the nature of the elements) in Haarlem in 1621,³⁸³ roughly a decade after serving nearly two years as Rudolf II's "chief alchemist" at court in Prague.³⁸⁴ Goltzius's experimental pen work, and his experimental pupil, both found a place in Rudolf's alchemy-obsessed circles, and it is easy to imagine that Goltzius and Drebbel engaged in natural philosophical inquiries during their partnership. The elegy's title indicates that Goltzius's achievements marked him not only as a successful artist, but as a scholar—a term associated with theory and intellect, as well as alchemical study. As noted in the previous chapter, Wijck's positive depictions of scholar-alchemists are formed with this dual emphasis on the material and intellectual.

The legacy of Goltzius's alchemical expertise endured long after the impact of his death had been felt. The unpublished *Vitae eruditorum Belgicorum* (Lives of the Dutch Scholars), penned by the connoisseur and antiquarian Aernout van Buchel around 1630, included the lives of notable print publishers, among them a brief biographical entry on Goltzius. Van Buchel claims that Goltzius's interest in alchemy was related to the development of pigments and oil colors, and that his experiments yielded substances

³⁸³ Cornelis Drebbel. *Een kort Tractaet van de Natuere der Elementen*. Tot Haarlem, Ghedruckt Vincent Casteleyn, aen 't Marckt-velt, in de Boeck-druckery. Anno 1621.
³⁸⁴ L. E. Harris. *The Two Netherlanders: Humphrey Bradley and Cornelius Drebbel*. (Leiden: E.J. Brill, 1961): 127-129. For the environment at Rudolf's court and claims of Drebbel's "magic," see Peter Marshall. *The Magic Circle of Rudolf II: Alchemy and Astrology in Renaissance Prague*. (New York: Walker and Company, 2006).

useful to his art-making.³⁸⁵ This was echoed in 1648, in Goltzius's entry in the *Harlemias* of Theodorus Schrevelius. Schrevelius's account of the history of Haarlem, and its most notable artists, praised Goltzius for his alchemical mastery, claiming that these practices in turn gave Goltzius mastery over nature: "he burned with a zeal for Alchemy, an investigator of Nature."³⁸⁶ Schrevelius continued on to state that many were "envious" of Goltzius's skills, both artistic and alchemical.

Goltzius's life demonstrates the degree to which alchemical activities by artists could be considered not only acceptable, but praiseworthy. Though Goltzius's patronage or partnership with the alchemist Engelbrechtsz ended badly, and more than one report indicates that he suffered accidents during the course of his experiments, these efforts did not mark Goltzius as a local laughingstock or a deluded seeker of the unattainable. With the exception of Constantijn Huygens—who decried Goltzius's alchemical habits primarily, it seems, for the injuries and mishaps it caused³⁸⁷—the majority of individuals who commented on Goltzius's alchemical pursuits did so favorably. Nor was Goltzius the only famous Netherlandish painter to achieve a reputation for alchemical interests and virtuosic painting—as I will demonstrate in chapter six, his contemporary Peter Paul Rubens shared both a familiarity with alchemy and a recognition of Netherlandish painting's innovative material heritage. It appears that to Goltzius's peers, as well as to

³⁸⁵ Huigen Leeflang. "The Life of Hendrik Goltzius (1558-1617)," in *Hendrik Goltzius: Drawings, Prints & Paintings*. (Zwolle: Waanders, 2003): 20.

³⁸⁶ "…brande hy door yver van de Alchemie, een ondersoecker van de Nature." Translation mine. Original text from Nichols, "Hendrick Goltzius – Documents and Printed Literature," 118.

³⁸⁷ Constantijn Huygens. *Mijn jeugd*. Translated and annotated by C.L. Heesakkers. (Amsterdam: Querido, 1987): 78.

those looking back at his successes, alchemy offered yet another avenue by which the artist might demonstrate creativity and mastery over nature.

It is virtually impossible that Wijck, trained in Haarlem and working there for much of his life, would have been unfamiliar with the legendary figure of Goltzius, and in turn the enduring mythos of Van Eyck's experimental discovery of oil painting. Less certain is Wijck's knowledge of the ties between Goltzius and alchemy, though from the examples above it is apparent that references to Goltzius in text were accompanied by references to alchemy with remarkable frequency. Van Mander's writings described connections between Goltzius and Van Eyck, between artistic imitation, nature, technical mastery, and experiment, centering his arguments in works that transformed commonplace materials into new and intriguing forms. When considered alongside Van Buchel's brief discussion of Goltzius's supposed involvement in pigment-making and the manipulation of color, these portraits of Goltzius as artist-alchemist offer a new means by which to contemplate Wijck's alchemical scenes. Goltzius's art-making was itself the site of experimentation. He harnessed alchemical ideas of material transformation within his process, leading to the creation of multi-media pen works that baffled their viewers at first glance and defied easy categorization. Thus, Goltzius embodied the heritage of Jan van Eyck's experimental "discoveries" in oil, leading to the production of beautiful images whose making was concealed beneath a luminous surface. ³⁸⁸ In this sense, oil painting itself stands as a process rooted in alchemical experiment, inventiveness, and adaptation, particularly in the context of Haarlem and the Northern artistic tradition.

³⁸⁸ Melion, "Karel van Mander's Life of Goltzius," 124.

Despite the seeming gulf between Goltzius's radical re-invention of his mediums and Wijck's essential conventionality as a painter (where workshop process is concerned³⁸⁹), the fact remains that both artists were heirs to an artistic and rhetorical tradition that rooted the origins of their abilities, and their shared knowledge, in alchemical discovery.

Both Goltzius and Wijck inhabited a sphere in which alchemy was more than a metaphor or rhetoric for describing creativity: it was the means by which many of their most basic materials were produced, and it encompassed even certain practices of the studio. Thus, like Goltzius, Wijck's work also transforms materials in a process analogous with alchemy, in his use of pigments, oil medium, distilled additives, varnishes, and other substances. Putting aside more hierarchical and concrete notions of style or influence, the example of Goltzius's alchemical innovation and the rhetoric of painterly transformation may have itself offered an appealing inspiration to a young Haarlem painter. Wijck's early training in Haarlem therefore may have primed him for later encounters with alchemy. This context reinforces his prolonged interest in the subject, and supports the likelihood that he pursued alchemical interests, experts, or practitioners during his many travels.

Working roughly four decades after Goltzius, Wijck's serious treatment of alchemy may be viewed, in a certain sense, as merging the rhetorical and painterly formulations of alchemy embodied by the legendary afterlife of Van Eyck and Goltzius. Wijck's paintings harness their own artisanal context by representing the *site* of

³⁸⁹ Wijck's practices in the workshop, and technical analysis completed on several of his paintings, will be discussed in greater depth in the sixth chapter.

experiment, the laboratory and workshop. While the results of his process do not yield objects that defy categorization in the same manner as Goltzius's, experimental practices are nevertheless located within the frame, in the alchemical workrooms he elects to represent, as well as in the manipulation and surface qualities of the oils produced by alchemical distillation. His paintings include references to pigment-making, in their depictions of earthenware sublimation vessels and colored powders. Such images call attention to their crafting in a reflexive manner that reminds the viewer of the materiality of art. Yet where Goltzius used his materials in innovative ways to mystify and amaze, Wijck uses his to reveal the origins of materials themselves. Wijck's paintings do not obscure their making for their viewers—as the pen works did, at first glance—but instead present a statement about the places where material things are made.

Practical, Artisanal Alchemy in Haarlem

Alchemy in the Dutch Republic was closely tied to artisanal process, through more than the legendary origins of oil medium or the transformative nature of painting. Products of distillation, metallurgy, dyeing and bleaching, and other alchemical processes were cornerstones of the industries that drove the Dutch economy. Wijck's place within a community of artists in Haarlem also linked him to a broader community of artisans and tradesmen, many of whom made use of chemical knowledge in their own professions. Their patronage of Wijck, and their shared bonds of work, family, and faith, indicates Wijck's immersion into a world where alchemical knowledge was less esoteric than useful, familiar, and ubiquitous. In the following section, I discuss the productive character of Dutch alchemy through the legendary figure of Isaac Hollandus, an early alchemist who works were used by artisanal writers of the seventeenth century, before turning to construct the network of collectors and artisans that surrounded Wijck.

Sixteenth- and early seventeenth-century alchemical and natural philosophy texts in the Dutch Republic often circulated in the vernacular, for a broad audience that included tradesmen, artisans, engineers, and other middle-class readers. The natural philosopher, mathematician and engineer Simon Stevin (1548-1620) championed the Dutch language as ideal for the circulation of practical technical knowledge. Stevin's 1585 mathematical treatise on decimal fractions *De Thiende (The Tenth)* contained a dedication to the "Astronomers, Surveyors, Tapestry-measurers, Wine-gaugers," and "Measurers of bodies in general" who would benefit from his calculations,³⁹⁰ indicating Stevin's interest in increasing scientific and natural philosophical literacy among the public.

Among the most famous alchemical authorities, whose works were printed and reprinted during the sixteenth and seventeenth centuries, was Isaac Hollandus, believed to have been a fourteenth- or fifteenth-century Netherlandish alchemist and an inspiration for the philosophies of Paracelsus. Hollandus was viewed as a foundational "father" of Dutch alchemy and alchemical medicine, yet the reception of his works also indicate alchemy's usefulness and status within artisanal networks. The French alchemist Bernard Penot claimed in 1594 that Paracelsus had learned of the *tria prima* (salt, sulfur, and

³⁹⁰ Klaas van Berkel, Albert van Helden, and Lodewijk Palm. *A History of Science in the Netherlands*, (Leiden: Brill, 1999): 19-20.

mercury) directly from Hollandus, while the German chemist and son of an alchemist Johann Kunckel claimed Hollandus was vastly superior to his heirs, including the renowned physician and chemist Jan Baptist van Helmont. Despite these lofty claims, contemporary scholarship has revealed that Hollandus was a sixteenth-century contemporary of Paracelsus rather than a predecessor. While later Hollandus texts circulated in Latin, word usage suggests they were originally penned and disseminated in Dutch.³⁹¹ In addition to their appreciation by physicians and iatrochemists, Hollandus's texts were widely praised and adapted by artisans, who found within their pages numerous recipes and instructions for the creation of enamels, imitation gemstones, colored glass, and other artisanal products. The Italian alchemist and glassmaker Antonio Neri, having lived in Antwerp for seven years, returned to his home in Florence around 1612 to publish L'Arte Vetraria (The Art of Glass), a practical treatise that carried not only adapted versions of recipes Neri claimed to have acquired through Hollandus's work, but the Dutch-origin term "amausa," referring to a process for enameling.³⁹² This broader context for artisanal Dutch alchemy indicates that Wijck likely encountered alchemy first through his own work and training as an artist, as the inherited, shared, and adapted knowledge of craftsmen and artisans, the tools by which these individuals manipulated their materials.

³⁹¹ Annelies van Gijsen. "Isaac Hollandus Revisted." *Chymia: Science and Nature in Medieval and Early Modern Europe*. Edited by Miguel Lopez-Perez, et al. (Newscastle-upon-Tyne: Cambridge Scholars Publishing, 2010): 310-317.
 ³⁹² Annelies van Gijsen. "Isaac Hollandus Revisted." *Chymia: Science and Nature in Medieval and Early Modern Europe*. Edited by Miguel Lopez-Perez, et al. (Newscastle-upon-Tyne: Cambridge Scholars Publishing, 2010): 316.

Relationships between artists and other artistans in Haarlem—as elsewhere in the early modern period—were typically close, owing in part to the organization of guilds. As members of their cooperative guilds, painters, silversmiths, sculptors, engravers, and other artisans shared in the oversight and protection of the city's artistic reputation and the day-to-day negotiation of fees and standards. As discussed in the second chapter of this project, Wijck's prominent role within the Haarlem Guild of Saint Luke included four terms as guild warden, in 1657, 1668, 1671, and 1676, and two periods as elected dean, in 1660 and 1669.³⁹³ In the same year as Wijck's last term as dean, the master silversmith Cornelis Snijder (1630-1685) had also been elected to a leadership position, namely that of guild assayer. Snijder appears to have been active in guild life, and was previously elected as a guild councilor in 1667. He later served as dean in 1677, the year of Wijck's death. An inventory taken of Snijder's home and workshop shortly after his death in May of 1685 reveals that Snijder owned one painting by Wijck of an unknown subject. The work hung in the *voorhuis* or front-room, a space typically used as the entryway and entertaining space of the Dutch home. While the inventory lists several thousand guilders' worth of equipment and silver objects, most belonging to the shop inventory, Snijder's collection of paintings was not extensive, numbering roughly twenty works in all, of which only five artists are mentioned by name. Of the three works listed in the *voorhuis*, Wijck's is the only one identified by the artist's name.³⁹⁴

³⁹³ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347.

³⁹⁴ Biesboer, *Paintings in Haarlem*, 281-284.

There can be little doubt, due to their overlapping terms as elected leaders within the guild, that Wijck was acquainted with Snijder, but Wijck's prominent inclusion within Snijder's limited collection speaks to the possibility of a closer relationship. Their proximity within Haarlem also supports such a claim. Snijder's workshop and showroom, located on the Damstraat, was located halfway between the Oude Groenmarkt—where Wijck and his family dwelled during the 1660s—and the house facing the Gravestenenbrug over the Spaarne River into which Wijck's family moved after 1674.³⁹⁵ As a result, less than 200 meters spanned the distance between Snijder's workshop and Wijck's home between 1660 and the latter's death in 1677. Furthermore, both artists were Catholic, as were many inhabitants of the surrounding neighborhood, located close to the Grote Kerk, formerly Saint Bavo's.³⁹⁶ The strong possibility of a deeper professional or personal association between Wijck and Snijder suggests another avenue by which Wijck may have encountered alchemical tools, texts, and materials outside of his own studio.

As a silversmith and assayer, Snijder's practices overlapped greatly with the work of alchemists in their investigations of the properties of nature. Assaying, or the analysis and identification of metals, was regulated by the guild as a means for controlling the quality and purity of metals and metal objects. These tasks were completed through processes such as *cupellation*, in which metallic ores and compounds are heated in a nonreactive bone ash *cupel*, a small cup mold similar to a crucible, until the precious metals separate from the impurities or additives in the form of slag. An early thirteenth-century

³⁹⁵ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 348.
³⁹⁶ Ibid: 348.

description of cupellation, given by Paul of Taranto in his alchemical treatise *Theorica et* Practica, instructs the assayer to make use of a blowpipe to assist in the removal of lead deposits during the process.³⁹⁷ In addition to its use as a regulatory aid, assaying was a powerful tool in the alchemist's investigation of nature, demonstrated by the writings of the Pseudo-Geber in the thirteenth-century Summa Perfectionis Magisterii (The Height of the Perfection of Mastery). Within its pages, cupellation and other experimental processes, such as ignition (testing metal's incandescence), burning with sulfur, and amalgamation with mercury, are detailed for their abilities to yield information on the character and behavior of metals.³⁹⁸ Despite my observation in the previous chapter that Wijck did not represent gold-making within his alchemical paintings, there remains a great deal of overlap between the materials he represented and the real tools and furnaces that he might have encountered in the workshop of a close colleague. The example of Snijder provides one model for a respectable tradesman engaged with chemicalmetallurgical work. Indeed, Wijck would have been one among several painters who may have found inspiration in the workshop of a silversmith—as noted in the third chapter, the artist Cornelis Bega, another painter of alchemists, was born into a family of silversmiths. Tight-knit familial networks characterized Haarlem's artisanal community, and the painters Willem Claesz Heda and Pieter de Grebber also counted silversmiths among their immediate kin.³⁹⁹ Here, too, Wijck's potential friendship with Snijder would

 ³⁹⁷ William R. Newman. "Alchemy, Assaying, and Experiment." *Instruments and Experimentation in the History of Chemistry*. Frederic Lawrence Holmes, Trevor Harvey Levere, eds. (Boston: MIT Press, 2000): 36.
 ³⁹⁸ Ibid: 46.

³⁹⁹ Van Thiel-Stroman, "Cornelis Bega," 100-101.

have echoed the life of Goltzius, who was a close friend of the Amsterdam goldsmith Jan van Weely.⁴⁰⁰

But artisanal studios and alchemist's workshops are not the only places where alchemical knowledge was linked with productive work. The city of Haarlem was a web of industries linked to distillation, dye-making, and other practices that required chemical expertise. As discussed briefly in the second chapter, Haarlem's major products were beer and textiles, industries that employed thousands in the city and surrounding countryside. Wijck's paintings appeared in the collections of prominent brewers, vintners, and textile merchants, many of whom shared close ties to Haarlem's artistic community through blood, marriage, and law. The subjects of these paintings are rarely identified beyond landscapes or interiors, and thus it is difficult to speculate on which of his patrons may have purchased alchemical pictures. Likewise, mere ownership of a painting by Wijck does not necessarily support a close relationship between patron and painter, nor the exchange of alchemical ideas across such a bond. However, Wijck's importance within his community (noted in chapter two) and his proximity to networks of brewers and textile manufacturers places him at the heart of a proto-industrial city where chemical knowledge was key to success.

Among his collectors was Johannes Adriaensz Stiphout, a wineseller whose shop was located in the Damstraat—again, a spot located between Wijck's home during the 1660s and the point of his relocation to the Spaarne in the 1670s. An inventory taken after Stiphout's death in 1680 contains three works by Wijck, two located in the voorhuis

⁴⁰⁰ Nichols, "Hendrick Goltzius – Documents and Printed Literature," 98.

and a third in a sideroom. No subjects are identified, but the first of two paintings listed in the voorhuis is described as bearing an ebony frame—the only picture in the inventory by a named artist to carry such a distinction.⁴⁰¹ The distinction given to Wijck's work, and the proximity of their professional and personal spheres, indicates that artist and collector may have been familiar. Stiphout's extended family was closely tied to Haarlem's artists and the network of the guild: he himself was the brother-in-law of two painters, Jan Wils and Nicolaes Berchem. Both of these artists were represented in Stiphout's collection by multiple works, which hung alongside other paintings by favored Haarlem artists of the period, including Jan Miense Molenaer, Jan Both, and several member of the Vroom family.⁴⁰²

Brewers and beer-sellers also possessed paintings by Wijck: among these individuals were members of the city's most prominent brewing dynasties, members of an upper middle-class elite. Nicolaes Duijst van Voorhout, a brewer and the son of Pieter Claesz Duijst van Voorhout, possessed one painting by Wijck of an unidentified subject, at the time of an inventory in April of 1650. Van Voorhout's collection was substantial and contained the work of notable artists, including two large figures by Goltzius and a country scene by Rubens.⁴⁰³ An inventory taken in 1673, after the death of Cornelis van Loo—son and son-in-law to two of Haarlem's most prominent brewers, Johan Claesz van Loo and Pieter Jacobsz Olijcan—reveals that the younger Van Loo owned a single

⁴⁰¹ Biesboer, *Paintings in Haarlem*, 190, 255-256.

⁴⁰² Ibid: 190, 255-256.

⁴⁰³ Ibid: 123-124.

painting identified as "after" Wijck.⁴⁰⁴ Such a detail indicates that Wijck was popular enough to be copied during his own lifetime. As noted in the second chapter, brewers were among Haarlem's economic elite, a segment of middle-class collectors whose taste for genre scenes and images of "everyday life" had supported the ongoing shift and expansion of subject matter in the first third of the seventeenth century. Wijck's scenes of workrooms, kitchens and other sites of trade and work may have appealed to such a population. His proximity to the Spaarne river also placed him close to the spaces in which brewers plied their trade—for the majority of the city's breweries were located at the city's eastern edge, along the curving lower spine of the Spaarne river, downriver from the luxurious riverside homes of their owners.⁴⁰⁵

Brewing, distillation, and the making of wine was, during this period, connected to the production of medicine and the health of the body. Wine was a key ingredient in many cures, including those of the famed "professor of secrets" Leonardo Fioravanti, the Bolognese alchemist and surgeon who achieved fame during the late sixteenth century for his miraculous cures. Fioravanti's treatment of syphilis began with a concoction of wine, herbs, honey, and boiled shavings of the guaiacum, a West Indian tree known in early modern medicine as the "lignum sanctum" (holy tree) for its supposed curative powers.⁴⁰⁶ Fioravanti also made use of a healing elixir he called "Quintessence,"⁴⁰⁷ named for the

⁴⁰⁴ Ibid: 231-233.

⁴⁰⁵ Biesboer, *Paintings in Haarlem*, 4. See also Gabrielle Dorren, "Communities within the community: aspects of neighbourhood in seventeenth century Haarlem." *Urban History* 25, No. 2 (1998): 176-177.

⁴⁰⁶ Eamon, *The Professor of Secrets*, 75.

⁴⁰⁷ Ibid: 142.

"quinta essentia" (fifth essence) of wine described by the fourteenth-century Franciscan friar and alchemist John of Rupescissa. This fifth essence of wine, produced from repeated distillation in a sealed, circulating apparatus, was intended to be mingled with the fifth essence of other precious substances, such as gold, antimony, or blood. Properly prepared, such substances were believed to hold the power to perfect matter and heal wounds. Accounts of the quintessence of wine also circulated widely within the writings of the Pseudo-Lull, whose work was ubiquitous in alchemical and medical communities throughout the early modern period, appearing in Latin, French, Italian, and German translations (among others).⁴⁰⁸ Procedures for brewing and fermentation also appeared frequently in alchemical writings. The German Jesuit polymath and alchemist Athanasius Kircher considered fermentation to be a form of "natural transmutation"⁴⁰⁹ in which the character of substances were radically altered. Much of the work and knowledge of alchemists, brewers, and distillers was shared, evidenced by alchemists' frequent embrace of cooking and brewing as metaphors for their own processes.

Many brewers also had close familial or economic relationships with the city's painters. The well-known brewer Jacques van Nesten also owned a successful inn, De Trompet, that was a favorite of the city's artists, most notably Frans and Dirck Hals and their extended circle. Van Nesten's relationship with the artists who frequented the inn appears to have been a positive one: in March of 1629, after an incident at De Trompet,

⁴⁰⁸ Moran, *Distilling Knowledge*, 18-21.

⁴⁰⁹ Martha Baldwin. "Alchemy and the Society of Jesus in the Seventeenth Century: Strange Bedfellows?" *Alchemy and Early Modern Chemistry: Papers from Ambix*. Allen G. Debus, ed. (Yorkshire: Jeremy Mills Publishing, 2004): 53.

Frans and Dirck gave eyewitness testimony on Van Nesten's behalf.⁴¹⁰ Ties to Haarlem's artistic community ran deeper than court documents, as Van Nesten's daughter, Josina, was also the stepmother of the silversmith Michiel Claesz Maenbeeck. An inventory of the Van Nesten family's holdings, after the death of Josina in 1662, contained no less than four works by Wijck, all identified in detail. The first work listed of the inventory is described as "eerstelijck een stuck schilderij met een ebben houten lijst sijnde van Mr. *Thomas Wijck*" ("first of all a painting with an ebony frame by Mr. Thomas Wijck"), followed by "noch een keucke van Thomas Wijck met een swarte lijst," ("a kitchen by Thomas Wijck with a black frame")⁴¹¹, "noch een tabackie met een tesje van Thomas Wijck met een vergulde lijst," ("a smoker with a pot by Thomas Wijck with a gilded frame"), and finally "noch een Christus beelt van Thomas Wijck met een swarte slechte *lijst*" ("an image of Christ by Thomas Wijck with a poor black frame").⁴¹² The subject of the latter painting was an unusual one for Wijck, despite his Catholicism. The eastern edge of Haarlem, along the Spaarne, was not only a densely clustered site for breweries and distilleries, but also part of the city's predominately Catholic neighborhoods close to the former Saint Bavo's.⁴¹³ The inclusion of multiple works by Wijck in the Van Nesten family collection suggests that in this case, Wijck's collectors may have shared a

⁴¹⁰ Biesboer, *Paintings in Haarlem*, 162, Note 3.

⁴¹¹ This painting may be related to the kitchen scene currently in the collections of the Walters Museum in Baltimore, MD. Wijck was highly regarded for his scenes of workrooms and other spaces of domestic labor, and multiple copies and variations of these themes may have circulated.

⁴¹² Translations mine. Biesboer, *Paintings in Haarlem*, 162-163.

⁴¹³ Gabrielle Dorren. "Communities within the community: aspects of neighbourhood in seventeenth century Haarlem." *Urban History* 25, No. 2 (1998): 177.

religious conviction that helped to link them within Haarlem's community of clandestine churchgoers.

Beyond the family's faith, the familial connections of Wijck's wife, Trijntgen Adamsdr, extended to Haarlem's booming textile industry.⁴¹⁴ The couple owned a shop close to the Kleine Houtstraat, where the majority of the city's textile shops were located.⁴¹⁵ Among their extended contacts may have been the Mennonite cloth merchant Harmanus Capoen and his wife, Maria Geraers, in whose large paintings collection Wijck appears represented by a single work. The inventory, completed after the death of Maria in 1669, does not identify the work's subject, referring to it as "een cleyn stuck" ("a small piece"). The painting was described as hanging in the voorkamer ("front room"). The work also shared space with a painting by Wijck's teacher, Adriaen van Ostade, an unknown portrait described as "een schilderijtje met een conterfeytseltje van Adriaen van Ostade" ("a painting with a little likeness of Adriaen van Ostade").⁴¹⁶ Such a description may refer to a tronie or study head produced by Van Ostade. Capoen's wife Maria had been, through her first marriage, related to the painter and engraver Pieter de Molijn,⁴¹⁷ thought to have been a student of Esaias van de Velde, as well as the teacher of Gerard ter Borch the Elder, Jan Wils, and his own son Pieter the Younger.⁴¹⁸ In turn, Pieter

⁴¹⁴ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 348.

⁴¹⁵ Biesboer, Paintings in Haarlem, 4.

⁴¹⁶ Ibid: 218-219.

⁴¹⁷ Ibid: 218-219.

⁴¹⁸ Irene van Thiel-Stroman. "Pieter Pietersz de Molijn." *Painting in Haarlem 1500-1850: The Collections of the Frans Hals Museum*. (Ghent, Ludion Ghent, 2006): 246-249.

Molijn was the son of a textile merchant,⁴¹⁹ a detail that emphasizes the tightly interwoven networks between artists and other artisans during this period.

Another of the city's most prominent and successful textile merchants, Dirck Smuijser, owned a painting by Wijck that was described as being placed in the *sijdelcamer* or side-room. Once again, no subject is listed for this "stuck," yet another piece in Smuijser's collection—located in the *lijnwaetcamer* (linen room)—bears ties to an alchemical subject. Unidentified by artist, the work is listed as "een Vulcanus,"⁴²⁰ referring to the Roman god of the forge, the ruling deity of metallurgical work. Vulcan gained additional significance to alchemy within the writings of Paracelsus, who in his *Labyrinthus Medicorum Errantium (Labyrinth of Lost Physicians)* of 1538 identified

Vulcan's labors before the fire as the potent central metaphor of all alchemical pursuits,

whether in metallurgy, distillation, or medicine:

Alchemy is an art, Vulcan is its artist... God has created iron, but not what can be made from it, namely horseshoes, rods, sickles; He simply gives us iron ore. He then tells the fire and Vulcan what to do: the iron must be separated from the dross... whatever the fire does is alchemy—likewise in the kitchen and in the oven. Thus it is also with medicine... The dross must be removed and then the medicine is available. That is alchemy and the office of Vulcan.⁴²¹

This passage emphasizes alchemy's productive potential, and the diversity of

useful goods and materials that stem from its practice. Alchemy was indeed useful to

textile merchants and manufacturers such as Smuijser, as it produced dyes, fixatives, and

⁴¹⁹ Biesboer, *Paintings in Haarlem*, 218, Note 1.

⁴²⁰ Ibid: 135-137.

⁴²¹ Paracelsus. *Labyrinthus Medicorum Errantium*, I. xi. 186-8. Translated by Nicholas Goodrick-Clarke. *Paracelsus: Essential Readings*. (Berkeley: North Atlantic Books, 1999): 102-103.

acids, all indispensable to Haarlem's booming fabrics industry. Goltzius's apprentice Drebbel, who shared his master's interests in alchemy, experimented extensively with dyes and pigments, even opening a dye-works after his move to London around 1605. This workshop was a remarkably successful operation later inherited and expanded by Drebbel's sons-in-law. Drebbel's greatest innovation in dye-making was the development of a tin mordant for use with cochineal reds.⁴²² Many fabric dyes made use of the mineral salt alum, or aluminum sulfate, to fix the vibrant red and maintain lasting color. Drebbel's tin mordant, a type of inorganic metallic oxide that aided in the fixation of the dye to its fabric, expanded the use of cochineal red pigments sourced from the crushed and processed shells of New World insects of the family Coccoidea.⁴²³ Drebbel was not the only artist to experiment with these exotic specimens: the Flemish artist and tapestry designer Pieter Coecke van Aelst, court painter to Charles V, Holy Roman Emperor, was also known to have experimented with cochineal dyes.⁴²⁴ Wijck's contacts within Haarlem's textile industry surely introduced him to dyes, pigments, and the chemical tools by which colors and fabrics were worked. A basic familiarity with the common processes of dyeing and bleaching would have communicated principles of fixation, purification, and chemical practices that broadly overlapped with the knowledge of the alchemists.

⁴²² Klaas van Berkel, Albert van Helden, and Lodewijk Palm. *A History of Science in the Netherlands*, (Leiden: Bill, 1999): 441-442.

⁴²³ Elena Phipps. "Cochineal Red: The Art History of a Color." *The Metropolitan Museum of Art Bulletin* 67, No. 3 (2010): 8-9.
⁴²⁴ Ibid: 28.

²⁴³

Beyond Wijck's artisanal contacts, there is also evidence that his work was wellreceived amidst Haarlem's social and intellectual elite. Haarlem was served by the circulation of the *Haarlemse Courant*, a newspaper produced by the printing shop of the Casteleijn family. This publishing dynasty, helmed first by the printer and bookseller Vincent Casteleijn, and afterwards by his son Abraham, also served as the printers of all Haarlem's official material and ordinances. The Haarlemse Courant was among the seventeenth century's most widely praised international papers, earning regard abroad for its accuracy and swiftness in reporting. An inventory of the family's holdings in 1694, after the death of Margarieta van Bancken, wife of Abraham, includes a single work by Wijck, of an unknown subject. Once again, the family's extended network also included notable artists, the painters Pieter Casteleijn and a second Abraham Casteleijn, whose works represent at least three of the fifty-six inventoried.⁴²⁵ Another painting by Wijck appears in the collections of Cornelis van Teylingen, the son of a high-ranking family who carried the title of *Jonkheer* or squire. Van Teylingen's collection of roughly sixty paintings included pieces by Haarlem's most popular artists of the period, among them Dirck Hals and Pieter de Molijn. Wijck's single entry is listed in an inventory of 1658 as *een principael* ("an original") in an ebony frame.⁴²⁶

An image of an alchemist in the collection of Cornelis Dusart, though not by Wijck, may nevertheless point to Wijck's importance as a painter of alchemists within Haarlem. Dusart was the son of a textile merchant, who trained as a painter in the studio

⁴²⁵ Biesboer, Paintings in Haarlem, 291-293.

⁴²⁶ Ibid: 146-148.

of Adriaen van Ostade. Born about 1660, he became a master in 1679, only two years after Wijck's death. Dusart worked as an artist and art dealer, and his immense collection, inventoried after his death in 1704, included his earlier acquisition of the studio contents of his former master, Van Ostade. This included sketches and unfinished pieces by Adriaen's brother Isaac, as well as by Wijck. The inventory lists these collected works as 200 st. kleetjes beeltjes huysjes en huysraat door Adriaen en Is. Van Ostade, Tomas Wijk en C. Dusart ("200 pieces, clothes, houses, figures, household objects by Adriaen and Isaac van Ostade, Thomas Wijck and C. Dusart").⁴²⁷ Dusart's interest in alchemy as a subject for art is demonstrated by his drawing after David Teniers' The Alchemist (Figure 106, Museum Wasserburg Anholt). The undated drawing (Figure 107, CHF), completed in black chalk on light-blue laid paper, shows a standing alchemist studying the pages of an open book, as he stirs material in a small crucible with his opposite hand. Dusart's carefully observed sketch records the details of the workroom-animal skulls hung on the wall close by, a portable furnace and alembic at the foreground, a large mechanical bellows at the rear—yet he condenses the vast space to a more intimate vignette of the alchemist and his books. By eliminating the assistants pictured at the rear and focusing on a single contemplative figure, Dusart transforms Teniers' image of the alchemist as workshop leader into a representation more closely aligned with Wijck's scholaralchemists working in solitude. Dusart's sketch confirms the availability of Teniers' pictures of alchemy as models for Haarlem artists in the circle of Van Ostade and Wijck, yet it may also point to Wijck's influence on his slightly younger peers.

⁴²⁷ Ibid: 301, 310.

From this limited set of collectors of paintings by Wijck, some initial patterns begin to emerge. First, it is apparent that Wijck's location on the south-east side of the city center, close to the Spaarne, placed him in direct proximity to communities of brewers and other artisans who purchased his paintings. Four of Wijck's ten collectors— Stiphout, Van Voorhout, Van Loo, and Van Nesten-were closely involved with the brewing and selling of beer and wine. Two—Capoen and Smuijser —were connected with Haarlem's textile production. Snijder was a silversmith, Casteleijn a publisher, and Dusart an artist and art dealer. It can be observed from this small sampling that Wijck's paintings were popular amongst Haarlem's successful tradesman. In a survey of 99 household inventories conducted in Haarlem between Wijck's entry into the guild as a master in 1642, and 1745, only one painting, owned by Van Teylingen, appears in the collection of an individual with an inherited title, that of squire, though the untitled Van Loo also served as alderman and captain of the civic guard.⁴²⁸ It appears that Wijck's popularity was more widespread amongst artisans and individuals of the upper middle classes than with landed gentry and government officials. However, this does not seem to be linked to a lower valuation of his works. As discussed in the second chapter, high valuations for paintings by Wijck within the same Haarlem inventories exceed the highest prices assessed for works by Karel van Mander, Judith Leyster, Frans and Dirck Hals, Pieter Codde, and Adriaen Brouwer,⁴²⁹ indicating Wijck's prominence and good reputation. Wijck's Catholicism may also have been a factor, as his collectors Snijder,

⁴²⁸ These inventories--number 13 through number 112--are those listed in *Collections of Paintings in Haarlem*.

⁴²⁹ Biesboer, *Paintings in Haarlem*, 37.

Van Nesten, and Van Teylingen all shared his Catholic confession. While religious leanings did not always determine patronage during this period, a marked preference for Catholic artists has been observed in the commissioning of art for clandestine churches.⁴³⁰ Secular commissions may likewise have been affected by the closeness of Haarlem's religious communities and its clustered Catholic neighborhoods.

Many of Wijck's primary patrons were within professions likely to encounter and use alchemy in daily practice. Alchemy's connections to brewing, distilling, textile dying, metalsmithing, and assaying were manifold. These individuals' decision to patronize an artist who specialized in images of workrooms, laboratories, and other spaces of productive but specialized work may be tied to the practices (and idealization) of their own livelihoods. Images of productive workshop labor in the Dutch Republic typically carried connotations regarding social order, economic strength, and virtuous toil. These pictures participated in a visual tradition dating back to medieval representations of artisans and craftsmen found in the margins of illuminated manuscripts. As Alison Kettering has noted, the display of images of labor in the homes of guild members and artisans demonstrates more than an interest in art—it offers a statement on the status of artisans and their works, an "affirmation"⁴³¹ of their cultural relevance and identity. Wijck's serious images of alchemists at work could have provided such affirmations, emphasizing the material skill and deep knowledge of the artisan, as well as modeling responsible workshop management and household harmony. In contrast to long-held

⁴³⁰ Van Eck, "The Artist's Religion: Paintings Commissioned for Clandestine Catholic Churches," 70-94.

⁴³¹ Kettering, "Men at Work," 701.

views of alchemical scenes as simple satires of folly and greed, Wijck's complex, often positive paintings may have offered validation to patrons engaged in, or connected to, chemical work. In this shift he was not entirely alone: as noted in chapter three, both Van Ostade and Bega also produced sympathetic scenes of alchemy that emphasized practitioners' labor, suggesting alchemy's distinctive place as a pictorial subject within Haarlem. Thus despite his relative absence from contemporary art-historical scholarship, Wijck appears to have been a person of some importance to Haarlem's artisanal community.

At any point during his lifetime in Haarlem—as a student in a Haarlem studio, an established master of the guild, dean of the same, a neighbor to brewers and metalsmiths, owner of a shop in the textile district, or a Catholic associating with other artisans within his congregation—Wijck could have been exposed to texts, practices, materials, and equipment that was decidedly alchemical through his relationships with neighbors and colleagues. In all likelihood, he encountered alchemical knowledge again and again in different forms, used for different purposes and adapted from different sources. This, too, is an echo of the life and works of Goltzius, who was heavily patronized by, and shared close friendships with, artisans in parallel fields. This is exemplified in Goltzius's collaboration with the silversmith Ernst Jansz van Vianen on designs for a beaker commemorating the life of Saint Martin, patron saint of the Haarlem brewer's guild, who commissioned the work.⁴³² Painter and draftsman overlapped with smith and brewer in

⁴³² Nichols, "Hendrick Goltzius – Documents and Printed Literature," 96.

the creation of an artifact that celebrated the works of all three, confirming the close bonds that joined artisanal efforts in Haarlem, whether in the time of Goltzius or Wijck.

Alchemy, Magic, and "Secrets" in Rome

The triumvirate of silversmith, brewer, and artist also appears in the itinerary of Goltzius during his famous trip through Italy, a journey in which it was said that he disguised himself and travelled as an unassuming amateur intent on taking in the sights, rather than a celebrated master.⁴³³ Goltzius was accompanied by one of his most supportive patrons, the wealthy silversmith and brewer Matthijs Jansz Ban.⁴³⁴ Much less is known about Wijck's travels to Italy: no documents confirm his habitation in Rome or elsewhere in the peninsula, though he is absent from Haarlem's records between 1644 and 1653, the most likely period for an extended trip to the south.⁴³⁵

Despite this lack of documents, Wijck's sketches, etchings, and paintings support a prolonged stay in Italy. A delicate drawing by Wijck, lightly lined with black chalk and shaded with an ink wash, shows a view of Santa Maria Liberatrice (Figure 108, Rijksmuseum), an early seventeenth-century church located in the Roman Forum. Rebuilt in 1617, it stood over the sixth-century remains of the Byzantine-era Santa Maria Antiqua.⁴³⁶ Wijck's sketch captures the solidity and monumental character of the building, though his strokes are far from rigid, at times bleeding into one another, or

⁴³³ Melion, "Karel van Mander's *Life of Goltzius*," 118.

⁴³⁴ Biesboer, *Paintings in Haarlem*, xi.

⁴³⁵ Van Thiel-Stroman, "Thomas Adriaensz Wijck," 347.

⁴³⁶ David Watkin. *The Roman Forum*. (Cambridge: Harvard University Press, 2009): 113-115.

turning swiftly to indicate a small patch of shadow or crumbling stone. His small corrections to the angle of the tilting hillside and the upper curve of the roof are visible in the form of thin chalk outlines. Another chalk and ink-wash drawing, a *View by an Arch in an Italian Courtyard* (Figure 109, Rijksmuseum), plays with the vivid Italian sunlight, leaving the forward figures in deep shadow and highlighting the cityscape behind. A monumental stone staircase with curved balusters leads the eye towards the stone-and-stucco architecture of urban Rome, framed by the compositional device of the arch—an element Wijck used and re-used throughout his career.

Wijck's time in Rome seems to have provided inspiration for one of his most unusual alchemical scenes, *The Alchemist and Death* (Figure 103, Bader Collection, Agnes Etherington Art Centre, Kingston). The scene's setting is typical for Wijck: a cluttered workroom with a large window to the left admitting daylight, directly above the alchemist's desk and gathered papers. Details of discarded vessels and open books speak to experiment and study, while the upper archway and prominent columns closely resemble Wijck's many sketches and studies of Roman architecture. Yet the actions and mood of this work, so unlike his meditative scenes of scholarly alchemists, is focused on the terrifying appearance of Death—a spectral skeleton who appears at right in a swirling cloud in the midst of an occult ritual. The young boy kneeling on the floor, hands clasped as if in prayer, sits beside a lit candle, a human skull and crossed bones, and a book propped open to a page of symbolic diagrams. Jane Russell Corbett has treated this work as evidence that Wijck was concerned with the "mystical aspects of alchemy,"⁴³⁷ despite

⁴³⁷ Corbett, "Convention and Change," 259-260.

its significant differences from Wijck's characteristically sober and serious treatments of alchemical work. While no direct source for this work has been identified, Wijck's scene may be tied to his Roman sojourn, as there was sustained interest in occult and esoteric knowledge amongst the *Bentvueghels* ("birds of a feather"), a social organization of Northern artists living and working in Rome.⁴³⁸ It may carry a more specific tie to the work of Pieter van Laer, whose *Self-Portrait with Magic Scene* (Figure 104, Leiden Collection, New York) indicates Van Laer's interest in alchemy and magic, through its depiction of substances and equipment that border occult and laboratory practices.

Ludovica Trezzani has connected Wijck's Italianate motifs to the work of the *Bamboccianti*, a circle closely related to the community of *Bentvueghels*, including many Northern artists surrounding the Haarlem-born genre painter Pieter van Laer. The *Bentvueghels* were known for their irreverent humor, as well as for elaborate mock-occult rituals. An anonymous painting of about 1660, titled *Initiation of a Bentvueghel in Rome* (Figure 110, Rijksmuseum) visualizes the rites performed by new members. Not long after his arrival in Italy, the young Dutch landscape painter Karel Dujardin received from the *Bentvueghels* a mock-baptism by a false priest, and the nickname *Bokkebaart* ("goat's beard").⁴³⁹ Likewise, the *Bamboccianti* took their unofficial label from the mocking

⁴³⁸ David de Witt has also suggested a second possible point of inspiration for Wijck's picture in the life and work of John Dee, the famed English alchemist and mystic, who was said to have communicated with angels. David de Witt. *The Bader Collection: Dutch and Flemish Paintings*. (Kingston: Agnes Etherington Art Centre, 2008): nr. 197.
⁴³⁹ Such rituals satirically mimicked the induction ceremonies performed for noble ceremonial orders. The "irregularities" of their behavior would eventually lead to the dispersal of the *Bentvueghels* by papal decree in the early eighteenth century.G.J. Hoogewerff. *Die Bentvueghels*. (The Hague: 's-Gravenhage, 1952): 93.

nickname of Van Laer, called *Bamboccio* ("ugly doll") for his physical irregularities. They were known for their scenes of "low" or everyday life amidst the courtyards and countryside haunts of Rome. Reviled by some for their eschewal of grandiose mythological, religious, and historical themes, the *Bamboccianti* were popular amongst collectors both Roman and Dutch. Wijck's construction of landscape scenes, particularly images of the Roman countryside and gatherings of the urban poor, demonstrate marked similarities to the work of Pieter van Laer, as well as Jan and Andries Both, Jan Miel, and Jan Asselijn.⁴⁴⁰ Wijck's *Morra Players* of about 1645-1655 (Figure 111, Akademie der Bildenden Künste, Vienna) exemplifies the focus of the *Bamboccianti* on the humble world of the urban and rural poor, including scenes of gambling and games of chance. Morra, played with the hands, was a simple and popular game for betting. Wijck's players, wearing coarse, simple clothes, sit in the shade of a crumbling stone courtyard, playing as a boy and dog look on. An earlier work by Pieter van Laer, *Cake-Seller* (Figure 112, Galleria Nazionale, Rome), finished before 1642, shares certain motifs: the crumbling walls growing weeds and vines, the coarse clothes and earthy physiognomies of the urban poor, and the close-gathered circle of morra players.

Van Laer's personal interest in magic, esoteric knowledge, and the occult is demonstrated by his unusual *Self-Portrait with Magic Scene* (Figure 104). Van Laer shows himself turning to scream in shocked horror as a pair of demonic, skeletal claws reach out to grasp him from the right edge of the canvas. Before him, arcane tools and texts convey his identity as a sorcerer or conjurer, one whose success in summoning the

⁴⁴⁰ Trezzani, "Thomas Wijck," 396.

forces of darkness has had unintended and tragic results. At left, a human skull rests over a pile of glowing coals, a thin trail of smoke rising from the unseen substances heating within. Candles, glass vials, and books with crude pentagrams and diagrams sit beside a knife identified as an *athame*—a type of double-edged blade used in ritual ceremonies and commonly associated with images of witchcraft.⁴⁴¹ A fragment of a song displayed on the sheet music at the bottom edge of the scene reads, "*il diavolo no burla*" ("the devil doesn't jest"), a mocking warning.

Van Laer's image may have drawn on the *Historia von D. Johann Fausten*, the legendary novel of alchemical occultism that first appeared in 1587. With the help of the devil, Faust trades his immortal soul for knowledge, power, and wealth—the latter through the alchemical transmutation of gold, an act that the novel identifies as a violation of the authority of nature.⁴⁴² The tale ends as the damned Faust is dragged away by the claws of his former benefactor. Faust's story was widely popular, appearing in English around 1592 as *The Tragicall History of the Life and Death of Doctor Faustus*, penned by playwright Christopher Marlowe. A cover illustration (Figure 113) for one 1628 London edition of Marlowe's theatrical adaptation shows a clawed, winged beast emerging from the right-hand edge of the frame, as a scholarly Faust attempts to ward away his fate. Mario Giuseppe Genesi has suggested links between Marlowe's final scene, in

⁴⁴¹ Barry Wind. 'A Foul and Pestilent Congregation': Images of Freaks in Baroque Art. (Brookfield: Ashgate Publishing, 1998): 118, n. 51.

⁴⁴² Helen Watanabe O'Kelly. "Saxony, Alchemy and Dr. Faustus." *The Golden Egg.* Alexandra Lembert-Heidenreich and Elmar Schenkel, ed. (Cambridge: Galda + Wilch Verlag, 2002): 31-36.

which a terrified Faust begs for reprieve but is finally carried away by the demonic forces. Marlowe's text also makes reference to common materials employed in Faust's acts of witchcraft, some of which also appear in Van Laer's composition, including the blood-letting knife, brazier, and occult texts.⁴⁴³

While this alchemical link remains speculation, Van Laer's *Magic Scene* may have nevertheless acted as a point of inspiration for Wijck's unusual The Alchemist and *Death.* In both paintings, a ritual of skull, book, and candle is interrupted by the appearance of a demonic skeleton that heralds death and likely damnation. The Alchemist and Death's architectural space, a use of columns and heavy broad archways, indicates that it was produced after Wijck's travels to Italy and his absorption of Roman structures. His inclusion of a vivid red substance smeared across the floor and open pages at lower right may further reference dragon's blood, a natural plant resin in use since antiquity as a dye and pigment, owing to its vivid red coloration. A staple of alchemical experimentation, dragon's blood appeared in literature as a medicine and curative as well as a potent symbol of transformation and renewal. As a substance that embodied the perfected color stage of *rubedo*, dragon's blood was one of many elements thought to be necessary for the attainment of the Philosopher's Stone. Yet it had more concrete usage as a resin varnish for instruments, and would have been equally familiar to luthiers as to natural philosophers.⁴⁴⁴ This red substance, too, may connect the painting to Van Laer's,

⁴⁴³ Mario Giuseppe Genesi. "Per una decodifica dei dettagli magico-musicali nella Scena magica con autoritratto di Pieter Bodding van Laer." *Music in Art* 30, No. 1/2 (2005): 95-96.

⁴⁴⁴ Ibid: 89.

as the *Magic Scene* depicts a small-handled cup of red liquid close to the fire. This may indeed be the resinous mixture known as "dragon's blood." There is little precedent for such motifs—dragon's blood, damnation, and occult ritual—in the alchemical genre scenes of Wijck's other Haarlem contemporaries, the majority of which relied on poverty and conventional satire to condemn alchemical folly. While *The Alchemist and Death* carries many of Wijck's characteristic objects and the structure of his other alchemical scenes, the painting is a thematic experiment.

Van Laer and Wijck's blendings of alchemical and magical themes would not have appeared particularly unusual to an Italian audience familiar with the culture of "secrets," a phenomenon of early modern natural philosophical and medical literature. As noted in the third chapter, "secrets" were understood as both cosmological revelations of the workings of nature and the universe, as well as more prosaic knowledge, recipes, technologies, and methods used by experts and masters.⁴⁴⁵ Published collections of such secrets were widely popular, beginning with the early sixteenth-century *I Secreti* of the humanist Girolamo Ruscelli. Ruscelli's claims that his collected secrets were the result of investigations conducted by an "academy" of secrets convened in Naples and populated by his humanist friends⁴⁴⁶ parallels the writings of Giovanni Battista della Porta, the noble son of a prominent Neapolitan family, who in 1550 established his own *Academia Secretorum Naturae* (Academy of the Secrets of Nature), devoted to experiment and observing the workings of the natural world. Della Porta's most famous work, published

⁴⁴⁵ Elaine Yuen Tien Leong and Alisha Michelle Rankin. "Introduction." *Secrets and Knowledge in Medicine and Science*, *1500-1800*. (Burlington: Ashgate, 2011): 12. ⁴⁴⁶ Eamon and Paheau, "The Accademia Segreta," 330-340.

in 1556, was the *Magiae Naturalis* (*Natural Magic*), a philosophical work populated with processes for refining and manipulating natural materials for the creation of efficacious substances—among them poisons, medicines, metallic compounds, cosmetics, and other products. The work's immense popularity, combined with della Porta's open interests in magic and experiment, likely contributed to his arrest and interrogation by the Inquisition in 1578. Acquitted by Pope Paul III, della Porta was nevertheless ordered to cease his investigations into the "prohibited sciences,"⁴⁴⁷ and forced to dissolve his academy. This episode illustrates the uneasy balance perceived to exist between alchemy's practical applications and the possibility of its misuse for magical and occult ends.

It is no coincidence that Naples, home to della Porta and the *Academia Secretorum Naturae*, was also a center for alchemical investigation. Its geographical importance as a point of contact between East and West had, since the twelfth century, established Naples as a center for the transmission and translation of Arabic and Hebrew texts. Among these were the alchemical works of the Pseudo-Geber, discussed in the previous chapter, as well as countless other treatises on the practices and theories of alchemy. But Naples' most acclaimed alchemical source was the circulation of texts spuriously attributed to Ramon Llull, a thirteenth-century Majorcan philosopher and theologian incorrectly held to have studied alchemy under the Catalan theologian and physician Arnold of Villanova. While Llull had indeed visited the kingdom of Naples on his journeys through Southern Europe and Northern Africa, working as a missionary and

⁴⁴⁷ Mosche Barasch. "Adam the Panphysiognomist: A Stage in Modern Physiognomics." *Self, Soul, and Body in Religious Experience*. Albert I. Baumgarten, Jan Assmann, et al., eds. (Leiden: Brill, 1998): 76.

translator,⁴⁴⁸ legends of his work as an adept stem from the misattribution of an early fourteenth-century alchemical compendium, the *Testamentum*. This work by an unknown author made frequent reference to a theory of quintessence formulated by an alchemist using the name of "Raymund," and was dedicated to King Robert of Anjou, ruler of the kingdom of Naples between 1309 and 1343.⁴⁴⁹ Naples' positioning as a center for alchemical thought led aspiring adepts to visit the city in the hopes of finding a teacher. Among these hopefuls was was the Bolognese physician and empiric Leonardo Fioravanti, who arrived in 1549 and promptly acquired a tutor and laboratory for his training. Fioravanti soon followed in the vein of Ruscelli and della Porta, forming his own informal "academy" of secrets, focused on alchemy.⁴⁵⁰

Wijck's many sketched and painted representations of the Bay of Naples—three of which will be discussed in the following section—support a stay in the city during his Italian travels. Through time spent in Naples as well as Rome, it is highly likely that he encountered strains of thought connecting alchemy to magic and other exoteric practices. In turn, these experiences may have led to the production of his unusual exploration of magical and occult themes within *The Alchemist and Death*. It is difficult to say what might have prompted Wijck to produce such a singular work, as the vast majority of his alchemical paintings clearly omit any attempts at mysticism. Rather, most reflect Wijck's experiences with alchemy as an artisanal discipline, as well as the scholarly and artisanal

⁴⁴⁸ Harvey J. Hames. *The Art of Conversion: Christianity and Kabbalah in the Thirteenth Century*. (Leiden: Brill, 2000): 16.

 ⁴⁴⁹ Jonathan Hughes. The Rise of Alchemy in Fourteenth-Century England: Plantagenet Kings and the Search for the Philosopher's Stone. (London: A&C Black, 2012): 94.
 ⁴⁵⁰ Eamon, The Professor of Secrets, 114-116.

aspects of his own work as a painter. Thus as a limited attempt at explanation, I propose that the painting in question does not, as has been suggested, ⁴⁵¹ indicate Wijck's personal concern for mysticism or occult alchemy. Instead, it appears to have been that most alchemical thing: an experiment.

Elite Alchemy and Experiment in London

Between the fall of Charles I in 1649 and the restoration of the English crown in 1660, alchemy in England had suffered from its associations with royal patronage. The coronation of Charles II marked a revived interest in alchemy. The new king's interests in natural philosophy and empiricism ensured a steady stream of hopeful adepts seeking the king's patronage. Only weeks after his coronation, Charles II had provided the French alchemist Nicolas Le Fevre with a suite of laboratory rooms near the palace at Whitehall. By 1668, Charles had also placed Thomas Williams, a London-trained physician and iatrochemist, in the newly anointed post of "Chemical Physician."⁴⁵² Charles II's private circle was also deeply involved with alchemical pursuits. Sir Robert Moray, one of the king's Privy Councillors, was known for his experiments with metals and chemical medicines. Moray's laboratory assistant, Thomas Vaughan, was a Welsh alchemist and former clergyman whose written works fused spiritual and practical alchemical doctrines.⁴⁵³

⁴⁵¹ Corbett, "Convention and Change," 259-260.

⁴⁵² Frances Harris. "Lady Sophia's Visions: Sir Robert Moray, the Earl of Lauderdale and the Restoration Government of Scotland." *The Seventeenth Century* 24, No. 1 (2009): 144-145.
452 Total Additional Contemportation (2009): 144-145.

⁴⁵³ Ibid: 136.

Inventories of Ham House, the estate of John Maitland, the first Duke of Lauderdale, Charles II's closest advisor and long-time friend, show further evidence of this circle's obsession with alchemy. Maitland commissioned two paintings of alchemists by Wijck. The larger of these, An Alchemist in Eastern Dress (Figure 72, Ham House, Richmond-upon-Thames), was hung in his private closet, above the desk where he wrote his letters. The second work, An Alchemist (Figure 70, Ham House, Richmond-upon-Thames), hung in one of the Maitland family's upper "withdrawing" rooms, where close friends were received.⁴⁵⁴ In addition to commissioned art, Ham House also held spaces devoted to medicinal and domestic chemical work, namely a large and well-equipped "Still House" that appears to have been used for distillation of cordials and tonics by members of the family.⁴⁵⁵ Despite his involvement with alchemy, Maitland's view of the art sometimes bordered on ambivalence-at least where the king's attention was involved. Charles II's obsessive interest in his laboratory presented business-minded Maitland with a distracting obstacle: in a letter of 1668, Maitland referred to alchemy as "the bewitching Chimestrie (in which our Dearest Master spends at least 2 or 3 hours every day) [sic]."⁴⁵⁶ Alchemical inquiry surrounded Maitland both at home and at court, presenting solutions as well as the occasional problem. England's taste for alchemy and other experimental empirical pursuits was booming.

⁴⁵⁴ Lang, "Fitting Pictures to Rooms," 410-411.

⁴⁵⁵ Christopher Rowell. "The Duke and Duchess of Lauderdale as Collectors and Patrons." *Ham House: 400 Years of Collecting and Patronage*, 122.

⁴⁵⁶ Frances Harris. "Lady Sophia's Visions: Sir Robert Moray, the Earl of Lauderdale and the Restoration Government of Scotland." *The Seventeenth Century* 24, No. 1 (2009): 144, note 78.

In the midst of this alchemical renewal, Thomas Wijck traveled to London, arriving in late 1663. Unlike Wijck's travels to Italy, known only through the evidence of his oeuvre, his voyages to England are well documented. A letter written by Wijck and dated March 26, 1663, outlines permissions for his wife Trijntgen to manage all household affairs, rents, and investments in his absence, as he was planning to be abroad for an extended period.⁴⁵⁷ Wijck does not appear to have departed for England for another four months, as guild records indicate he was still being reimbursed for expenses in Haarlem in late July of the same year.⁴⁵⁸ Wijck's first stay lasted less than five years, as he was re-elected to the position of guild warden in Haarlem in August of 1668.⁴⁵⁹ Several years later, he made a second voyage, lasting between 1672 and 1674.

Already a successful and mature master, Wijck quickly found himself patronized by social and economic elites in an extended circle of intellectuals and empirics. Maitland's friends and peers participated in the founding of the Royal Society of London for Improving Natural Knowledge, and engaged in a variety of experimental practices and technological discoveries that shaped emerging science. Wijck's connections to this circle came through the patronage of Maitland as well as through his own son, the artist Jan Wijck, who also lived and worked in London during this period. Wijck's production

⁴⁵⁷ The letter, discovered in the AVK, NA M. de Keyser 255, does not mention the dates of travel but refers to Wijck's intention to remain abroad for a lengthy stay: "Thomas Wijck, poorter deser stede [...] voor eenige tijt van meninge sijnde te trecken utlandich." (Thomas Wijck, citizen of this city [...] intending to travel abroad for some time.) Cited in Van Thiel-Stroman, "Thomas Adriaensz Wijck," 349, Note 23.

⁴⁵⁸ Hessel Miedema. *De archiefbescheiden van het St. Lukasgilde te Haarlem 1497-1798*.
(Alphen aan den Rijn: Canaletto, 1980): 667.
⁴⁵⁹ Heide 1062

⁴⁵⁹ Ibid: 1063.

of alchemical scenes perfectly positioned him for entry into a rapidly expanding, alchemy-obsessed English market. Links between Wijck's alchemical subject matter and the court's taste for laboratory work were noted by George Vertue⁴⁶⁰ and Horace Walpole. Yet alchemy as a subject within Wijck's oeuvre does not rely on his exposure to alchemical ideas through the English court: along with stylistic evidence discussed in the previous chapter, his lifelong connections to chemical work through his own artistic practice offer the best evidence that Wijck had already become a painter of that subject before his arrival. Wijck's sustained inventions of alchemical imagery indicates a deeper level of involvement with alchemy, whether personal or professional, suggesting that the alchemical paintings produced for the English elite were the continuation, rather than the beginning, of a significant theme within his work. His travels to England during this specific period may indeed indicate a savvy move to respond to demand for his specialized subject matter, as well as an opportunity for expanding his own engagement with alchemy itself.

Wijck's presence in London is demonstrated by a drawing of Saint Paul's Cathedral and public works buildings by the side of the Thames. His *View of the Waterhouse and Old St. Paul's, London* (Figure 114, Yale Center for British Art), makes use of a pen and grey ink-wash to capture the subtle shadows of daylight on the cathedral, at right, and on the unusual architecture of the wooden water-house and tower. The latter building was demolished before 1665, confirming that Wijck arrived before that year.⁴⁶¹

⁴⁶⁰ Vertue, *Note Books*, Vol. V, 43.

⁴⁶¹ John Baskett. *Paul Mellon's Legacy, A Passion for British art: Masterpieces from the Yale Center for British Art.* (New Haven: Yale Center for British Art, 2007): 243, no. 7.

A second drawing of Saint Paul's façade, completed a few years later (Figure 115), records the city's abrupt and lasting transformation after September of 1666. The "Great Fire" of London, lasting more than three days, between September 2nd and 5th, began in a bakery and rapidly spread to engulf and ravage much of the closely woven, woodenframed city. It is likely that Wijck observed the fire, along with many of the city's artists. His pen and ink-wash sketch of the cathedral carefully records the aftermath of the fire's devastation, from the grit of small blackened patches on the remaining walls, to the small figures who climb around the piles of broken stone. The scale of his observers evokes a sense of awe at the scale of the fire's destructive force. Wijck's painted views of the fire and its aftermath were enthusiastically praised by the early eighteenth-century engraver George Vertue in his notebooks,⁴⁶² as well as by Horace Walpole, who may have owned Wijck's drawing of the water-house and cathedral before the fire.⁴⁶³ Vertue also praised Wijck's panoramic vistas of London before the fire, including the View of London from Southwark (Figure 28, Chatsworth House), the painting that Walpole later called "the best view [Vertue] had seen of London."464

Following consecutive terms as guild warden and dean back in Haarlem between 1668 and 1672, Wijck returned to London.⁴⁶⁵ His stay lasted roughly two years,

See also Rhys Jenkins, et al. *London Topographical Record* Volume 2 (London Topographical Society, 1903): 110-111.

⁴⁶² Vertue, *Note Books*, Vol. I, 106.

⁴⁶³ John Schofield. St. Paul's Cathedral Before Wren. (Swindon: English Heritage, 2011):
210, fig. 5.39. See also John Baskett. Paul Mellon's Legacy, A Passion for British art: Masterpieces from the Yale Center for British Art. (New Haven: Yale Center for British Art, 2007): 243, no. 7.

⁴⁶⁴ Walpole, Anecdotes of Painting in England, 266.

⁴⁶⁵ Miedema, *De archiefbescheiden van het St. Lukasgilde te Haarlem 1497-1798*, 1063.

evidenced by a deposition given in December of 1674 by Trijntgen regarding her mother's estate, that made reference to "Thomas van Wijck, haeren uytlandigen man," ("Thomas Wijck, her husband abroad).⁴⁶⁶ This second stay was marked by a series of commissions from Wijck's most prominent English patron, John Maitland.

Maitland's 1672 marriage to Elizabeth Murray, second Countess of Dysart, brought with it her family estate Ham House, just outside of London at Richmond-upon-Thames. Maitland and Murray engaged in a campaign of renovation and redecoration that lasted several years. They installed paintings, tapestries, and architectural embellishments, and expanded the libraries to accommodate the bibliophile Maitland's enormous collection of volumes.⁴⁶⁷ A voracious reader and writer, Maitland's education in classical languages had included the requisite Latin, but he also demonstrated abilities in Greek and Hebrew, as well as some fluency in French, Spanish, and Italian.⁴⁶⁸ While the majority of his library was dedicated to history, theology, law, and politics, it also extended to Maitland's interests in natural philosophy and the occult. Volumes dealing with witchcraft (and skepticism) included works by George Gifford, Reginald Scot, and Gabriel Naudé. Maitland also owned a copy of Robert Hooke's *Micrographia*, the landmark illustrated text detailing Hooke's observations through an early microscope. The *Micrographia*, a publication of the Royal Society of London for Improving Natural

⁴⁶⁶ Cited in Van Thiel-Stroman, "Thomas Adriaensz Wijck," 349, Note 32.
⁴⁶⁷ Christopher Rowell. "The Duke and Duchess of Lauderdale as Collectors and Patrons." *Ham House: 400 Years of Collecting and Patronage*. (New Haven: Yale University Press, 2013): 119-122.

⁴⁶⁸ Raymond Campbell Paterson. *King Lauderdale: The Corruption of Power*. (Edinburgh: Birlinn, 2006): 21-22.

Knowledge, was joined in Maitland's library by numerous volumes of the Society's journal, the *Philosophical Transactions*, first issued in 1665.⁴⁶⁹

Wijck was among a number of Dutch painters who found patronage at Ham House. Jan Silberechts, Dirck van den Bergen, Abraham Begeyn, Henry Danckerts, Peter Lely, and both the elder and younger Willem van de Velde were also commissioned by Maitland to produce paintings for his lavish redecoration program.⁴⁷⁰ They were joined by a number of other Dutch artisans brought to England by Maitland and his architect, Sir William Bruce, for the renovation of Ham House and the Maitland's additional properties in Scotland. This included joiners and craftsmen Mathias Jansens, Heinderich Meinners, Johan Christian Ulrich, Jan van Santvoort, and others. England's political situation after the Restoration had made the journey favorable for such workers. While the Anglo-Dutch War of 1672 strained relationships, the English extended a welcoming hand to Netherlandish tradesmen fleeing the conflict: a royal proclamation in June of 1672 formally invited the "Subjects of the United Provinces of the Low-Countreys [sic]" to emigrate with their households and "Settle in… England."⁴⁷¹ Religious freedom and the right to practice their trades was enforced by the Rebuilding Act of 1667 and its 1670

⁴⁶⁹ Giles Mandelbrote. "The Library of the Duke of Lauderdale." Christopher Rowell. *Ham House: 400 Years of Collecting and Patronage*. (New Haven, Yale University Press, 2013) 223-227.

⁴⁷⁰ David Adshead, "Altered with Skill and Dexterity: The Caroline House." Christopher Rowell. *Ham House: 400 Years of Collecting and Patronage*. (New Haven, Yale University Press, 2013): 99. Also Jacob Simon, "Picture Framing at Ham in the Seventeenth Century," 152-153.

⁴⁷¹ Quoted in Adshead. Ibid: 99.

amendments, that offered assurances of the same "liberty of working" afforded to native citizens.⁴⁷²

Maitland's extensive patronage of Dutch artists and craftsmen can be better understood in the context of his long sojourn in the Netherlands following the death of Charles I. Maitland was Scottish by birth and Presbyterian by confession, yet staunchly royalist. Following the king's execution, Maitland was unofficially exiled to The Hague.⁴⁷³ There, at the court of Charles II's sister Mary Stuart and her husband William, the Prince of Orange, Maitland served as advisor to the new king, fourteen years his junior. The English royal family's close ties to the Dutch *stadholder*—and in turn to Dutch harbors—provided a base for Charles II's plans to invade England by sea.⁴⁷⁴ This plan also relied on the assistance of Scottish forces, and Maitland acted as diplomat and negotiator. A defeat of the royalist army in 1651 left Maitland imprisoned in England for nearly nine years, until the restoration of the English crown in 1660.⁴⁷⁵

Maitland and Murray's plans for Ham House were ambitious, and reflected a return to power alongside Charles II. Certain elements also demonstrated the couple's shared tastes for the curious and experimental subjects contained in Maitland's library. While many of the pictures they commissioned were portraits and landscapes, they also selected alchemical themes by Wijck, and placed these paintings in key locations within

⁴⁷² Quoted in Adshead. Ibid: 99.

⁴⁷³ Raymond Campbell Paterson. *King Lauderdale: The Corruption of Power*. (Edinburgh: Birlinn, 2006): 93-97.

⁴⁷⁴ Anna Keay. *The Magnificent Monarch: Charles II and the Ceremonies of Power*. (New York: Bloomsbury, 2008): 46.

⁴⁷⁵ Raymond Campbell Paterson. Ibid: 117-120.

the household. Inventories of the household's paintings, drawn up between 1677 and 1683, reveal the presence of six paintings by Wijck, five of which were "fixt" or fixed pictures installed, rather than hung, into the walls. The sixth, described as "A Chymist of old Wick," appears as a hanging picture in "The red Withdrawing Roome" in a 1683 inventory of Ham House's paintings. This is likely one of the eight paintings with ebony frames previously referenced (without title or attribution) as appearing in the same room in inventories of 1677 and 1679.⁴⁷⁶ This entry for a "chymist" corresponds with the Ham House Alchemist, a picture measuring roughly 18 inches high by 17 inches wide. Located in the withdrawing room, where guests retired after supper for conversation, it would have been frequently viewed by close friends and peers. A second, substantially larger picture—An Alchemist in Eastern Dress, measuring roughly 50 inches high by 40 inches wide—can be found in the adjacent room, identified as "His Graces Closett [sic]" in an inventory of 1677. This private chamber is a small space consisting of little more than a writing desk beside a large window. The impressive scale of An Alchemist in Eastern Dress in comparison to the space that housed it suggests that the picture was never far from Maitland's mind. Another picture by "old Wick,"⁴⁷⁷ appears in the same chamber, an Italianate landscape titled A View of a Forum (Figure 116, Ham House, Richmond-on-Thames), located over the doorway. This scene offers a pleasant view of picturesque ruins, crumbling columns, and well-dressed travelers surveying the landscape.

⁴⁷⁶ Lang, "Fitting Pictures to Rooms," 410-411.

⁴⁷⁷ Ibid: 412.

Three additional landscapes in fixed cabinetry frames—noted in the 1683 inventory as "Three fixt pictures of old Wijck"-are located in "The Queens Clossett [sic]," directly adjacent to the "Queen's Bed Chamber."⁴⁷⁸ This suite received its name from Charles II's queen consort, Catherine of Braganza. The Portuguese-born queen was a close friend of the Maitlands, and made many visits to the private apartments installed for her at Ham House.⁴⁷⁹ Three landscapes in gilt frames appear in the room's inner sanctum. All share a unified motif: a Mediterranean harbor populated with "foreign" traders and sailing ships. This theme was tied to territories granted as part of Catherine of Braganza's dowry, notably the bustling port of Tangier on the coast of Northern Africa, modern-day Algiers. As noted in the previous chapter, Algiers was a locus of global trade and a subject of fascination in the West.⁴⁸⁰ The largest of these works, the Capriccio of a Seaport with Orientals and an Antique Statue (Figure 117, Ham House, Richmond-on-Thames), measures roughly 46 inches high and 54 inches wide. Here, a decaying stone tower overlooks a bustling harbor, as traders and customers gather before a well. A second work, installed beneath the first, shares the same title—*Capriccio of a Seaport* with Orientals and an Antique Statue (Figure 118, Ham House, Richmond-on-Thames)yet is horizontally oriented at 17 inches high and 43 inches wide. This scene and the next share a glimpse of an unusual geographical marker: a smoking volcano. The third

⁴⁷⁸ Ibid: 418.

⁴⁷⁹ Christopher Rowell. "Parquetry and Marquetry Floors and the Carvings in the Queen's Apartment at Ham House." *Ham House: 400 Years of Collecting and Patronage*. (New Haven, Yale University Press, 2013): 85.
⁴⁸⁰ Linda Colley. *Captives: Britain, Empire, and the World, 1600-1850*. (New York:

Knopf Doubleday, 2007): 24-25.

painting, a *View of the Bay of Naples with Orientals and an Antique Statue* (Figure 12, Ham House, Richmond-on-Thames), measuring 42 inches high by 48 inches wide, presents a picturesque harbor, while in the distance the volcano puffs a cloud of ashy smoke. This is undoubtedly a representation of Mount Vesuvius, the long-dormant giant whose eruption on December 16, 1631, had re-awakened both fearful anxieties of cataclysm and interest in Pliny's ancient account of the destruction of Pompeii.⁴⁸¹ Wijck's travels through Italy, likely including Naples, and his high reputation as a landscape painter may have been a point of importance to the Duke and Duchess of Lauderdale, influencing their selection for this ambitious decorative program. That Wijck would have been the artist commissioned to produce multiple works for such an intimate and important setting speaks to the high regard in which he was held by Maitland and Murray.

Wijck's success in England was shared by his son, Jan. Born in Haarlem in 1645, Jan was trained as a painter by his father, and may have accompanied Wijck to England on his first journey around 1663. Unlike the elder Wijck, Jan does not appear listed as a member of the Haarlem guild—instead, he appears in the London registers of the Worshipful Company of Painter-Stainers, an organization incorporated by charter in 1581. In a document dated June 17, 1674, Jan states before the Painter-Stainers that he will shortly deliver to them his "proofe piece," a masterwork completing his admission

⁴⁸¹ Sean Cocco. "Natural Marvels and Ancient Ruins: Volcanism and the Recovery of Antiquity in Early Modern Naples." *Antiquity Recovered: The Legacy of Pompeii and Herculaneum*. Victoria C. Gardner Coates, Jon L. Seydl, eds. (Los Angeles: Getty Publications, 2007): 28-30.

requirements as a master.⁴⁸² Jan appears to have had no shortage of important patrons, and Wijck's patronage by the Duke and Duchess of Lauderdale also extended to his son. When the elder Wijck returned to England around 1672, Jan accompanied him, finding employment with Maitland and Maitland's engineer, John Slezer, Slezer, a foreign-born engineer and surveyor working in Scotland since 1669, was responsible for creating new plans and elevations during Ham House's sustained renovations. A drawing of the grounds and gardens (Figure 119, Ham House, Richmond-on-Thames), dated to about 1672, shows both the precise surveying of Slezer and the whimsical additions of Jan, who contributed a pair of putto as a framing device, as well as minute staffage along the riverbank. Slezer and Jan worked together on numerous projects for Maitland as well as for Slezer's own *Theatrum Scotiae* (*Theatre of Scotland*), an ambitious and lavishly illustrated volume of Scotland's natural and man-made landmarks. Jan was employed by Slezer for the "touching and filling up with little figures,"⁴⁸³ adding a human scale to Slezer's topographically rigorous representations. Much like his father, Jan was also considered a good judge of paintings, evidenced by an inventory and evaluation of the Ham House collections produced by Jan for the Duchess of Lauderdale in 1686. This survey, noted as "A Catalog of Pictures with their prices, taken by Mr. Wyke [sic]," provided estimated prices for roughly fifty pictures, not including the family's many personal portraits. Jan's own financial success is demonstrated by his purchase in the same year of four pictures from the Duchess of Lauderdale, at a price of ± 100 . The note

⁴⁸² Katharine Gibson. "Jan Wyck c.1645-1700: A painter with 'a grate deal of fire'." *The British Art Journal* 2, No. 1 (2000): 3-4.

⁴⁸³ Adshead, "Altered with Skill and Dexterity: The Caroline House," 103.

confirming the sale also mentions "an agate bowl pledged to [Jan],"⁴⁸⁴ further evidencing the sustained goodwill between the Duke and Duchess of Lauderdale and the Wijck family.

Both the elder and younger Wijck were at the heart of an extended network of curious elites engaged in natural philosophical inquiry, including members of the Royal Society of London for the Improvement of Natural Knowledge. While Maitland never officially joined the ranks of membership within the Society, his overlapping interests, personal friendships, political ties, and intellectual habits brought him into continual proximity with its founders. Their presence at Ham House, and Maitland's contacts with Society members in London, confirms the circulation of the Society's natural philosophical ideas and experimental pursuits within this network. Wijck's relevance to these circles is supported by his subject matter. As noted in the second chapter, Wijck's English biographers gave particular praise to his laboratory scenes, and he was closely associated with his trademark alchemical themes. While alchemy was a somewhat contested subject among the members of the Royal Society, the art was continually present in debates and experiments and remained a subject of fascination, even to skeptics.

The Royal Society emerged from an informal group of natural philosophers, engineers, and mathematicians who began meeting at Gresham College around

⁴⁸⁴ Lang, "Fitting Pictures to Rooms," 408.

November of 1660.⁴⁸⁵ It was officially sanctioned by a series of charters issued by Charles II in 1662 and 1663. Its earliest members included Maitland's fellow Privy Councillor Robert Moray, the natural philosopher Robert Boyle, the architect and polymath Christopher Wren, and William Brouncker, Second Viscount Brouncker, the Society's first president. The group's activities included meetings and committees, the presentation of experiments and new empirically gathered data, and a supper club that entertained lively discussion. Much of these proceedings were captured in the meticulous diaries of Samuel Pepys, a member of the Society, secretary to the Earl of Sandwich and a former royal clerk of the Navy Board. Pepys would later serve as president of the Royal Society.⁴⁸⁶ Pepys was a close friend of the author and horticulturalist John Evelyn, another early member of the Society. Both were known to dine at Ham House and enjoyed the intellectual conversation of their host. Like Maitland, Evelyn was a serious bibliophile, a voracious book-collector in London's bustling marketplace. In a 1689 letter sent by Evelyn to Pepys after the death of Maitland, Evelyn despaired of the loss of Maitland's great library, then appearing at auction, as a "sad" dispersal of Maitland's "intire, choicely bound [sic]" collection.487

 ⁴⁸⁶ Norman J. W. Thrower. "Samuel Pepys FRS (1633-1703) and the Royal Society." *Notes and Records of the Royal Society of London* 57, No. 1 (2003): 6-10.
 ⁴⁸⁷ Giles Mandelbrote. "The Library of the Duke of Lauderdale." Christopher Rowell. *Ham House: 400 Years of Collecting and Patronage*. (New Haven, Yale University Press, 2013): 225.

⁴⁸⁵ Frances Harris. "Lady Sophia's Visions: Sir Robert Moray, the Earl of Lauderdale and the Restoration Government of Scotland." *The Seventeenth Century* 24, No. 1 (2009): 133-135.

The connected web of artists, empirics, engineers, and patrons who circulated within and around Ham House included the Dutch painter Peter Lely, famed portraitist and "Principal Painter" to Charles II,⁴⁸⁸ as well as Lely's apprentice, Robert Hooke, author of the Micrographia found in Maitland's library. As a "curator" of experiments at the Royal Society, Hooke was instrumental in developing the Society's programs and identifying topics of interest.⁴⁸⁹ Hooke was also trained as a surveyor, and in 1666, following the devastation of the Great Fire of London, was appointed as one of three surveyors for the city of London.⁴⁹⁰ Hooke's work in recording and assessing sites of damage recalls Wijck's repeated sketching of central London and the crumbled buildings along the Thames. Hooke's work as a surveyor and draftsman also extended to his production of architectural plans—a world in which his mechanical aptitudes were clear. Among his many innovative projects was the installation of six new sash-style windows, a form of vertically sliding windows fitted with lines, pulleys, and counter-weights, in the central building of the College of Physician in London around 1674.⁴⁹¹ Such windows represented the latest fashion and technologies in building, and had been installed less than a year prior into both St. James's Palace, in the apartments of the Princess Mary, and Ham House. Fifty-three sash windows were installed at Ham House between 1673 and

⁴⁸⁸ Ellis Kirkham Waterhouse. *Painting in Britain, 1530 to 1790.* (New Haven: Yale University Press, 1994): 92.

⁴⁸⁹ Rob Iliffe. "Material Doubts: Hooke, Artisan Culture and the Exchange of Information in 1670s London." *The British Journal for the History of Science* 28, No. 3 (1995): 287-288.

⁴⁹⁰Ibid: 292.

⁴⁹¹ Hentie Louw and Robert Crayford. "A Constructional History of the Sash-Window c. 1670-c.1725 (Part 1)." *Architectural History* 41 (1998): 86.

1674, and their design and installation was comprehensively recorded by Slezer.⁴⁹² The scale of such a project within the closely networked community of London surveyors, architects, and engineers suggests the possibility of interaction or exchange of knowledge between Slezer and Hooke. It is highly plausible that his interests in surveying, architecture, and the mechanical trades would have connected him with Slezer—and by extension to Slezer's longtime collaborator, Jan Wijck.

One of Hooke's mentors, Robert Boyle, was also alchemy's staunchest champion within the Royal Society. Opinions on the art within the Society were divided: its first official historian, Thomas Sprat, openly derided the seekers of the Philosopher's Stone who drew symbolic alchemical parables between their own works and the texts of the Bible.⁴⁹³ Likewise Joseph Granvill, an early member made fellow in 1664, condemned earlier practices as superstitious folly, insisting that only the rationalizing effect of the Royal Society had succeeded in establishing chemical inquiry as "honest, sober, and intelligible," having at last "refined it from its dross."⁴⁹⁴ But others enthusiastically embraced alchemy, including the derided art of chrysopoeia, and testified to its efficacy and potential. Boyle, son of an Irish Earl and a mentor of Sir Isaac Newton, vigorously defended alchemy and participated in first-hand chemical experiments throughout the course of his life. He corresponded with fellow alchemists (including the American-born George Starkey, and the circle of Samuel Hartlib) and authored the *Dialogue on*

 ⁴⁹² Adshead, "Altered with Skill and Dexterity: The Caroline House," 110.
 ⁴⁹³ Principe, *Secrets of Alchemy*, 180-181.

⁴⁹⁴ Quoted by P.M. Rattansi. "The Helmontian-Galenist Controversy in Restoration England." Alchemy and Early Modern Chemistry Papers from *Ambix*. Allen G. Debus, ed. (Yorkshire: Jeremy Mills Publishing, 2004): 364.

Transmutation around 1670.⁴⁹⁵ Within its pages, Boyle defended the possibility of attaining the Philosopher's Stone, delivering an eyewitness account of a transmutation of lead and mercury into gold, through the use of a precious red substance carried by an unidentified "Traveller." Boyle's tests of the gold produced confirmed its qualities, and the same experiment was subsequently witnessed by a close friend, Edmund Dickinson, the royal physician. Several years later, in 1689, Boyle and Dickinson's impassioned first-hand testimony before Parliament regarding the legitimacy of transmutation led to the repeal of the 1404 English statue against its practice.⁴⁹⁶

Transmutation remained a point of contention among Society members until the turn of the eighteenth century. Yet, as noted in the third chapter, even those skeptical of gold-making often expressed admiration for alchemy's successes in metallurgy, medicine, and other practical fields. These less divisive types of chemical and alchemical work were ongoing, championed by figures on both sides. Both elite and popular audiences were fascinated with alchemical technologies, and privately conducted experiments in the domestic sphere were not uncommon: Samuel Hartlib's kitchen laboratory was one among many.⁴⁹⁷ It is apparent that alchemical work was also conducted at Ham House. Inventories reveal the presence of distillation equipment, furnaces, and other materials that suggest chemical experiments—likely the making of

⁴⁹⁵ Lawrence Principe, "Boyle's Alchemical Pursuits." *Robert Boyle Reconsidered*. Michael Hunter, ed. (New Haven: Cambridge University Press, 2003): 98.
⁴⁹⁶ Like the majority of laws passed against the practice of alchemy, Henry IV's prohibition against transmutation had largely centered on the possibility of a devalued currency and the potential for financial fraud. Principe, *Secrets of Alchemy*, 168-170.
⁴⁹⁷ J. Andrew Mendelsohn. "Alchemy and Politics in England 1649-1665." *Past & Present* 135 (1992): 51.

distilled waters and medicines— were being performed on-site by members of the Maitland family. Such pursuits would have been appropriate for Maitland as well as his wife and her household, as many women engaged in the keeping of recipe books and the production of tonics and other remedies. The Duchess of Lauderdale's interests in chemical experiments and esoteric studies is known to have extended to the production of invisible inks—an interest she shared with Moray and Boyle.⁴⁹⁸ The Ham still-house, a large room placed close to the kitchens, had a portico entrance to the outside, enhanced by columns, ⁴⁹⁹ indicating the room's prominence and the possibility that outside visitors may have been welcomed through. Inventories completed in 1677, 1679, and 1683 detail the contents of the well-stocked still-house, offering lists of equipment that resemble the apparatuses visible in many of Wijck's alchemical scenes. In 1677, the still-house contained "3 stoves... 1 Copper oven, 3 Stills, 4 preserving panes, 1 paire of scales & weightes, 1 Skellett, 1 iron furnace, 3 chaffing dishes, 1 paire of bellows tongue & Shovell, 1 Coal basket, 9 glass heads for stills [sic]," as well as furniture, sieves, platters, and basins.⁵⁰⁰ The inventory of 1679 also makes note of "One marble morter... Three pewter stills with leaden bottoms & Iron frames [sic]."⁵⁰¹ Many of the same objects

⁴⁹⁸ Jane Clark. "Lord Burlington is Here." *Lord Burlington: Art, Architecture and Life*. Toby Barnard and Jane Clark, eds. (London: A&C Black, 1995): 289-291.

⁴⁹⁹ Christopher Rowell. "The Duke and Duchess of Lauderdale as Collectors and Patrons." *Ham House: 400 Years of Collecting and Patronage*. (New Haven, Yale University Press, 2013): 122.

⁵⁰⁰ Appendix 5: The c. 1655, 1677, 1679, 1683, c. 1683, 1728 and 1844 Inventories of Ham House and of the Lauderdale Whitehall Lodgings." Christopher Rowell. *Ham House: 400 Years of Collecting and Patronage*. (New Haven, Yale University Press, 2013): 442.

⁵⁰¹ Ibid: 450.

appear in the inventory of 1683, with the addition of "two black Marble Morters" and one "balneo Maria [sic],"⁵⁰² referring to the "Mary's bath" of water or sand used to slowly and gently distribute heat during distillation.

The presence of several distillation apparatuses within Ham House lends an additional dimension to Wijck's scenes of laboratories that hung on the house's upper floors. Wijck's specificity and accuracy in his detailed depictions of alembics, portable furnaces, mortars, and other basic tools of distillation and alchemical work would have drawn favorable comparison to the real tools observed by the owners of his paintings and their visitors. The presence of alchemical paintings in proximity to real spaces of alchemical inquiry supports their role as conversation pieces and confirms the social importance of such representations. As established, Wijck's images do not merely reflect the interests of his patrons, but project the artist's own engagements with, and connections to, alchemical practices and materials. These works actively model alchemy as a respectable experimental discipline, and thus contribute to an environment in which alchemy played an active role in the discovery of new natural knowledge.

It is clear that Wijck's stays in England, his presence at Ham House, and his undoubted exposure to members of the Maitland circle, provided extensive access to alchemical ideas, texts, and materials. Wijck's arrival shortly after the restoration placed him in an England undergoing a vibrant alchemical renaissance, a period in which his scenes of alchemical workshops would have been objects at the height of fashion, catering to the taste of the nation's social and intellectual elites. Wijck's training in

⁵⁰² Ibid: 463.

Haarlem, and his life there amidst a network of artisans and metalsmiths, brewers, textilemakers, and other tradesmen, had already provided a model for practical alchemical work as well as an artistic legacy—through Goltzius—that linked painterly experiment to alchemical transformation. In Rome, Wijck's circles included artists interested in alchemy's occult dimensions, while Naples provided a setting saturated in alchemical inquiry and experiment. Such a background of experiences and encounters with alchemy would have primed Wijck to recognize England's growing fascination with alchemy, and to be able to make use of alchemy as a popular pictorial subject while drawing on his own expertise. England obviously offered a prime opportunity for this painter of alchemists, as Wijck's time there was spent amongst those most eager to discover nature's secrets via alchemical means.

Chapter 6

THE ARTIST IN THE LABORATORY, THE ALCHEMIST IN THE STUDIO

Thomas Wijck's diverse encounters with alchemy at home in Haarlem, and abroad in Rome, Naples and London, provided him with a lifetime's worth of sources for his representations of alchemical practice. Yet Wijck's practices within the studio also encompassed materials, habits, and knowledge that were alchemical in nature and that bordered on the investigative processes used by natural philosophers to explore matter. These connections provided him access to alchemical knowledge that was distinct from the knowledge of his elite curious patrons. Links between art and alchemy, as they appear in later nineteenth- and twentieth-century literature, often serve as shorthand for artists whose processes seem shrouded in mystery or defy easy categorization. Eugène Fromentin famously declared that Rembrandt's work was recognized by his contemporaries "as that of an alchemist."⁵⁰³ It is the alchemist, however, who would have recognized seventeenth-century painters' pigments such as mercuric sulfide vermillion, as well as the aqua fortis or "strong water" (now known as nitric acid) used by Rembrandt and other etchers to "bite" their plates. For their extensive chemical knowledge artists relied on experiences gained first-hand in the workshop, as well as shared collectively through recipe books and manuals. The raw materials used by painters—oils or binding

⁵⁰³ Quoted in Van der Wetering, *Rembrandt: the Painter at Work*, 7.

mediums, pigments, varnishes, solvents—demanded expert skill in their manipulation. Despite clear rhetorical and metaphorical connections between alchemical and artistic transformations, the most concrete linkages between art and alchemy lie not in mystery, but in making.

As I demonstrate in chapter four, Wijck eschews satire to present alchemists as scholar-artisans: respectable members of their communities, heads of households, expert teachers of young apprentices, erudite scholars, and experimental practitioners. The clutter and broken vessels he depicts speak not only to the real demands of material work, but the experimental practices and knowledge-seeking that characterized alchemy. Unlike many of his contemporaries, Wijck did not represent the metallurgical quest for transmuted gold,⁵⁰⁴ nor did he represent urinoscopy, a common motif designating a physician or medical iatrochemist.

⁵⁰⁴ As noted in the previous chapter, an unsigned painting identified as a work "by or after" Wijck, in the collections of the Wellcome Library, London (Wellcome Library no. 45111i), does show a single alchemist working at a large forge. The forge, bellows apparatus, and peasant-alchemist type closely resemble the work of Teniers and Adriaen van Ostade, finding no correspondence with any alchemist figures or laboratories found elsewhere in Wijck's oeuvre. The work's handling and the arrangement of still-life objects bear little to no resemblance to Wijck's stylistic and compositional treatments. Wijck rarely painted night scenes or depicted his figures in such actively gestural, animated postures. Despite the existence of an 18th-century engraving after this work by P. F. Basan, labeled "Th. Wyck pinx. F. Basan exc.," I am skeptical that the original work in question can be attributed to Wijck or his workshop. Even his most unusual outlier in the same genre--The Alchemist and Death--shares a compositional familiarity with numerous other works, as well as distinct details including his characteristic column at right and large earthenware jar beside the alchemist's familiar desk and paraphernalia. While it is possible that Wijck deviated from his every pictorial and stylistic precedent to create the single image held by the Wellcome, a deviation he appears never to have repeated, it does not seem likely.

Instead, Wijck depicts types of alchemical work that bear the closest relationship to his own practices as a painter. Many of Wijck's alchemical scenes depict distillation, a process necessary for the making and refining of oils and solvents, such as turpentine. At the forefront of many paintings, he also places large earthenware vessels—vessels that are strikingly close in form to the equipment required for producing pigments. This vessel is paired with distinctive colored matter that resembles pigments in his Schwerin *Alchemist* (Figure 68), where bright powders in red, yellow, and blue sit at the foreground; similar vessels and vivid chunks of matter appear in his Mauritshuis *Alchemist* (Figure 69), and also in his Ham House *Alchemist* (Figure 70), where a large earthenware vessel is being emptied of red matter by a young assistant. Wijck's choice to depict his alchemists as makers of artists' materials, rather than seekers of gold or cures, is a remarkable one. It affirms the connections between his subject matter, his practices as a painter, and his place within a Netherlandish art-theoretical tradition that linked alchemy and experiment to artistic virtuosity.

Wijck's representations of painters' colors and studio work, paired with the characterization of alchemists as scholarly and experimental, form an image of alchemy that is simultaneously material-based and intellectually creative. This dual emphasis on hand and mind is also evident in period images of painters produced by Wijck's contemporaries, as artists struggled to visually and socially elevate their own practices above those of tradesmen. Thus it appears that, of the early modern types who could have provided Wijck with a model for his construction of alchemy, it is artists who most closely align.

This chapter argues that understanding Wijck's alchemical scenes depends on understanding his knowledge and practices as a painter. Three primary threads emerge: Wijck's use of alchemical materials in the studio, his depiction of the making of those materials in the laboratory, and his repeated use of alchemy as a subject—with the latter constituting a coherent body of images that helped to form his artistic persona. I further assert that the relationship within Wijck's painted representations between artistic and alchemical practices is not a framework applied a posteriori, but a construction formed by Wijck himself. Wijck was surely conscious of the legendary achievements of Jan van Eyck, the foundational artist-alchemist of the early modern Netherlands, as well as the work of Goltzius, a figure who modeled the experimental artist. Oil painting was more than a technique: it was both a manner, and an applied philosophy, of naturalistic representation that imitated and transformed the observed world. In Wijck's day, the very origins of oil painting as a discipline were believed to be rooted in Van Eyck's alchemical experimentation. Such beliefs fundamentally link the representation of alchemy with the manner of its representation, through the work of the oil painter. His decision to represent alchemy as it specifically relates to *art*, through depictions of distillations and pigments, places him within a continuum of Northern painters whose claims to artistic mastery were tied to their investigations of nature via alchemy. Art and alchemy had, long before Wijck, shared a historic rivalry, each claiming to be the true "perfective" art, while relegating the other to superficial mimic. Wijck's pictures demonstrate not only the mastery of the painter over nature, in illusionistic depictions of

texture, light, and form, but painting's ability to make use of alchemical products pigments, solvents, and so on—to capture the practice of alchemy itself.

This chapter profiles Wijck's working habits and his use of alchemically created materials to demonstrate that his knowledge of alchemy was rooted in studio practice. Painting required expert understanding of reactivity and other chemical characteristics. I will explore recipes for the production of Wijck's materials and discuss regional specialization, as the Netherlands was a center for the production of vermillion, lead white, and other common artists' pigments. New technical analysis performed in cooperation with conservation scientists in the University of Delaware's Department of Art Conservation, as well as with the Chemical Heritage Foundation in Philadelphia, PA, will reveal Wijck's usage of pigments manufactured via alchemy. In particular, Wijck's repeated use of vermillion as a powerful accent color indicates the importance of alchemical pigments to his process.

As explorations of artisanal work, highlighting the making of artist's materials, Wijck's pictures also provide an enriching parallel, visually and theoretically, to contemporaneous images of the studio. Comparison between Wijck's *The Alchemist* in Schwerin (Figure 68) and his teacher Adriaen van Ostade's 1663 *A Painter in his Workshop* (Figure 3, Gemäldegalerie Alte Meister, Dresden), yields striking similarities. In both, the rustic setting of the workshop, cluttered with discarded, crumpled papers and bits of charcoal, serves to highlight demanding labor and hours spent in pursuit of perfection. Both include a central man in middle age seated before a desk or easel. For the alchemist, this position emphasizes the scholarly aspect of his practice, highlighting

his contemplation beside signs of worldly knowledge such as the globe to his left. For the artist, shown working with maul-stick and brush, illumination from the warm, radiant light of the window at left suggests the touch of inspiration. As his easel faces the viewer, we are also able to glance over his shoulder to see the landscape he paints: since the artist works indoors, this detail emphasizes creative, imaginative powers. Both alchemist and painter are paired with a younger assistant who performs the grueling manual task of grinding matter. Though their settings are humble, both images share a serious vision of the artisan's substantial physical and intellectual labors. Both, too, suggest experimental stages. The alchemist's broken jars signals success and failure over the fire, attempts made, and notes taken. Objects in the artist's studio likewise speak to searching for new compositions or attempting to capture a precise play of light and form: the wooden mannequin, draperies, skulls, and other props are all elements to be combined and recombined. Though Wijck rarely represented artists at work-with the exception of a sketch I will discuss below—his repeated return to artisanal alchemy as a subject, and the acclaim he gained for these paintings, indicates alchemy's usefulness to Wijck as a strategy, a means to distinguish his artistic practice within a crowded marketplace. As a painter of alchemists, he could craft unique claims to expertise over both nature and art.

As Pamela Smith has observed, the painter was one among many artisans for whom experiential and experimental knowledge was central. Artists were not merely recorders of scientific innovation, but fully engaged as innovators. Both artists and alchemists laid claim not only to the "imitation of nature," but to the ability to perform nature's creative and generative processes. The thirteenth-century Dominican alchemist

Albertus Magnus claimed that alchemy was the "art" that most closely mimicked nature.⁵⁰⁵ This statement has complex implications for an artistic culture that praised the imitation of nature as the painter's highest achievement. The link between art and alchemy is not circumstantial, nor is it new: deep ties between artistry and alchemy were continually reinforced in ancient and contemporaneous literature. Even the ambivalent reputation of alchemy has an echo in the rhetoric surrounding the arts; for, as William Newman notes, "the skill that could rival the gods in re-creating nature was also the trickery that fooled the eye."⁵⁰⁶ Both alchemy and painting were subject to criticism for their attempts to mimic and master nature. In this sense alchemy offered the artist a type of challenging *paragone* over the domain of creativity and experiment. This chapter will explore the boundary between the studio and the laboratory, comparing Wijck's images of alchemical work to scenes of painterly practice. In these painted laboratories, Wijck's expert hand transforms alchemical materials into a simulacrum of nature. Thus alchemy was a powerful subject through which the artist demonstrates his mastery over light, form, and color.

Oil Painting and the Art-Alchemy Debate

The possibility that Wijck deliberately used alchemy as a tool for forming an artistic persona must first be addressed through the alchemical origins of his materials, as well as via established debates between art and alchemy as competing masters of the

⁵⁰⁵ Gareth Roberts. *The mirror of alchemy: alchemical ideas and images in manuscripts and books, from antiquity to the seventeenth century.* (London: British Library, 1994): 54. ⁵⁰⁶ Newman, *Promethean Ambitions,* 12.

natural world. The legacy of Jan van Eyck, and the realities of painterly process, acquainted Wijck with a chemical knowledge, as well as an artistic heritage, that connected his replications of nature with the work of the laboratory. The total extent of Wijck's involvement in the making of his own materials is unknown: he may have ground his own colors or purchased them pre-ground, boiled his own oils and varnishes, or else purchased ready-made supplies. His paints would have been freshly prepared within the studio, as they were not yet available pre-mixed. But more generally, Wijck's place as an artist within a community of artists and artisans—and, as I have demonstrated, a leader within that community—makes possible an understanding of the highly alchemical world he inhabited.

Among the products made by alchemy during the sixteenth and seventeenth centuries were pigments, oils, and solvents, all necessary to the painter, as well as the acids necessary to the etcher. As I have noted, certain highly ambitious and experimental artists such as Jan van Eyck and Hendrik Goltzius were openly labeled alchemists, yet many more artists knew of, or made use of, distinctly alchemical recipes and techniques. The question of whether or not individual artists prepared their own materials in the workshop, or purchased them ready-made, is in many cases unresolved. In terms of artists' materials, the seventeenth century was a period of transition: an increasingly diverse and segmented economy, and a booming art market, contributed to the rise of specialist dealers. The availability and quality of pigments in the Dutch Republic was particularly high, and their reputation extended abroad: although new patents for the manufacture of smalt were registered in England in 1605, the London Painter-Stainer's

Guild continued to prefer imported Dutch smalt to the local product.⁵⁰⁷ Certain colorsellers also dealt extensively in other prefabricated supplies. The Rotterdam art dealer and colorman Crijn Hendricksz Volmarijn, who was patronized by major masters such as Salomon de Bray and Leonard Bramer, provides such an example. In addition to the expected pigments, his account books show numerous sales of oils and binders, glues and resins.⁵⁰⁸ These details indicate that many painters made use of these prepared materials, whether or not they altered them further after purchase. Typically, artists' manuals of the sixteenth and seventeenth centuries devoted less page space to the manufacture of materials, and much more to their preparation and handling, suggesting most painters' involvement in pigment-making was limited, while their manipulation of colors and binders was extensive.⁵⁰⁹

Certain artists, however, were considered to be more innovative with their materials, and many recipes attributed to famous painters were circulated. One recipe for a red lake pigment created with dyes from the *cochineal* insect was attributed to Gerard ter Borch,⁵¹⁰ and the *Polygraphice* of William Salmon, a drawing manual and recipe

⁵⁰⁷ Noted in Jo Kirby, "The Painter's Trade in the Seventeenth Century: Theory and Practice." *National Gallery Technical Bulletin* 20, Painting in Antwerp and London: Rubens and Van Dyck (1999): 31. A fight between the original patent holders, William Twynyho and Abraham Baker, is revealed by sworn statements of 1613 that claim Baker's smalt (then the only licensed product) was of such poor quality that the Painter-Stainers were "obliged to send for a supply from abroad." Edward Walford, George Latimer Apperson, editors. "Early English Inventions." *The Antiquary: A Magazine Devoted to the Study of the Past*, Volume 12 (1885): 63.

⁵⁰⁸ Koos Levy Van Halm. "Where Did Vermeer Buy His Painting Materials? Theory and Practice." *Studies in the History of Art* 55, Symposium Papers XXXIII: Vermeer Studies (1998): 139.

⁵⁰⁹ Kirby, "The Painter's Trade in the Seventeenth Century," 10-11.

⁵¹⁰ Van Halm, "Where Did Vermeer Buy His Painting Materials," 140.

book published in London in 1685, attributed its recipe for an asphaltum and mastic etching ground to "Rinebrant."⁵¹¹ While these linkages may have been spurious, the notebooks kept by artists do reveal experimental practices and the pursuit of improved materials. At times this interest in practical chemical recipes was matched by an interest in more philosophical dimensions, as in the case of Peter Paul Rubens. Though his original notebooks were lost in a fire in 1720, period copies have preserved his sketches and musings, as well as collected recipes and references to alchemical theory. One transcribed copy, thought to have been made by his close pupil and collaborator Anthony van Dyck, contains a recipe for varnish made with oil of turpentine, while a second contains a brief passage by Rubens on the nature of the alchemical *tria prima* (mercury, sulfur, and salt) as it relates to the prime matter of the human body. Rubens's notes relate the alchemical trinity to the three geometric shapes that form the human figure (triangle, square, and circle) and make reference to the Emerald Tablet, then still believed to be an authentically ancient source of alchemical wisdom. Rubens's deep interest in alchemy is further demonstrated by his posthumous portrait of the famed Swiss-German alchemist and medical reformer Paracelsus, painted around 1615.⁵¹²

Turpentine, a common solvent, was key to Rubens' characteristically radiant flesh: according to the biographical notes provided by his court colleague and friend, the Paracelsian physician Théodore Turquet de Mayerne, Rubens claimed that dipping his

⁵¹¹ William Salmon. *Polygraphice*. (London: Three Bibles, 1685): 77.

⁵¹² Tine L. Meganck. "The Reddener: Peter Paul Rubens and Alchemy." *Art and Alchemy: The Mystery of Transformation*. (Munich: Hirmer; Düsseldorf: Museum Kunstpalast, 2014): 146-147.

brush frequently in turpentine during painting (a technique that would have thinned his paint for glaze-like layers) allowed him to create flesh that was practically alive.⁵¹³ His notebooks' reference to turpentine may appear less overtly alchemical than Rubens' musings on the *tria prima*, yet for a painter in oils, turpentine was a direct link to the dual legacies of alchemy and artistry in the North. The ability to paint in oils is affected by more than the medium itself: it also required solvents, used to thin oil paints to a desirable consistency. Here enters turpentine, a distillate of a natural resin. Turpentine was more typically referred to as "oil" of turpentine (*oleum terebentina, terpentijnolie*), but also appeared in early modern recipe collections as *terebinthine* (a reference to the Mediterranean terebinth tree from which the resin was sourced), or in Italian texts as *aqua di ragia* ("water of resin").⁵¹⁴ Though turpentine is not explicitly mentioned in Vasari's account, its distinctive pungency is likely the source of his remark that the Flemish "secret" of oil painting possessed a "sharp" odor.⁵¹⁵

Turpentine is obtained through distillation, one of the oldest alchemical processes remaining in use. As I note in the fourth chapter, distillation was a means to reduce matter to essence or separate it by evaporation, but its practical aims were also considered to have philosophical implications for creating "pure" substances. The discovery of processes for refining mineral acids and alcohols during the twelfth and thirteenth centuries in Europe rapidly expanded the applications for distillation and contributed to

⁵¹³ Cited in Meganck, Ibid: 147.

⁵¹⁴ Here I am grateful for the expertise of Alan Phenix, Scientist at the Getty Conservation Institute, for his research into the origins and identification of turpentine in period sources.

⁵¹⁵ Vasari (Bondanella and Bondanella, trans.), *The Lives of the Artists*, 187.

its profound impact on the medicine, art, industry, and natural philosophy of the Latinate West. Recipes for distilled *aqua vitae* (the so-called elixir of life) and *aqua ardens* (literally "burning water," meaning alcohol) circulated throughout medieval alchemical treatises as medical tonics.⁵¹⁶

Distilled turpentine appears in these collections shortly after the discovery of alcohol, dating to roughly the middle of the thirteenth century. Its earliest uses were also medicinal, rather than artisanal. Turpentine was a common ingredient in topical preparations to relieve muscle pain or treat areas for surgery, as were other substances widely used by painters of the period. One common ointment made with turpentine, referred to as *Basilicon* or *Basilicum*, appears in no less than twelve variations within the Inventarium Sive Chirurgia Magna (The Inventory or Great Work of Surgery) written around 1363 by Guy de Chauliac. An influential work on surgery and pharmacy, the text was translated into several vernacular languages and re-published through the seventeenth century. One 1580 French edition lists *cire* (wax), *mastic* (resin, used in varnishing), verd de gris (verdigris, likely as a drying agent), terebinthine (turpentine), *litharge* (lead oxide, similar to massicot), and *galban* (resin) as ingredients used in making Basilicon.⁵¹⁷ All these materials would have been well known to the painter. This particular point of overlap between painting and alchemy appears not to have escaped at least one artist: Cornelis Bega, Wijck's contemporary and a fellow pupil of Van Ostade. As I note in chapter three, a large apothecary's jar bearing the label "SILICON,"

⁵¹⁶ Ibid: 58-59.

⁵¹⁷ Guy de Chauliac. Laurent Joubert, translator. *La Grand Chirurgie*. (Lyon: Estienne Michel, 1580): 674-676.

identified as an abbreviation of Basilicon, can be seen in Bega's *The Alchemist* of around 1663 (Figure 58, National Gallery of Art, Washington DC).⁵¹⁸ The prominence of the label as the only legible text indicates Bega's intentional selection of the ointment, perhaps a conscious allusion to the relation between the alchemist's art and his own.

Yet despite their shared parentage—or perhaps because of it—relations between the artistic and alchemical spheres were not always genial. The understanding that alchemy developed in parallel with the visual and decorative arts, from its first textual emergences in artisanal handbooks produced in Greco-Roman Egypt, is by now wellestablished in the history of science.⁵¹⁹ But during the thirteenth and fourteenth centuries, both art and alchemy began to erupt in a series of theoretical arguments regarding whose practices were the true replicators and perfectors of nature, and whose (merely) imitative. This division stemmed in part from Aristotle, whose Physics famously claimed that "the arts either... carry things further than Nature can, or they imitate Nature."520 Leading voices of late medieval alchemy, including Roger Bacon and Petrus Bonus, decisively elevated alchemy to the role of perfective art. They claimed that only alchemy could improve upon nature, produce alchemical gold purer than mined, or generate medicines that raised sick bodies to ideal health. As a consequence, other arts—including painting and sculpture—were relegated to the category of mimics. Artists were understandably resistant to this line of thinking. Even the experimental and chemically curious Leonardo

⁵¹⁸ Wheelock, "Cornelis Bega/The Alchemist/1663,"

http://purl.org/nga/collection/artobject/161648 (accessed June 29, 2015).

⁵¹⁹ Newman, *Promethean Ambitions*, 24-27.

⁵²⁰ Quoted in Newman, Ibid: 116.

da Vinci wrote scathingly that the alchemists had never been able to successfully produce "the slightest thing that nature could make,"⁵²¹ claiming that all their workings amounted to inferior composites of nature's elegantly simple designs. Likewise the sixteenthcentury French sculptor, glassmaker, and potter Bernard Palissy denigrated alchemists for their efforts at transmuting gold, an activity Palissy found doomed and fraudulent. He considered the truest form of transmutation to be natural petrification, the change of living matter into stone. Palissy's obsession with this transformation led to his development of processes for casting fish, snakes, lizards, and other creatures from life.⁵²² Warnings against becoming involved with alchemy appeared throughout the Vitae of Giorgio Vasari, who claimed the early death of the experimental etcher Parmigianino was due to a tragic fascination with the laboratory.⁵²³ This tension meant that certain artists rejected alchemy's theories even as they embraced its products: for the luminous transparency of oil paints praised by Vasari is obtained via distilled oil of turpentine, and many of the vivid colors of the painters he celebrates are also manufactured by alchemy, as I will discuss below.

Passionate arguments against alchemy, in defense of art, were largely a product of the sixteenth century. In the same era, debates regarding the *paragone* also occasionally erupted, typically in a contest between painting and sculpture, but sometimes extending to poetry, architecture, music, and other forms. A questionnaire circulated by the art

⁵²¹ Ibid: 122.

⁵²² Ibid: 145-153.

⁵²³ Rudolf and Margot Wittkower. *Born Under Saturn: The Character and Conduct of Artists: a Documented History from Antiquity to the French Revolution.* (New York: New York Review Books Classics, 2006): 85-86.

theorist Benedetto Varchi in 1546 offered up the problem of the *paragone* to Florentine artists. The answers he received often stated painting was best for its ability to depict texture, narrative, and the ephemeral affects of nature (such as wind and fire), while sculpture was more tangible, best for its ability to depict three dimensions.⁵²⁴ Supposedly, the painter Giorgione responded to these arguments with an image that showed Saint George glancing into a brook, with two mirrors placed behind him, revealing the saint from every possible angle.⁵²⁵ Painters were highly cognizant of the relative status of their art, quick to defend it, and creative in their responses to criticism. Thus the "perfective" art of alchemy offered a challenge, an alternative *paragone* between the mimics of nature and nature's masters.

By the seventeenth century, the violence of rhetoric against alchemy—at least that emerging from the pens of artists—appears to have quieted, and Northern art-theoretical texts offer the positive exemplars of Jan van Eyck and Hendrik Goltzius as models of painters whose creative explorations benefitted from alchemical experiment. The involvement of major masters such as Rubens with alchemy further supported alchemy's legitimacy within some artists' circles. Likewise, by this period, urgency regarding the artistic *paragone* had also cooled. The seventeenth-century German art historian Joachim von Sandrart stated that he could grant neither painting nor sculpture "pride of place," as both stemmed from the same familial lineage.⁵²⁶ But artists had not ceased to find ways

⁵²⁴ Erwin Panofsky. *Galileo as a Critic of the Arts*. (The Hague: Martinus Nijhoff, 1954): 1-4.

⁵²⁵ Peter Hecht. "The Paragone Debate: Ten Illustrations and a Comment." *Simiolus: Netherlands Quarterly for the History of Art* 14, No. 2 (1984): 125-126, n.5.
⁵²⁶ Hecht, "The Paragone Debate," n. 43, 136.

to engage with the *paragone*, and painters continued to offer witty salvos in support of painting's supremacy in capturing the qualities of the natural and real. Peter Hecht has demonstrated that Gerrit Dou's repeated use of sculptural reliefs in his trompe l'oeil paintings offers an intentional play on the question of imitation, the deception of the senses, and visual pleasure. Dou's pairings of reliefs with ephemeral effects-pipe smoke, or poured water—demonstrated oil painting's unparalleled abilities in replicating motion, texture, light, and shadow, claiming a triumph over sculpture.⁵²⁷ As painters continued to engage competitively with sculpture, poetry, and other disciplines, we must ask whether alchemy may have offered an equally compelling rival: a means through which to explore the imitation and perfection of nature, ideas central to period art theory. While alchemy has increasingly been incorporated into a technical understanding of artist's practices in their real-life studios,⁵²⁸ alchemy's potential as a sophisticated subject for visual rhetoric in painting has not likewise received a full re-evaluation. Its suitability as an analogue or metaphor for the work of the oil painter is, however, amply evidenced by the paintings of Wijck.

⁵²⁷ Peter Hecht. "Art Beats Nature, and Painting Does so Best of All: The Paragone Competition in Duquesnoy, Dou and Schalcken." *Simiolus: Netherlands Quarterly for the History of Art* 29, No. 3/4 (2002): 184-201.

⁵²⁸ See the work of Sven Dupre and others involved with the working groups and projects "Laboratories of Art" and "Early Modern Art Technologies and Materials," among others, through the Max Planck Institute for the History of Science. A recent volume, *Art and Alchemy: The Mystery of Transformation*, edited by Dupre, Dedo von Kerssenbrock-Krosigk, and Beat Wismer, was produced in conjunction with the 2014 exhibition of the same name at the Museum Kunstpalast in Düsseldorf, Germany (Chicago: University of Chicago Press, 2014).

Making and Representing Pigments

Numerous scenes of alchemy include references to distillation, in the form of alembics and other glassware. In *The Alchemist* (Figure 68, Staatliches Museum, Schwerin), Wijck presents a large multi-level hearth topped with a large glass retort, small spoons, and stirring implements, close beside a tubular copper stand and tub, likely used for the preparation of cooling water baths during distillation. Yet these familiar implements are augmented by an unusual array of bright, vivid powders and chunks of colored matter that are scattered or placed on surfaces throughout the workroom. Strikingly, these materials closely resemble the forms of ground and raw pigments. The books and papers on the floor are shown smudged with a chalky red substance, some of which has been folded into a small paper parcel. At left, a shallow ceramic dish holds nugget-like particles of a vibrant blue. A smudge of red matter sits on the lip of a large earthenware vessel at center, and further left, a pile of powdered yellow matter has been streaked across the floor. More red matter has been piled into dishes near the foot of a wooden chair, close to a large mortar and pestle. The prominent foregrounding of this vivid, colored matter throughout the workshop links this painting to one of alchemy's most successful and commercially viable products: pigments and dyes.

Many of Wijck's images of alchemical workrooms—including his Schwerin, Mauritshuiis, and Ham House *Alchemists* (Figures 68, 69, 70)—specifically represent the creation of pigments in the laboratory through the appearance of distinctive vessels and brightly-colored chunks of matter. Wijck's strategy to represent alchemists as makers of pigments connects art-making to alchemical practices, positioning both alchemist and

artist as materially knowledgeable artisans, and making visible the production of artists' materials. More poetically, it also invites contemplation of the painter's own mastery of materials—mastery not only over the imitation of nature, but over the products of the laboratory itself. In combination, Wijck's subject matter and process serve to amplify and enrich one another. The presence of specific alchemically created pigments in his work, including the mercuric sulfide *vermillion*, was confirmed through x-ray fluorescence analysis performed on four paintings in the collection of the Chemical Heritage Foundation.⁵²⁹ Wijck's use of alchemically created pigments to general period practices for artists, yet his repeated use of alchemy as a subject matter, in concert with his striking depictions of pigments within the laboratory, indicates that Wijck was highly self-conscious regarding the origins of his materials and their transformative implications.

The production of pigments at this time in the chemical workshop represented a thriving industry connected not only to painting and other fine arts, but to textile and fabric dyeing and other uses of manufactured colors. Pigments rendered from metallic compounds—such as the copper-based verdigris, or the mercuric sulfide vermillion—had been in use since antiquity, and countless artisanal texts expounded the processes of their

⁵²⁹ Technical notes: this analysis was conducted using a handheld Bruker TRACeR III-V energy dispersive x-ray fluorescence (XRF) spectrometer. A rhodium tube acted as the x-ray source, and collection times ranged from 40 to 100 seconds. For more difficult to detect elements ranging from Na (Sodium, Z=11) to K (Potassium, Z=19), a vacuum unit was connected to the spectrometer. S1PXRF software gathered the spectra with the x-axis representing the characteristic energy levels of the emitted x-rays, and the y-axis representing the intensity. XRF represents a non-destructive technique for analysis: the paintings were examined at the surface only, and no samples were taken.

making. In certain locales, pigments were still classed as drugs or medicines: in England, a 1642 table of prices and fees listed the duties applied to vermillion, lapis lazuli, orpiment, and several lead-based pigments under the general heading of "drugges."⁵³⁰ Pigments were commonly sold by apothecaries, alongside tonics and purgatives, but also increasingly by specialist dealers in artist's colors. The sixteenth-century account book of one such dealer, Michiel Cock of Antwerp, refers to vermillion and smalt, varnishes, turpentines, and other raw materials that suggest Cock was more than a middleman, and may have been producing pigments himself.⁵³¹ Pigments could be purchased in varying levels of refinement, some requiring laborious grinding and washing, others in a more costly pre-ground form. Nearly all pigments required some additional grinding or processing on the part of the artist or his assistants, to be fine enough to be blended with oil. Paint was made daily in the workshop, and required its own grinding and mixing to achieve a desired consistency. Painters' selective judgments on the quality of materials and pigments, and preferred methods for rendering, varied from workshop to workshop. As Ernst van der Wetering notes, in his discussion of the seventeenth-century palette, the differences in reactivity, transparency, and opacity could vary greatly from pigment to pigment, each of which presents its own "inherent possibilities and limitations."⁵³² The preparation of paint required a highly specialized knowledge and careful interactions with one's materials.

⁵³⁰ Kirby, "The Painter's Trade in the Seventeenth Century," 33.

⁵³¹ Filip Vermeylen. "The Colour of Money: Dealing in Pigments in Sixteenth-Century Antwerp." *Trade in Artists' Materials: Markets and Commerce in Europe to 1700.* (London: Archetype Publications, 2010): 358.

⁵³² Van der Wetering, *Rembrandt: the Painter at Work*, 148.

Pigments could fall into one of several loosely defined categories, usually relating to their origins, whether organic or mineral. "Lake" pigments were derived from *lac*, a term for the dye made from the sticky, reddish excretions of insects living on the surface of various fruit trees across Asia and the Indian Peninsula. This term was originally applied only to certain deep, violet-red colors, but eventually came to refer to nearly any organic insoluble pigments rendered from soluble dyes.⁵³³ Other colors were made from grinding down naturally occurring minerals mined or collected from the ground: these were fittingly called "natural" pigments by Cennino Cennini in his fifteenth-century *Libro dell' Arte*. These pigments, "mineral in character,"⁵³⁴ included hematite (red), porphyry (red), and the earth color *terre-verte* (green) and yellow ocher, a color that Cennini advises his readers to obtain from "earth in the mountains, where there are found certain seams resembling sulphur."⁵³⁵

Cennini's third category of pigments identified colors manufactured by alchemy. Though his handbook provides few recipes, as he is chiefly concerned with the applied uses of pigments—grinding, mixing, and so on—Cennini does occasionally comment on the alchemical processes that originate them. Verdigris, Cennini writes, "is green... and it is manufactured by alchemy, from copper and vinegar." Elsewhere he notes that

⁵³³ It is only recently that scientists and conservators have identified the insects, rather than the trees themselves, as the source of the excretion: lac or lacca was believed for centuries to be a type of natural tree resin. Nicholas Eastaugh. *Pigment Compendium: a Dictionary and Optical Microscopy of Historical Pigments*. (Amsterdam: Butterworth-Heinemann, 2008): 220.

 ⁵³⁴ Cennini (Thompson), *Il Libro dell' Art: The Craftsman's Handbook*, 612.
 ⁵³⁵ Ibid: 770.

"vermilion is red; and this color is made by alchemy, prepared in a retort."⁵³⁶ Other colors identified by Cennini as alchemical include red lead, yellow orpiment ("an artificial one... made by alchemy, and [is] really poisonous"⁵³⁷), a little-known yellow called *arzica*, and lead white. The classification of pigments as alchemical products continued well into the early modern period, evidenced by recipe books, such as Salmon's *Polygraphice*, that blended alchemical and artistic instruction. Recipes for making paints, and coloring fabric and glass, were frequently included alongside methods for tinting and assaying precious metals.

Recipes for these common pigments appeared centuries earlier within the *Mappae Clavicula*, a widely circulated body of knowledge known as the "little key," compiled during the ninth century and frequently adapted through the thirteenth. Written for tradesmen and artisans, the text's prologue demonstrates protectiveness towards its valuable contents that echoes the injunctions of alchemical writings against the uninitiated. Without the "key," the work's compiler warns that the "sacred writings" of the past (antique treatises on artists' materials⁵³⁸) would remain obscure:

I call the title of this composition *Mappae Clavicula*, so that everyone who lays hands on it... will think that a kind of key is contained in it. For just as access to [the contents of] locked houses is impossible without a key... so also, without this commentary, all that appears in the sacred writings will give the reader a feeling of exclusion and darkness.⁵³⁹

⁵³⁶ Ibid: 657.

⁵³⁷ Ibid: 717.

⁵³⁸ Ibid: 21.

⁵³⁹ Cyril Stanley Smith and John G. Hawthorne. "Mappae Clavicula: A Little Key to the World of Medieval Techniques." *Transactions of the American Philosophical Society* 64, No. 4 (1974): 28.

The verdigris that Cennini mentions appears here as "Byzantine green," a name that indicates its long usage in antiquity and transmission to the medieval West. A copper carbonate, verdigris is produced as the natural, bright greenish-blue efflorescence of copper when exposed to acetic acid—a mild and familiar acid type found in vinegars. The Mappae Clavicula instructs the reader to "take a new pot and put sheets of the purest copper in it; then fill the pot with very strong vinegar, cover it and seal it."⁵⁴⁰ Variations of the recipe can be found throughout later treatises on painting, some more pleasant than others: at least one late fourteenth-century recipe suggested using a brass vase filled with "urine... to the depth of one finger's breadth."⁵⁴¹ Yet verdigris also appeared outside of artisanal literature, in treatises devoted to alchemical medicines. It was believed to be an effective anticonvulsant, used in the treatment of seizure and "fits." One seventeenthcentury English text, A Choice Collection of Rare Chymical Secrets and Experiments in *Philosophy*, compiled by the natural philosopher Sir Kenelm Digby and published posthumously by his assistant George Hartman in 1682, instructed the reader to "Take Verdegrease, and distil a spirit thereof," claiming that "it is excellent for the convulsion of little children, being given in some fit vehicle."542

The simplicity of verdigris' manufacture—sealing it into a vessel with a weak acid, to stimulate efflorescence—may not at first share a clear link with the demanding work of seeking the Philosopher's Stone, or the multi-stage laboratory processes

⁵⁴⁰ Ibid: 27.

 ⁵⁴¹ Mary P. Merrifield, ed. Original Treatises, Dating from the XIIth to the XVIIIth Centuries, On the Arts of Painting. (London: John Murray, Albemarle Street, 1849): 66.
 ⁵⁴² Kenelm Digby. A choice collection of rare chymical secrets and experiments in philosophy. (London: George Hartman, 1682): 226.

described by alchemical authors. Yet alchemy's modern reputation has been clouded by its embrace into psychological and spiritual movements, and its later perception as a highly mysterious and esoteric practice pursued by a hermetic few. Its practical applications in the early modern marketplace have become obscured. As I have noted in previous chapters, contemporary historians of science affirm that alchemy within the early modern world was vastly broad and diverse: the term encompassed both experimental, intellectual inquiries into the properties of matter, and more industrial or commercial applications of chemical knowledge. Alchemy was a tool of the scholar and natural philosopher as well as the colorman, goldsmith, and distiller. Cennini's recognition of certain colors as "alchemical" is primarily a marker of their status as manmade material created by art, rather than collected from nature.

Although Wijck began painting more than two centuries after Cennini wrote his text, much of his palette would have remained familiar. Technical analysis of four paintings, via x-ray fluorescence (XRF) spectrometer, registered the presence of iron and lead throughout all the surveyed areas, indicating the most widespread usage of iron oxide and lead carbonate pigments. These were most likely in the form of red or brown earth colors, and lead white. These readings, combined with additional examinations conducted during conservation of other works by Wijck, indicate that he made use of light-colored oil grounds,⁵⁴³ probably a mixture of lead white and "palette scrapings,"

⁵⁴³ The combination of a white, opaque chalk ground paired with a light-colored imprimatura was common in the 17th-century Netherlands. Both Rembrandt and Wijck's slightly older Haarlem contemporary, Adriaen Brouwer, are known to have made use of a chalk ground topped by a light brown imprimatura layer in certain early works. Light-toned second grounds were also used by Gerrit Dou: his preparatory layers frequently

resulting in grey or beige *imprimatura* under-layers.⁵⁴⁴ Chemically created verdigris also appears in several works. Strong readings for copper-containing pigments were taken in an area of green tablecloth in Wijck's *Alchemist and Family* (Figure 73, CHF), indicating usage of verdigris there. Other readings for copper appeared in a blue-green vessel resting on the floor of the CHF *Alchemist* (Figure 74), as well as in the bluish-green glass of the alembic shown prominently in the *Alchemist in his Study* (Figure 66, CHF).

While lead white and verdigris were considered alchemical by their manufacture,

certain pigments were even more closely associated with alchemy from a rhetorical and

included imprimaturas of lead white and chalk, blended with small amounts of ochre, umber, black, and red ochre. Three examined paintings by Wijck-An Alchemist in His Studio (CHF), The Scholar (CHF), and Alchemist (CHF)-all make use of a white ground paired with a buff or grey imprimatura. For information on tinted grounds see Nico Van Hout, "Meaning and development of the ground-layer in seventeenth century painting," in Erma Hermens, et. al., eds., Looking Through Paintings: the study of painting techniques and materials in support of art historical research. (Baarn: De Prom, 1998): 210. For Dou, see Annetje Boersma. "Dou's Painting Technique." Gerrit Dou, 1613-1675: Master Painter in the Age of Rembrandt. Ronni Baer and Arthur K. Wheelock. (Washington: National Gallery of Art, 2000): 58. Data on Wijck's images was reported in conservation notes of Nica Gutman, "Survey Report: An Alchemist/Apothecary in His Studio, 00.03.04," Page 1. Conservation Files, Chemical Heritage Foundation, 2002; Philip Klausmeyer, "Condition Report: Alchemist/Apothecary in His Studio, 00.03.04," Page 3. Conservation Files, Chemical Heritage Foundation, 2007; and Philip Klausmeyer, "Condition Report: The Scholar," Pages 1-2. Also "Alchemist," Pages 1-2. Conservation Files, Chemical Heritage Foundation, 2007.

⁵⁴⁴ A dark grey ground does appear in one alchemical scene, *An Alchemist at Work, with a Mother at a Cradle Beyond* (Figure 59, CHF), a detail that may support an early date associated with Wijck's time in Italy. The circle of Haarlem painters surrounding Frans Hals typically used white or light single grounds, while the Amsterdam circle of Rembrandt and the Utrecht Caravaggisti often made use of a double ground—grey over red—when painting on canvas. The presence of this darker ground in one of Wijck's early alchemical pictures, a work that demonstrates his exposure to Neapolitan modes, aligns with his general stylistic developments following his return from Italy. See Andrea Kirsch and Rustin S. Levenson. *Seeing Through Paintings: Physical Examination in Art Historical Studies* (New Haven: Yale University Press, 2000): 77. For Wijck, see Birgit Strahle. "Conservation Treatment Proposal: *An Alchemist at Work*, 00.03.35," Page 1.

symbolic perspective. This is best demonstrated by vermillion, a vibrant red first found naturally in the mineral cinnabar. By the fifteenth century artificial vermillion, synthesized by combining mercury and sulfur, dominated the market. Early recipes for its making can also be found in the *Mappae Clavicula*. At roughly the same time, the medieval corpus of the Pseudo-Geber, long associated with the eighth-century Persian polymath Jābir ibn Hayyān, described the making of a brilliant red substance manifested in the alchemical conjunction of mercury and sulfur.⁵⁴⁵ Mercury and sulphur represent two-thirds of the alchemical trinity or tria prima of mercury, sulphur, and salt, the parent principles of metallic growth, forces central to alchemical ideas of purification and union. Yet vermillion's significance to the alchemist is further expressed in the color changes observed during its physical transformation. In 1974 Jan Van Damme identified a group of sixteenth-century pigment recipes, Netherlandish in origin—not copied from Italian or antique sources-in a manuscript within the Plantin Moretus library in Antwerp, that gives instructions for the making of vermilion, azurite, verdigris, lead white, and other pigments that were the painters' stock in trade.⁵⁴⁶ The manuscript's recipe for vermillion calls for "quicksilver" and sulphur to be placed into a glass vial and covered with a paste of sand and manure. Heated on an iron plate over a flame, the mixture will produce blue smoke followed by yellow, signaling the final stage. At the end, the author instructs the hopeful chemist to "break the vial in two"⁵⁴⁷ to recover the precious substance within.

⁵⁴⁵ A. Wallert. "Alchemy and medieval art technology." Z.R.W.M. Von Martels, ed. Alchemy Revisited: Proceedings of the International Conference on the History of Alchemy at the University of Groningen, 17-19 April 1989. (Leiden: Brill, 1989): 155.
⁵⁴⁶ Cited in Vermeylen, "The Colour of Money," 361.
⁵⁴⁷ Ibid: 361

Other recipes note that prior to the final color transition to brilliant red, vermillion will appear as a blackened lump. The actual color stages experienced by mercuric sulfide compounds, heated to the point of sublimation, echo the color progressions embedded into the "great work" of alchemy described by period alchemical authors: from the *Nigredo* or blackened stage, where matter is decomposed and purified by fire, to the *Albedo* or white stage, associated with silver, to the ultimate stage of *Rubedo*, the red stage that marks the Philosopher's Stone and the attainment of perfection.⁵⁴⁸ This interplay between symbolic transformation and reality again reinforces alchemy's historic parallels with artisanal method.

Vermillion appears in XRF analysis as mercuric sulfide. Readings indicate that Wijck made use of the pigment in prominent locations throughout three of the four examined works. Minor readings for mercuric sulfide in a fourth painting indicate that trace amounts of vermillion, possibly in the form of palette scrapings, may also have been present in Wijck's imprimatura layers. The first painting, *The Alchemist in his Study* (Figure 66, CHF) shows Wijck's alchemist at his desk, beside a distillation apparatus. On the desk beside the alchemist sits a glazed earthenware jar sealed with a red cloth lid, of a common type used by apothecaries for storing medical compounds. In a reading of the red lid, the spectrometer registered the presence of mercuric sulfide, indicating the use of vermillion. Vermillion's richness and brilliance—as a high-chroma pigment with a high refractive index—made it ideal to lend contrast. A second painting by Wijck—the *Alchemist at Work, with a Mother by a Cradle Beyond* (Figure 59, CHF)—also makes use

⁵⁴⁸ Linden, Alchemy Reader, 16-17.

of small but vivid touches of red as compositional highlights. Beside the alchemist's desk, and in close proximity to his assistant, a small bundle of cloth or yarn is colored a striking red, drawing the eye inwards to the mortar and cracked jar beside it. Once again, this examined section exhibited the presence of mercuric sulfide. A third painting, the *Alchemist and Family* (Figure 73, CHF) foregrounds a domestic scene. Strong readings for mercuric sulfide were discovered in several sections of the work, including the boy's red cap, which sits nearly at the composition's center. A second reading for mercuric sulfide was taken from the bright copper pail that sits at the feet of the alchemist's wife as she works to prepare a family meal. The fourth and final of these works, Wijck's *Alchemist* (Figure 74, CHF), includes a trace reading for mercuric sulfide in the blue-grey earthenware pot lying discarded on the floor at center.

At the time Wijck's paintings were made, Amsterdam was the leading manufacturer of artificial vermillion, exporting thousands of pounds of the pigment annually.⁵⁴⁹ As mentioned above, older recipes for the manufacture of vermillion called for glass vials and retorts covered in clay. But a seventeenth-century paint-seller's manuscript sheds light on the Dutch method during the second half of the century. The unpublished manuscript was penned by a member of the Pekstok family of Amsterdam likely Pieter, son of Willem, who inherited his father's paint-making enterprise in about 1691. By around 1660, Willem and his wife Caterina, the daughter of a silversmith, had established a business selling pigments and artists' supplies, close to the prominent

⁵⁴⁹ Rutherford J. Gettens, Robert L. Feller, and W.T. Chase, "Vermillion and Cinnabar." *Artists' Pigments: a Handbook of their History and Characteristics*, Vol 2. (Washington: National Gallery of Art, 1993): 162.

Papenbrug across the Damrak canal in the center of the city. Prosperous and active, the Pekstoks had clients both at home and abroad in German-speaking territories. Their manuscript contains the family's "house" formulas for pigments and dyes, as well as for sealing-wax, vinegar, turpentine, and other painters' materials. As A. F. E. van Schendel notes, the importance of the Pekstok notebook lies in its originality: rather than a collection of recipes copied from stock sources or earlier "books of secrets," the content appears to have been gathered from first-hand experiences in the workshop, and thus represents the family's personal expertise.⁵⁵⁰

The manuscript begins with a description of their process for manufacturing vermillion. Unlike other recipe books, the text also illustrates the pots and furnaces necessary to the task (Figure 120). In order to seal in heat, but to prevent flames from rising along the sides of the pot, the vessel and furnace require a broad top tapering to a narrow base, with a mouth opening "wide enough so that one can reach inside with his arm."⁵⁵¹ The furnace opening in which the pot sits must be, at the smallest end, seven inches wide and twenty-two inches in diameter. The earthenware pot itself must be "well-glazed," and at least "twenty-six or twenty-seven inches high."⁵⁵²

Large earthenware vessels with tapering bottoms can be found in a number of Wijck's alchemical pictures, including both the Ham House and Schwerin *Alchemists* (Figures 70 and 68), as well as the CHF *The Scholar* (Figure 63) and *Alchemist* (Figure

⁵⁵⁰ A. F. E. van Schendel, "Manufacture of Vermillion in 17th Century Amsterdam: The Pekstok Papers." *Studies in Conservation* 17 (1972): 70.

⁵⁵¹ Ibid: 74.

⁵⁵² Ibid: 74.

74), and the Mauritshuis Alchemist (Figure 69). These vessels usually appear prominently at the front of the composition, close to the alchemist. Their absence from nearly all of Wijck's kitchen scenes, Italianate landscapes and courtyards, and images of "foreign" traders, suggests that they may not have been among common types used domestically for cooking and food storage.⁵⁵³ Among the few places in which a pot of this type can be found is in his Warehouse at a Southern Harbor (Figure 121, Staatliches Museum, Schwerin), placed on the ground beside a pile of wrapped goods and packing crates overlooked by a seated man wearing a cloth turban and embroidered robe. Close similarities between the still-life elements of this scene and Wijck's alchemical compositions have been noted by Gero Seelig, who observes a shared "fascination" with otherness, strange or exotic practices, and the unfamiliar.⁵⁵⁴ Here it can further be noted that certain widely used artists' pigments, including Naples yellow and the so-called "Indian" yellow exported from the Near East through Persia, as well as the precious lapis *lazuli* mined in Afghanistan for use as powdered ultramarine, traveled to Europe through ports like these. Wijck's own travels may have brought him into proximity with foreign pigment-dealers, or led him to one of many bustling markets where colors could be

⁵⁵³ A survey of contemporaneous Dutch earthenware--of the types used for cooking, food storage, and other household tasks--demonstrates the unusual specificity of Wijck's oversized pots. They do not belong to the major vessel groups that were commonplace in Dutch kitchens, nor do they closely resemble the ash-pots, oil-pots, or storage vessels used elsewhere in the home or more generally in trade. For further information on typical forms of Dutch ceramics see Richard G. Schaefer, *A Typology of Seventeenth-Century Dutch Ceramics and its Implications for American Historical Archaeology*. (Oxford: British Archaeological Reports, 1998).

⁵⁵⁴ Gero Seelig. "Warenlager an Einem Sudlichen Hafen." *Die holländische Genremalerei in Schwerin*. (Petersberg: Imhof Verlag, 2010): 237-238.

found. While Wijck is one of very few painters to depict these distinctive, oversized pots, either within the context of international East-West trade or in the presence of alchemical endeavors and colored powders, he is not the only one: Cornelis Bega's *Alchemist* in the Getty Museum (Figure 57), discussed in chapter three, presents a nearly identical vessel at the foreground of the painting. Bega's alchemist sits alone amongst cracked earthenware, his bared knee signaling his humble status. Yet the vivid red substance he cradles may be vermillion in its coarse form. This detail both complicates the painting's previous interpretations as a scene of failed experiment, and supports a potential link between these distinctive vessels and pigment-making.

These pots often appear with cracked rims or broken edges that show wear and use. Though past interpretations have linked broken alchemical instruments to folly and ruin, such breakage results from the alchemical process, and the requirements of handling. The Pekstok manuscript frequently makes reference to cracked rims, as the sublimation process held the potential to tightly seal the lid to the pot's mouth when vermillion crystallized into a dense, cakey material over heat. Pekstok claims that cracks and spillovers are likely, that one may have had to chisel off the lid with an iron scraper, or knock it off with a broomstick when the firing has ended. The instructions note that "slamming" and "knocking" the pot is often necessary to success:

It is also necessary to keep the lid loose; otherwise it be would be fastened tight to the pot by the subliming process. If this should occur, knock against the side, or slam the pot so hard that sometimes the lid along with the vermilion which is attached to it flies off... If the mouth is too narrow, and if one judges the pot can withstand it, knock the mouth open with a pointed hammer... When you have burned for the last time put out the fire and leave the lid on top of the pot until it is cold. Remove the pot with the

vermilion from the furnace, and set it upside down on a slab. Carefully chip off the pot away from the cake [of vermillion].⁵⁵⁵

Pekstok's instructions were far from unique. The thirteenth-century Dominican theologian Albertus Magnus claimed that when dealing with fixation—an alchemical stage in which more volatile substances are transformed to solids, usually by high heat—the only route to obtaining the finished substance was through breaking the vessel that contained it: "When the medicine is dry, the vessel has to be broken, since you cannot empty it otherwise."⁵⁵⁶ Similarly, a fifteenth-century Bolognese treatise on the making of artists' colors, dyes, and gildings provides a recipe for *purpurino*, a form of false gold, that ends with the instruction to "break the bottle" after it has cooled.⁵⁵⁷ Here a broken rim may serve to remind the viewer of the demanding hands-on labors by which alchemical success is obtained, acknowledgment of mess and effort. In addition, Wijck's depictions of cracked vessels conform not only to historic recipes for pigments, but to the most contemporaneous and detailed accounts of vermillion-making expressed within the Pekstok manuscript.

⁵⁵⁵ "...en ten anderen op dat het dexel gedurigh soude los blijven want anders sublimeert het dickwils vast toe, dan stoot hem aan een zeide wat op soo geeft de pot een harder slagh, ja soo dat somtijts het dexel met het fermeljoen dat er aansit afvlieght, hierom verschrickt niet, maar leght hem weder op... soo de mont te naauw is, en men meent de pot het kan verdragen, kan men de mont met een spitse hamer wijder opkloppen... Als gij de laatste rijs gestookt hebt neemt u vuur uyt en laat de dexel op de pot leggen tot dat het kout is, neemt de pot met 't fermeljoen uyt het vernijs het onderste boven op een vel nedersettende, de pot soetjes van 't brood afgeslagen." Translation by Schendel, "Manufacture of Vermilion," 80.

⁵⁵⁶ Albertus Magnus. *Libellus de Alchimia*. Virginia Heines, translator (1985). Quoted in Linden, *Alchemy Reader*, 110.

⁵⁵⁷ Merrifield, Original Treatises, Dating from the XIIth to the XVIIIth Centuries, 458.

Wijck's choice to fill the Schwerin *Alchemist* with colored powders and raw substances also strongly indicates his knowledge of the processes by which painter's pigments, or other commercial dyestuffs, were made. His familial connections to the textile industry through his wife, Trijntgen, may have facilitated further knowledge of dyes and dye-making, processes that also relied on alchemical matter such as alum, fixatives, and bleaching products. While the vast majority of painters did not produce their own pigments, their sophisticated understanding of pigment qualities—including reactivity to oils and solvents, drying times and potential discolorations—may have necessarily incorporated some technical knowledge of their materials' origins. Wijck also incorporates the motif of the apprentice or assistant and grinding-stone. In the Schwerin Alchemist, a young assistant appears bent over a worktable with his hands placed around a muller, indicating that he works to grind an unseen substance on the surface of his work station. As noted in the opening to this chapter, he bears a striking resemblance in reverse to the young apprentice shown grinding colors in Adriaen van Ostade's A Painter in his Workshop (Figure 3, Gemäldegalerie Alte Meister, Dresden). It may be that the young Wijck was himself first introduced to pigment-grinding and color-mixing in Van Ostade's Haarlem workshop. Many substances used in alchemy required processing to fine powder before their incorporation in distillation, calcination, or other stages, yet it seems all too plausible that in the creation of this image, Wijck would have relied on the familiar sight of an artist's assistant rather than an imagined scenario of alchemical work.

Numerous apothecaries were doing business in Haarlem around this time—among them Jan Trioen, respected dean of the city's Collegium Medico-Pharmaceuticum, as

well as the eventual mutineer of the *Batavia*, Jeronimus Corneliszoon.⁵⁵⁸ In addition to apothecaries, records indicate other professions—including art dealers and grocers—could also be involved in making and selling pigments.⁵⁵⁹ Even those listed in guild records as painters might also have conducted business as color-sellers or materials merchants on the side: in Antwerp around 1600, this hybrid category included the painters David Remeus, Jacob Spaegnaert, and Jan Snellinck the Elder.⁵⁶⁰

The hybrid art-dealer/color-seller is the subject of an unusual work attributed to Job Berckheyde, the *Merchant of Colors* (Figure 122, Museum der Bildenden Kunste, Leipzig).⁵⁶¹ In turn this work bears a striking resemblance to Wijck's *Alchemist* (Figure 101, Hermitage Museum, St. Petersburg), in its depiction of color-weighing and analysis of colored powders. Though their subjects differ, the resemblance between their activities makes strikingly visible the connections between pigment-making (via alchemy) and their entry into art process. Berckheyde was a fellow resident of Haarlem and Wijck's contemporary, having joined the Guild of Saint Luke in 1654 and remaining active in the city until his death in 1693. Wijck's influence on the younger artist is evident in

⁵⁵⁸ For Trioen, see Koen Vermeir. "Circulating Knowledge or Superstition? The Dutch Debate on Divination." *Silent Messengers: The Circulation of Material Objects of Knowledge in the Early Modern Low Countries*. Sven Dupre, Christoph Luthy, eds. (Berlin: LIT Verlag, 2011): 319. For Corneliszoon, see Mike Dash. *Batavia's Graveyard*. (New York: Three Rivers, 2003).

⁵⁵⁹ A lack of standardization in terms means that individuals listed as grocers in one document might appear as apothecaries or color-sellers in another, and vice versa. It was not unusual for a single individual to deal in a wide variety of goods, both artistic and medicinal. See Kirby, "The Painter's Trade in the Seventeenth Century," 33-34. ⁵⁶⁰ Ibid: 34-35.

⁵⁶¹ Many thanks to Dr. Peter Lukehart, Associate Dean of CASVA, for his insights and suggestions regarding this unusual image.

Berckheyde's genre scenes.⁵⁶² Colormen were indispensable to the painter, but were almost never represented in art.

The *Merchant of Colors* shows a well-dressed man, in spectacles and cap, closely examining a small pair of scales. Less a workman than a merchant, his goods have the appearance of a carefully chosen collection, displayed in a wooden chest of many drawers. His elbows rest on a bundled folio, perhaps an album of prints and drawings for sale, upon which sits a lump of a powdery yellow substance on a scrap of paper. Other scraps contain small amounts of pigments or dyestuffs in brilliant red and deep black, beside quills and open jars. The chest of drawers holds small jars and bundles, with open lids and unwrapped edges revealing brilliant color. As noted above, the sale of dyes and pigments was often controlled by regulatory bodies, such as apothecaries' guilds, or laws dictating the cost of medicines. The careful attention the color-seller devotes to his task likely measuring a precise amount for sale, or testing the weight of a sample—speaks to the seriousness of his profession and the preciousness of his materials. While some pigments were produced in volume, the most valuable were sold in small amounts: one color-seller in the Holborn neighborhood of London was described around 1651 as offering pots of color no bigger than a "walnut" for the price of five shillings.⁵⁶³

The weighing of vividly colored substances is also the central focus of Wijck's Hermitage *Alchemist*. Here the alchemist holds a balance up to the light of a nearby window. One half of his scale has been filled with brilliant red matter, potentially

 ⁵⁶² Irene van Thiel-Stroman. "Job Adriaensz Berckheyde." *Painting in Haarlem 1500-1850: The Collection of the Frans Hals Museum*. (Ghent: Ludion Ghent, 2006): 106-109.
 ⁵⁶³ Kirby, "The Painter's Trade in the Seventeenth Century," 33.

vermillion. With his free hand, the alchemist reaches into a nearby dish that contains more of the substance. On the floor at his feet sits a dish of crumbled yellow matter, and an earthenware jar with a cracked rim. Red powder spills across the floor at far right, amongst paper packets. Wijck's alchemist is once again surrounded by objects and materials that connect him to artistic practice. An alchemist measuring a vivid red substance also appears in Bega's *Alchemist* (Figure 57), potentially linking both works to the activities of colormen—or indicating that Bega's alchemist, too, may be engaged in the making of artists' colors. The scales and powders shown in all three works, by Berckheyde, Wijck, and Bega, speak to the shared knowledge and practices of alchemists and colormen, many of whom produced at least some of the pigments they sold. As these works were all produced by a Haarlem painter during the middle of the seventeenth century, they indicate a climate of broader interest in the processes of color-making. As in the case of the apprentice at work with a grinding-stone, each artist would have had sources of such practices close at hand within their own networks.

The prominence of vermillion and other alchemical pigments in Wijck's images of alchemical workrooms does more than reinforce vermillion's widespread use among painters or confirm Wijck's general adherence to artistic norms. Knowledge of the artist's materials—and the production of these materials—provides essential context for pictures created in a world where artists and alchemists lived and worked in close proximity. Many past interpretations of alchemical pictures have relied on notions of mess and disorder, using broken vessels as shorthand for the chaos and folly of the alchemist's mind. But while bearing in mind the gap between written sources and lived practice,

alchemical work as described by alchemical writers and artisans often demanded that chemists break their sealed and insulated jars to reach the precious matter—in this case, pigments—within. Wijck's intimate familiarity with pigments, and his representation of their manufacture in the laboratory, suggests that these broken vessels may be understood not as condemnations of alchemy, but as explorations—even celebrations—of the materials of the workshop. Color was of paramount importance to the painter: it offered an important source for painting's unique claims to mastery over nature, as Dutch art theory connected the appearance of the rainbow to the superlative ability of painting to capture and recreate intangible natural phenomena.⁵⁶⁴ Wijck's choice to present alchemy seriously, as a workshop practice enacted by knowledgeable experts, may therefore have been substantially shaped by an awareness of the methods and expertise by which his own materials were made—and the importance of those materials to his artistic identity, success, and virtuosity.

Alchemy, Artistry, and Identity

The prominence of alchemical themes across Wijck's career implies that he was highly conscious of his reputation as a painter of alchemists, and carefully selected and emphasized specific aspects of alchemical work for his own ends. His representations of alchemists as color-makers both affirms alchemy's utility to artists, and supports painting's ties to experimental innovation and creative mastery over nature. While we

⁵⁶⁴ Ulrike Kern. "Samuel van Hoogstraeten and the Cartesian Rainbow Debate: Color and Optics in a Seventeenth-Century Treatise of Art Theory." *Simiolus: Netherlands Quarterly for the History of Art* 36, No. 1/2 (2012): 104.

have little evidence of his aspirations outside of his works, the examples of other painters and the extent of their persona-building through self-identification with their subjects— Dou the scholar, Steen the sociable rogue—offer a context for Wijck's repeated use of alchemical themes. The established art-alchemy *paragone*, the legacies of Van Eyck and Goltzius, and the climate of alchemical inquiry and industry surrounding Wijck, suggest that alchemy offered a particularly potent tool for building an artistic identity. A painter of alchemists, and particularly one who painted in oils, was uniquely positioned to make claims for his imitations of nature and transformations of humble materials into objects of beauty and value.

Wijck's innovations of alchemical subject matter, and his emphasis on the tools and materials of alchemy—particularly as these relate to art—in elaborate and detailed still-life vignettes, vividly stake his claims for expertise, excellence, and ingenuity in painting. His intentional depictions of alchemists as prosperous scholar-artisans, in contrast to their common depictions as peasant-paupers, demonstrates a consciousness regarding class and social markers that may have extended to his own self-presentation via the subjects of his painting. The self-conscious persona-building of Wijck's contemporaries raise the question of his own efforts to be seen as a "painter of alchemists." Wijck seems to have intentionally manipulated existing alchemical themes (satires, busy workshops, poverty) into new modes (scholarly, contemplative, artisanal) that aligned more closely with his desired vision. In addition, his emphasis on description of light, surface, and texture in depicting alchemical materials make further claims for his virtuosity. His expert handling works to suggest that he—the painter—is the superlative transformer of nature.

Many of Wijck's contemporaries worked to craft artistic identities, and make claims for their mastery or specialization, through representations of the artist's studio. At times, these works simultaneously familiarize and elevate the artist's trade. Wijck's teacher Van Ostade created several such pictures: A Painter in his Workshop (Figure 3, Gemäldegalerie Alte Meister, Dresden), The Painter's Studio (Figure 123, Rijksmuseum, Amsterdam), and a related etching, the Painter in His Studio (Figure 124, Metropolitan Museum of Art, New York), all model a studio as humble and earthy as the scenes of peasant inns and rustic barns Van Ostade was best known for producing. This appealing construction is a masterstroke of persona-crafting and a claim to authenticity for his pictures within a demanding market. As Perry Chapman has observed, Van Ostade's scruffy, "barnlike" studios suggest that "the painter of peasants must be a peasant himself,"⁵⁶⁵ an ingenious positioning that echoes the self-fashioning of other painters of comic and bawdy genre pieces, most notably Jan Steen.⁵⁶⁶ Yet certain editions of Van Ostade's etching, the *Painter in His Studio*, were accompanied by a brief poem that compared the pictured artist to Apelles, the antique master par excellence.⁵⁶⁷ Apelles, in

⁵⁶⁵ H. Perry Chapman. "The Imagined Studios of Rembrandt and Vermeer." *Inventions of the studio, Renaissance to Romanticism.* Michael Wayne Cole and Mary Pardo, ed. (Chapel Hill: University of North Carolina Press, 2005): 129.

⁵⁶⁶ For a discussion of Steen's intentional self-fashioning and its afterlife and adaptation into biography, see H. Perry Chapman. "Persona and Myth in Houbraken's Life of Jan Steen." *The Art Bulletin* 65 (1993): 135-50.

⁵⁶⁷ James Clifton, Leslie Scattone, and Andrew Weislogel. *A Portrait of the Artist, 1525-1825: Prints from the Collection of the Sarah Campbell Blaffer Foundation.* (Houston: Museum of Fine Arts, 2005): 132.

turn, had been praised in antiquity for his use of a limited palette of four colors—white, yellow, red, and black—with which he was nevertheless able to capture nature and earn universal admiration.⁵⁶⁸ The seeming irony between his simplicity and unsurpassed mastery offers an ideal model for Van Ostade's humble painter, whose ragged studio veiled the reality of Van Ostade's own financial success.

While Wijck's treatment of alchemy was very different from that of Van Ostade, their representations of the artist's studio share many qualities. These similarities emphasize the humility, but also the materiality, of the painter's trade. They bear a close resemblance to Wijck's alchemical artisans in their depictions of studio equipment, intellectual and physical labor, and apprenticeship. A drawing by Wijck in ink and brown wash, subtly highlighted with white gouache (Figure 125, Metropolitan Museum of Art, New York) shows a solitary painter before his easel in a humble studio. The painter dabs at the canvas with his brush, a maulstick steadying his hand. The room is spacious, with a large window at left admitting bright daylight, and the walls are hung with tools and props: animal skulls and horns, a high shelf of books, and baskets. The cabinets that line the wall at left are laden with small vials and jars, dishes and stirring-rods, and assorted papers. Although there is no grinding stone, the arrangements suggest spaces where the painter prepares his paints—mixing small amounts of powdered pigment with oil from the bottles at left, before applying it to his palette.

⁵⁶⁸ John Gage. *Color and Culture: Practice and Meaning from Antiquity to Abstraction*. (Oakland: University of California Press, 1999): 29.

Opposite the painter's easel is a shelf with an hourglass and human skull, a hanging lute and masks, and above a globe and plaster bust. Such objects were markers not only of familiar *vanitas* tropes of worldliness and life's fleeting nature, but signs of the creative and intellectual labors of the painter. The lute evokes the inspiration of music, considered food for the artistic soul; the masks and plaster bust signal the influence of classical archetypes; and all might serve as props and models for the artist's study of nature through close observation and drawing.⁵⁶⁹ Like the alchemist's stuffed reptiles, signaling erudition and up-to-date empirical study, the presence of these objects within the artist's studio work to elevate painting as a complex and intellectual discipline.

Wijck's drawing bears an especially close resemblance to Van Ostade's etching (Figure 124, Metropolitan Museum of Art, New York). The print places the painter at his easel in a room similar in size and layout to Wijck's. The four-paned window at left, rectangular in Wijck's image and vaulted in Van Ostade's, sheds strong daylight onto the painter's canvas, while a curving set of stairs works to define the architectural space. Smaller details—such as the painter's left foot resting on the bottom rung of the easel, the hanging lute, and the hexagonal storage trunk at far right—reinforce the link between these works, indicating that Wijck may have modeled his design on Van Ostade's print. Yet Wijck has transformed Van Ostade's humble studio and master into a more ragged, solitary scene: the crumbling window-frame and cupboard beside the stairs contrast to the

⁵⁶⁹ For a more detailed look at the types of objects most frequently selected by painters to project artistic identities and elevate their craft, see Celeste Brusati. "Stilled Lives: Self-Portraiture and Self-Reflection in Seventeenth-Century Netherlandish Still-Life Painting." *Simiolus: Netherlands Quarterly for the History of Art* 20, No. 2/3 (1990-1991): 168-182.

simple but sturdy construction of Van Ostade's studio setting. Wijck's painter wears a plain cap and sashed smock, in contrast to the dandyish slashed breeches of Van Ostade's subject. Van Ostade's print also includes a pair of young apprentices or assistants working beneath the stairs, mixing paint or varnishes in earthenware jars, where Wijck's painter sits in utter solitude, perhaps out of economic necessity, or else seeking quiet and stillness for the sake of inspiration. The work offers a vision of art-making based firmly in the realities and demands of a small-scale workshop, a construction in keeping with the tone of Van Ostade's scenes—yet with greater emphasis on the painter's isolation and seclusion.

The motif of the solitary artist speaks to ideas of independence and inventiveness. As Perry Chapman has noted in her examination of Rembrandt's *The Artist in His Studio* (Figure 126, Museum of Fine Arts, Boston), the choice to present an artist in hermetic solitude contributes to an atmosphere of both physical and mental privacy. Solitude stakes a claim for autonomy and interiority in relationship with artistic creation. Certain sixteenth-century images of artists at work, such as Stradanus's *Color Olivi*, from the Nova Reperta, had envisioned the productive and collaborative workshop teeming with assistants, models, and clients, while others justified the very vision of art-making by placing the artist in the role of Saint Luke, employed in the depiction of the sacred subject of Virgin and Child. Rembrandt's *Artist in His Studio*, produced during his first brushes with commercial success around 1629, marks an early moment in a new wave of studio pictures produced in the Dutch Republic: "self-conscious" statements regarding the nature of the painter's art. Images such as Jan Miense Molenaer's *Painter in His*

Studio, Painting a Musical Company (Figure 127, Gemäldegalerie, Berlin) fashioned the merry, sociable artist whose studio was a place of lively entertainment—a construction that shaped and complemented Molenaer's popular scenes of music, drinking, and courtship. Such a picture functioned as a claim that the joviality of Molenaer's works originated authentically, in the painter's convivial spirit.⁵⁷⁰ Regardless of the "truth" behind these exercise in persona-building, their impacts were considerable, both in their efforts to create individualized identities within a flooded marketplace, and in their lasting effects on the popular image of the painter.

Yet the ways in which artists built their personas were not limited to the depiction of their own craft: representations of the "sister arts" of poetry or sculpture could define boundaries and establish claims for supremacy. Other disciplines, too, offered counterpoints and connections. A desire to elevate the status of painters—to enter them into "sociable exchanges"⁵⁷¹ with the elite and intellectual class—has been suggested as a motivating factor in the production of images of young scholars by the Leiden painter Gerrit Dou. Dou, Rembrandt's pupil, adapted the latter's scene of a painter at work in his own *Artist in His Studio* (Figure 128, Private Collection), yet transformed the heroic solitude of the painter and easel into an image of erudition. Adding signs of worldly knowledge (such as the globe and lute) as well as tools of scholarly discourse (the book,

⁵⁷⁰ Chapman, "The Imagined Studios," 119, 129.

⁵⁷¹ Sheila D. Muller. "Young Scholar in his Study: Painters and Scholars Learning the Art of Conversation in Early Seventeenth-Century Leiden." *Envisioning the Artist in the Early Modern Netherlands*. H. Perry Chapman and Joanna Woodall, eds. *Netherlands Kunsthistorisch Jaarboek* 59 (2009): 294.

quill, and ink-pot), Dou fashions a vision of the painter as learned *pictor doctus*.⁵⁷² In the following decade, Dou repeatedly produced paintings with similar attributes, sometimes taking young scholars, rather than artists, as his subject. As Sheila D. Muller has established, Dou's Interior with a Young Violinist (Figure 129, National Gallery of Scotland, Edinburgh), focusing on the study of a young university scholar, closely resembles Dou's studio pictures in tone, composition, and setting. Such scenes appealed to Leiden's highly educated upper-class, the community amongst whom Dou courted sustained patronage. Dou's depictions of young scholar-collectors, in dialogue with his images of the artist as collector-scholar, act as an "imagined complement to the learned artist in his studio."573 They work to fashion Dou as the learned painter whose own erudition and sophistication grant entry into the intimate circles of the elite. Later images join the artist and scholar into a single figure: Dou's *Violinist* (Figure 130, Palace on the Water, Warsaw) of about 1665, shows a man leaning over the edge of an illusionistic window ledge, with violin in hand and music spread out before him. In the background we see a painter's studio, complete with easel and canvas, and tools of intellectual inquiry such as a globe and books. Such a picture completes the connection between painter and erudite elite.

While evidence suggests that Wijck began painting alchemists in Haarlem, he also produced numerous alchemical scenes during his stays in England and gained fame amongst connoisseurs for the subject. High demand for his works assures that Wijck was

⁵⁷² Chapman, "The Imagined Studios," 131-133.

⁵⁷³ Muller, "Young Scholar in his Study," 295.

aware of his popularity as a painter of alchemists—and that he fed this audience with a stream of innovative and engaging scenes on the subject. In much the same way that Dou's scholars were suited to the tastes of his sophisticated Leiden clientele, we know that Wijck's alchemists appealed to an elite community of collectors, including successful Haarlem brewers and textile merchants, and the highly educated and alchemically curious circle surrounding Charles II. Wijck's scholarly alchemists, like Dou's diligent university students and refined musicians, sit in the company of objects expressing their taste, social standing, erudite learning, technical mastery, and creativity. The Alchemist in his Study (Figure 66, CHF) foregrounds a distillation apparatus, yet also shows the alchemist engaged with a folded paper, signaling scholarship. The globe and oversized books are highly conventional (yet meaningful) signs seen also in Dou's Interior with a Young Violinist, Artist in His Studio, and other works on similar subjects. As Chapman observes, Dou's 1647 Self-Portrait (Figure 131, Gemäldegalerie Alte Meister, Dresden) merges the painter and scholar into a single image that expresses Dou's intellectual and creative powers, as well as his elite tastes.⁵⁷⁴ While Wijck is not known to have produced portraits—self or otherwise—Dou's continued merging and cross-connecting of scholarly and artistic subject matter demonstrates the potential for a painter of scholars to form a persona along corresponding lines. This particular mode of identity construction also fits within both artists' patronage models.

In addition to his subject matter, the *mode* of Wijck's paintings, and his techniques and handling of paint, also support claims of virtuosity and supreme

⁵⁷⁴ Chapman, "The Imagined Studios," 133.

knowledge over the visible world. Such claims are closely connected to the goals of the alchemists—artists' rivals in the quest to master nature. As I have noted, simplistically negative readings of Wijck's alchemical clutter neglect the reality of laboratory work namely, its messy and occasionally destructive nature, even in moments of success—as well as that clutter's role in expressing the experimental character of alchemical inquiry. But images such as Wijck's Schwerin and Rijksmuseum Alchemists (Figures 68, 1) do more than display clutter for alchemy's sake: in foregrounding the tools of work and experiment, they in turn showcase the painter's grasp of textures, surface reflection, and pictorial illusion. Wijck's lavish attention to detail, from stone, wood, and cloth to the worn edges of folded paper, or the cracked rim of an earthenware vessel, or the subtle differentiation between glazed and unglazed ceramic, invites the viewer's contemplation and make bold claims for the painter's virtuosic skill in manipulating oil, solvent, and pigment to achieve these effects of reality. The subject of alchemy, with its embedded workshop practices, instruments, and raw materials, offers the artist nearly unlimited opportunity to construct curious and elaborate still-life vignettes across the surface of the painting. Such displays of virtuosic imitation, demonstrating the painter's ability to observe, discern, and render diverse forms and effects convincingly, were in keeping with period ideals of artistic practice espoused by Dutch art theorists, including Philips Angel and Samuel van Hoogstraten. Angel's 1642 address to the painters of Leiden, titled Lof der Schilder-Konst (Praise of Painting), calls upon artists to observe "real, natural things" and to work tirelessly in rendering them with accuracy and subtlety, as painters

are the "imitators of life."⁵⁷⁵ Van Hoogstraten's treatise on painting, the 1678 *Inleyding tot de hooge schoole der schilderkonst, anders de zichtbaere werelt (Introduction to the Great School of Painting, or the Visible World)*, refers to painting as a "mirror of nature." Such a mirror, for Van Hoogstraten and his contemporaries, was not merely an empty deception, but a means for self-reflection and a tool for philosophy, as art could render not only the visible, but those things previously only conceivable.⁵⁷⁶

As Norman Bryson has observed, the still-life, when featuring made goods, as well as naturally occurring objects such as fruit and foliage, argues not only for the expertise of the painter in capturing the appearance of nature, but identifies painting as *the* superior discipline for its unparalleled ability to represent, and thus master, the products of other artisans. In his discussion of Willem Kalf, Bryson further suggests that the objects Kalf presents—such as a nautilus-shell cup, imported porcelain and carpets—constitute a "collection" rather than simply a slice of domestic reality, and as such carry with them their real-world value as well as their global contexts and associations with trade, travel, and discovery.⁵⁷⁷ Some objects among Wijck's familiar settings communicate ideas of luxury and erudition, such as his globes and numerous, oversized books, but many are decidedly humbler, including the broken jars and baskets. His

⁵⁷⁵ Angel (Hoyle and Miedema), "Praise of Painting," 244.

⁵⁷⁶ Thijs Weststeijn. *The Visible World: Samuel Van Hoogstraten's Art Theory and the Legitimation of Painting in the Dutch Golden Age.* (Amsterdam: Amsterdam University Press, 2008): 269-272. For a nuanced exploration of the ways in which van Hoogstraten made use of illusion as a device for persona-forming, particularly within the environment of the early modern court system, see Celeste Brusati. Artifice and Illusion: The Art and *Writing of Samuel Van Hoogstraten.* (Chicago: University of Chicago Press, 1995). ⁵⁷⁷ Norman Bryson. *Looking at the Overlooked: Four Essays on Still Life Painting.* (London: Reaktion Books, 1990): 122-126.

assemblages lack the preciousness of Kalf's gold and porcelain, yet Bryson's concept of the object's carrying of context and value bears further examination. Wijck's images pair highly familiar domestic tools—baskets and sieves, mortar and pestles—with more technical equipment in the form of alembics, alchemical furnaces, and other distillation glassware. Kalf's pictures appealed to a class of individuals who might presumably be able to afford and own the luxury goods he represented: in turn, Wijck's pictures were known to have been collected by social elites engaged in alchemy themselves. As noted in the fourth chapter of this project, the inclusion of certain alchemical or natural philosophical elements in paintings of laboratories has been connected with the knowledge of the artists who painted them. Jane Davidson has concluded that the appearance of anatomically precise iguana taxidermy specimens within the alchemy paintings of Teniers is linked to his interactions with specimens and drawings of iguanas arriving from the New World: thus their presence acts as a sign that emphasizes not only the alchemist's familiarity with current discoveries, but the artist's.⁵⁷⁸ Wijck's depictions of distinctive glassware, distillation apparatuses, and other alchemical paraphernalia may have been interpreted by initiated viewers as indicators of his own specialized knowledge. His paintings participated in the cultivation of a persona that was knowledgeable, erudite, even versant in contemporaneous natural philosophy: an idealized painter of alchemists.

Beyond an appeal to alchemically-curious elites, Wijck's pictures may have also held special appeal for *liefhebbers*—as well as to other painters—for their evocations of

⁵⁷⁸ Davidson, "I am the poison dripping dragon," 63.

artistic practice and visualizations of the making of colors. As I have noted, studio pictures—naturalistic images of artists at work—were produced by Dutch artists in increasing numbers. Their appeal to collectors rested in part on the real-life phenomenon of the studio visit, and the ability of studio pictures to create a lasting illusion of transparency: the opportunity to pay a repeated virtual visit to a master's private world.⁵⁷⁹ Wijck's representations of color maufacture in the alchemical laboratory constituted a rare, unusual glimpse into a little-depicted but vital stage of art-making, and may therefore have held unique appeal to collectors interested in color theory, the properties and qualities of materials, or other aspects of artistic practice.

What Wijck represents is one vital facet of his paintings' claims for mastery: *how* he represents them is another. In previous generations, artists such as Palissy and DaVinci had engaged in a violent rhetorical rivalry with alchemy that was fought over the imitation and perfection of nature. By Wijck's time, this debate had largely cooled, yet artists continued to argue for their unique mastery over the representation of the natural world. The use of light was key—particularly for Northern artists, working with the heritage of Jan van Eyck and the radiant "glow" of oil paint. Wijck's attention to surface, and the play of light that differentiates texture and reflectiveness, seems to demonstrate the art of *reflexy-konst* described by Karel van Mander in his *Schilder-Boeck. Reflexy-konst* ("reflection-art") was used by Van Mander to capture the nature of painterly illusion, and its reliance on reflected light. Just as light was the "artist" of nature, creating color and shadow, the painter's imitation of natural things was made possible by the

⁵⁷⁹ Chapman, "The Imagined Studios," 126-127.

depiction of illuminated forms. Van Mander's text differentiated between natural light sources and their effects, identifying *reflexy*, the light that fell on objects in the form of rays or glow, as well as *spieghelen*, a term for the "mirroring" effect visible on the surface of water, nature's method for self-portraiture. For Van Mander, man-made *reflexy-konst* was the source of all artistic representation, the root of the painter's imitation of the natural world—yet it was also a quality he ascribed primarily to Northern painters, working in a mode that was descriptive and illusionistic. In making use of nature's own tool, light, to form the basis of their working methods, Netherlandish painters became the imitators of nature par excellence.⁵⁸⁰ Wijck's choice to fill his alchemical scenes with carefully differentiated texture and surface (jugs and earthenware, glass, metal, fabric, stone, leather, flesh) at the foreground, speaks to his desire to showcase these imitative skills. That these effects were made possible through alchemy, in the form of turpentine, oil, pigment, and so forth, lends weight to Wijck's painterly depictions of the laboratory, and places Dutch painting within an artistic-alchemical continuum stretching forward from the experimental Jan van Eyck. Alchemists frequently made use of processes that replicated the forces of nature (heat, pressure, evaporation) to achieve their imitations or transmutations. In turn, reflexy-konst may have provided artists with an authoritative response to accusations that they were merely mimics: in duplicating the generative effects of light to form images, they were placed (at least rhetorically) on a footing with nature. In such a framework, Wijck's scenes ultimately

⁵⁸⁰ Walter S. Melion. *Shaping the Netherlandish Canon: Karel Van Mander's Schilder-Boeck*. (Chicago: University of Chicago Press, 1991): 70-72.

appear poised to argue the artist's mastery over alchemy (through his materials) and over nature itself—the contested territory shared by painter and alchemist.

Wijck's production of alchemical paintings, over roughly two decades of his life, represents a sizeable portion of his output as a painter, and one of the major means by which he established his artistic legacy abroad. I have demonstrated above that Wijck's pictures of alchemical laboratories make visible the manufacture of artists' colors, materials that would have appeared as familiar and valuable to the alchemist and colorseller as to the painter himself. Wijck, indeed, made use of the same types of alchemically created colors that he depicted. The alchemists that Wijck constructed were masters of their trade—scholars in private moments of contemplation, members of an extended intellectual community signaled by their letters and manuscripts, workshop leaders guiding the productive efforts of their apprentices, and responsible heads of households. These are the qualities belong to the ideal alchemist, as expressed in the writings of the Pseudo-Geber, Khunrath, Thurneisser, and many others. They are also the qualities of ideal artisans, ideal artists. Rembrandt's painter in his studio is a highly individualized, autonomous thinker, whose door is shut to the world in pursuit of hermetic solitude and perfection of craft. Dou's painter appears as a scholar, worldly and intellectual, part of a community of scholar and collectors. And Van Ostade's studio was a humble scene of cluttered materials, half-finished works, and continuing process. Studio scenes share many qualities with other idealized or constructed images of trade labor: for example, the presentation of tailors and smiths as responsible shop masters. But alchemy's unusual dual status as practical artisanal toolkit and experimental natural

philosophy sets it apart, placing it in a liminal category not unlike the art of painting, a discipline that struggled internally and externally with the balance of craft and creative endeavor.

Wijck's pictures of serious, materially expert artisanal alchemists offer a subject by which the tension between art and alchemy could find new expression, a route that artists might take to demonstrate, with subtle finality, art's triumph. Alchemy is uniquely suited to dialogue with art. Both alchemists and artists looked to nature for guidance, but transformed its substances and principles in order to craft materials and objects of beauty and worth. Rather than merely confronting alchemy as a *paragone* for art-making, with alchemy presented as a negative and foolish dead-end, Wijck's paintings elect to represent their parallels and overlaps, visualizing experimental process. Wijck's subject may be alchemy, but his *language* is painting, expressed in subtle texture and the play of light and color, and ultimately it is painting that offers the most convincing transformation of natural things. Using the very materials of the laboratory, Wijck replicates not only nature, but the practice of alchemy itself. FIGURES

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