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**Women's Alchemical Literature 1560-1616 in Italy, France, the Swiss
Cantons and England, and its Diffusion to 1660**

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Submitted for the degree of PhD in Comparative Literature

April 2003

(This electronic version created August 2015 with minor changes in presentation)

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Acknowledgements

I would like to thank three people who have contributed significantly to the shape of this thesis. Susan Bassnett guided, developed and energised my thoughts, and helped with Italian translation. Jane Stevenson fostered creative writing, offered support, and helped with French and Latin translation and palaeographical problems. Charles Webster offered encouragement and ideas on some chapters.

Special generosity was shown by Lyndy Abraham, who put aside work on a similar subject, and Jayne Archer, who lent her thesis. Members of the internet-based Alchemy Academy shared their knowledge, particularly Jan Bäcklund, Michal Pober, Corey Hollis, and Adam McLean. Mark Haeffner, Heidi Collins and Heather Ummel were also generous with their help.

Julian Roberts and Andrew Watson kindly commented on the hands in *The Margaret manuscript*. Stephen Clucas, Stephen Johnston, Diane Purkiss, Sue Maxwell, Mark Haeffner and Nicholas Goodrick-Clarke provided helpful information or ideas. Tony Smith translated specific Latin phrases, and Piotr Kuhlaczak and Emil Wagner advised on a Czech text. Numerous Librarians and Archivists have helped this project: thanks are due to Richard Hall and Anne Rowe in the Cumbrian Record Office; Isabelle de Conihout, Conservateur, Bibliothèque Mazarine, Paris; Bengt Rur, Riksarkivet, Stockholm; Palle Ringsted, Det Kongelige Bibliotek, Copenhagen; Zaoal Roman for help in the state archive, Olomouc, and Olomouc University; Karla Faust, Staatsbibliothek zu Berlin; Christine Butler, Archivist, Corpus Christi College, Oxford; staff of the Bodleian Library, particularly Jack Flavel, and all in Duke Humphries and the Upper Reading Room.

Finally, the biggest acknowledgement is to my partner Malcolm, who sacrificed a great deal to enable me to study. This thesis is dedicated to him, and to the memory of my sister Venetia.

This dissertation is written in accordance with the *MHRA Style Book: Notes for authors, editors, and writers of theses* (London: Modern Humanities Research Association, 1996). In transcription of primary sources I have normally retained the form of the original except for expansions of contractions which are indicated by underlining. In the rare cases that any further amendment has been made this is explained in a footnote.

This thesis is 75,810 words in length exclusive of appendices, footnotes, tables and bibliography, in accordance with the regulations of the University of Warwick.

Summary

This thesis seeks to show that there were alchemical writings associated with women from Italy, France, the Swiss Cantons and England which originated in the period 1560 to 1616, and that these writings were read, translated, circulated, and referred to, at least up to 1660. The main evidence is provided by case studies: a printed book of secrets by Isabella Cortese (Venice, 1561); a sequence of late sixteenth and early seventeenth century manuscripts associated with Madame de la Martinville and Quercitan's daughter (Jeanne du Port); and material, including an alchemical receipt book, associated with Lady Margaret Clifford (1560-1616). Supporting evidence suggests these women represent a wider participation of women in philosophical and practical alchemy, and adds to the evidence for evaluating women's participation in early modern philosophy and science. Women apparently read and wrote about alchemy, and assisted its diffusion through their work as editors, compilers, translators and patrons.

The thesis compares writings from different genres and languages, and addresses issues such as the problem of defining alchemy, complexities of textual interpretation, and the difficulty of ascertaining women's authorship or symbolic representation. Through a comparative process, the thesis discusses possible reasons for representations of women's alchemical practice based in key cultural themes: Paracelsian ideas, ambiguous readings of texts, women's education, spiritual practice and household work, and their liaison with male experts and European networks. The underlying association of the alchemical metaphor of knowledge, that the material world could be returned to a perfected heavenly state, is interpreted with varying sophistication.

The thesis considers how these women accommodated gender to alchemical philosophy. It suggests that there was scope for ambiguous interpretation, both of alchemical

texts and of shared injunctions for early modern women and medieval alchemist monks to be silent, chaste, and obedient. Women may have used alchemy as an area in which to resist passivity and demonstrate their agency.

Introduction

I deliver you the health of the soule; which is this most pretious pearl of all perfection, this rich diamond of devotion, this perfect gold growing in the veines of that excellent earth of the most blessed Paradiſe, wherein our second Adam had his restlesse habitation.

Aemilia Lanyer to Lady Margaret Clifford, 1610/1611.¹

Aemilia Lanyer's use of the alchemical metaphor in her poetic address to Lady Margaret Clifford was specifically targeted, since Lady Margaret practised alchemy. Nevertheless, the allusion would have been intelligible to a wider audience. During Lady Margaret's lifetime (1560 to 1616) interest in alchemy was a European phenomenon, expressed through craft, intellectual discussion, and literary and artistic forms. It was associated with natural philosophy, spiritual practice, science, medicine, crafts such as dyeing, metal-working, horticulture, and the distillation of perfumes and waters, and through metaphors and representations in literature and art.² The absorption of the medieval alchemical tradition into

¹ Aemilia Lanyer, *Salve Deus Rex Iudæorum. Containing, 1. the Passion of Christ, 2. Eves Apologie in defence of Women, 3. The Teares of the Daughters of Jerusalem, 4. the Salutation and Sorrow of the Virgine Marie* (London: Richard Bonian, 1611), prefatory poem at p. 31 hand numbered in Bodleian Library, Vet A2 f. 99. The nine extant versions, all of which include the prose dedication to Margaret Clifford, are described by Susanne Woods in *The Poems of Aemilia Lanyer* (Oxford: Oxford University Press, 1993) p. 1 - xlvi. Woods suggests that as the Victoria and Albert copy, presented to Prince Henry, James I elder son, bears the annotation "Cumberland", it might have been presented originally to Margaret Clifford. See also Barbara Lewalski, 'Imagining Female Community: Aemilia Lanyer's Poems', in *Writing Women in Jacobean England*, ed. by Lewalski (Cambridge: Harvard University Press, 1993) pp. 212-41; and *Renaissance Women: The Plays of Elizabeth Cary and the Poems of Aemilia Lanyer*, ed. by Diane Purkiss (London: William Pickering, 1994) pp. xxx-xxxvii, particularly fn. 76, p. xlvi, where the presentation copies are discussed.

² See Eric John Holmyard, *Alchemy* (Harmondsworth: Penguin, 1968); William Eamon, *Science and the Secrets of Nature* (Princeton: Princeton University Press, 1994); William R. Newman, *Gehennical Fire: The Lives of George Starkey, an American Alchemist in the Scientific Revolution* (Cambridge, Mass.: Harvard University Press, 1994) p. 84-7; Allen G. Debus, *The Chemical Philosophy: Paracelsian Science and Medicine in the Sixteenth and Seventeenth Centuries* (New York: Science History Publications, 1977); Charles Webster, 'Alchemical and Paracelsian Medicine', in *Health, Medicine and Mortality in the Sixteenth Century*, ed. by Charles Webster (Cambridge: Cambridge University Press, 1979) pp. 301-333. On alchemy as a cultural phenomenon also see Ioan P. Couliano, *Eros and Magic in the Renaissance*, transl. by M. Cook (Chicago: University of Chicago Press, 1987), and Mark Haeffner, *The Dictionary of Alchemy* (London: Aquarian Press, 1991) pp. 12-13. Despite rigorous criticism Frances Yates' work on the far-reaching impact of Renaissance hermetic-alchemical-cabalist ideas remains significant, and has been extended by Peter French and R.J. Evans. A comprehensive study of alchemical literature is provided by Stanton J. Linden, *Darke Hieroglyphicks* (Lexington: The University Press of Kentucky, 1996) who shows that references to alchemy appeared in a wide range of genres. Robert Schuler argues for a variation of "spiritual alchemies" from one cultural context to another ('Some Spiritual Alchemies of Seventeenth Century England', *Journal of the History of Ideas*, 41

humanist trends resulted in what might be termed a “golden age” of alchemy.³ The allegorical nature of some alchemical literature lent itself to humanist appropriation, but the wider alchemical metaphor was also expressed in a large *corpus* of sources of theory and practice for the alchemist, ranging from learned works to scrappy manuscripts.⁴

This thesis seeks to show that this alchemical *corpus* included work associated with women, from several countries. It draws on evidence which has not been previously examined in great detail, probably because standard histories of alchemy have not focused primarily on the issue of women’s role in early modern alchemy.⁵ However, this study adds to, and is situated within, a body of work written from different scholarly perspectives, which illustrates shifting trends in the treatment of women and gender in twentieth century literature on alchemy. Early works focus on canonical figures of “great men”, with any slight discussion of women alchemists scattered, without focus on the question of women’s role. Arthur E. Waite’s *Lives of the Alchemystical Philosophers*, 1888, and John Read’s *The Alchemist in Life, Literature and Art*, 1947, fail to include a single life of a woman alchemist.⁶ The beginnings of a more inclusive approach appear in the late 1960s and early

(1980), 293-318. See also John Read, *The Alchemist in Life, Literature and Art* (Largs, Scotland: The Banton Press, 1990, first pub. 1947).

³ The social range of alchemical interest before this period is suggested by Thomas Norton of Bristol (fl. 1470s), reprinted by Elias Ashmole in *Theatrum Chemicum Britannicum* (London: J. Grimmond, 1652) p. 6, who describes the wide appeal of alchemy, to popes, cardinals, archbishops, abbots, priors, friars, kings, princes, lords, merchants, common noblemen, goldsmiths, weavers, Freemasons, tanners, parish clerks, tailors, glaziers and tinkers, but indicates that many have been too credulous “For it is most profound Philosophie/The subtil science of Alkimy”. The “endemic” nature of alchemical activity in the late sixteenth century is described in Webster, ‘Alchemical and Paracelsian medicine’, p. 313. On the justification for calling the Renaissance a golden age of alchemy see p. 6 of this thesis.

⁴ Newman, *Gehennical Fire*, p. 135.

⁵ See Holmyard, *Alchemy*; Read, *The Alchemist in Life, Literature and Art*; Frances Yates, *The Rosicrucian Enlightenment* (London: ARK Paperbacks, 1972), *The Occult Philosophy in the Elizabethan Age* (London: Routledge, 1979), *Giordano Bruno and the Hermetic Tradition* (London: Routledge & Kegan Paul, 1964); Lynn Thorndike, *History of Magic and Experimental Science* (New York: The MacMillan Company, 1923); Arthur Edward Waite, *Lives of the Alchemystical Philosophers* (London: G. Redway, 1888). Throughout this study I use “early modern” to designate the broader period, from the sixteenth to eighteenth century, within which the narrower period of the material in this thesis is situated: it is recognised as a useful but artificial modern category.

⁶ Waite, *The Lives of the Alchemystical Philosophers*. Carl Jung's pioneering analysis of the alchemical *corpus* is significant for discussions of the psychological meaning of “the feminine principle”, but does not address the cultural issue of women's embodied participation. He regards alchemy and its formulations to be of a mainly masculine character. C.W. Jung, *Psychology and Alchemy* (London: Routledge and Kegan Paul, 1953);

1970s, contemporaneously with second wave feminism. John Holmyard makes passing reference to occasional women practitioners, such as Anne of Austria, Anne of Denmark, Marie de Medici, Perenelle Flamel, and the wife of Helvetius, though without consideration of gender issues.⁷ Jack Lindsay's 1970 standard work on semi-mythical women of the Graeco-Egyptian period draws on the work of Marcelin Berthelot, the collector and translator of Greek alchemical texts, to describe alchemical literature attributed to Isis, Maria the Jewess, Cleopatra, Theosebeia, and Paphnutia, whose stories resurface in the European alchemical tradition from the twelfth century onwards.⁸

During the late 1970s seeds of a more comprehensive approach were sown. In 1978 Cherry Gilchrist noted potential for further research on women with alchemical interests, expressing the opinion that there probably had been women alchemists as yet unrecorded in history.⁹ Charles Webster, in 1979, described the important role of Lady Mary Herbert in her sixteenth century 'academy' at Wilton, suggesting that alchemical practice was taking place in a literary milieu.¹⁰

When, in the 1980s and 1990s, feminist literary critics and historians directly addressed the question of gender in alchemy, it was argued that Renaissance alchemy developed as a "men only" activity, by which men sought to understand and recreate women's biological and psychic secrets. In 1980 Sally G. Allen and Joanna Hubbs argued that a masculinist bias in Michael Maier's *Atalanta Fugiens* indicates that the alchemist sought "nothing more than the magic of maternity conferred on the 'lesser' half of the species" with a "vehement absorption and denial of the feminine by the masculine", a process

Alchemical Studies (London: Routledge and Kegan Paul, 1968); 'The Psychology of the Transference', in *The Practice of Psychotherapy* (London: Routledge, 1993, 1st ed. 1954) pp. 163-320 (p. 296).

⁷ Holmyard, *Alchemy*, pp. 210, 212, 238, 240-6.

⁸ Jack Lindsay, *The Origins of Alchemy in Graeco-Roman Egypt* (London: Frederick Muller, 1970) pp. 194-209, 240-261, 343; Marcelin Berthelot, *Collection des Anciens Alchimistes Grecs* (Paris: Steinheil, 1887).

⁹ Cherry Gilchrist, *Alchemy: The Great Work* (Wellingborough: Aquarian Press, 1978) pp. 88-90.

¹⁰ Webster, 'Alchemical and Paracelsian medicine', pp. 301-333 (pp. 306-7).

which they saw as a precursor of the production of the test-tube baby.¹¹ Jeanne Achterburg, in 1991, argued that not only were women rarely associated with alchemy, but that unconscious hostility of medieval alchemical churchmen towards women was responsible for the construction of the philosophical basis for the persecution of women as witches.¹² David F. Noble, in 1992, posited that scientific and theological culture, within which he placed alchemy, developed in a “world without women”, and that even when they broke the clerical monopoly on learning, the alchemists aimed at an arrogation of the powers of the feminine, especially those of procreation.¹³ Anthony Fletcher’s comment in 1995 that the alchemist Robert Fludd’s visual representation of cosmic man with arms and legs outstretched provides a “powerful metaphor of the notion of male perfection as one flesh in relation to the cosmos” perhaps sums up this idea of alchemical theory as an agent of patriarchy.¹⁴

During the mid to late 1990s, scholars began to consider how alchemical history might look if women were placed at the centre rather than the margins of investigation, and consequently approached the possibility of women’s active participation in alchemy from new angles. Anthony Fletcher brought together evidence that there were gentlewomen participants in medical alchemy.¹⁵ The interrogation of the disciplinary records of the Royal College of Surgeons by Margaret Pelling in 1997 suggested a knowledge of technical Paracelsian and alchemical medicine amongst unregulated female medical practitioners in early modern London.¹⁶ The same year, *Women, Science and Medicine 1500-1700*, edited by Lynette Hunter and Sarah Hutton, looked at how reassessment of the categories of science,

¹¹ 'Outrunning Atalanta: Feminine Destiny in Alchemical Transmutation', *Signs*, 6 (1980) no. 2, 210-229 (pp. 213, 221).

¹² Jeanne Achterburg, *Woman as Healer* (London: Rider, 1991) pp. 65-75.

¹³ David F. Noble, *A World Without Women: The Christian Clerical Culture of Western Science* (New York: Alfred A. Knopf, 1992) pp. xvi, 178. He also comments on radical seventeenth century women alchemists.

¹⁴ Anthony Fletcher, *Gender, Sex and Subordination in England 1500 – 1800* (New Haven, London: Yale University Press, 1995) p. 286.

¹⁵ Fletcher, *Gender, Sex and Subordination*, pp. 234-7.

¹⁶ Margaret Pelling, 'Thoroughly resented? Older women and the medical role in early modern London', in *Women Science and Medicine 1500-1700*, ed. by Lynette Hunter and Sarah Hutton (Thrupp: Sutton, 1997) pp. 63-107 at 75-7.

medicine and technology, particularly in relation to the domestic sphere, produced new views on who participated.¹⁷ In 1998 the art historian M.E. Warlick examined domestic images of women in German alchemical imagery to raise questions about women's uncredited role in the craft of alchemy.¹⁸ More recently, Jayne Archer has looked in detail at women's place in the production and consumption of alchemical knowledge in early modern England.¹⁹

This thesis examines texts from different genres (including books of secrets, transmutation accounts, and manuscript collections) attributed to women from Italy, France, the Swiss Cantons and England.²⁰ Through the process of placing different examples of women's alchemical literature side by side, this study endeavours to shed more light on specific cases, and to identify comparative themes.²¹ The nature of the alchemical content in the case studies shows shared themes of transmutation, transformation, and the influence of neoplatonic-Paracelsian ideas, although technical and philosophical dimensions are variously emphasised. The ways in which women are represented as working with male experts show commonalities: the significant relationships that enabled women to participate in alchemy were between noblewomen and priests, vicars, advisors and friends, and a Paracelsian doctor, his daughter and other women in his circle. Through these relationships women found ways of utilising European-wide networks of alchemical information and expertise. Isabella Cortese's *I Secreti* describes clerical networks stretching from Italy to Cologne, Ragusa,

¹⁷ *Women, Science and Medicine 1500-1700*, ed. by Hunter and Hutton, p. 4.

¹⁸ M.E. Warlick, 'The Domestic Alchemist: Women as Housewives in Alchemical Emblems', in *Emblems and Alchemy*, ed. by Alison Adams and Stanton J. Linden (Glasgow: Glasgow Emblem Studies, 1998) pp. 25-47.

¹⁹ Jayne Archer, 'Women and Alchemy in Early Modern England' (unpublished PhD thesis, University of Cambridge, 1999). Much of the research for the present study was completed before the appearance of this work, but I have found it very helpful and acknowledge my debt to Archer's research even though our conclusions may not be identical.

²⁰ Isabella Cortese, *I Secreti de la Signora Isabella Cortese* (Venice: Giovanni Bariletto, 1574). Copenhagen: The Royal Library, MSS 1776, ff. 1-12, 1792, ff. 1-24. London: British Library, Sloane MS 693, ff. 139-144. Glasgow: University of Glasgow, Ferguson MS 163, ff. 1-90. Oxford: Bodleian Library, Ashmole MS 1440, ff. 48-98. Paris: Bibliothèque Mazarine, MS 3681, ff. 77-81. Kendal: Cumbrian Record Office, WD Hothman MSS 5, 44.

²¹ The concept of "placing" in comparative literature is discussed by S.S. Prawer, *Comparative Literary Studies: An Introduction* (London: Duckworth, 1973) pp. 143-156.

Olomouc and Kracow. The evidence surrounding *Quercitan's Daughter's Letters* brings in Geneva, Lyon, Paris, Basle, and Joseph du Chesne's diplomatic/secret agent travel in Germany. *The Margaret manuscript* shows links with the intellectual life of France and Germany, as well as circles around Edward Kelley in Prague, and raises questions about the role of Lord Willoughby's contact with alchemists in Prague and Denmark. Supporting material which supplements the case studies reinforces these points and indicate that women took part in alchemy in this period in the networked countries, such as Denmark and Germany.²² There appears to have been a network of Paracelsian men who knew each other in northern, central and eastern Europe sharing alchemical knowledge with women in their circles between 1560 and 1616.

A secondary area of comparison is between the main period of study, 1560 to 1616, when the writings were initiated, and the period of diffusion, 1616 to 1660, in which the texts were rewritten and memories of women alchemists recorded. The main period was chosen because the evidence suggested that women actively experimented with both philosophical and practical alchemy between 1560 and 1616, corresponding with a "golden age" of European alchemy centred on courts and noble households across Europe.²³ Within this period Paracelsianism and quasi-Paracelsian ideas were disseminated by figures such as, in Italy, Leonardo Fioravanti, in France, Joseph du Chesne and Theodore de Mayerne, and in England, John Dee, John Hester and Thomas Muffet. The passion for Paracelsian alchemy in Central Europe was at its height and centres including Prague, Trebon and Kracow were magnets for alchemists in western Europe, a fact reinforced by the case studies.²⁴ The mood at the start of the period is signalled

²² The importance of Germany and Denmark for alchemy and Paracelsianism in this period is acknowledged but German and Danish language publications were not included in this study.

²³ The role of the courts and noble households is discussed in chapter two.

²⁴ Robert J.W. Evans, *Rudolf II and his World: A Study in Intellectual History 1576–1612* (Oxford: Oxford University Press, 1973) p. 199.

by the publishing of John Dee's *Monas Hieroglyphica* in Antwerp in 1564: the end by Isaac Casaubon's critical work on the *Hermetica* in 1614.²⁵ The period coincides closely with the lifetime of Lady Margaret Clifford (1560-1616), the primary English case study. The time frame chosen also allows for consideration of the early stages of the Rosicrucian movement (circa 1609) in relationship to the French case material.

The period 1616 to 1660 is used to study diffusion of the case study material, rather than as the main focus of this study, for several reasons. First, there are clear positive reasons for choosing to work on the earlier material, where a unity of theme has emerged. In this later period, divergent themes characterise expression of the alchemical metaphor with the development of the idea of the alchemystical wife, of the Rosicrucian movement, and of the relation of chemistry to theology.²⁶ Secondly, seventeenth century women with alchemical interests are mostly already subjects of scholarship or current work in progress. Suzanna Åkerman has investigated the alchemical interests of Queen Christina of Sweden (1626-1698).²⁷ B.J. Gibbons and Desirée Hirst have written on the English Behmenist movement, the mystical form of Paracelsianism which was deeply rooted in spiritual alchemy, finding expression in the writings of Jane Lead

²⁵ Garth Fowden identifies this work as marking "the watershed between Renaissance occultism and the scientific rationalism of the new age" (*The Egyptian Hermes: A historical approach to the late pagan mind* (Princeton, New Jersey: Princeton University Press, 1986) p. xxii). Anthony Grafton argues that it is hard to argue that Casaubon's argument was original, but acknowledges that most Protestant seventeenth century scholars seem to have accepted his views. ('Protestant versus prophet: Isaac Casaubon on Hermes Trismegistus', *Journal of the Warburg and Courtauld Institutes*, 46 (1983), 79-93 (pp. 85-8).

²⁶ For a chronology of the development of the Rosicrucian movement see Åkerman, *Rose Cross over the Baltic: The Spread of Rosicrucianism in Northern Europe* (Leiden; Boston; Koln: Brill, 1998) p. 2.

²⁷ Susanna Åkerman, *Queen Christina of Sweden and her Circle: The Transformation of a Seventeenth-Century Philosophical Libertine* (Leiden: E.J. Brill, 1991).

(1623-1704) and Ann Bathurst (1639- after 1696).²⁸ Jane Lead published allegories and Ann Bathurst wrote private spiritual diaries: both used alchemical imagery in purely interior analogical ways.²⁹ The interest in hermetic, alchemical and Rosicrucian ideas of the intellectually gifted Lady Anne Conway (1631-79) is also well known.³⁰ Donald R. Dickson has written about the alchemystical wife in his analysis of the joint work of Rebecca and Thomas Vaughan.³¹

This later period is significant for understanding the material chosen as the main case studies. The material associated with the French women alchemists shows significant alterations in rewritings and annotations during this period, a process explored in chapter four. The notebooks and manuscript collection of Elias Ashmole, many of which were collected, written or annotated circa 1650 to 1660, have been a significant source for this study.³² Assessment of these manuscripts often involves consideration of attitudes to

²⁸ Desirée Hirst, *Hidden Riches*, (London: Eyre and Spottiswoods, 1964) p. 337, gives 1610 but under her portrait in Oxford: Bodleian Library, MS Rawlinson D1262 is handwritten “Ann Bathurst, 1639-after 1696” . The latter is supported by a comment in her introduction to her spiritual diary for 1679 that she was about 30 in 1667 (Oxford: Bodleian Library, Rawlinson D1262 f. 6). Her spiritual diary continues to 1696 (Oxford, Bodleian Library: Rawlinson D 1263). B.J. Gibbons, *Gender in Mystical and Occult Thought: Behmenism and its Development in England* (Cambridge: Cambridge University Press, 1996); see also Hirst, pp. 103-4.

²⁹ Jane Lead’s writings (STC, Wing, nos 782-792) include *A Fountain of Gardens* (J. Bradford, 1696); *The Revelation of Revelations* (London: A. Sowle, 1683); and *Ascent to the Mount of Vision*, ed. by W.D. Forsyth (Littleborough, 1906, 1st pub. 1699). See Catherine F. Smith, 'Jane Lead: Mysticism and the Woman Cloathed with the Sun', in *Shakespeare's Sisters: Feminist Essays on Women Poets*, ed. by Sandra M. Gilbert and Susan Gubar (Bloomington: Indiana University Press, 1979) pp. 3-18; B.J. Gibbons, *Gender in Mystical and Occult Thought: Behmenism and its Development in England* (Cambridge: Cambridge University Press, 1996); Paula McDowell, *Women of Grub Street: Press, Politics and Gender in the London Literary Marketplace 1678-1730* (Oxford: Clarendon, 1998); Julie Hirst, 'Mysticism, Millenarianism and the Visions of Sophia in the Works of Jane Lead (1624-1704)' (unpublished PhD thesis, University of York, 2002). Hero Chalmers explores how the late seventeenth century provided some women writers with a window of opportunity enabling major transformations in the authorial subject (Hero Chalmers, 'The feminine subject in women's printed writings, 1653-1689', (Unpublished DPhil, Oxford, 1993).

³⁰ See Charles Webster, *The Great Instauration* (London: Duckworth, 1975) pp. 276 ff., 303 ff.; Hirst, pp. 153 ff. and 162 ff.; Sarah Hutton, 'Anne Conway, Margaret Cavendish and Seventeenth Century Thought', in Hunter and Hutton, pp. 218-234; Christopher McIntosh, *The Rosicrucians* (Wellingborough: Crucible, 1987) pp. 68-9.

³¹ Donald R. Dickson, 'The Alchemystical Wife: The Identity of Thomas Vaughan's "Rebecca" ', *The Seventeenth Century*, 13 (1998), 36-49 and Thomas and Rebecca Vaughan, *Aqua Vitæ: Non Vitis: Or, the radical Humiditie of Nature: Mechanically, and Magically dissected By the conduct of Fire, and Ferment (British Library MS Sloane 1741)*, forthcoming, ed. by Dickson.

³² Ashmole began to study alchemy in 1648 when he settled at Bradfield in Berkshire. He published *Fasciculus Chemicus* in 1650 and *Theatrum Chemicum Britannicum* in 1651 and the peak of his interest in alchemical manuscripts appears to have been circa 1650-1660. However, as late as 1672 he was studying the mystical

alchemy, and to women, both in the mid-seventeenth century and in the earlier period, 1560 to 1616. Ashmole's conservatism is sometimes apparent, but his obsessive antiquarian drive to catalogue and record has safeguarded evidence of all sorts of women, such as translators, whose connection with alchemy would otherwise be unknown today. In England, the tumult of the Civil War period is also significant for recording women's voices: Anne Clifford's proud record of her mother's alchemical practice, which is the starting point for the discussion of Lady Margaret Clifford as alchemist, dates from this period. Isabella Cortese's *I Secreti* had undergone a wide European diffusion by 1660.

The process of placing and comparison is emphasised by the similar structure of chapters three to five. Each opens with an introduction to the nature of the writing which forms the main case study, and discusses how far provenance or authorship can be established. Each chapter examines the intellectual themes, craft aspects, and relationship to European alchemical circles that are indicated in these case studies, and then seeks to contextualise the case study by asking whether it was exceptional for a woman in that country at that time to participate in alchemy. The nature of this wider contextual evidence varies between countries, and more examples have been found for England, reflecting the author's access to English material in Oxford and London libraries. The English chapter therefore gives more space to this aspect, and less to the issue of diffusion of the writings up to 1660 which proved central to understanding the French/Swiss material, and to recognising the significance which later generations gave to *I Secreti*. The greater number of English examples has resulted in an emphasis in the conclusion towards English alchemy and its links to the continent.

works of John Dee and he received gifts of alchemical manuscripts in 1677 and 1679 (C.H. Josten, *Elias Ashmole 1617-1692*, vol. V (Oxford: Clarendon Press, 1966) pp.1904-5).

A product of the search for the texts is the most detailed bibliographical search currently available on women's alchemical writing. It draws on two types of catalogue: those of alchemical works in printed books and manuscript; and bibliographies for writings associated with women in the early modern period, focusing on the sixteenth and seventeenth centuries. The alchemical bibliographies were by the Bibliotheca Philosophia Hermetica, W.H. Black, Pierre Borel, William Cooper, D.L. Duveen, Lenglet du Fresnoy, Ian MacPhail, S.A.J. Moorat, D.W. Singer, Katherine R. Thompson, Mary Margaret Service, Lynn Thorndike, Pearl Kibre, and V. Verginelli.³³ Lynn Thorndike's *A History of Magic and Experimental Science* (New York: MacMillan, 1923) provided a valuable background resource. The databases created by Adam McLean on an alchemy website facilitated the task of sifting through descriptions of manuscript material held in a large number of archives in Denmark, England, France, Germany, Italy, Scotland and the United States.³⁴ A search for relevant women's printed works was made using *the Short-Title Catalogue* and Charlotte Otten's *Bibliography of Women Writers 1540-1700*.³⁵ Sixteenth century Italian women were

³³ Bibliotheca Philosophia Hermetica, *Christ, Plato, Hermes Trismegistus: the dawn of printing: Catalogue of the incunabula in the Bibliotheca Philosophia*, vol. 1, pt. 1 (Amsterdam: In de Pelicaan, 1990). W.H. Black, *Catalogue of the Manuscripts[...]bequeathed by E. Ashmole* (Oxford: Oxford University Press, 1845). Pierre Borel, *Bibliotheca Chimica. Sev catalogus librorum philosophicorum hermeticorum* (Paris: Carolum du Mesnil, 1654). William Cooper, *Catalogue of Chymicall Books* (London: [n.p.] 1675). Denis I. Duveen, *Bibliotheca Alchemica et Chemica* (London: E. Weil, 1949). *Alchemy: A Comprehensive Bibliography of the Manly P. Hall Collection of Books and Manuscripts including related material on Rosicrucianism and the Writings of Jacob Boehme*, ed. by R.C. Hogart (Los Angeles, California: The Philosophical Research Society, 1986). Lenglet du Fresnoy, *Histoire de la philosophie hermétique*, vol. III, 1742. *Alchemy and the Occult: A Catalogue of Books and Manuscripts from the Collection of Paul and Mary Mellon given to Yale University Library, Printed Books 1472-1623*, ed. by Ian MacPhail (New Haven, Connecticut: Yale University Library, 1968). S.A.J. Moorat, *Catalogue of Western Manuscripts on Medicine and Science in the Wellcome Historical Medical Library* (I, London: Wellcome Historical Medical Library, 1962; II, London: Wellcome Institute of the History of Medicine, 1963). D.W. Singer, *Catalogue of Latin and Vernacular Alchemical Manuscripts in Great Britain and Ireland dating before the XVI Century* (Brussels: M. Lamertin, 1928-31). [Katherine R. Thompson, and Mary Margaret Service], *Catalogue of the Ferguson Collection of Books mainly relating to alchemy, chemistry, witchcraft and gipsies* (Glasgow: Robert Maclehose, 1943). John Ferguson, *Bibliotheca Chemica*, 2 vols (Glasgow: Maclehose, 1906). Lynn Thorndike and Pearl Kibre, *A Catalogue of Incipits. Medieval Scientific Writings in Latin* (London: Medieval Academy of America, 1963). Vinci Verginelli, *Bibliotheca hermetica, Catalogo alquanto ragionato della raccolta Verginelli (secoli XV-XVIII)* (Florence: Nardini, 1986).

³⁴ <http://www.levity.com/alchemy> and available on cd rom, Version 6 "Alchemy Web Site".

³⁵ Alfred William Pollard and Gilbert Richard Redgrave, revised by W.A. Jackson, F.S. Ferguson, and Katharine F. Pantzer, *A Short-Title Catalogue of Books Printed in England, Scotland, and Ireland and of English books printed abroad 1475-1640* (London: The Bibliographical Society, 1986). Charlotte F. Otten,

sought on P.O. Kristeller's *Iter Italicum*.³⁶ During the course of the research the catalogue of manuscripts in the British Museum was consulted, as were the library catalogues of sixteenth and seventeenth century individuals who had alchemical interests or prominent libraries.³⁷

Other material was found through reading biographies, histories and literary criticism.

Nonetheless this approach is not fully comprehensive: by focusing on dedications to women patrons in chemical works, and by examination of women's receipt books in libraries to which I did not have ready access, Jayne Archer has discovered suggestive evidence of the interest of several other noblewomen and at least one gentlewoman in philosophical and practical alchemy.³⁸

The choice of writings to compare has required consideration of various methodological problems. Since the initial choice of writings to compare is based on alchemical content and the mention of a woman, primary problems concerned the problems of defining alchemy, understanding its arcane manuscripts, and ascertaining whether these were in fact women's writings.

Because there are divergent scholarly perspectives on the meaning of alchemy, any survey of alchemists raises crucial questions about the definition of terms. Until recently historians of science have been primarily interested in alchemy's contribution to chemistry. Some of this group accept that alchemy had a mystical or philosophical aspect; others

'Bibliography of Women Writers 1540-1700', in her *English Women's Voices* (Miami: Florida International University Press, 1992). This has been compiled from Pollard and Redgrave (above) and Wing.

³⁶ Paul Oskar Kristeller, *Iter Italicum, accedunt alia itinera, on CD Rom; a database of uncatalogued or incompletely catalogued humanistic manuscripts of the Renaissance in Italian and other libraries* (Leiden: E.J. Brill, 1995). This database is not complete, but is the best available catalogue.

³⁷ *A Catalogue of the Manuscripts in the British Museum, Collection of Sir Hans Sloane and the Rev Thomas Birch*, vol. 1, (London: British Museum, MDCCLXXX11); James Orchard Halliwell, *The Private Diary of John Dee* (London: Camden Society, 1842) pp. 65-89; Julian Roberts and Andrew Watson, *John Dee's Library Catalogue* (London: The Bibliographical Society, 1990); David J. McKitterick, *The Library of Sir Thomas Knyvett of Ashwellthorpe c. 1539-1618* (Cambridge: Cambridge University Library, 1978); Ronald .S. Wilkinson, 'The Library of John Winthrop Jr 1606-1676', *Ambix*, 13 (1965),139-186; *The Lumley Library. The Catalogue of 1609*, ed. by Sears Jayne and Francis K. Johnson (London: British Museum, 1956); John Harrison, *The Library of Isaac Newton* (Cambridge: Cambridge University Press, 1978).

³⁸ Archer in 'Women and Alchemy in Early Modern England' discusses Lady Anne Cecil, Countess of Oxford (1556-1588), Lady Frances, Countess Dowager of Exeter (1580-1663) and the receipt book of Sarah Wiggles.

recognise only a material process masked by a smokescreen of purposely allusive terminology.³⁹ Recently historians have emphasised the complexity of the field of alchemical knowledge prompted partly by a recognition of the extent to which Isaac Newton and Robert Boyle, key figures in the history of science and ideas, took alchemy seriously.⁴⁰ On the other hand, historians of religion, such as Mircea Eliade, focus on alchemy as ritual with spiritual and mythic meaning.⁴¹ Social historians touch on alchemy, though not as a main focus.⁴² Medical historians show interest in alchemical medicine and Paracelsianism.⁴³ Literary and art critics focus on representational questions including hermeneutical interpretations.⁴⁴ This study aims to widen parameters to avoid exclusion of any potential women alchemists, and to

³⁹ A good example of the former is Frank Sherwood Taylor, Curator of the Museum of the History of Science, Oxford: *The Alchemists, Founders of Modern Chemistry* (London: W. Heinemann, 1951[?]); 'The Origins of Greek Alchemy', *Ambix*, 1 (May 1937), 30-47; 'A Survey of Greek Alchemy', reprinted from *The Journal of Hellenic Studies*, L (1930), 109-139; 'The Idea of the Quintessence', in *Science, Medicine and History*, ed. by Edgar Ashworth Underwood (Oxford: Oxford University Press, 1953) vol.1, pp. 247-265; 'The Visions of Zosimus', *Ambix*, 1 (1937), 88-92; 'The Evolution of the Still', *Annals of Science*, 5 (1945), 185-202. William Newman emphasises that alchemical writing can often be interpreted as material interactions (*Gehennical Fire*, pp. 92-99). Lawrence M. Principe, in *The Aspiring Adept: Robert Boyle and his Alchemical Quest* (Princeton: Princeton University Press, 1998) p. 188, argues that the common view that alchemy is closely linked to spiritual or religious topics exaggerates the situation. John Shirley adopted the material approach to alchemy as recently as 1983 (See 'The Scientific Experiments of Sir Walter Raleigh, The Wizard Earl, and the Three Magi in the Tower 1603-1617', *Ambix*, 4 (1949), 52-66. This and other historiographical positions on alchemy are discussed by Stephen Clucas in *Thomas Harriot and the Field of Knowledge in the English Renaissance* (Durham: The Thomas Harriot Seminar, 1995).

⁴⁰ See Principe, *The Aspiring Adept*; Betty Jo Dobbs, *The Foundations of Newton's Alchemy or "The Hunting of the Green Lyon"* (Cambridge: Cambridge University Press, 1975); and Stephen Clucas' paper on "Harriot's Alchemy", reported in *The Harrioteer*, November 1999.

⁴¹ Mircea Eliade, *The Forge and the Crucible* (London: University of Chicago Press, 1978), and *The Myth of Eternal Return* (Princeton: Princeton University Press, 1974). By far the largest body of work on alchemical texts during the twentieth century is by Carl Jung and his followers, who theorise that alchemy was primarily a psycho-spiritual pathway of the soul, which alchemists projected onto material experiments. Jungian scholarship focuses on the symbolic aspect of alchemical literature, rather than technical aspects. Carl Gustav Jung, *The Collected Works: Psychology and Alchemy*, vol. 12 (London: Routledge and Kegan Paul, 1953); *Alchemical Studies*, vol. 13 (London and Henley: Routledge and Kegan Paul, 1968); Marie Louise von Franz, *Alchemy: An Introduction to the Symbolism and the Psychology* (Toronto: Inner City Books, 1980); *The Mysterium Lectures: A Journey through C.G. Jung's Mysterium Conjunctionis*, ed. by Edward Edinger and J.D. Blackmer (Toronto: Inner City Books, 1995).

⁴² For example Fletcher, pp. 234-7 and Pollock, *With Faith and Physic: The Life of a Tudor Gentlewoman Lady Grace Mildmay 1552-1620* (London: Collins and Brown, 1993).

⁴³ For example Pelling, see fn. 16 above.

⁴⁴ See Linden; Lyndy Abraham, *Harriot's Gift to Arthur Dee: Literary Images from an Alchemical Manuscript* (Durham: University of Durham School of Education, 1997); *Marvell and Alchemy* (Aldershot: Scholars Press, 1990); M.E. Warlick, 'The Domestic Alchemist: Women as Housewives in Alchemical Emblems'; Stanislav de Rola, *The Golden Game* (London: Thames and Hudson, 1988); Anna Maria Partini, 'La personalità ermetica di Massimiliano Palombara', in *La Porta Magica*, ed. by Fratelli Palombi Editori (Rome: Comune di Roma, 1990) pp.17-28.

place women alchemists within a social, intellectual and cultural context in order to add to the history of women, and alchemy itself.

The experience of feminist historians of science and medicine has shown that women's apparent absence from standard histories dominated by "great men" can be consequential to definitions which by their nature exclude many participants. In particular, Hunter and Hutton emphasise that science and technology are not fixed categories but constructs open to reassessment.⁴⁵ They argue that early modern women were culturally authorised to engage in science and medicine within the domestic household space, through food preparation, making household chemicals and medicines, and caring for the sick. Their argument, that there is a need for more material to be examined without the constraints of traditional categorisation, has informed this research.⁴⁶ This study suggests that to understand the extent of women's participation it is helpful to deconstruct definitions of alchemy, and look for overlaps with women's roles, including those in household management and production, such as cookery, perfumery, distillation of waters and oils and the preparation of medicines. It extends this from the sphere of the history of science into the study of women's spiritual and intellectual life, where continuities between the religious aspects of alchemy and early modern woman's household role caring for her own and her family's spiritual life, through prayer, meditation, and religious reading and writing are suggested. The importance of these roles in establishing a cultural context for women alchemists is discussed in chapter two.

Women might be expected to appear in the history of alchemy as part-contributors to the experimentation process, as, or alongside, other little known characters such as technicians, servants, craftspeople, or colleagues, whose contribution has not normally been

⁴⁵ Hunter and Hutton, p. 4.

⁴⁶ Hunter and Hutton, p. 4.

recorded. Servants were regarded as significant participants in the alchemical process, to be chosen with care since experiments could last for months and had to be consistently and reliably watched.⁴⁷ In fact, at least two of the women alchemists discussed refer to servants or experts who assisted them.⁴⁸ It might also be expected that creative couples would emerge, in view of explicit representations of the male alchemist working with a female “other” in some alchemical works, notably in the mythology surrounding the French alchemical couple Nicolas and Perenelle Flamel, and in the seventeenth century *Mutus Liber*.⁴⁹ Evidence from other periods indicates that the male partner in a creative partnership with a woman has often been credited with any resultant scientific advance.⁵⁰ In fact the evidence on which I have focused does not show husband and wife partnerships, but features relationships between father and daughter, brother and sister, cleric and noblewoman, and perhaps most surprisingly, between friends. The problematic nature of the seventeenth century tendency in France and England to describe the alchemistical wife as an adjunct to the active male alchemist, rather than active alchemist in her own right, and the consequential lack of any writings by these women, is discussed in chapters four and six.

Stanton J. Linden has pointed out that the task of defining alchemy is a formidable one, which challenges modern scholars as it did the early alchemists.⁵¹ The stereotypical idea that it simply concerns transmutation of base metals into gold is a partial understanding of the exoteric alchemical tradition, which was also concerned

⁴⁷ For example, in 1546 the Frenchman Zachaire lived and worked on alchemy in a small room in Faubourg Saint-Marceau in Paris with a small boy as a servant, seeing no-one else (Holmyard, p. 253). Isabella Cortese's *I Secreti* advises great care over the choice of servants, who should never be left alone.

⁴⁸ Quercitan's daughter blames a servant for falling asleep instead of watching the vessel. Lady Margaret Clifford probably employed alchemists, one of whom was possibly Christopher Tylour.

⁴⁹ Nicholas Flamel's *Le Livre des Figures Hieroglyphiques de Nicolas Flamel* (Paris: 1612).

⁵⁰ *Significant Others: Creativity and Intimate Partnership*, ed. by Whitney Chadwick and Isabelle de Courtivron (London: Thames & Hudson, 1993). *Creative Couples in the Sciences*, ed. by Helena M. Pycior, Nancy G. Slack, Pnina G. Abir-Am (New Brunswick: Rutgers University Press, 1995).

⁵¹ Linden, p. 6.

with the creation of the elixir and alchemical medicines, and completely omits the esoteric spiritual or philosophical aspect. There were various early modern meanings of the word “alchemy”. It could be a term of insult, when a Paracelsian alchemist sought to distance himself from charlatans, or a term with connotations of the highest virtue and spirituality. Alternative terms, such as “natural philosopher”, “spagyrist”, or “cabalist” were sometimes used.⁵² The word “rosicrucian” might also encompass alchemical work, and there was also considerable overlap between the hermetic and alchemical traditions. The word “Paracelsian” also often overlapped with alchemy.⁵³ Lawrence M. Principe has attempted to resolve the problem of ambiguous and value-laden baggage of the terms alchemy and chemistry.⁵⁴ He uses the term "chymistry" to mean "the sum total of alchemical/chemical topics as understood in the seventeenth century", and adds some other terms to differentiate the range of pursuits encompassed within it. He uses "chrysopoeia" and "argyropoeia" for pursuit of metallic transmutation of gold and silver, especially involving the Philosopher's stone, as well as the terms spagyria, ageirein, and iatrochemistry. Principe recognises that to abandon altogether the cautious use of the words alchemy and chemistry would lead to historical nihilism. He

⁵² *Spagyrist* is a term probably invented by Paracelsus to mean alchemist (*The New Shorter Oxford English Dictionary* (Oxford: Clarendon Press, 1993) vol. 2, p. 2963), although the works attributed to him include the use of the term alchemy eg. *The Seven Books [...] concerning the nature of things* (Oxford: Ashmole MS 1490 Item 79 f. 200r) “by Alchimya”. Oswald Croll addresses “the Sons of Art, who [...] have bathed themselves in the springs of true philosophy” and were nothing to do with “the common rabble of the Alchymists”, *Philosophy Reformed and Improved* (London: Llodowick Lloyd, 1657) p.7. B.G. a Portu Aquitan writes that reports of cures by tinctures and spirits are being spread by those “whom the common sort at this day call Chymists or Alchymists” (*A hundred and fourtene experiments and cures of [...] Paracelsus*, H. Middleton, 1583[?], p.6). For Blaise de Vigenère the divine secrets had been so “cried down [...] that men durst scarcely speak thereof, but must presently incur the bruite of being an Atheist, Witch, or a false money-coyner”. *A Discourse of Salt and Fire* (London: Richard Cotes, 1649)

p. 33, first published as *Traité du feu et du sel* (Paris: 1608).

⁵³ Allen G. Debus describes Rosicrucianism as “a neo-Paracelsian and an alchemical movement – and a missionary one at that”, in *The Chemical Dream of the Renaissance*, p.17. Suzanne Åkerman, while noting that Rosicrucianism is notoriously difficult to define, attempts the following: “christian hermetic theosophy with a specific theory of human restitution, affected through alchemy, angelic magic, Kabbalah, and a background in apocalyptic speculation on a new order of reformers able to discern certain clues in Arabic astrology”. *Queen Christina of Sweden and her Circle: The Transformation of a Seventeenth-Century Philosophical Libertine*, p. 7. *Hermeticism and the Renaissance*, ed. by Ingrid Merkel and Allen.G. Debus (Washington: Folger Shakespeare Library, Associated University Press, 1988) pp. 7-13.

⁵⁴ *The Aspiring Adept* (Princeton: Princeton University Press, 1998) pp. 8-10.

decides never to use "chemistry" to refer to seventeenth century activities, and to use the phras traditional alchemy, or alchemy, to refer to chrysopoeia and spagyria.

This study also uses the word "alchemy" where it is found in the original and includes chrysopoeia, argyropoeia and spagyria. It does not use the word "chemistry" with reference to the period 1560 - 1660 unless it is specifically used in the literature. However, following the approach of Hunter and Hutton, the boundaries of alchemy are not defined too precisely from the outset. Two levels of definition emerge, a broad one and its components, which together contributed to the phenomenon of alchemy as a cultural form, overlapping with, but distinct from, science, literature and art.

Any comprehensive definition of alchemy includes two aspects: the technical craft and the philosophical-mystical inquiry. Alchemists were natural philosophers, in the sense that they constructed explanations for the natural world with which they experimented. From the first century AD alchemy (variously referred to as “the Work”, “the divine and sacred art” and “the making of gold”) was concerned with practical explorations of the material world, involving transmutations, distillations, sublimations and extractions, within a philosophical or mystical construction of the cosmos.⁵⁵ Democritus, circa 100 AD, described an art of the transmutation of metals in terminology at once physical and mystical.⁵⁶ The problem of understanding the relationship between the two mutually related aspects of the alchemical tradition bears a relationship to the debate in the work of Brian Copenhaver, Walter Scott, A. J. Festugière, and Garth Fowden over the relationship in the hermetic tradition of popular occultist and learned philosophical treatises, which highlights the tendency of western scholarship to distinguish and separate aspects of cultural heritage according to its own

⁵⁵ Sherwood Taylor, ‘A Survey of Greek Alchemy’. Although the word “alchemy” is normally considered to be of Arabic origin, the earliest documented cases of alchemy are found in Graeco-Egyptian culture from the first to fourth century AD. See Jack Lindsay, *The Origins of Alchemy in Graeco-Roman Egypt* (London: Frederick Muller, 1970).

⁵⁶ Sherwood Taylor, ‘The Origins of Greek Alchemy’, (p. 30).

lights.⁵⁷ Although this debate extends from the first to the third century AD, it is relevant for early modern alchemy because of the great influence of Marsilio Ficino's translation of the *Corpus Hermetica* in 1471, and because of the overlap between hermeticism and alchemy which is demonstrated by the mentions of Hermes in many early modern alchemical texts, including some of those associated with women in this study.⁵⁸ Classical scholarship from the 1920s to the 1950s took the view that the only parts of the *hermetica* worth studying were the philosophical/religious ones which Walter Scott distinguished in 1924 from the other sort, comprising "astrology, magic, alchemy and kindred forms of pseudo-science" which Scott considered to be fundamentally different, including "masses of rubbish".⁵⁹ This type of dismissive comment, which implies that alchemy does not have a philosophic context, is typical of much academic work on alchemy from the nineteenth and early twentieth centuries in which scholars sought to distance themselves from aspects of cultural history that sat awkwardly with rationalist norms.⁶⁰ Since the 1960s this approach has been challenged. Charles G. Nauert noted in 1965 that historians "have been unable to rid themselves of a sense of embarrassment when faced with magical phenomena" which he suggests to be the result of judging past events by modern criteria.⁶¹ Garth Fowden argues that the writings of Zosimus (which belong to Scott's "masses of rubbish" of technical *hermetica*) show a contact with philosophical *hermetica* and represent the belief that a correct alchemical understanding

⁵⁷ Brian P. Copenhaver, *Hermetica* (Cambridge: Cambridge University Press, 1992) pp. xxxii-xl.

⁵⁸ Lord Willoughby cites Hermes in his letter to Lady Margaret, Countess of Cumberland (Cumbria: WD Hoth Box 44/4). Hermes is an authority for Isabella Cortese's *I Secreti*: "e per tanto ben dice Hermes", p. 22.

⁵⁹ The philosophical ones were *Corpus Hermeticum*, *Asclepius*, excerpts in the *Anthologium* of Stobaeus, and other fragments: see *Hermetica: the writings attributed to Hermes Trismegistus*, ed. by Walter Scott (Bath: Solos Press, 1992) pp. 45, 33.

⁶⁰ Ioan Couliano, a historian of religion, addresses this issue, recognising that his attempts to enter into the magical imagination of the Renaissance run counter to most academic currents which see "merely a ludicrous heap of recipes and methods stemming from primitive, unscientific notions about nature". *Eros and Magic in the Renaissance*, transl. by Margaret Cook, (Chicago: University of Chicago Press, 1987) p. xvii.

⁶¹ Charles G. Nauert, *Agrippa and the Crisis of Renaissance Thought* (Urbana: The University of Illinois Press, 1965) pp. 222-3.

of the properties of nature is indispensable for the purification and perfection of the soul prior to its liberation from the body.⁶² He suggests that Zosimus' sister Theosebeia was a priestess surrounded by a circle of alchemists, who may have had philosophical as well as technical preoccupations.⁶³ Peter Kingsley argues against over-neat classifications, seeing the additional distinction made by classical scholars between philosophy/science on the one hand and religion/mythology on the other as an anachronistic dichotomy.⁶⁴ He constructs a picture of early alchemy as part of a Mediterranean magical tradition of philosophy, magic, healing, herbalism and ritual.⁶⁵

The problems of classification have also been recognised by scholars of early modern alchemy. The same tendency to focus too exclusively on ideas perceived as part of the progress of science and knowledge has been challenged by ideas of the significance of the field of knowledge within which alchemy sits. Scholars emphasise these fields of knowledge in various ways. One is the hermetic-alchemical-neoplatonic thinking and practice found most clearly at the Florentine court of Cosimo de' Medici (1519-1574).⁶⁶ The pivotal work of Frances Yates in promoting this field of knowledge, although with less emphasis on alchemy than on hermeticism, cabala and neoplatonism, has been widely criticised for seeking to explain too much through it, particularly in the political sphere.⁶⁷ However, even those who downplay the connection between spirituality, religion and alchemy recognise that in the late fifteenth century Pico della Mirandola, Johannes Trithemius and Cornelius Agrippa linked

⁶² Fowden, *The Egyptian Hermes*, p. 120.

⁶³ Fowden, p. 188.

⁶⁴ Peter Kingsley, *Ancient Philosophy, Mystery and Magic: Empedocles and Pythagorean Tradition* (Oxford: Clarendon Press, 1995) pp. 8, 329.

⁶⁵ Kingsley, in particular at pp. 55-68, 375-9.

⁶⁶ Giulio Lensi Orlandi, *Cosimo e Francesco de' Medici Alchimisti* (Firenze: Centro Internazionale del Libro, 1978).

⁶⁷ In the *Occult Philosophy in the Elizabethan Age*, for example, there is very little about alchemy itself, and when it is discussed it is as an adjunct to the hermetic-cabalist-neoplatonic argument (see p. 83). For the critique of Frances Yates' work see Merkel and Debus, *Hermeticism and the Renaissance*, pp. 7-13; Charles Trinkaus, *In Our Image and Likeness: Humanity and Divinity in Italian Humanist Thought*, vol. 2 (London: Constable, 1970) pp. 502 ff.; Mebane, *Renaissance Magic and the Return of the Golden Age*, pp. 4-5.

some alchemical notions with cabala, hermetic and neoplatonic mysticism and natural magic, links which were intensified by Paracelsus.⁶⁸ This thesis has found evidence of inter-relationships between hermeticism, alchemy, neoplatonism, and Paracelsianism, which together probably formed one intellectual frame for some early modern practising alchemists.⁶⁹ Some early modern women did write in neoplatonic vein and the relationship of alchemical writers to this tradition is discussed in chapters three and four.⁷⁰

Paracelsianism emerges as a significant field of knowledge in the women's writings in this study.⁷¹ The wide scope of the thought and activities of Theophrastus Bombastus von Hohenheim (c.1493 –1541), who adopted the name Paracelsus, include alchemy, medicine, theology, and social concerns, making his ideas difficult to conceptualise and easy to oversimplify. An extended discussion of the scope and content of Paracelsianism, which is a complicated and developing area of scholarship, is not attempted here.⁷² However, I have sought in this study to trace Paracelsian ideas that are cited or alluded to in the women's writings in the case study, and to address gendered elements in his, or his followers', writings which may help explain why there appear to have been female Paracelsians. The opening up of alchemical ideas and secrets to a wider cross-section of society, which may have included

⁶⁸ Principe, *The Aspiring Adept*, p. 189.

⁶⁹ The significance of neoplatonism in framing Isabel Cortese's *I Secreti* is demonstrated in the chapter on Italy. The alchemical interests of the Medici reached France by Marie de Medici, and England by her daughter Henrietta Maria.

⁷⁰ The best known example is Marguerite d'Angoulême (1492-1549): see Yon Oria, 'Platonic Symbolism of Marguerite D'Angoulême in the royal courts of France and Navarre (1492-1549)', *Principe de Viana*, no. 177 (1986), 319-329. I am aware of the haziness of the boundaries between neoplatonism and other forms of thought such as natural magic which is implied when I use the term neoplatonic in this thesis.

⁷¹ See Walter Pagel, *Paracelsus: An Introduction to Philosophical Medicine in the Era of the Renaissance* (London: Karger, 1982); *Religion and Neoplatonism in Renaissance Medicine*, ed. by Pagel and Marianne Winder (London: Variorum Reprints, 1985). Care is needed in interpreting the term "Paracelsianism", which came to have a very broad, loose meaning during the course of the sixteenth and seventeenth centuries, and the views of those who were later called Paracelsians are not always the same as those presented as belonging to Paracelsus (*Paracelsus: The Man and his Reputation, His Ideas and their Transformation*, ed. by Ole Peter Grell (Leiden: Brill, 1998) pp. 3-6.

⁷² The principal figures in the development of Karl Sudhoff's foundational work on Paracelsus are Walter Pagel and Kurt Goldammer. A full bibliography of the works of these and other writers on Paracelsus such as Charles Webster, Andrew Weeks and Joachim Telle, is given by Andrew Weeks, in *Paracelsus: Speculative Theory and the Crisis of the Early Reformation* (Albany: State University of New York, 1997) pp. 217-231. The only writer to address the issue of Paracelsus' theological attitude to women and femininity is Ute Gause in *Paracelsus* (Tübingen: J.C.B. Mohr, 1993).

some women, is framed by the wider context of the Paracelsian social and educational reform movement. The concept of the physician as priest-healer, for whom medicine and religious faith were inseparable, was allied to belief in spiritual regeneration and redemption in the making of alchemical medicines. Alchemy was founded upon “Vertues and Powers which God with his own Finger hath impressed in Metals” and the alchemistical art paralleled the Trinity of Father, Son and Holy Ghost.⁷³ Thus for Paracelsus, the God-given alchemical process was material, practical and useful, at the same time that it was a spiritual work. Chapter two argues that both the medical and theological bases of Paracelsianism brought it into the remit of the learned woman, whilst its lay approach to the sacraments had much in common with magical practice.

Not all alchemists were neoplatonists or Paracelsians. Some drew on a range of theoretical understandings of chemical processes in a complex field of alchemical knowledge which incorporated practical interests such as horticulture, dyeing, metallurgy, medicinal preparations and other commodities.⁷⁴ The complexity of the field of knowledge emerges in the case studies in chapters three and five.

However, the uniqueness of the alchemist as opposed to the craft worker or philosopher lay in a united approach to the philosophical and technical. Garth Fowden suggests that in the ancient hermetic tradition there was no absolute intellectual discontinuity between those who saw Hermes primarily as a technician and those who thought of him as a

⁷³ *Paracelsus Of the Supreme Mysteries of Nature. Of the Spirits of the Planets. Occult Philosophy. The Magical, Sympathetical, and Antipathetical Cure of Wounds and Diseases. The Mysteries of the twelve signs of the Zodiac. Englished by R. Turner* (London: N. Brook and J. Harison, 1656), reproduced in *The Archidoxes of Magic, by Paracelsus*, ed. by Stephen Skinner (London: Askin Publishers, and New York: Samuel Weier, 1975) sigs B-B2. This work is distinct from the *Archidoxis*.

⁷⁴ See Clucas, *Thomas Harriot and the Field of Knowledge*. The interests of Bernard Palissy (c.1510-1590) ranged from pottery, enamelling, garden design, philosophy, natural history, underground wells and springs, to alchemy (Marshall P. Katz and Robert Lehr, *Palissy Ware: Nineteenth-Century French Ceramicists from Avisseau to Renoleau* (London: The Athlone Press, 1996)). Hugh Platt (1552-1608) was a mechanical inventor, horticulturalist, distiller and (al)chemist who produced a book of household secrets for women and in *The Garden of Eden* discusses the “philosophical garden”, drawing on the writers Cornelius Agrippa of Nettesheim and Joseph du Chesne.

philosopher.⁷⁵ Similarly, in this research there are examples of women's practical alchemy in the kitchen, the still-house, and the glassworks, alongside philosophical writing, reading and translation. Women participants and their contribution, at whatever part of the spectrum from technician to philosopher, are included as far as possible, whilst remembering the breadth of the activity with which they were potentially involved. In some cases a deductive approach is used: for example it is credible to argue that Lady Grace Mildmay (1552-1620) meets the general definition of a philosophical and technical alchemist, since she left evidence of alchemical medical practice, in the tradition of Oswald Croll, as well as extensive scriptural meditations for the refining of the soul.⁷⁶ Similarly, Lady Mary Herbert (1561-1621) was well known as a chemist, but also had philosophical and literary interests which are unlikely not to have extended to the wider theories behind alchemical practice.⁷⁷

The texts located which offer the best evidence for women alchemists are in English, French, Italian and Latin, and produced in England, France or the Swiss Cantons, and Italy. In addition to one printed book by Isabella Cortese there is a cluster of previously unexamined manuscript material from the end of the sixteenth century and early seventeenth century, from Italy, France/Swiss Cantons and England, each of which is attributed to a woman as author, compiler or patron. These materials have been chosen to form the central case material of this thesis because they are clearly alchemical, they appear to be by women,

⁷⁵ Fowden, p. 117.

⁷⁶ Linda Pollock does not allow that an interest in Paracelsian alchemical medicine makes Lady Mildmay an alchemist: alchemical medicine was 'an absorbing passion of Lady Grace', but also "It should be noted first of all that Lady Grace was not an alchemist" (*With Faith and Physic*, pp. 66,146).

⁷⁷ I refer to Lady Mary, daughter of Lady Mary Sidney and brother of Sir Philip Sidney, by her married name, Lady Herbert. Edward Dyer was a close friend and Katherine Duncan-Jones speculates that they may have been bonded partly because of their shared interest in alchemy (*Sir Philip Sidney, Courtier Poet* (London: Hamish Hamilton, 1991) p.115). See Charles Webster's comments on her alchemical academy at Wilton in 'Alchemical and Paracelsian Medicine', 306. Regrettably, most records from Wilton were destroyed in a fire before about 1730 (Note from Wiltshire County Council Record Office, May 1999). Mary Herbert's works include translations of Petrarch's *Triumph of Death* (1590s), Philippe du Plessis Mornay's *Discourse of Life and Death* (1592), and Robert Garnier's *Tragedie of Antonie* (1592). She completed her brother's work translating the Psalms and revising *Arcadia* (1595). See Diane Purkiss, *Three Tragedies by Renaissance Women* (London: Penguin, 1998), and *The Collected Works of Mary Sidney Herbert, Countess of Pembroke*, ed. by Margaret P. Hannay, Noel J. Kinnamon, Michael G. Brennan (Oxford: Clarendon Press, 1998).

and most have not been studied in depth. In addition, they form a previously unrecognised pattern of women in Paracelsian circles working with men on alchemy at the early period of 1560 to 1616. Isabella Cortese's *I Secreti* presents many sorts of craft receipts (alchemical work with metals, non-alchemical metal working, the making of medicines, dyeing, perfumery and distillation of waters) within a neoplatonic framework which is most apparent in the alchemical sections. Chapter three argues that although her book is not explicitly Paracelsian it shows the influence of broadly Paracelsian ideas, with strong dependence on Catholic clerical culture for her alchemical receipts. *Quercitan's Daughter's Letters* offer an account of an attempted transformation with detailed commentary: a central concept, strongly influenced by neoplatonism, is the creation of the "vegetable soul" by the alchemist as the mediating substance between body and spirit. Chapter five argues that the author was probably Jeanne du Port, the biological daughter of the most prominent French Paracelsian, Joseph du Chesne, whose pseudonym was Quercitanus. He also received letters on alchemy from Madame de la Martinville, whose *Discours Philosophical* and *Episola Nobilissima* explaining alchemical processes in obscure symbolism, are explicitly Paracelsian, whilst also citing medieval alchemical references. *The Margaret manuscript*, a detailed alchemical notebook with annotated comments, catalogued as the receipt book of Lady Margaret Clifford (1560-1616), also shows strong Paracelsian influences, alongside a rich variety of medieval, neoplatonic, classical, and critical sources, from France, Germany and Italy. According to her daughter, Lady Margaret's other intellectual interests, besides alchemy, were Stoic philosophy (which has a long history of relationship with the alchemy of spiritual regeneration)⁷⁸ and Christian puritanism.⁷⁹ In chapter five I argue that she shared her interest

⁷⁸ The close relationship of Stoic ideas, the redemptive theme, gnosticism and alchemy is highlighted by H.J. Sheppard in 'The Redemptive Theme and Hellenistic alchemy', *Ambix*, 7 (1959) 42-46, and 'Gnosticism and Alchemy', *Ambix*, 6 (1957), 86-101.

⁷⁹ This is deduced from the four books with which Lady Anne Clifford associated her mother in the Clifford Great Picture: a book of alchemical receipts, a book of Stoic philosophy, the Bible and the Psalms (Cumbrian Record Office (Kendal): MS Hoth/JAC 332).

in alchemy with at least one, and probably more, Puritan clerics and was also in touch with the John Dee circle.⁸⁰

This study not only suggests that there were alchemical writings associated with women: it locates other supporting material by, to, or about women in alchemy, which, taken together, suggest that more women participated in alchemy than previously thought. The context for this material, though, is that the overwhelming majority of the vast alchemical literature in printed books and in manuscript are by men, a sizeable proportion is anonymous, and only a very tiny fraction of works appear related in some way to a woman, whether as author, translator, recipient or subject matter (in the latter case most usually recounting the stories associated with the semi-mythical Graeco-Egyptian alchemist Maria). This mirrors the problem of evidence in other areas of the investigation of women's history, and is an expected consequence of circumstances in which fewer women were educated, literate, and had access to paper, ink, and the space, time and confidence to write.⁸¹

It is perhaps surprising to have found so much material, even though it is probably only a tiny percentage of the total. The evidence is not found in one consistent genre: there are printed books of receipts and secrets, manuscript receipts, manuscript letters in circulation, a philosophical discourse in manuscript, an alchemical treatise accompanied by love poems in manuscript, spiritual writings in manuscript, transmutation stories, printed works of prophecy and defence, and poetry of love and grief. These various genres derive from different conventions, which affect their reading and interpretation. Texts range from hard-to-decipher hand-written fragments, particularly from the sixteenth and early

⁸⁰ Thomas Tymme; and perhaps also the Christopher Taylour associated with her receipt book who was likely to have been the local vicar of Bradford.

⁸¹ Clare Brant and Diane Purkiss, *Women, Texts and Histories 1575-1760* (London: Routledge, 1992) pp. 3-9. On the significance of a small number of classically learned women see Jane Stevenson, 'Female Authority and Authorisation Strategies in Early Modern Europe', in *'This Double Voice': Gendered Writing in Early Modern Europe*, ed. by Danielle Clarke and Elizabeth Clarke (Basingstoke: MacMillan, 2000) pp. 16-40.

seventeenth centuries, to printed sources, mostly from later than 1640. A prominent exception is the Cortese book of secrets, which was published and republished from 1561 onwards. Far more books by Italian women were published in the sixteenth century than by women in other European countries, but this on its own does not answer the question of how a woman in sixteenth century Italy could so openly associate herself with alchemy, an issue which is addressed in chapter three.⁸²

Amongst the supporting evidence are further examples of writings and translations apparently by women. The receipt book of Sarah Wigges, dated 1616, draws on a continuum of receipts from toothache cures, medicines, sugar craft, and herbal waters, to the alchemical and magical philosophy of Paracelsus, Andreas Libavius, and the *magia* of John Baptista Porta.⁸³ Signora L.L.G. exchanged letters on questions concerning alchemy with Angelo della Casa, an alchemist at the laboratory of Don Antonio de Medici.⁸⁴ It is likely that Barbara Holbrunnerin, whose writings are contained in a manuscript in German and Latin from about 1600, may have been an alchemist: one manuscript attributed to her concerns “Die preparation des [solis]”, and another “De lapide philosophorum”.⁸⁵ A significant example from just outside the main period of study is a translation by a Mistress Litton of a philosophic alchemical text from French into English. This long “Treatise on the harmony and general constitution of the true salt concealed of the Philosophers” is peppered with allusions and references, drawing on neoplatonism, Christian cabala, Paracelsianism,

⁸² Axel Erdmann lists all known books by women published in the sixteenth century. For Italy, the total is 216 women; for England, 18, for France, 30, for Germany, 19 (*My Gracious Silence: Women in the Mirror of 16th Century Printing in Western Europe* (Lucerne: Gilhofer & Ranschburg GmbH, 1999) pp. 199-221).

⁸³ London: Royal College of Physicians, MS 654, p 5, v.

⁸⁴ Florence: Biblioteca Nazionale, Palat. MS 867, vol. 14, ff. 101v-124v. On Della Casa see Eamon, p. 270.

⁸⁵ Leiden: MS Vossianus Chym 0.3, ff 25-30, ff 163-172. Source: Alchemy web site cd rom. First hand study of the manuscripts would be required to give a firm opinion.

hermeticism and other mythological interpretations from classical antiquity in the full Christian humanist tradition.⁸⁶ This text is explored further in chapter two.

The thesis also draws on examples of philosophical and practical alchemical writings by men to women, which suggest that these men were apparently willing to share their knowledge with some women who wished to learn. An anonymous alchemical treatise in a rough Elizabethan hand addressed to Mistress Barkely on *De lapide philosophico* cites [R]osimus, Razes, Socrates, and Aristotle's *Secrets of Secrets* as a preliminary to love poems, utilising the erotic charge in some alchemical imagery.⁸⁷ In chapter five it is suggested that *A mystical treatise of occult philosophy, or the philosophers' stone*, which Christopher Taylour addresses to a noble lady, was probably intended for Lady Margaret Clifford. A Bishop who was also a Paracelsian, John Thornborough, wrote a long alchemical treatise, incorporating mixed messages about gender, to Lady Knowles in 1614.⁸⁸

Another way in which this study develops the idea of a wider participation of women in Italy, France/Swiss Cantons and England, is through the more indirect argument that alchemy appears to have been “in the air” that some women and many male humanists breathed between 1560 and 1616. Chapter three argues that the *impresse* of the Italian academies, where neoplatonism was commonplace, are powerfully suggestive of a widespread appreciation of both practical alchemical/distillation work and the type of alchemical symbolism that turns up in later hermetic-alchemical emblems. Chapter four examines the relationship of women, alchemy and the French academies. Chapter five includes consideration of the use of alchemical golden age imagery at the court of Queen Elizabeth, where alchemical ideas were an acceptable part of court philosophy and patronage,

⁸⁶ Oxford: Bodleian Library, Ashmole MS 1446 ff. 1-116v. In the margin of f. 53b Ashmole has noted “Mrs Littons Translacion”. The manuscript is a translation of Jacques Nuysement's *Traitez de l'harmonie et constitution generale du vray sel* (Paris: Jeremie Perier et Adbias Buisard, 1621). A second edition appeared in 1639.

⁸⁷ Oxford: Bodleian Library, Ashmole MS 1492, VII, ff. 29-39.

⁸⁸ London: British Library, Sloane MS 1799, ff. 74-104. I am grateful to Corey Hollis for this reference.

in which neoplatonism also played a part.⁸⁹ An example of a learned woman reflecting the philosophical-alchemical interests of the Paracelsian circle at Prague is Elizabeth Weston (1582-1612), who wrote the prefatory poem to Oswald Croll's *Basilica Chymica* in 1609.⁹⁰ Examples from other countries such as Denmark, Germany and Sweden, also suggest women's presence within the wider European networks of international alchemists.

Another source of evidence discussed in this study derives from many small receipts or passing references which indicate women's participation in the craft of alchemy. An anonymous Jewish woman expert is mentioned in manuscripts in Spain and Venice as the source for receipts for dyeing, tinting, writing in gold ink and work with silver.⁹¹ Also from Italy come several mentions of a Dame Laura in Medici alchemical circles.⁹² A sixteenth century French manuscript of alchemical formulæ includes "L'oeuvre d'une duchesse de Bretagne".⁹³ Philippina Welser, from a rich German merchant family, owned a book of medicine, in which her mother Anna Welser (1560-1570) wrote down instructions for alchemy, medicine and cookery in German vernacular.⁹⁴ A letter by one Salome Scheunpflugin indicates that she worked on alchemical operations in Trebon, in southern Bohemia, in 1588.⁹⁵ There were women alchemists in the circle around Tycho Brahe in Denmark: his sister Sophie (b. 1556) acted as his laboratory assistant and later married an

⁸⁹ For a discussion of Edmund Spenser and Neoplatonism, see Yates, *The Occult Philosophy in the Elizabethan Age*, pp. 95-108.

⁹⁰ See Susan Bassnett, 'Revising a Biography: A new interpretation of the life of Elizabeth Jane Weston, (Westonia) based on her autobiographical poem on the occasion of the death of her mother', *Cahiers Elizabethains*, no. 37, April 1990, pp. 1-8.

⁹¹ Raphael Patai, *The Jewish Alchemists: A History and Sourcebook* (Princeton: Princeton University Press, 1994) p. 454.

⁹² Alfredo Perifano, 'L'Alchimie à la Cour de Côme I^{er} de Médicis', in *Alchemy Revisited*, ed. by Z.R.W.M. von Martels (Leiden: E.J. Brill, 1990) pp. 175-181.

⁹³ Paris: Bibliothèque Nationale Français, MS 19964, (source: Alchemy cd rom).

⁹⁴ Letter from Kuntshistorisches Museum, Innsbruck, dated 5.2.1999: the receipt book is considered of special interest for Anna Welser's detailed comments on children's illnesses, dental care and hygiene when dealing with the sick.

⁹⁵ Trebon: Rozmberk archive, fam rosenberg 25. I am grateful to Michal Pober for this reference.

alchemist, Eric Langer, with whom she shared medical alchemical interests,⁹⁶ and Brahe's niece Sophie, who married his friend Holger Rosenkrantz, regularly bought chemical preparations in Copenhagen.⁹⁷ Another friend of the Brahes, Heinrich Rantzov, was the dedicatee of the German version of Isabella Cortese's *I Secreti*.⁹⁸ *The Margaret manuscript* includes a receipt by a gentlewoman in York,⁹⁹ and another to fix *luna in sol* attributed to the daughter of the receipt writer.¹⁰⁰ A method to make gold, said to be approved by a Queen Katherin[e], is included with alchemical receipts in a manuscript written in a rough Elizabethan hand.¹⁰¹ Lucy Apsley paid for experiments by Sir Walter Raleigh and Mr Ruthin in the Tower of London.¹⁰²

The significance of social rank, as well as gender and intellectual circle, emerges from the wider evidence for women's participation in alchemy. Whilst the main evidence of this thesis supports the argument, discussed below, that some moderately or highly learned women engaged with intellectual aspects of alchemical theory, there are also cases of less educated women on low incomes experimenting with practical alchemy. In 1558 Pieter Breughel the Elder caricatured the folly of a lower class alchemical household with a housewife neglecting her children and heading for the poor house.¹⁰³ Ben Jonson's *Doll Common*, in *The Alchemist*, 1610, is a satirist's portrait of a lower class woman abetting a

⁹⁶ Victor E. Thoren, *The Lord of Uraniborg: A Biography of Tycho Brahe* (Cambridge: Cambridge University Press, 1990) pp. 140-1, 175, 206, 334, 336, 357, 403, 424.

⁹⁷ Ole Grell, 'The Acceptable Face of Paracelsianism' in *Paracelsus*, ed. by Grell, pp. 260-1.

⁹⁸ On Rantzov's friendship with the Brahe's and King Frederick of Denmark see Thoren, *The Lord of Uraniborg*, p. 140; on his role in the translation of *I Secreti*, see chapter three.

⁹⁹ In *The Margaret manuscript*, f.52r: the same receipt is transcribed in the seventeenth century Glasgow: Ferguson MS 163, p. 136.

¹⁰⁰ *The Margaret manuscript*, ff. 53v-54r.

¹⁰¹ Oxford: Bodleian Library, Ashmole MS 1408, f. 371. Various identities for this Queen are possible including three of Henry VIII's wives, Catherine of Aragon, Katherine Howard, and Katherine Parr. Claire Lesage discusses Caterina Sforza's apparent interest in alchemy (see 'La Litterature des "Secrets" et *I Secreti* d'Isabella Cortese', *Chroniques Italiennes*, 36 (1993), 145-178).

¹⁰² Lyndy Abraham, *A Dictionary of Alchemical Imagery* (Cambridge: Cambridge University Press, 1999) p. 105.

¹⁰³ Reproduced in M.E. Warlick, 'The Domestic Alchemist', p. 28.

fraudulent alchemist and living on the dangerous side of respectability.¹⁰⁴ A living equivalent is Anne Turner, a scapegoat, with three men, who all paid with their lives for the supply of poison in the murder of Sir Thomas Overbury (d. 1613). The deceased Paracelsian alchemical doctor Simon Forman had been widely suspected, drawing on the well-known Paracelsian use of poison as a cure, but Turner was hanged after Forman's widow stated that Anne Turner had twice visited the Forman's house to burn papers of Forman's.¹⁰⁵

The argument that women were alchemists also finds support in the period of the diffusion of the writings in the main case studies, 1616 to 1660. From the middle of the seventeenth century, published books by women appeared more frequently on the market, including some on practical alchemy. After the first early example by Isabella Cortese in 1561, the earliest located in this study is by the Frenchwoman Martine Bertereau, Dame de Beausoleil in 1640. The principal focus of her treatise is mining, but a short section on the philosophers' stone is also included.¹⁰⁶ There are several works associated with Englishwomen in the 1650s which include technical remnants of Paracelsianism.¹⁰⁷ Elizabeth

¹⁰⁴ John S. Mebane argues that Christopher Marlowe, Ben Jonson and William Shakespeare wrote plays with magical and alchemical themes in this period (*Renaissance Magic and the Return of the Golden Age: The Occult Tradition and Marlowe, Jonson and Shakespeare* (Lincoln: University of Nebraska Press, 1989) p.6). A ubiquity of foolish female practitioners, both above and below stairs, is suggested by Jonson's satire against women alchemists in *Mercury Vindicated Against the Alchemists*, 1615. He describes women below stairs putting Mercury through exercises in torture, making him dance the philosophical circle five times an hour, by alchemical processes of exaltation, sublimation and reduction, as well as kitchen methods of sousing, salting, pickling, smoking, drying and powdering. Upstairs, for the Ladies, "a perpetuality of beauty [...], health, riches, honors, a matter of immortality is nothing". *Ben Jonson's Plays and Masques*, ed. by Robert M. Adams (London: W.W. Norton and Company, 1979) pp. 357-358, l. 35-45, 70. Stanton J. Linden argues that Jonson probably drew on a satirical work by the Moravian alchemist Sendivogius, *Dialogus Mercurii, Alchymistae et Naturae*, extending the satire to offer a more negative overall view of alchemy. ('Jonson and Sendivogius: Some New Light on *Mercury Vindicated from the Alchemists at Court*', *Ambix*, 24 (1977), 39-54. Shakespeare's representations of women in magical roles offer one mode of access to popular conceptions of arguably alchemical women such as Helena, in *All's Well that Ends Well*, and Paulina, in *A Winter's Tale*. Helena is discussed in chapter five of this thesis. Frances Yates interprets Paulina in the light of hermetic magic, in *Shakespeare's Last Plays: A New Approach* (London: Routledge & Kegan Paul, 1975) pp. 90-91.

¹⁰⁵ DNB, Overbury, p. 1274. Lauren Kassell, 'Simon Forman's Philosophy of Medicine: Medicine, Astrology and Alchemy in London, c 1580-1611' (Unpublished D.Phil. thesis, Oxford University, 1997) p. 1.

¹⁰⁶ Martine de Bertereau, Dame de Beausoleil, *La Restitution de Pluton* (Paris: Herve' du Mesnil, 1640).

¹⁰⁷ For Lynette Hunter's interpretation of these writings see 'Women and domestic medicine: Lady Experimenters 1570-1620', and 'Sisters of the Royal Society: the Circle of Katherine Jones, Lady Ranelagh', in *Women, Science and Medicine*, ed. by Hunter and Hutton, pp. 89-121, 178-197.

Grey (1581-1651), a learned woman with a reputation as apothecary and physician, is memorialised in *A Choice Manual of Rare and Select Secrets*, 1653, which includes quasi-Paracelsian receipts.¹⁰⁸ Her sister Alatheia Talbot is associated with *Natura Exenterata* or *Nature Unbowelled*, a medicinal and pharmaceutical work, which includes alchemical symbols and very clear chemical receipts.¹⁰⁹ The role of Katherine Jones, Lady Ranelagh, and Robert Boyle's sister in Hartlib's scriptorium is described by Lynette Hunter.¹¹⁰ Later, in 1674, Marie Meurdrac wrote *La chimie charitable et facile en faveur des dames*, which, like Cortese's *I Secreti*, included a section specifically for women on beauty and perfumes.¹¹¹ The trend for continental women to write on hermetic alchemy and practise alchemy continued into the eighteenth century.¹¹²

Anne Mathew, who republished her deceased husband's book *The Unlearned Alchymist his Antidote* in 1663 with her own preface, may be regarded as a feisty entrepreneur defending her livelihood from competitors who claimed the receipt for the

¹⁰⁸ In 1653, W.J., Gentleman, published at London *A Choice Manual of Rare and Select Secrets in Physick and Chyrurgery; collected and practiced by the Right Honourable, the Countesse of Kent late deceased*.

¹⁰⁹ Alatheia died in 1654; *Natura Exenterata* was published in 1655. It is attributed by the cataloguers of the British Library and the Bodleian Library as the work of Philiatros (pseudonym) who signed the foreword. Lynette Hunter has attributed the book to Alatheia Talbot (*Women Science and Medicine*, p.103) noting the prominent display of her picture at the start, a picture whose apparent removal from the copy I worked with in the Bodleian Library is an example of alterations to texts diminishing the transmission of female identity (Douce R.66).

¹¹⁰ Lynette Hunter, 'Sisters of the Royal Society: The Circle of Katherine Jones, Lady Ranelagh', in *Women Science and Medicine*, pp.178-197.

¹¹¹ Paris: Jean D'Houry, 1674, 2nd ed.

¹¹² The German Dorothy Juliana Wallachin wrote a treatise on the double mercury of the philosophers in 1705 (cited in *Alchemy: A Comprehensive Bibliography of the Manly P. Hall Collection* ed. by Ron Charles Hogart (Los Angeles: The Philosophical Research Society, 1986) p. 312, Bacstrom Collection, MS 240). In 1728-31 the Frenchwoman Madame de Warens, a friend of Rousseau, engaged in preparation of elixirs, tinctures, and balsams with the help of all members of her household. Leona Constantia (a suggested pseudonym of Jane Lead) produced various works (see Glasgow: Ferguson MSS 46 and 202). An eighteenth century manuscript displays the work of a Madame D.D., *virtuose hermetique*, on the *Clef de la Philosophie-naturelle*. (CJ Jung Collection MS 2). In 1743 work including materials written by Anna Susanna Lieber in 1705 was published in a work by F. F. Weicherhaan in German and Latin (Yale University: Mellon Collection MS 81). A Dutch woman, Cornelia Rathlaan, and her alchemical partner Jan Pieter in circa 1758 drew up a contract with Baron von Tholl for the sharing of alchemical secrets (Yale University: Mellon Collection MS 108, Item 7). Towards the end of the eighteenth century Sabine Stuart de Chevalier wrote *Le Discours Philosophique sur le trois principes, animal, vegetal et mineral* (Paris: 1781).

marvellous pill, or a charlatan selling false goods.¹¹³ There is no philosophy in her preface, and the proud announcement that this is the work of an “Unlearned Alchemist” distinguishes her work from the magical philosophical/experimental field of knowledge of the learned women who form the main case studies of this thesis.

Women poets addressed alchemical themes during the seventeenth century in some of the more elegant writing encountered in this research. Marie de Gournay (1565-1608) defended her practise of alchemy in poetry: “L’Alchimie est chez moi mais non ses suites folles”.¹¹⁴ Aemilia Lanyer’s prose dedication (1610/11) to Lady Margaret Clifford, cited at the start of this chapter, moves from Indian pearls, Arabian gold, and the aromatic gums, incense and sweet odours presented to the infant Jesus by kingly philosophers, to the perfect gold of the second paradise, and the sweet incense, balsam, odours, and gums that flow from the tree of life.¹¹⁵ The central metaphor in Lucy Hastings’ poem on the death of her son, circa 1649, is alchemical, as he leaves “this Crucible of Clay” to “a richer Case/ To raise his Luster” into the “Treasure of Blessed Spirits” in the resurrection. The combined use of imagery of fettering with gold, poison and riches as well as reference to the true Elixir by Mary Astell (1666-1731) in *Awake my Lute, daughter of Musick come*, also suggests an alchemical metaphor.¹¹⁶ The two verses of poetry in Cortese’s *I Secreti* were praised during the seventeenth century.¹¹⁷ Women were also recipients of poetry using alchemical themes, notably by John Donne.¹¹⁸

¹¹³ Richard Mathews, *The Unlearned Alchymist his antidote Presented to the world by Mrs Anne Mathews* (London: J. Leigh, 1663).

¹¹⁴ In *Peincture de mœurs*, l. 94-98, reproduced in Marjorie Ilesley, *A Daughter of the Renaissance* (The Hague: Mouton & Co., 1963) p. 96.

¹¹⁵ *Salve Deus Rex Iudæorum*, see fn 1 above.

¹¹⁶ Lucy Hastings (fl. 1649) wrote a poem on the flyleaf of the 1650 issue of *Lachrymæ Musarum* which is now in the Huntingdon: I am grateful to Jane Stevenson for this reference. On Mary Astell see G. Greer, J. Medoff, M. Sansone, *Kissing the Rod* (London: Virago, 1988) p. 333 ff..

¹¹⁷ Pierre Moet, *Douze Clefs de Philosophie de frère Basile Valentine* (Paris: Moet, 1660) introduction.

¹¹⁸ In *Darke Hieroglyphicks*, pp. 169-172, Stanton J. Linden discusses alchemical imagery in the poetry of Donne, addressed to his patron Lucy Russell, to The Countess of Huntingdon, in tribute to Lady Marckham after her death, and in praise of Elizabeth Drury’s purity.

One theme that has emerged from this material is the suggestion that some moderately educated women helped to diffuse alchemical culture through their role as editors, compilers and translators. This adds to the wider scholarly investigation of female culture, in which the extent and nature of women's education, reading and writing are central issues. This study suggests that some women engaged at a sophisticated level with alchemical and Paracelsian texts. Madame de la Martinville and Quercitan's daughter appear to have read relevant books and knew what to expect before testing receipts supplied by Joseph du Chesne. *The Margaret manuscript* shows an unusually wide range of contemporary reading. Sarah Wigges appears to have collected alchemical papers from Leonardo Fioravanti and Giambattista della Porta. These women's apparent interest in contemporary, rather than medieval, alchemical texts, taken with their humanist associations, as patrons and participants in informal networks of learning, adds to other evidence that early modern women *were* part of the intellectual rebirth associated with humanism that was later labelled the Renaissance.¹¹⁹

The study further suggests that women did not only absorb alchemical texts, manuscripts and oral advice, but actively wrote, rewrote in translations, or arranged for writings and rewritings to be made on their behalf. These writings add to the canon of known early modern women's writings and translations which is available for the identification of the emergence of the feminine voice in early modern literature.¹²⁰ Chapter two explores how

¹¹⁹ Joan Kelly-Gadol's 1977 argument that women were not part of the Renaissance of learning acted as a benchmark for much subsequent work ('Did Women have a Renaissance?', in *Becoming Visible: Women in European History*, ed. by Renate Bridenthal and Claudia Koonz (Boston: Houghton Mifflin, 1977) pp. 137-164). Elizabeth Tebeaux and Mary M. Lay, in 'The Emergence of the Feminine Voice, 1526-1640: The Earliest Published Books by English Renaissance Women', *JAC*, 15.1 (1995), pp. 3, 2, argue that English women's writings on the Church fathers, maternal advice books, books of devotions and prayers show that they were not part of the English Renaissance, although they accept that women ventured into the world of ideas. See also Tina Krontiris, *Oppositional Voices: Women as Writers and Translators of Literature in the English Renaissance* (London and New York: Routledge, 1992) p. 2. Women's contribution to learning and writing in the Renaissance is recognised and assessed by Katharina M. Wilson, *Women Writers of the Renaissance and Reformation* (Athens: University of Georgia Press, 1987); Jane Stevenson, 'Women, Writing and Scribal Publication in the Sixteenth Century', *GRR Manuscript Studies* 9 (2000), 1-32; Letizia Panizza and Sharon Wood, *A History of Women's Writings in Italy* (Cambridge: Cambridge University Press, 2000); Colette Nativel, *Femmes Savantes, Savoirs des Femmes* (Geneva: Droz, 1999).

¹²⁰ Wilson discusses women translators and adapters, in *Women Writers of the Renaissance*, pp. xxx-xxxi. See also Anne Laurence, *Women in England 1500-1700* (London: Weidenfeld and Nicolson, 1994)

reading, writing and translation of alchemical texts by women was made easier by the existing genres of women's religious writing and translation, and keeping of household receipt books. Modern scholarship has only recently begun to value the work of early modern religious writers, and translators of all genres, and to recognise that as expressions of authorial identity and skill these were more highly valued in Renaissance literary circles than in the twentieth century.¹²¹ Jeanne du Port's possible two translations of the verses of the *Rosarium* not only suggest that she may have experimented playfully with words and meaning, but provide the earliest known English translation of this part of a significant alchemical text. In other cases it is the affinity of alchemical receipts with women's writing in household receipt books that delineate the space for authorship. The private nature of this form of writing sometimes enables closer proximity to a female voice. Sarah Wiggles provides an example of a woman independent enough to use the phrase "my sealf", making it frustrating that little is known about her. A question arises over Lady Margaret Clifford's ability to compose and write: her extant letters are poorly written and spelled, yet the epitaph she composed for Richard Cavendish is a reasonable, if not elegant, piece of poetry, whilst her partial copy letter to Dr Layfield shows sophistication.¹²²

The continuities between magic and religion which Keith Thomas' study *Religion and the Decline of Magic* identifies at all levels of early modern society suggest how alchemy could have found cultural acceptance.¹²³ Whilst the populist or satirical view of women's alchemical practice may draw on widespread interest in some sort of practical routine alchemy, its over-emphasis obfuscates the interface with learned and moderately learned

p. 178.

¹²¹ See Krontiris, *Oppositional Voices*, pp. 10, 20; Sherry Simon, *Gender in Translation: Cultural Identity and the Politics of Transmission* (London: Routledge, 1996) pp. 1-3, 46; Susan Bassnett, *Translating Literature* (Cambridge: D.S. Brewer, 1997) p. 11; Jane Stevenson, *Women Writers in English Literature*, p. 7.

¹²² The problem of whether from the onset she was better able to dictate than write, or whether her ability to write or dictate improved during the course of her life, is one that I should like to pursue further.

¹²³ Keith Thomas, *Religion and the Decline of Magic* (Harmondsworth: Penguin, 1971).

culture which has emerged in this study. Thomas regards it as mistaken to see too much overlap between the practice of popular magic and the intellectual interests of contemporary scientists and philosophers which he sees as essentially two different activities. In his view, the learned activity of “virtuosi and university-based magicians” was affected by the Renaissance revival of magical enquiry and the learned volumes that characterised it, and was distinct from the practice of the village wizard.¹²⁴ Some women, who were not part of the court scene, perhaps like Sarah Wiggess, simply copied or collected receipts without, apparently, a great deal of knowledge of the intellectual tradition, and may have been female representatives of an alchemical underworld inhabited by men such as Simon Forman.¹²⁵ However, Madame de la Martinville, Jeanne du Port, and Lady Margaret Clifford were women close to court, who apparently understood the relatively sophisticated intellectual background and literary associations of Paracelsian alchemy. Their cases suggest that alchemy did offer the opportunity for some women to enter into a contemporary knowledge quest which had a coherent intellectual tradition.¹²⁶ It may therefore be more useful to think in terms of a continuum of alchemical practice, from the transmission of receipts for practical technological tasks of distillation, dyeing, perfumery, food preservation, and medical preparations; through religious and magical rituals, concerned with the philosophers’ stone and the alchemical mass, in which the process predominates over philosophic explanation; to learned texts, which include critical judgement on receipts, and philosophic explanations.¹²⁷

¹²⁴ Thomas, *Religion and the Decline of Magic*, p. 271.

¹²⁵ See Lauren Kassel, 'Simon Forman's Philosophy of Medicine', and Gamini Saldado, *The Elizabethan Underworld* (Gloucester: Alan Sutton, 1984).

¹²⁶ Shakespeare’s Helena is discussed in chapter four; see also Frances Yates, *Shakespeare’s Last Plays*. On the satirical tradition see Linden, *Darke Hieroglyphickes*, pp. 37-103.

¹²⁷ Archer, 5. xviii, suggests there was a continuum of beliefs "Between the Philosopher's Stone and rosewater, the chymist and the amateur healer".

This positioning of women's alchemical writings within that continuum adds to the debates about who participated in experimental early modern science. It challenges ideas of non-existent, or insignificant, female practice, even though alchemy does not seem to have been usually a primary activity but one amongst a range of these women's activities.¹²⁸ This study builds on William Eamon's identification of the practice of amateur "secrets" within household activity as an aspect of science, and supports the argument that the extent of women's roles in these significant household technological activities has been undervalued.¹²⁹ The viewpoint that almost all women were too busy coping with pregnancies and domestic life to pursue a luxurious interest in science overlooks the point that in the process of managing childbirth and household affairs, women engaged in what is today regarded as technology, preparing a wide range of alchemical medicines, distilled waters, cordials, dyes, colourings, imitation stones and finishes, that fell into the housewife's province alongside herbalism, food preservation, cookery, fishing, needlework, and gardening.¹³⁰ A special alchemical closet was not considered essential. Even though it is not clear exactly where Lady Margaret Clifford, Quercitan's daughter or Isabella Cortese practised, it is apparent that locations within the boundary of the house such as the kitchen hearth, or the still-room, were significant locations for the sort of female knowledge explored through household technology.¹³¹

¹²⁸ The same is true for male practitioners, who were often doctors or vicars.

¹²⁹ Eamon, p. 4. Hunter and Hutton, pp. 1-6.

¹³⁰ The former view is put forward by Patricia Phillips, *The Scientific Lady: A Social History of Women's Scientific Interests 1520-1918* (London: Weidenfeld and Nicolson, 1990) p. xii. Elizabeth A. Spiller asserts that women rarely entered the alchemical closet in 'Reading through Galileo's telescope. Margaret Cavendish and the experience of reading', *Renaissance Quarterly* 53.1 (2000) 192-221, (p. 211).

¹³¹ The gentlewoman of York explicitly refers to the hearth ("take sixe penyeweight of this powder, & grinde it w^{ith} yo^{ur} said matter & put it into a crucible well luted & sett it under yo^{ur} herthe in the Chimnye", *The Margaret manuscript*, ff. 52r-v). Many household books addressed to women discuss distillation: examples discussed in this thesis include, in chapter three, Isabella Cortese's *I Secreti*, and in chapter four Charles Estiennes and Jean Liebault's *Maison Rustique, or the Countrie Farme*, ed. by Gervase Markham, transl. by Richard Surfleet (London: Bonham Norton, 1600).

However, this study suggests that women's alchemical practice was not exclusively a household activity. Some women alchemists worked in industrial locations. Mademoiselle de la Gournay negotiated the use of a Parisian glassworks, whilst Isabella Cortese implied that her women readers may have access to metalworking and glassworking facilities. Lady Margaret Clifford and her friend Lady Shrewsbury were seriously interested in mining, although it is unclear whether they ever entered a mine, unlike Martine Mertereau, Dame de Beausoleil, who described her trips to mining communities in great detail. Although not all women participated in industrial activity, others show their interest in related crafts: Lady Margaret Hoby recorded a visit to a London glassworks with her mother, and conversations with goldsmiths.¹³²

Women's participation in science is sometimes presented as insignificant, as amateur or recreational, a point challenged by the case studies.¹³³ The figure of the *curioso* or virtuoso male is well established in the history of science and the case studies suggest that there were also curious women. Isabella Cortese's collection of secrets is a sort of cabinet of curiosities in book form, including marvellous and amusing tricks for creating illusory changes alongside practical advice. Marie de Gournay describes herself as a curious woman.¹³⁴ The writings associated with Jeanne du Port and Lady Margaret Clifford suggest inquisitive minds. However, although many male *curiosi* were gentlemen, the significant point that emerges from the case studies is that the alchemy of these women was not a recreational activity. Time, money, business acumen and practical application did matter, and experimentation was carried out with serious concentration. The range of Lady Margaret Clifford's business interests and ideas for reform, as well as domestic responsibilities,

¹³² *The Private Life of an Elizabethan Lady: The Diary of Lady Margaret Hoby 1599-1605*, ed. by Joanna Moody (Stroud: Sutton, 1998) pp. 134, 91, 94, 98.

¹³³ Patricia Phillips states that "Nor do I mean to imply that these women pursued their interest much beyond the level of recreation", in *The Scientific Lady*, p. xii.

¹³⁴ Marjorie Henry Ilsley, *A Daughter of the Renaissance*, pp. 94-6.

contradicts the idea that she “dabbled” in alchemy because she had nothing much else to do.¹³⁵ Sarah Wigges was apparently earning a living through midwifery, medicine and perhaps the counterfeiting of gems. Quercitan’s daughter has time, money and servants, but her experimentation is not frivolous social recreational activity; her letters suggest a solitary watcher exhibiting powerful concentration.

Stephen Shapin has drawn attention to the invisibility of women participants in science, and the way in which women and servants were generally considered unreliable witnesses.¹³⁶ The case studies add to the available evidence, showing a variation in women alchemists’ testimonies. Certainly Lord Willoughby and Lady Anne Clifford regarded Lady Margaret as an expert witness. Quercitan’s daughter defended her recollections and observations in the expectation of criticism. Isabella Cortese gives credence to the secrets she passes on. Sarah Wigges apparently annotates comments in her notebook. They, and their work, also perform the significant role of truth-mediator through their position within alchemical culture and the movement of alchemical literature between cultures and locations. The many editions of Isabella Cortese’s *I Secreti* popularise in published form secrets, which originate quite probably from a noble household and an academy, for women in literate but less privileged households. Quercitan’s daughter stands between her mentor, who criticises her, and the anonymous servant she blames. Jeanne du Port’s apparent translation of verses of the *Rosarium Philosophorum* (like other alchemical translations by women) enable its poetry to be read in England in the vernacular, thus bridging high and middle-brow culture. Lady Margaret Clifford mediates through patronage of vernacular literature, and of alchemists, and her movement between the court, groups of learned women, and her own households. *The*

¹³⁵ Georgina Blakiston calls her alchemical practice “dabbling” in *Woburn and the Russells* (London: Constable, 1980) p. 43. On her business and mining interests see chapter five, and the works of Richard Spence.

¹³⁶ Stephen Shapin, ‘The house of Experiment in Seventeenth-Century England’, *Isis*, 79 (1988), 373-404; and *A Social History of Truth* (Chicago: The University of Chicago Press, 1994) pp. 359-362, 369-372.

Margaret manuscript crosses between learned and popular culture, by compiling philosophical references next to the opinion of honest craftsmen such as “Mr John the Golde Smyte” for testing gold “good both in the eye: the tutche and in the hameringe” and “honest Mr John Remis” for turning lead into silver. The opinions of women are, by implication, included in this cross-over, through the recording of the findings of the daughter who tested a receipt, and the methods of the Gentlewoman of York who supplied one.¹³⁷

1560-1616 was an early phase in an era when concepts of natural philosophy were changing and coming closer to modern notions of science. The medieval mode of subordinating natural philosophy to theological interests altered as natural philosophy was differentiated from and reintegrated with religious belief. The sequence was complex with, for example, a shift towards a magical philosophy of nature resulting in a new integration of scientific and religious motifs.¹³⁸ Alchemy is accepted by historians of science as a major source for the chemical experimental tradition.¹³⁹ The influence of the Paracelsian movement in stressing the teachings of experience amongst natural philosophers, physicians and intellectuals is also accepted to have played an important part in the Scientific Revolution in mathematical sciences, natural history, anatomy and medicine.¹⁴⁰ Male Paracelsians were often in favour of new discoveries. Blaise de Vigenère, for example, argued that it was reasonable to make a place for antiquity but that it did not follow from this that only the work of the ancients should be approved.¹⁴¹ There is increasing interest amongst historians of science in understanding the context of the scientific revolution, partly to understand why

¹³⁷ *The Margaret manuscript*, ff. 91v, 51r.

¹³⁸ John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (Cambridge: Cambridge University Press, 1991) pp. 16, 56-58.

¹³⁹ John Henry, *The Scientific Revolution and the Origins of Modern Science* (Basingstoke: MacMillan, 1997) p. 32.

¹⁴⁰ Paul H. Kocher, 'Paracelsian Medicine in England: the First 30 Years (c.a. 1570-1600)', *Journal of the History of Medicine* 2 (1947), 451-80; Henry, *The Scientific Revolution*, pp. 32-3.

¹⁴¹ In his preface to N. Chalcondoye, *L'histoire de la décadence* (Paris: 1571) cited by Paolo Ross in *Philosophy, Technology and the Arts in the Early Modern Era*, transl. by Salvator Attanasio (New York: Harper and Row, 1970) p. 74.

science eventually became such a dominant paradigm, but also to understand the influences on discoveries of men like Robert Boyle and Isaac Newton.¹⁴²

The case studies in this thesis suggest that Paracelsian women alchemists may have taken part in this shift and therefore can be said to form a neglected and underestimated aspect of the social and intellectual context of the scientific revolution. They offer counter-evidence to David Noble's thesis that the hermetic movement resembled the humanist movement which spawned it, and was "male in composition, ascetic in spirit, and masculine in purpose" which generated only temporary openings for women because of its anti-scholastic, anticlerical and religious tendencies.¹⁴³ During the 56 years covered by this thesis the case studies suggest an alchemical movement with more positive attitudes to women, with examples of women on friendly terms with clerical and/or married men, some of whom wrote material for women to read. Women alchemists are shown reading learned texts and carrying out experiments. At the start of the period of study Isabella Cortese's book of useful secrets are presented uncritically, as useful discoveries.¹⁴⁴ By the late sixteenth and early seventeenth century different sorts of evidence emerge. Quercitan's daughter's experimentation is closer to modern science, in its inclusion of quantities, timings, equipment design, observed results and explanations for failure. Madame de la Martinville is named repeatedly for proving chemical receipts.¹⁴⁵ *The Margaret manuscript* provides some detailed annotations on what works and what does not, with alternative methods, further reading and clearly identified sources. Less educated women went less far. The Sarah Wiggles manuscript provides some detailed comments based on experiences in medical matters, though not for alchemy,

¹⁴² See Henry, *The Scientific Revolution*, pp. 1-7; Betty Jo Dobbs, *The Foundations of Newton's Alchemy or "The Hunting of the Green Lyon"* (Cambridge, Cambridge University Press, 1975).

¹⁴³ David F. Noble, *A World Without Women: The Christian Clerical Culture of Western Science* (New York: Alfred A. Knopf, 1992) pp. 175-6.

¹⁴⁴ "Da qui le speculationi, dalle quale son fatti poi le scienze, & l'altre cose trovate dall'intellecto son nate: Da qui parimenre, è nato l'investigare gl'occulti secreti della natura: ma che dico l'investigare?"

¹⁴⁵ London: British Library, Sloane MS 693, ff. 145r, 148r, 159r.

suggesting that it interested, but was not necessarily a central activity of, the manuscript compiler.

Much of the evidence for women alchemists between 1560 and 1616 is in manuscript. The majority of alchemical texts, notes and records were also hand-written since alchemists kept their knowledge to themselves and only rarely divulged their sources or results in print.¹⁴⁶ Manuscripts were copied in standardised formats, rewritten and circulated, often anonymously. R.J. Evans describes alchemy as an elusive tradition with what little that was committed to paper written in purposefully highly allusive and secretive language, composed by men who wandered through Europe.¹⁴⁷ This research suggests that women were part of that network and that they occasionally wrote within the genre. Their use of symbols may have been intended to veil meaning; it also causes some interpretative problems in this study. *The Margaret manuscript*, for example, includes many symbols within the text, whose meaning requires deciphering for a full understanding of the chemistry and symbolism described or implied. I have endeavoured to decode them, using the work of Fred Gittings and other sources.¹⁴⁸ This attempt has not always been fully successful. However, since the purpose of this study is not to decipher chemical processes and to debate their value to the development of chemistry, it has not been an insurmountable problem that the meaning of some symbols remains unclear. Enough has been understood to confirm that an alchemical process is being described.

The complexity of tracing sources of manuscript material and deciphering the

¹⁴⁶ H.R. Woudhuysen, *Sir Philip Sidney and the Circulation of Manuscripts 1558-1640* (Oxford: Clarendon Press, 1996) p. 13, 120, 15. Recent research on women poets in the sixteenth century concludes that women's poetry entered print just as much as manuscript: see Jane Stevenson, 'Women, Writing and Scribal Publication in the Sixteenth Century', 1-32.

¹⁴⁷ Evans, p. 201.

¹⁴⁸ Fred Gittings, *Dictionary of Occult, Hermetic and Alchemical Sigils* (London: Routledge and Kegan Paul, 1981). James R. Partington, *Everyday Chemistry* (London: MacMillan, 1952) p. 140. Betty Jo Dobbs, *The Foundations of Newton's Alchemy*, pp. xii-xiv, 138. Douglas McKie, 'Some Early Chemical Symbols', *Ambix*, IV (1951), 75-77. Gareth Roberts, *The Mirror of Alchemy* (London: The British Library, 1994) p. 21. Oxford, Bodleian Library: Ashmole MSS 1490, 1459 Item 11.

circulation of material has emerged as a complex task made more difficult by the lack of edited versions of standard texts and little baseline research on provenance and movement of alchemical manuscripts. For example, a complete analysis of every source mentioned in *The Margaret manuscript* would necessitate a serious study of its own. The resolution of all these problems is not crucial for many aspects of this study, as I am not claiming any originality by women alchemists, but rather, making a study of their participation. More detailed analysis has been undertaken where it was held to be significant, for example in ordering and dating the sequence of manuscripts associated with Madame de la Martinville, Quercitan's daughter and Neptis, in order to draw conclusions about these women's identity, or in the dating of *The Margaret manuscript*, to help determine its relationship to Lady Margaret Clifford.

Even when a manuscript or text is attributed to a woman, there are difficulties in establishing whether it constitutes a constrained form of female authorship, which is a wider problem encountered in women's history.¹⁴⁹ As the space between historical fact and literary output is examined, the notion of authorship becomes fluid and it is increasingly difficult to establish whether a woman picked up a pen and wrote all or some of the attributed text, dictated to a scribe, asked for work to be written, or was represented symbolically as author. In all the case studies this problem arises, though they show varying emphases between literary and historical evidence. The search for a female "voice", which may in itself be a constructed representation, cannot be avoided, but does not resolve the issue of authorial identity. Chapter three argues that what sounds like Isabella Cortese's voice can be heard in the preface and in some introductory sections within the text of *I Secreti*, but that much of her material is collated from male sources. Despite considerable archival research it has not been

¹⁴⁹ Diane Purkiss, *The Witch in History* (London: Routledge, 1996) p. 93. Danielle Clarke, 'Introduction', *This Double Voice*, pp. 1-15, at 2, 8. Patricia Crawford and Laura Gowing, *Women's Worlds in Seventeenth-century England: A Sourcebook* (London: Routledge, 2000) pp. 8-9.

possible to establish that Isabella Cortese was a real person. Chapter four suggests that Quercitan's daughter is likely to have been Jeanne du Port, the biological daughter of Joseph du Chesne, and explores the voice that emerges in her letters, which is both deferential and assertive. The process of manuscript collapse in transmission, however, means that there is a possibility that Quercitan's daughter may not be Jeanne du Port and I have therefore been perhaps over-cautious about using the name of the historical woman. It is also possible that the name Quercitan's daughter had symbolic meaning. There is nothing to suggest that Madame de la Martinville did not write the treatises which bear her name, but neither is there any definite provenance or historical identity. In chapter five I address the problem of the handwriting in *The Margaret manuscript* and suggest that Lady Margaret Clifford's hand did not write the annotations, as had previously been thought. However, other evidence defines Lady Margaret's alchemical interests and makes it very likely that she was strongly associated with the manuscript, possibly as patron. Because of the importance of establishing as clearly as possible the relationship between an historically identified woman and text, more emphasis is given to this aspect in the chapter on Lady Margaret.

In all the case studies a process of joint working between men and women is reflected in the written text. The problem of distinguishing a woman's contribution to a document with multiple authorship and diverse scribal markings is foregrounded in the receipt book attributed to Sarah Wiggles.¹⁵⁰ Even though the frontispiece demands belief that this is a woman's own work with the claim "Sarah Wiggles./ hir book", it is unclear whose hands, whose annotations, and whose compilation it really shows.¹⁵¹ Jayne Archer argues for multiple authorship and for the presence of many hands in the manuscript.¹⁵² There are at least three main hands. The first, which is similar to the hand which has written the

¹⁵⁰ The fallaciousness of assuming a model of single authorship in the early modern period is noted by Danielle Clarke, p. 13.

¹⁵¹ London: Royal College of Physicians, MS 654.

¹⁵² Archer, 6, vii-xii.

frontispiece, writes medical and cookery receipts which an annotating hand often attributes to other women, including “Mo[ther] Wigges”. Although one annotation, apparently by a woman, reads “this healed my husband in great extremity”, the first hand refers once to “my wife”, indicating a man’s involvement. Taken together with an occult method for curing toothache ending “Richard Wigges”, his joint authorship may be inferred.¹⁵³ Different hands have written two major alchemical treatises inserted into the manuscript: these are not annotated, and one is probably later than the first main hand.¹⁵⁴ Yet despite these problems, the assertion that this is Sarah Wigges’ book cannot be ignored; neither can the network of female family and friends which is implied; nor the field of knowledge which ranges from making soaps and cleaning materials, drinks, cordials and restoratives, to medical remedies with a heavy emphasis on remedies for childbearing and birth, to alchemical philosophy and the forging of gems.

A further complication is the problem of the meaning and effect of the symbolic signification of gender in alchemical literature in this period. Symbols of women in alchemical literature were part of the cultural context, as discussed in chapter two: these may have empowered women to participate; led to symbolic interventions in representations of women's alchemical practice; or to new entirely symbolic representations of women alchemists.¹⁵⁵

The problematic nature of female expression has emerged as a theme. Isabella Cortese encodes her book strongly with references to male clerical authority and omits any mentions of gender or sexuality, metaphors of which are central to much alchemical material.

¹⁵³ London: RCP MS 654, ff. 278, 318, 273.

¹⁵⁴ A small tight hand has copied out referenced passages from “Basil Valentin: his Triumphal Wagon of Antimony” (London: RCP MS 654, ff. 331-339). A looser, sometimes indecipherable hand, catalogued by the Wellcome Library as a later hand, has copied out receipts compiled by a doctor, Andrew Boord, such as “A philosophicall worke”, which includes Paracelsian alchemical philosophy (ff. 340-484).

¹⁵⁵ Annette Kolodny addresses the problem of reading women's texts in two ways: woman as historical person, and the symbolic significance of gender ('Turning the Lens on "The Panther Captivity": A feminist exercise in practical criticism', in *Writing and Sexual Difference*, ed. by Elizabeth Abel (Brighton: The Harvester Press, 1982) pp. 159-176).

Quercitan's Daughter's Letters are defined in their title by the author's relationship to Joseph du Chesne, although the struggle for the author to assert her own position is conveyed in the text. Madame de la Martinville describes, with elegance, traditional Paracelsian alchemy; whilst it is of great interest that she does this at all, her identity as a woman does not intrude. However closely Margaret Clifford may have supervised *The Margaret manuscript*, she is at one remove, and there is a tension in the manuscript between the association with a woman and traditional gendered imagery of the feminine as inferior to the perfect male: one particularly double-edged metaphor seeks to accept femininity in the shape of "Alchimye" as a beloved Lady, but then rejects it by surrounding her with prostitute handmaids.¹⁵⁶ John Thornborough shows a similar ambiguity in his treatise addressed to Lady Knowles: Lady Alchimy welcomes Lady Knowles into her field of knowledge, but the Work can only be perfected by Lady Alchimy's son.¹⁵⁷

A third problem arises through alterations to texts. Without an authenticated manuscript of Isabella Cortese's text it is impossible to know if there was a hidden editorial process at work by her publisher. It is demonstrable that her book was perceived in different ways during its diffusion, including at least one case where an extract loses its attribution to her overall authorship. Because several versions of *Quercitan's Daughter's Letters* are extant it has been possible to show how the text was altered during copying, including one annotation that seeks to prove that the text was not by a woman at all. The process of copying and circulation also led to the merging of the identities of Madame de la Martinville and Quercitan's daughter. The annotations in *The Margaret manuscript* date from the late sixteenth/early seventeenth centuries, but the problem of the hands and the nature of patronage have not been solved. It is not clear whether the name of Mistress Berkeley was

¹⁵⁶ f. 93v.

¹⁵⁷ London: British Library, Sloane MS 1799, ff. 74-104.

struck out from an alchemical manuscript addressed to her in order to protect her identity, to erase a woman's name from the history books, or for some other reason.¹⁵⁸

The impossibility of reconciling some of these problems may appear to undermine the argument of this thesis, that women were alchemists. However, as Dianne Purkiss has concluded with regard to the evidence for women's testimonies at witch trials, "it is questionable whether the early modern period offers any texts authored 'purely' by women in this very demanding sense".¹⁵⁹ Any text by a woman in the early modern period was prone to male intervention, in the composition, the transcription or printing and, she continues, "[I]n order to tell any kind of a story, women had painstakingly to insert themselves into such discourses by careful negotiation".¹⁶⁰ This process of negotiation is apparent throughout the case studies, and paradoxically provides the sort of unsatisfactory evidence that is expected to be found in women's history. Although much of the evidence cited in this study is fragmentary without full provenance, and despite the many unanswered questions, it does seem to add up to a suggestive body of evidence that women were active alchemists between 1560 and 1616.

¹⁵⁸ Oxford: Bodleian Library, Ashmole 1492, VII, pp. 29-39 followed by two poems using alchemical themes at pp. 39 and 40. Mistress Berkeley's name has been written, obscured and uncovered.

¹⁵⁹ Purkiss, *The Witch in History*, p. 93.

¹⁶⁰ Purkiss, p. 93.

Chapter Two

The Cultural Context

This chapter seeks to investigate the broad cultural context in three countries that may have enabled the women whose alchemical work is considered later in this thesis to play an active role.

The culture of learned/semi-learned alchemy was complex. Alchemy was one way in which natural philosophers could theorise the relationship between eternal spirit and temporal matter. In the early modern period this found renewed expression at various interfaces between Christian humanism, neoplatonism, Paracelsianism, natural magic and popular culture. Alan Bullock describes Christian humanism as a lay movement independent of Church and universities, which profoundly affected a small elite of educated men and women, affecting the lives both of action and contemplation, and crossing Christian sectarian boundaries in an invisible college of humanist scholarship.¹⁶¹ For those with strong religious or spiritual motivations who wished to accommodate classical enthusiasms to the Christian faith there were two ways open to them: neoplatonism and biblical humanism, both of which appear to have influenced women discussed in this study, although the literature discussed also shows continuities with the Aristotelian influences of medieval alchemical tradition.¹⁶² Whilst Walter Pagel describes continuities between neoplatonism and Paracelsianism, the latter originated from a man who represented the antithesis of humanism, whose influence

¹⁶¹ Alan Bullock, *The Humanist Tradition in the West* (Wisbech: Thames and Hudson, 1985) pp. 34, 35; Paul H. Kocher, *Science and Religion in Elizabethan England* (New York: Octagon Books, 1969) pp. 6, 9.

¹⁶² Bullock, p. 30. On the relationship between neoplatonism and Paracelsianism see Walter Pagel, *Paracelsus: An Introduction to Philosophical Medicine in the Era of the Renaissance*, ed. by Marianne Winder (London: Karger, 1982). Aristotle's theory of the four elements and the formation of metals and minerals was fundamental: see E.J. Holmyard, *Alchemy* (Harmondsworth: Penguin, 1957) pp. 21-24; Gareth Roberts, *The Mirror of Alchemy* (London: British Library, 1994) pp. 45-50. I have found more emphasis on biblical humanism in the English examples.

cannot be understood without reference to gnostic and magical practice in popular culture.¹⁶³ Charles Webster argues that none of the attempts so far made to relate Paracelsus to major streams within the humanistic movement have met with success, pointing to the huge gulf which Paracelsus initiated between himself and the humanist programme, constantly distancing himself from contemporary learned culture. His opposition to humanist scholars was equalled by his bonds with ordinary people and respect for their knowledge.¹⁶⁴ However, in subsequent generations in certain humanist circles, such as those around the courts of the Medici, Henri IV, Rudolf II and Elizabeth, an intellectual form of Paracelsianism emerged, emphasising that reason and experience were both required in the development of knowledge. This tendency within the broad definition of Paracelsianism is suggested in some of the writings associated with women in this study, though other examples of women's alchemical practice have more in common with popular culture, as discussed below.

The impact of Paracelsianism on women

The contemplative, mystical Christian humanism that found expression in fifteenth century Florentine neoplatonism developed across Europe, resulting in art, literature and attitudes that had a profound effect on European cultural life.¹⁶⁵ Women's participation in neoplatonic culture provides a background to their apparent study and practice of alchemy, a theme developed in chapters three, four and five. By the 1560s, when the first women's alchemical writings located in this study appear, a specialised form of neoplatonism had emerged, Paracelsianism, strongly associated with practical alchemy. The literature attributed to

¹⁶³ Pagel, *Paracelsus; 'The Eightness of Adam and Related "Gnostic" Ideas in the Paracelsian Corpus' in Religion and Neoplatonism in Renaissance Medicine* ed. by Pagel and Marianne Winder (London: Variorum Reprints, 1985) VIII pp. 119-139. On Paracelsianism and irregular practitioners see *Science, Culture and Popular Belief in Renaissance Europe*, ed. by Stephen Pumfrey, Paolo L. Rossi, Maurice Slawinski, (Manchester: Manchester University Press, 1991) p. 212.

¹⁶⁴ 'Paracelsus and Demons: Science as a Synthesis of Popular Belief', in Istituto Nazionale di Studi sul Rinascimento, *Scienze credenze occulte livelli di cultura* (Florence: Leo S. Olshcki, 1980) pp. 3-20 (p. 4).

¹⁶⁵ Bullock, *The Humanist Tradition*, p. 31.

Paracelsus, despite its unclear provenance, was a major influence on sixteenth and early seventeenth century alchemists, and this is also apparent in writings associated with women in this study and some of the men with whom they worked. The women's alchemical writings examined here draw on writings attributed to Paracelsus from all stages of his life.¹⁶⁶

Paracelsus' early medicinal/alchemical works which Sudhoff dates to 1526-7 are represented, including the *Archidoxis*;¹⁶⁷ his more mature and philosophical works of the 1530s are only referred to tangentially;¹⁶⁸ and there are frequent allusions to works classed by Sudhoff as "Philosophia magna. Spuria".¹⁶⁹ *The Margaret manuscript* is particularly rich in references to works by the Paracelsians Isaac Holland, A Portu Aquitanus, Alexander Suchten, and Blaise de Vigenère.¹⁷⁰ The English and French sources also refer to legendary aspects of the Paracelsian myth.¹⁷¹ The Italian example of Isabella Cortese's *I Secreti* draws, I suggest in

¹⁶⁶ This study uses Sudhoff as a guide and does not to seek to enter into the debates on the dating and authorship of works attributed to Paracelsus.

¹⁶⁷ *The Margaret manuscript* (f. 44r) refers to both parts of *De Transmutationibus Metallorum*, which comprises two parts, *De Cementis* and *De Gradationibus*, giving receipts for "cements" and fourteen "degrees" of preparation. The *Archidoxis* gives receipts for quintessences, arcanae, specificks, elixirs and other remedies, and is named in *The Margaret manuscript* (f. 44r) and the *Discours philosophical* (f. 77v). The *Discours philosophical* also refers to the *Liber de Longa Vita* from this period (ff. 77v, 80r).

¹⁶⁸ *De Natura Rerum*, dated at 1537 by Sudhoff, discusses the generation, life, death, increase and transmutation of natural things by seven alchemical degrees (calcination, sublimation, solution, putrefaction, distillation, coagulation and tincture). It appears to be referred to in *The Margaret manuscript* in the instruction "reade Paracelsus his seaven books of natural things" (f. 43r). The *Discours philosophical* refers to the *ens*, a concept developed in the *Opus Paramirum*.

¹⁶⁹ *The Margaret manuscript* refers extensively (ff. 41r, 42v, 43r, 43v) to the *Liber Vexationum (Fixationem)*, a more obviously magical work with sections on the planets, metals, precious gems and stones, and to the *Libellus de Tinctura Physicorum* (by name at ff. 44r, 127v, and by content at ff. 127v, 128v, 118r), which explains the process of making tinctures in terms of symbolic images such as the rose-coloured blood of the lion, the gluten of the eagle, the *Lili* and the swan. The text of the latter is cited significantly by the *Discours philosophical* (at ff. 79r, 79v, 80r). Discussions in *The Margaret manuscript* on *Electrum* (f. 127v) appear to be drawn from *Das manuale de lapide philosophico medicinali*.

¹⁷⁰ See chapter five, and, also ff. 49v, 42v, 43r-v, 112r, 121r, and 128r of *The Margaret manuscript*.

¹⁷¹ *Splendor Solis* (London: K. Paul, Trench, Trubner and Co., 1921) by Solomon Trismosin [pseud.], teacher of Paracelsus, includes a summary of an alchemical process called the red lion. The stellar lion is depicted in *Philosophia Reformata* (Frankfurt: 1622) by Johann Daniel Mylius, where it is described as the Universal Solvent, the Green Lion of Mercury of the Wise (reproduced in Stanislas Klossowski de Rola, *The Golden Game* (London: Thames and Hudson, 1988) pp. 176, 181). *The Epistola Nobilissime* includes images of the stellar lion, the flying eagle, and a sequence of black, azure, and blood red lions, associated with the making of Azoth, which I have not located in a specific text by Paracelsus but which are found in publications associated with Paracelsianism, including the process of making the red lion in the *Splendor Solis*. The influence of the *Splendor Solis* may also be found in *The Epistola Nobilissime*. French manuscript translations under the name *La Toysor d'Or* were made in the sixteenth and seventeenth centuries which could have been known to Madame de la Martinville and Quercitan's Daughter (see Oxford: Bodleian Library, Ashmole MS 1395). There is an indirect link with Paracelsianism between *Quercitan's Daughter's Letters*, which mentions papers/boxes M, and the Rosicrucian manifesto the *Fama*, in which Paracelsus is named as one who "was none of our Fraternity, yet

chapter three, from the natural magic tradition which includes elements of Aristotelian and neoplatonic ideas, but is also a quasi-Paracelsian work: it does not cite Paracelsus directly, but like other examples in the genre of books of secrets reflects the mythology of the wondering alchemist who seeks to learn from practical experience the secrets of nature within a religious context.¹⁷²

This study suggests that Lady Margaret Clifford, Madame de la Martinville and Quercitan's daughter benefited from close liaison with distinguished Paracelsians for their alchemical knowledge. Joseph du Chesne, one of three court physicians to Henri IV, is perhaps *the* most significant French Paracelsian.¹⁷³ After his death his reputation increased in England through the influence of his younger colleague Theodore de Mayerne, who moved to the English court of James I and Queen Anne, after Henri's assassination, later becoming physician to Queen Henrietta Maria.¹⁷⁴ De Mayerne appears to have brought with him papers about the alchemical mythology of Neptis and the Druid associated with Du Chesne and his daughter, discussed in chapter four. John Dee, in whose circle Margaret Clifford probably moved, is now recognised as a significant figure in the dissemination of Paracelsianism in England.¹⁷⁵ Dee owned the Paracelsian texts referred to in Madame de la Martinville's letters and *The Margaret manuscript*, in several editions and copies. These do not seem to have been exceptions: other fragmentary examples of Paracelsian alchemists working for, with, or educating women about alchemy, are described in subsequent chapters.

nevertheless he diligently read over the Book M' and had conferred on others his knowledge and understanding of nature. See Frances Yates, *The Rosicrucian Enlightenment* (London: ARK Paperbacks, 1972) p. 241, and chapter four of this thesis.

¹⁷² On the natural magic tradition see Eamon, p. 213.

¹⁷³ See Allen G. Debus, *The French Paracelsians* (Cambridge: Cambridge University Press, 1991) pp. 33-36 and Bruce Moran, *The Alchemical World of the German Court: Occult Philosophy and Chemical Medicine in the Circle of Moritz of Hessen 1572-1632* (Stuttgart: Franz Steiner, 1991) pp. 71, 115-122.

¹⁷⁴ Hugh Trevor-Roper, 'Harriot's physician: Theodore de Mayerne', in *Thomas Harriot: An Elizabethan Man of Science*, ed. by Robert Fox (Aldershot: Ashgate, 2000) pp. 48-63.

¹⁷⁵ Julian Roberts and Andrew G. Watson, *John Dee's Library Catalogue* (London: The Bibliographical Society, 1990) pp. 42-44.

It is too simple to speak of one Paracelsian movement since its expression was affected by social status, education, and local cultural variations. Marco Ferrari identifies a two-tier diffusion of Paracelsian ideas: an intellectual professional development by professors of medicine and doctors, and a popular dispersion.¹⁷⁶ Some women like Madame de la Martinville and Neptis, appeared to emulate the elite secret status of the hermetic professionals, whilst others, like Isabella Cortese as compiler and Lady Margaret Clifford as patron of literature, assisted and participated in the processes of popular diffusion. Chapters three to five discuss women's participation in the modes of diffusion of alchemical ideas, through books aimed at a popular market with female readers, and the passing on of receipts.

Cultural variations across Europe also affected the expression and diffusion of Paracelsianism from its origins in central Europe to a flourishing period under the Medici, and the largely Protestant movement of the late sixteenth century in France and England.¹⁷⁷

The transmission of alchemical ideas was affected by cross-European movements: from 1580, French Paracelsianism was strongly associated with the Huguenots, who, after the assassination of Henri IV, looked to England and Prague.¹⁷⁸

This movement is reflected in English copies of the letters of the daughter of Joseph du Chesne, and an English collection of the papers of Theodore de Mayerne referring to French women alchemists.

This study raises the problem of the extent to which women may have read Paracelsian works. There is no doubt that there was a wide diffusion of works by Paracelsus in print and in manuscript between 1560 and 1600: in England this process has been

¹⁷⁶ Marco Ferrari, 'Alcune Vie di Diffusione in Italia di idee e di testi di Paracelso', in Istituto Nazionale di Studi sul Rinascimento, *Scienze credenze occulte livelli di cultura* (Firenze: Leo S. Olschki, 1982) pp. 21-29.

¹⁷⁷ Allen G. Debus, 'Paracelsianism and the Diffusion of the Chemical Philosophy in Early Modern Europe', in *Paracelsus: The Man and his Reputation, His Ideas and their Transformation*, ed. by Ole Peter Grell (Leiden: Brill, 1998) pp. 226-244; Hugh Trevor-Roper, 'Paracelsianism made Political 1600-1650', in Grell, *Paracelsus*, pp. 119-133, (p. 120).

¹⁷⁸ Trevor-Roper, 'Paracelsianism made Political', pp. 123, 126.

documented by Charles Webster.¹⁷⁹ Works by Paracelsus were collected not only in university libraries for male readers but also in private library collections, some of which were accessible to women.¹⁸⁰ In the early stages of the diffusion of Paracelsus' writings outside Germany the literature was available only to men or women who read Latin or German, but by the 1590s a wider diffusion became possible as manuscript translations circulated in the vernacular, a process in which I suggest that some women took part, as patrons and translators.¹⁸¹ The case studies suggest that some French women were well versed in Paracelsus' writings. Louise Schleiner's view that more women could read than could write, and that others heard works read aloud, suggests that the fragments of evidence for women writing about Paracelsian alchemy may represent more who read, or heard, about it.¹⁸²

The Paracelsian literature seems mostly to have been deposited in the hands of Paracelsus' disciples and published after his death. The emergence of these writings played a large part in the formation of the Paracelsian movement.¹⁸³ One way of reading Paracelsian

¹⁷⁹ Charles Webster, 'Alchemical and Paracelsian Medicine', pp. 301-333.

¹⁸⁰ Webster, 'Alchemical and Paracelsian Medicine', pp. 301-333, (p. 320). An example is the library in which the learned translator Jane Lumley (1537-1576) worked, which contained *De Gradibus* (Basle: 1568) as well as works by the Paracelsians Leonardo Fioravanti and Timotheo Rossello, and the *Rosarium Philosophorum* (*The Lumley Library. The Catalogue of 1609*, ed. by Sears Jayne and Francis K Johnson (London: British Museum, 1956) Item 2297, 2047, 2254, 2183, 2383). Lumley's father's vast book collection made it possible for Jane and her brother and sister to acquire classical learning. Jane lived most of her married life in her father's house, continued to use his library and kept her own books (a least fifteen) and translation exercises there. See Jayne and Johnson, Index, and Dianne Purkiss, *Three Tragedies by Renaissance Women* (London: Penguin, 1998) pp. 167-9. Lady Lumley translated *The Tragedy of Iphigeneia* in the early 1550s, probably 1553, and Purkiss suggests that her notes about the medicinal eaglestone on the back page of *Iphigeneia* indicate that she shared her husband's interest in medicine.

¹⁸¹ Examples of translation in the vernacular: the copy made by Simon Forman, the irregular astrological medical practitioner, in 1591 of "The 7 bookes of Aurelius Theophrastus Paracelsus [...] as totching the Nature of Things, and finally 2 bockes concerning man", which he had obtained from a copy made by one William Falowfield in July 1590 (Black, *A Descriptive, Analytical & Critical Catalogue*, p.1364, MS. 1490, item 79); by 1592 in France Roch le Baillif had written several works of what Hugh Trevor-Roper describes as "somewhat crude Paracelsian propaganda": see his 'The Sieur de la Rivière, Paracelsian Physician of Henry IV', in *Science, Medicine and Society in the Renaissance*, ed. by Allen G. Debus (London: Heinemann, 1972) vol. 2, pp. 227-250, (p. 229).

¹⁸² Suzanne W. Hull, *Chaste Silent and Obedient* (San Marino: Huntingdon Library: 1982) p. 4. Louise Schleiner, 'Women's Household Circles as a Gendered Reading Formation: Whitney, Tyler and Lanyer', in *Tudor and Stuart Women Writers*, ed. by Schleiner (Bloomington and Indianapolis: Indiana University Press, 1994) pp. 1-29.

¹⁸³ Trevor-Roper, 'The Paracelsian Movement', p. 162.

literature is to foreground the wide range of types of people, including women, who are cited as authorities for their practical experience. The literature describes Paracelsus travelling restlessly, learning from magicians, herb-women, gypsies, physicians, abbots, barbers, commoners and nobles, expert and simple.¹⁸⁴ Through these allusions, Paracelsus became associated with popular culture and his medical-theological concerns were presented as knowledge appropriate for many groups to use. The inclusion of women in this list may reflect not only the reality of many women's involvement in medical care, but also a symbolic role as bearers of knowledge of matters of soul and body, both of which were crucial to Paracelsian medicine.

Whether the Paracelsian idea that women and other groups possessed valuable knowledge was symbolic, or based in social reality, the effect was a challenge to scholastic learning. Paracelsus' explicit criticism of the narrowness of university approaches was taken seriously enough to threaten the power and knowledge bases of university men who consequently attacked him for preferring the views of the common people, and for acting as the devil's instrument.¹⁸⁵ His repeated claim that practical experience was more important than book learning was potentially significant for anyone outside the university system, which in practice meant all women and most men.¹⁸⁶ The act of publishing books of secrets in Italy in the 1560s can be seen in this light: a valuing of the practical experiences of non-

¹⁸⁴ See Jolande Jacobi and Norbert Guterman, *Paracelsus: Selected Writings*, (London: Routledge, 1951) pp. 45, 78, 131. I acknowledge my debt to the translations of Jacobi and Nicholas Goodricke-Clarke in this contextual chapter.

¹⁸⁵ John S. Mebane in *Renaissance Magic and the Return of the Golden Age: The Occult Tradition and Marlowe, Jonson and Shakespeare* (Lincoln: University of Nebraska Press, 1989) pp. 95, 105, discusses the *Disputationem de medicina nova Philippi Paracelsi* in which Thomas Erastus, Professor at the University of Heidelberg, attacks Paracelsus' claim that the common people possess more wisdom than the educated classes. Mebane also describes how William Perkins, Professor of Theology at Cambridge, uses Paracelsus as an example of one of three types of witch (learned magicians, Catholics and the uneducated). Paracelsus, like Pico della Mirandola and Agrippa, is an example of a learned magician, although he might just as easily have been condemned under the other two categories as a Catholic who valued the undereducated. Perkins notes Paracelsus' links with village "cunning men", or "wise women" to whom the ignorant populace turned instead of relying on genuinely learned and licensed physicians. For Perkins, practitioners of the folk medicine valued by Paracelsus were practitioners of the devil.

¹⁸⁶ Mebane, *Renaissance Magic*, p. 95.

academics and their diffusion to a wider public.¹⁸⁷ Paracelsians elsewhere in Europe also published on secrets previously available mainly in Latin or in manuscript. Oswald Croll did so expressing the belief that he would be attacked by hermetic philosophers for popularising their secrets.¹⁸⁸

In his delineation of the impact of Paracelsianism in coordinated efforts in the scientific field, and planning in the wider social and political spheres, Charles Webster suggests that the history of natural magic is closely tied up with a profusion of schemes for academies and specialised societies, as well as broader social and utopian proposals. In England, for example, he cites John Dee and Thomas Muffet as seeking to reform medicine.¹⁸⁹ Even though Paracelsianism became associated with the conservatism of courtly culture, as discussed below, it contained within it intellectual affinities with groups favouring a radical overhaul of all institutions, including medical humanist culture.¹⁹⁰ Paracelsus' writings were hostile to the learned professions and princely courts, but Paracelsians at court took his unshaped ideas and directed them into reforms.¹⁹¹ William Eamon suggests that in the Neapolitan intellectual tradition, for example, elevated aims of alchemical and experimental research were often associated with moral and religious reforms, including the work of Giambattista della Porta, whose *Magia naturalis*, I argue in chapter three, has much in common with Isabella Cortese's *I Secreti*.¹⁹²

The utopianism of the Paracelsian movement did not alter the powerful perception that woman was defined by her biology. Like his contemporaries, Paracelsus emphasised

¹⁸⁷ Eamon, *Science and the Secrets of Nature*, p. 7.

¹⁸⁸ Oswald Croll, *Philosophy Reformed and Improved in Four Profound Tractates 1. Discovering the Great and Deep Mysteries of Nature: by that learned Chymist and Physician Osw Crollius*, transl. by H. Pinnell (London: 1657) p. 8.

¹⁸⁹ Webster, *From Paracelsus to Newton*, pp. 59-60, 5.

¹⁹⁰ Charles Webster, 'Bare Heads against Red Hats: a portrait of Paracelsus', in *From Physico-Theology to Bio-Technology: Essays in the Social and Cultural History of Biosciences*, ed. by Kurt Bayertz and Roy Porter (Amsterdam: Rodopi, 1998) pp. 54-75 (p. 64).

¹⁹¹ Webster, *From Paracelsus to Newton*, p. 55.

¹⁹² Eamon, *Science and the Secrets of Nature*, p. 158.

woman as womb, pregnancy as woman's fruition, and menstruation as potentially dangerous for those around her.¹⁹³ A menstruating woman represented the opposite of the Paracelsian physician-healer. She could worsen injuries and poison remedies. By looking at a boil or a wound she infected it and stopped the cure through touch as well as sight. If she touched the finished medicine or the ingredients (such as vinegar, aqua vitae, ambergris, musk, gold, coral, and pearls) they lost their strength and force.¹⁹⁴ It is striking that Paracelsus singled out "old women" for their knowledge of cures: it can be assumed that these older women no longer faced the dilemma of being categorised as either pregnant or dangerously menstruating. It could be argued that it was the older women who had the experience, and the time, for alchemical and other healing activities. The time of many early modern women of child-bearing age was spent producing and raising children, thus limiting the opportunity for other activities, particularly time-consuming alchemical ritual preparations. However, the women alchemists in this study do not appear to have been limited to the status of post-menopausal "older women", or constrained by care of large numbers of children. Isabella Cortese wrote in 1561 as a woman running a household, and revised her text some 13 years after the first edition. Madame de la Martinville wrote in 1609 of the swapping of alchemical powders and receipts with Joseph du Chesne when she was twenty years younger, in 1589. Lady Margaret Clifford appears to have pursued alchemical interests from circa 1590, when she was thirty, if not earlier. Neither Isabella Cortese, Madame de la Martinville or Jeanne du Port mention children; and Lady Margaret Clifford records the five miserable years she spent attempting to conceive before giving birth to two sons who died young, leaving her maternal

¹⁹³ In the *Opus Paramirum, liber de matrice*, Paracelsus explains his vision of the matrix, womb and sexuality. In the *Book concerning the nature of things* Paracelsus describes putrefaction as the removal of venom and the first stage of the *opus*, by drawing on the imagery of the venom of a woman "unto the which there is nothing in the worlde to be compared". The venom of the imagination, he continued, "is not moch unlyke to a woman wch hath her naturall purgation, called her flowers. The which carieth a secrete poison in their eyes, in so much that by her only sight: the glas wherin she loketh taketh spott". See Oxford: Bodleian Library, Ashmole MS 1490 Item 79, f. 210r.

¹⁹⁴ Oxford: Bodleian Library, Ashmole MS 1490, Item 79, f. 210r. *The Book concerning the nature of things*.

care focused on just one daughter, Lady Anne.¹⁹⁵ Lady Mary Herbert had four children, one of whom died young. Sarah Wigges is exceptional in including (non-alchemical) remedies for children of different ages alongside notes on Paracelsus, Andreas Libavius, and John Baptista Porta.¹⁹⁶

The emphasis in Paracelsian works on a general requirement of virtue, chastity and purity for men and women is mirrored by the need for the highest degree of virtue in alchemy.¹⁹⁷ The physician-chemist had to be virtuous, pure and chaste, to work with virtues innate in nature.¹⁹⁸ The requirement for women of rank to be virtuous was often discussed in other contexts. I suggest that in Paracelsian alchemy, it is possible to see how a fusion may have occurred between ideas of virtue in nature, closely linked to heaven, the required virtue in the alchemist-physician, and the virtuous character of mystically minded noble or learned women. Lady Anne Clifford's glowing memorial to her mother foregrounds the endowment of Lady Margaret's mind with the seeds of the four moral virtues, Prudence, Justice, Fortitude and Temperance, before mentioning her alchemical work. This cross-reference between alchemy as practice, and alchemy as imagery of inner virtue, has the effect of reinforcing the goodness of Lady Margaret's interest in alchemy and its close association with both her moral and spiritual qualities, and her nobility.¹⁹⁹ In 1589 Blaise de Vigenère allowed for women's participation in the making of the philosophers' stone on the basis that

¹⁹⁵ Letter to Dr Layfield. British Library, C26, Althorp Papers, Item 4 is an eighteenth century copy, reproduced in George Williamson, *George Clifford, Third Earl of Cumberland* (Cambridge: Cambridge University Press, 1920) pp. 285-288.

¹⁹⁶ London: Royal College of Physicians MS 654.

¹⁹⁷ Jacobi, *Paracelsus*, pp. 108-9, 158.

¹⁹⁸ "The physician should be pure and chaste, that is to say, a whole man in the sense that his mind is free from lewdness, conceit and any evil thought", Jacobi, *Paracelsus*, p. 146. In the *Archidoxis* Paracelsus describes how the virtues of the mystery of Nature are impeded or captivated in their bodies. The powers and virtues work through the five senses, the mobility of the body, and the division of the powers of the body. The quintessence is the virtue of the thing in question: this quintessence or virtue is a noble, pure and potent Nature which has an affinity with the soul.

¹⁹⁹ See chapter five, page 232.

the important factors for men or women were their own virtue and standard of behaviour, and that of their families.²⁰⁰

Reading Paracelsian-cabalistic-hermetic-alchemical ideas

During the Reformation and Counter-Reformation, ideas about women's status were subject to vigorous debate in the well-documented *Querelle des Femmes*, to which Paracelsus and Agrippa contributed.²⁰¹ At the same time a major change in the relationship of male alchemists to women occurred as alchemy extended out of the clerical *domaine* into the secular courts. Where most alchemists of the Middle Ages had been clerics vowed to celibacy (or sometimes, if the satirists are to be believed, in illicit relationships with women), during the sixteenth century Paracelsian alchemists were married, sometimes to educated women.²⁰² Some married alchemists were Protestant clergy.²⁰³ Their circles included many other women with varying degrees of education, including queens and noblewomen interested in alchemy and alchemical medicine. They had real, rather than symbolic, relationships with women. The problem is raised of whether the new breed of secular married alchemist, as well as women in their circles, read mixed messages about women in alchemical-hermetic-cabalistic-Paracelsian texts in new ways. To explore this issue fully requires complex problems to be addressed about the reception and diffusion of traditions from other cultures into Renaissance Europe and their impact on women, which is not attempted here.²⁰⁴ However, three ways of

²⁰⁰ Blaise de Vigenère, *Traicté des Chiffres* (Paris: 1589) p. 7.

²⁰¹ Constance Jordan, *Renaissance Feminism* (Ithaca: Cornell University Press, 1990) pp. 122-27, 132-33; Ian MacLean, *The Renaissance Notion of Woman* (Cambridge, Cambridge University Press, 1980) p. 85.

²⁰² Arnald de Villa Nova is an important early exception: he married. Early modern married alchemists include John Dee and Edward Kelley, Thomas Moffet (to Jane Wheeler, 1580, and Catherine Brown, d. 1626), Joseph du Chesne (see chapter four), and Michael Sendivogius (to Veronica Stiberin, a German from Frankfurt, eulogised on her death in 1599 by Joannes Chorinsky, a Moravian nobleman and poet).

²⁰³ For example, John Thornborough, Bishop of Bristol, who married more than once, and Thomas Tymme, rector of Hasketon, Suffolk and St Antholin, London, whose marriage to Mary Hendy in 1615 bore one son (DNB, p. 1349).

²⁰⁴ Raphael Patai has shown how the secrets of alchemy became associated in the Renaissance mind with Jews and the cabala. By the time *Aureum Vellus* was published in 1598 it had become part of Paracelsus' mythology

reading the hermetic/cabalistic material associated with Paracelsian alchemy are identified. The first emphasises the traditionally conservative hierarchical substance of the material within which woman was second class, and a vehicle for men's spiritual development. The second draws attention to the numerous female models for women alchemists associated with hermeticism (both from Judaic tradition and classical antiquity) and positive images of female creative power. The third recognises anxieties in Reformation society about widespread changes, including alterations to women's role, and a corresponding tension between the conservative strand in alchemical philosophy and the impossibility of pinning down the aspect of the tradition based on oral transmission and immediate experience, which offered options for change.

In many respects Paracelsus' ideas of Christian alchemy, hermeticism and cabala appear hierarchical and conservative and do not seem to encourage women's participation except in a secondary role.²⁰⁵ Paracelsus often addresses his "Sons" but never his daughters.²⁰⁶ He draws authority from a long list of Old Testament and other patriarchs, in whose shoes the elect may follow.²⁰⁷ Paradoxically, the appeal to traditional male authorities such as Solomon may have appealed to women schooled in devotional literature.²⁰⁸ One

that in Constantinople in 1520 he met Salomon Trismosin, who had learned his alchemical and cabalistic knowledge from a German-speaking Jew with whom Trismosin travelled to Venice.

See Raphael Patai, *The Jewish Alchemists: A History and Sourcebook* (Princeton: Princeton University Press, 1994) pp. 269-9.

²⁰⁵ The impact of the merging of Christian alchemy, hermeticism and cabala is significant because this approach was adopted by many Paracelsians to the extent that by the seventeenth century the traditions become indistinguishable. The process of the overlaying of traditional alchemy with Christian cabalistic ideas was well advanced by the 1590s and is shown by marginal annotations of *The Margaret manuscript*.

²⁰⁶ *The Archidoxis* opens "If we consider our misery, most dear Sons"; it was "our Sons" (whom Paracelsus distinguished from the vulgar) who would understand the secret veiled tradition. *Paracelsus his Archidoxis: Comprised in Ten Books*, transl. by J.H., (London: W.S., 1660) pp. 1, 5.

²⁰⁷ In *The Tincture of the Philosophers* Paracelsus cites Hermes Trismegistus the Egyptian, Orus the Greek, Hali the Arabian and Albertus Magnus the German as followers of a method to arrive at a long life. See *Paracelsus his Archidoxis*, chapter 1. In *The Aurora (Paracelsus his Aurora, & Treasure of the Philosophers)*, transl. by J.H. (London: Giles Calvert, 1659)) he cites Adam, Noah, Abraham, Moses, Hermes Trismegistus and Zoroaster as Wise Men and Magi.

²⁰⁸ Mary Herbert's translation of Philippe du Mornay's *A Discourse of Life and Death*, for example, cites Solomon as an authority. *The Collected Works of Mary Sidney Herbert, Countess of Pembroke*, ed. by Margaret P. Hannay, Noel J. Kinnamon, Michael G. Brennan, vol. 1, (Oxford: Clarendon Press, 1998) p. 249, l.761.

Paracelsian hermetic creation story is based exclusively on male authority figures.²⁰⁹ Eve is an invisible aspect of Adam.²¹⁰ The Paracelsian-alchemical hermaphrodite as masculine Adam, rather than a fully androgynous being, occurs in *The Margaret manuscript*, and the perfection of masculine Adam is made explicit by the Paracelsian indexer Martin Ruland in 1612 and by Jean-Jacques Manget in 1702.²¹¹ In another of Paracelsus' creation stories of the Fall two earthly "mothers", Nature and Eve, are created for the benefit of Adam as he leaves Paradise, and each "mother" includes a light figured as a masculine son. When Adam is driven out of Paradise it is for Adam, not Eve, that God creates the light of nature, which is associated with Adam's work of gaining "sustenance through the toil of his hands".²¹² At the same time God creates "the light of Eve" when he says "In sorrow thou shalt bring forth children", and Eve is taught how to raise her children using cradles and nursing.²¹³ Eve's purpose is defined, conventionally, purely in terms of childbearing: her role is separate from that of the light of nature. Paracelsus draws from his biblical reading the conclusion that men and women are two different species, and appears to accept that woman is made from Adam's spare rib.²¹⁴ The Paracelsian Richard Surfleet adopts a conventional critique of

²⁰⁹ *The Aurora of the Philosophers* celebrates Adam's knowledge of all things, both before and after the Fall. His knowledge of astronomy, magic, cabala and alchemy are written on stone by Adam's ancestors, found by Noah, passed on to Abraham (an astrologer and arithmetician), Moses (who excelled in Egyptian wisdom), and Daniel (a cabalist). All these men, like the wise men who came to Jesus' birth, are true Magi, divine sophists and cabalists. This knowledge was common to the Chaldeans and Persians (who called it Sophia and Magic) and Egyptians (who called it wisdom priestcraft). *Paracelsus his Aurora*, pp. 1-8.

²¹⁰ The stone "which also they have called their Adam, who carries his invisible Eve hidden in his own body, from that moment of time in which wherein they were united by the power of the most High God", *Paracelsus his Aurora*, p. 50.

²¹¹ In *Paracelsus his Aurora*, p. 50, the philosophers' stone is described as "hermaphroditic Adam". Martin Ruland, "[I]n the deep consideration of the Hermetic and Paracelsian writings", gives Adam as "a name which the Philosophers have given to their *Magisterium* when it has attained the perfection of the Red [...] because their matter [...] has a perfect correspondence with that original Adam, in whom God united the most pure substance of beings [...]". He links the perfection of the Red to the Red King whose complement is the White Queen (images central to the *Aureum Vellus/Splendor Solis* series) in Ruland, *A Lexicon of Alchemy*, transl. from 1612 ed. (London: [n.p.] 1892) p. 333. Jung interprets Paracelsus' Adam as a masculine journey: he is the *filius philosophorum* or primordial "astral" true man, symbolised by a star who descends to earth accompanied by Eve, and through purifications, assisted by medical alchemy, seeks to unite with the Father (Jung, *Alchemical Studies*, pp. 130, 148).

²¹² Jacobi, *Paracelsus*, pp. 175-6.

²¹³ Jacobi, *Paracelsus*, pp. 175-6.

²¹⁴ Jacobi, *Paracelsus*, pp. 97-8.

women's sin casting humanity out of Eden when Earth was a temple, arguing that because of this they are charged with the cure and charge of family health, but should not meddle above their place, nor wallow in sin, and make it twice as bad.²¹⁵

During the sixteenth century the perceived relationship between Paracelsian alchemy and cabala became very close.²¹⁶ Philip Beitchman suggests that the merging of cabala and Paracelsian alchemy in John Dee's work allowed the cabala to lend its authority, sanction and dignity to systems that were vulnerable, otherwise, to the accusation of triviality.²¹⁷ This same process is illustrated in *The Margaret manuscript* where annotations to Paracelsian ideas associate them with cabala.²¹⁸ The close relationship of alchemy and cabala is also shown in the work of the Paracelsians Thomas Tymme and Blaise de Vigenère.²¹⁹ If the spirit of the original Jewish cabala had been retained, women would have played no part in the Renaissance cabalistic movement: their only significance would have been in their role as a vehicle for men's spiritual development.²²⁰ The significant cabalist text the *Zohar* represents

²¹⁵ Charles Stevens and John Liebault, *Maison Rustique, or The Countrie Farme*, transl. by Richard Surfleet (London: Bonham Norton, 1600) sig. A6r.

²¹⁶ Françoise Secret argues that although Paracelsus never made a clear a cabalist representation, he was nevertheless one of the great representatives, with Agrippa, of the type of literature where cabala becomes astrology, alchemy, and magic, so that consequently many Paracelsians and anti-Paracelsians represented him as a cabalist. See François Secret, *Les Kabbalistes Chrétiens de la Renaissance* (Paris: Dunod, 1964) pp. 296-300.

²¹⁷ Philip Beitchman, *Alchemy of the Word, Cabala of the Renaissance* (New York: State University of New York Press, 1998) p. xii.

²¹⁸ "Also studye well the Bookes made by Blaise Vigenere, printed in the frenche tounge, att Paris 1587. There are foure or 3 volumes of them, they are most excellent Bookes, looke well unto them, for they are Cabalisticall", f. 43r. and, concerning Blaise de Vigenère's cabalistic work: "And this worke is the doublinge of a Circle", *The Margaret manuscript*, f. 121r.

²¹⁹ Thomas Tymme styled himself Lady Margaret Clifford's "loving friend", in his introduction to his English translation of Dee's *Monas Hieroglyphica*. Thomas Tymme, *A Light in Darkness*, ed. by S.K. Heninger (Oxford: New Bodleian Library, 1963) p. 6, on "the true Christian secrets of Alchimy" conflates alchemy and cabala in the meaning of the *monas* sign in which Dee "hath comprehended the whole Science and practice of Alchimie". Tymme uses many of the same arguments as *The Aurora*. The close relationship between alchemy, cabala and mythology in the work of Blaise de Vigenère has been documented by Sylvain Matton in 'Alchimie, Kabbale et Mythologie chez Blaise de Vigenère: L'Exemple de so Théorie des Eléments', in *Blaise de Vigenère, poète et mythographe au temps de Henri III*, ed. by Marc Fumaroli (Paris: Centre V.L. Saulnier, 1994) pp. 111-137.

²²⁰ Gersham G. Scholem, the acknowledged authority on Jewish cabala, is categorical that "[B]oth historically and metaphysically it is a masculine doctrine, made for men and by men. [...] There have been no women Kabbalists", *Major Trends in Jewish Mysticism* (New York: Schocken Books, 1974) p. 37.

only men taking part in its mystical discussions.²²¹ Women are related to the demonic, even while, paradoxically, the conception of the *Shekhinah* has room for the idea of a feminine element in God, through which men may obtain intimacy with God.²²² Paracelsus' work also includes associations of woman with the demonic, beside an increased feminine aspect of God. Although the concept of man obtaining intimacy with God through sexual union has not been found in Paracelsus, it may be reflected in the seventeenth century concept of the alchemystical wife. The extent to which these attitudes to women were modified at their reception into a Christian European alchemical-cabalist tradition warrants a study in its own right, but a continuation of the traditional exclusive attitude is expressed by the spirit mediated by Edward Kelley in response to Jane Dee's petition for provisions: "Give ear unto me, thou woman, is it not written that women come not into the synagogue?"²²³ However, the cumulative evidence presented in chapters three to five suggests that women were not entirely excluded in this period.

A second way of reading alchemical-hermetic texts is to draw attention to images of matriarchal alchemists, who are cited as founders of alchemy often from spurious Jewish origins, or from Hellenistic Egypt.²²⁴ During the reception and development of alchemical-cabalistic ideas in Europe, the idea that knowledge of alchemy and other knowledge came from women appears to have become part of the received wisdom.²²⁵ Some of the texts

²²¹ In the *Zohar* the Rabbi Simeon ben Yohai wandered in Palestine with his son Eleazar and male friends and disciples. Scholem, p. 156.

²²² Scholem, pp. 37, 38. Philip Beitchman, *Alchemy of the Word, Cabala of the Renaissance* (New York: University of New York Press, 1998) p. 99 ff, explains that cabala differed from "the constitutional misogyny of a certain Christian-Platonic tradition [... by which woman] is considered to be baser, more earthly and material than men" because it regarded women as closer to heaven, and, perhaps most significantly, as the channel through which a man might experience the divine presence at maximum intensity, in sexual intimacy.

²²³ *The Diaries of John Dee*, ed. by Edward Fenton (Oxfordshire: Day Books, 1998), p. 174.

²²⁴ For example: the "daughters of men" instructed by angels in metal work and tinctures, following the Book of Enoch; the wife of Noah, or Sybilla, wife of Nimrod, as recipients of the secret knowledge of alchemy; Sarah, wife of Abraham, took the Emerald Tablet from the hands of the dead Hermes in a cave at Hebron; Korah's wife learned alchemy from her brother Moses; Sheba inherited the philosophers' stone. See Patai, *The Jewish Alchemists*, pp. 22-29.

²²⁵ Postel believed it was time for a female messiah, and that he had met the female Messiah in Sister Johanna at Venice in 1547. Secret, *Les Kabbalistes Chrétiens*, p. 176. Jack Lindsay, *The Origins of Alchemy in Graeco-Roman Egypt* (London: Frederick Muller, 1970).

associated with women and considered in this study may draw on this tradition, for example when Lady Margaret Clifford's alchemy is presented within the tradition of the woman of wisdom, and in the naming of *Quercitan's Daughter's Letters*, perhaps drawing on ideas of transmission of knowledge through the female line. Guillaume Postel introduced the significant idea that the masculine revelation of the Jews is completed by the feminine prophecies of the Sibyls.²²⁶ This idea of the complementarity of the knowledge of men and women occurs in a seventeenth century text translated by Mistress Litton. Whilst Hermes teaches

Moses cabala, his sister Mary the Prophetess learns philosophy, for which she is revered in the alchemical tradition.²²⁷ Whether or not this was a way to circumvent the Jewish restriction on women's knowledge of cabala, it *was* the sort of image to encourage or reflect men's inclusion of women within the Christian alchemical-cabalistic-hermetic tradition.

One relevant aspect of Paracelsus' mother images is his creation of a female image of a spiritual queen, whose birth-giving qualities are entirely heavenly. By doing so he offers a symbol of devotion for women with spiritual inclinations and extends the role of the feminine aspect of God, which may have been significant for women receiving his ideas. In the *Liber de Sancta Trinitate* he describes a theologically-defined feminine aspect of God. Paracelsus conventionally defends the divinity of the Virgin Mary but, unconventionally, makes a place for a higher prototype of her, a goddess, in the divine family of Father, Son and Holy Ghost. Although this heavenly queen is an eternally pure being she is a secondary creation, made by God for himself and drawn out of his person for the purpose of generating the divine son.²²⁸ Despite being a birth-giver for the masculine aspect of God, she appears to have offered a

²²⁶ See Åkerman, *Rose Cross over the Baltic*, p. 176.

²²⁷ Oxford: Bodleian Library, Ashmole MS 1446, f.2v.

²²⁸ Andrew Weeks, *Paracelsus: Speculative Theory and the Crisis of the Early Reformation* (Albany: University of New York, 1997) pp. 80-83. See also Ute Gause, *Paracelsus* (Tübingen: J.C.B. Mohr, 1993), particularly pp. 11-14, 26-39.

different model from woman as womb in a pure, chaste Queen, possessed of eternal life. This Paracelsian heavenly queen is of great interest for allegorical-theological alchemy. The possible connection with the white Queen in the *Rosarium Philosophorum*, 1550, and *Splendor Solis*, has yet to be explored.²²⁹

A third way of reading alchemical-cabalistic texts in this period is to consider whether there is scope for new interpretations. In the Christian cabalistic version of *hermetica* (promoted by, for example, Cornelius Agrippa, Johann Reuchlin, Guillaume Postel, Pico della Mirandola and Blaise de Vigenère) the complete ban on women's participation found in Judaism may have been lifted so that some women of good birth and character could overcome the handicap of their sex to become part of the elect.²³⁰ Philip Beitchmann argues that as the restricted hierarchical Jewish esoteric teaching was integrated into a universal Christian framework, it may have been read in new ways, a likelihood increased by the oral, unfinished nature of cabalist knowledge and teaching, and changing perceptions of educated women's role.²³¹

The tension and ambiguity between conservative, hierarchical, and progressive, anti-authoritarian ideas in Paracelsianism may also have provided opportunities for alternative readings.²³² The tension in a transition from traditional to progressive ideas is evident in the work of Blaise de Vigenère. On the one hand his creation story associates the male with the

²²⁹ *La Toyson d'Or*, for example, describes a beautiful woman, dressed in many coloured robes, golden sandals, and white, yet simultaneously multi-coloured feathers extending down her back. She wears a crown of gold, on which is a star of silver, carries a yoke ("carcan") of gold inset with a precious ruby. She epitomises compassion as she holds out her hand to a desolate man emerging from water; she dries him, and gives him a purple robe, and then takes him to heaven with her. Salomon Trismosin, *La Toyson d'Or*, transl. by L.I. (Paris: Charles Sevestre, 1612).

²³⁰ Johann Reuchlin, *De Arte Cabalistica* (Hagenau: Thomas Anselmus, 1517); Pico della Mirandola, *A Platonick Discourse upon Love*, ed. by Edmund G. Gardner, transl. by T. Stanley, (London: Grant Richards, 1914); Blaise de Vigenère, *Traicté des Chiffres* (Paris: [n.p.] 1587). The latter two authors are referred to in *The Margaret manuscript*.

²³¹ Beitchmann, p. 99.

²³² Ian McLean argues that by discarding scholastic method and language, thinkers such as Paracelsus and Postel were more effective in liberating thought about women from its scholastic axes than were neoplatonism and neostoicism. See *The Renaissance Notion of Women* (Cambridge: Cambridge University Press, 1980).

interior spiritual man, and the female with that which is exterior, sensible and corporeal, “qui est le pire”.²³³ However, he pays homage to nobles including “Madame Henriète de Cleves”, wife of “Ludovic de Gonzague, Prince de Mantove”, and “Madame Catherine, pourveve à monseigneur le Duc de Guise, Henry de Lorraine”, after which he refers to the work of Agrippa and comments that women do not always want to leave this work (i.e. cabala and alchemy) to the men. To take part it was necessary to be virtuously and well born, and “qu’il semble que votre famille par une certaine occulte propriété l’attire à soy”.²³⁴ Elsewhere he writes in favour of women’s participation in the arts and sciences.²³⁵ However, social rank and educational elitism appear to play a decisive role for Vigenère, who also mentions dismissively that oils of sage, thyme, pepper and the like are so well known “even unto chamber maids, that I should be ashamed to speak of”.²³⁶

In 1614 John Thornborough, Bishop of Bristol, wrote to Lady Knowles about cabalistic-alchemy in ambiguous terms.²³⁷ The very fact that, as a Bishop, he wrote to her about alchemy-cabala is significant. He justifies cabala to her by reference to its role in the worship of God, and places before Lady Knowles conflicting metaphors of woman in alchemy, thus opening possibilities for interpretation.²³⁸ Whilst Lady Alchemy rejoices that

²³³ de Vigenère, *Traicté des Chiffres*, p. 3.

²³⁴ de Vigenère, *Traicté des Chiffres*, p. 7.

²³⁵ Denyse Métral, *Blaise de Vigenère: Archéologue et Critique d’Art 1523-1596* (Paris: Librairie E Droz, 1939) p. 26.

²³⁶ de Vigenère, *A Discourse of Fire and Salt, Discovering Many Secret Mysteries, as well Philosophicall, as Theologicall* (London: Richard Cotes, 1649) pp. 6-7.

²³⁷ This text appears to have been first discussed by Allen G. Debus, in *The English Paracelsians* (London: Oldbourne, 1965) p. 104. See also Jayne Archer, 'Women and Alchemy in Early Modern England' (unpublished PhD thesis, Cambridge, 1999) p. 3ii-iv. The British Library on-line catalogue identifies Lady Knowles as Elizabeth Knollys, second wife of William, Baron Knollys, afterwards Earl of Banbury (<http://molcat.bl.uk/msscat/INDX0010.ASP>).

²³⁸ London: British Library, Sloane MS 1799, ff. 74-104, at 85r-v. The ancient Philosophers “as it were by characters or rather by caball hiroglifically uttered to the world speaking misteries of more divine matters, that the knees of all creatures might bow to their creator seeing he himself hath sett upon them, the privie & secret seale of his owne maiestie who is the first & the last and the same forever, whom also the Philosophers demonstratively expressed in their simple circle without beginning and without ending.” Thornborough uses the word “cabala”: a Neopythagorean interpretation is also possible: Thornborough refers to the numbers one to ten, in the latter the Philosopher’s stone is accomplished (f. 79v). The use of number and diagram shows some similarities to John Dee’s *Monas*.

“a Lady of yo^{ur} birth and worth will voucheself to come & knock at her first & outmost gate” he introduces uncertainty over woman’s role in alchemy-cabala by the analogy of Lady Alchemy’s son and daughter.²³⁹ The daughter who willingly and humbly helps begin the work with her handmaids is “a faire daughter named Distillation, on whom do waite many handmayds, as Extraccions of Tinctures & Salts, drawing oyles by Serpentine, forcing of spirit by retort with many other of that kinde”.²⁴⁰ The daughter and her handmaids have the skills to separate and extract the three principles of body, soul and spirit, but the ability to unify the purified parts back into one body is beyond them and requires the help of Lady Alchimia’s son.²⁴¹ In this unusual Trinity of mother, daughter, son, the woman reader has a choice of alignment.

The significance of alchemy in court circles

One of the multiple meanings of alchemy was as political analogy for a harmonious microcosm, with the signor, prince, king or queen as the central sun around which their subjects revolved in a hierarchical universe.²⁴² Consequently the alchemical cosmology took on wider political and financial implications than the purely household applications which are discussed later. The courts, and households of wealthy courtiers, acted as foci for alchemical experimentation and discussion of alchemical ideas as theology-science and literary metaphor. The majority of published major Paracelsian-alchemical works, Paracelsus’ excluded, were written by courtiers or authors employed at court. Practitioners of alchemy at the courts of London, Paris, Florence and Rome knew they were part of a wider European

²³⁹ London: British Library, Sloane MS 1799, f.75r.

²⁴⁰ London: British Library, Sloane MS 1799, ff. 75v-76r.

²⁴¹ London: British Library, Sloane MS 1799, f. 78v: this ecelent skill is beyond the reache of the daughters weake [illeg.] wⁱthout the brothers helpe./ Therefore to effect this worck, the brother putteth to his helpeth hand”.

²⁴² Moran, p. 8.

phenomenon, in which alchemists and their patrons sought knowledge from their equivalents at the courts of, for example, Rudolf II in Prague, Wilhelm and Peter von Rosenberg at Trebona, Maurice of Hesse at Kassel, Frederick II and Queen Sophie in Denmark, and Prince Laski and King Stephen Bathory in Poland.²⁴³

Although the cultural context of alchemy varied between European courts, the practical appeal of finding a secret formula for gold and silver held the enticing promise of huge monetary rewards. For rival courts, the possibility of being first successfully to master the secrets of transformation justified the employment of alchemists. Knowledge of the secret of transmutation implied closeness to divinity, in addition to the wealth and power that would be conveyed by limitless gold and silver reserves. For the Medici, alchemy was not only part of a neoplatonic worldview, but a means to maintain the appearance of expensive magnificence, pursued in tandem with the normal methods of seeking silver and gold through trading and mining rights.²⁴⁴ For Elizabeth I, the possibility of obtaining gold by a secret formula had strong appeal, though not one in which she placed confidence. She took the claims that Edward Kelly was making successful transmutations in Prague seriously enough to send Edward Dyer to investigate twice, and Lord Willoughby at least once.²⁴⁵ Rulers and courtiers also sought the best medical care available and in many cases chose Paracelsian practitioners, who were sometimes also alchemists, such as Oswald Croll, Michael Sendivogius, and Joseph du Chesne.

²⁴³ On alchemy at the court of Rudolf II at Prague see R.J. Evans; Zbigniew Szydlo, *Water Which does not Wet the Hands: The Alchemy of Michael Sendivogius* (Polish Academy of Sciences: Warsaw, 1994) p. 37; for Kassel see Moran; for London, see for example Peter French, *John Dee: The World of an Elizabethan Magus* (London: Routledge & Kegan Paul, 1972); for Paris, see *The French Paracelsians* (Cambridge: Cambridge University Press, 1991); for Denmark, where Peter Severinus (1542-1602) was court physician for 30 years, see Haeffner, p. 230; for Trebona, see Vladimir Karpenko, 'Bohemian Nobility and Alchemy in the Second Half of the Sixteenth Century: Wilhelm of Rosenburg and Two Alchemists', *Cauda Pavonis*, 15 (1996) 14-18; on Poland see Fenton, p. 326.

²⁴⁴ Lisa Jardine, *Worldly Goods: A New History of the Renaissance* (London: Papermac, 1996) p. 93ff.

²⁴⁵ On Dyer see Fenton, pp. 235-237. On Lord Willoughby and Dee, Northamptonshire Record Office: Isham Papers, IC 272 Arthur Dee to Mr Aldrich, Norwich, and *The Margaret manuscript*, see chapter five.

Female rulers acted as patrons of alchemy and Paracelsian medicine just as much as their male colleagues, and their intellectual, social and economic concerns included some knowledge of alchemy. Elizabeth I, Catherine of Navarre, Queen Sophie of Denmark, Catherine de' Medici and, later, her daughter Queen Henrietta Maria, wife of Charles I, employed alchemists.²⁴⁶ English women courtiers who employed alchemists apparently included Lady Mary Herbert and, I suggest in chapter five, Lady Margaret Clifford. Isabella Cortese's book bears the hallmarks of life at the highest level.²⁴⁷ Madame de la Martinville and Jeanne du Port's association with Joseph du Chesne, a trusted employee of Henri IV before and during his Kingship, seems to be in the context of an informal grouping of alchemists. The strong literary tradition of poetry and prose on love, literature and philosophy, with women as patrons and sometimes writers, is reflected in French alchemical writings and poetry, by Madame de la Martinville, Quercitan's daughter and Marie de la Gournay.²⁴⁸

A few hints have been found that sometimes women were employed at court as alchemists, though the examples of Salome Scheunpflugin and Anna Maria Zieglerin are both drawn from Germany.²⁴⁹ Certainly women who served Queen Elizabeth as Maids of Honour had some opportunity to learn a wide range of skills, not only taking part in State occasions

²⁴⁶ Elizabeth I employed John Dee and Cornelius de Alneto; Catherine of Navarre was patron of Jean Ribit who later became *médecin premier* to Henri IV, and in turn took on Joseph du Chesne and Theodore de Mayerne as his junior doctors at court (Hugh Trevor-Roper, 'The Sieur de la Rivière, Paracelsian Physician of Henry IV', in *Science, Medicine and Society in the Renaissance*, ed. by Debus, pp. 227-250 (p. 240). Both Queen Sophie and Frederick II of Denmark were actively interested in iatrochemistry and Paracelsianism, and were patrons of Severinus, the royal physician (Grell, pp. 253, 81-2). On Catherine de' Medici see chapter three, fn. 199-200. Henrietta Maria employed Kenelm Digby as her chamberlain at a time when he was known throughout Europe for exploring the new experimental science (Lynette Hunter, 'Women and Domestic Medicine: Lady Experimenters, 1570-1620' in Hunter and Hutton, eds, pp. 89-107, at 93).

²⁴⁷ See chapter three.

²⁴⁸ Wendy Gibson, *Women in Seventeenth Century France* (Basingstoke: Macmillan, 1989) p. 175, 176-178. See also chapter five.

²⁴⁹ Salome Scheunpflugin was an alchemist at the Rosenberg court of Trebon in 1588 (Trebon: Rozmberk archive, fam rosenberg 25). Anna Maria Zieglerin worked as an alchemist at the court of Duke Julius of Braunschweig-Wolfenbüttel 1571-75 and was executed following a fraud (source: email dated 20 December 2000, from Tara E. Nummedal, with information from her forthcoming unpublished PhD thesis, Stanford University, on practising alchemists in the Holy Roman Empire (c. 1550-1620)).

and informally influencing matters of power: they engaged in a range of activities, from laundry, dancing, administration of the robes, jewels and royal books, to the manufacture of royal clothing, duties in cooking, distilling, chaperoning, and nursing people and the Queen's small animals. The still-house was used to prepare both food and cosmetics for the queen and her immediate entourage.²⁵⁰ Distilled products were highly sought after: an Italian merchant living in London, Giovanni Darcuero, offered Queen Elizabeth, via Lady Warwick, finely scented waters (and rich materials) in return for a protection from creditors.²⁵¹ Whether or not some courtly women gained their knowledge of Paracelsian alchemical medicine or alchemical theory at court is unclear. Both Lady Margaret Clifford and Lady Mary Herbert were closely associated with the court of Elizabeth. Elizabeth Talbot served in the Privy Chamber in 1600 as a Maid of Honour and by the end of her life practised quasi-Paracelsian medicine, memorialised by the posthumous publication of a book of secrets under her married name, Elizabeth Grey. Her sister Alethea Talbot is associated with *Natura Exenterata*, 1655, a medicinal and pharmaceutical work which includes alchemical symbols and very clear chemical receipts.²⁵²

Courtiers on diplomatic missions formed an important link between the European courts, and their journeys provided a conduit for the diffusion of alchemical receipts. Thomas Muffet, for example, who introduced sophisticated Paracelsianism into England, accompanied Lord Willoughby de Eresby on an embassy to Denmark in 1582 where he met Petrus Severinus.²⁵³ Joseph du Chesne was a regular agent for Henri IV to Kassel, court of Henri's main German ally, Maurice Landgrave of Hesse, where du Chesne exchanged

²⁵⁰ Caroline Merton, 'The Women who Served Queen Mary and Queen Elizabeth', (unpublished PhD thesis, University of Cambridge, 1992) pp. 81-2.

²⁵¹ Merton, p. 168.

²⁵² Lynette Hunter puts this view in 'Women and Domestic Medicine: Lady Experimenters, 1570-1620', in *Women, Science and Medicine 1500-1700*, ed. by Hunter and Sarah Hutton, pp. 89-107 (pp. 90-95). See also fn 111, chapter one of this thesis.

²⁵³ Hugh Trevor-Roper, 'The Court Physician and Paracelsianism' in *Medicine at the Courts of Europe, 1500-1837*, ed. by Vivian Nutton (London: Routledge, 1990) pp. 79-94 (p. 91).

alchemical secrets with the court physician Jacob Mosanus.²⁵⁴ Alchemy was part of the learned interest of at least one member of Henri III's entourage, the scholar-diplomat Blaise de Vigenère.²⁵⁵ Marc Fumaroli suggests that as a symbol of working the "coincidences des contraires" which de Vigenère sought, alchemy was the diplomatic art par excellence.²⁵⁶ These highly placed men recognised one another's status and education: Oswald Croll distinguishes Severinus the Dane, Joseph du Chesne, Thomas Muffet and Thomas Bovio from the common rabble of alchemists.²⁵⁷ In some cases the difference between the diplomatic and the undercover agent blur: Joseph du Chesne was both; Lord Zouche and Henry Wotton combined covert collection of political information and magical books.²⁵⁸

In some cases, women saw alchemical receipts when their male contacts returned home, whilst a few obtained their information through their own travels. Lady Margaret Clifford may have obtained a copy of Lord Willoughby's Prague receipts; Joseph du Chesne shared his alchemical knowledge with Madame de la Martinville and Jeanne du Port. Isabella Cortese appears to have travelled, at least as far as her house in Olomouc, Moravia, where she found the alchemical letters published in her book. She fortuitously obtained alchemical knowledge from Cologne, through the demise of the courier who was taking it to Kracow, and was aware of "secrets" related to the subjects in her book, from Hungary. The Frenchwoman Martine de Bertereau, whose treatise on mining also discusses alchemy as the separation of the pure from the impure, travelled extensively in Europe with her husband, an

²⁵⁴ Hugh Trevor-Roper, 'The Paracelsian Movement', in *Renaissance Essays*, ed. by Trevor-Roper (London: Secker & Warburg, 1985) pp. 149-199 (p. 173). On du Chesne and Mosanus in 1604, see Moran, p. 71.

²⁵⁵ Marc Fumaroli, *Blaise de Vigenère, poète et mythographe au temps de Henri III* (Paris: Centre V.L. Saulnier, 1994) pp. 8-9.

²⁵⁶ Fumaroli, Blaise de Vigenère, p. 9.

²⁵⁷ *Philosophy Reformed and Improved in Four Profound Tractates I. Discovering the Great and Deep Mysteries of Nature by that Learned Chymist and Physitian Osw: Crollius*, transl. by H. Pinnell, (London: Lodowick Lloyd, 1657) pp. 7, 28, 47.

²⁵⁸ See Henry Wotton's letters to Lord Zouche in *Reliquiae Wottoniae* (London: B. Tooke and T. Sawbridge, 1685).

inspector of mines.²⁵⁹ She describes her descent into silver and gold mines in Neusoln, Cremitz and Schemnitz in Hungary, where she met workers of many different nations and religions including Anabaptists, Calvinists, Lutherans, Zwinglians, Hussites, and Mohammedans.²⁶⁰ Alatheia Talbot travelled to Italy with her husband, probably visiting the Medici laboratories; her book *Natura Exenterata* includes some receipts from continental scientists.²⁶¹ Her mother, Mary Cavendish Talbot, received a description by her employee Thomas Coke from the Medici court in 1609 of a nail labelled as partly transmuted into gold after a dinner, by Leonard Tomaiser, Duke Francesco's nephew.²⁶² *The Margaret manuscript* indicates a strong diffusion of alchemical secrets from the continent by various sources: Lady Margaret Clifford did not travel abroad, but seems likely to have obtained European contemporary receipts. Similarly, Quercitan's daughter did not appear to travel herself, but corresponded with her mentor, whose work took him far away, and another contact, Monsieur de la Fin. Although more men than women travelled between courts, there were nonetheless European links between female courtiers. Lady Stafford, an Elizabethan courtier, was a friend of Catherine de' Medici and the French court, and the ill health of Lady Anne, Countess of Warwick, was news in Venice, due to her power and influence with the Queen.²⁶³ No evidence has been found, however, of international sharing of alchemical receipts by female courtiers.

Alchemists travelled between European courts seeking patronage, alchemical education, contact with other alchemists, and books.²⁶⁴ William Newman suggests that

²⁵⁹ Martine de Bertereau, Dame de Beausoleil, *La Restitution de Pluton* (Paris: Herve' du Mesnil, 1640).

²⁶⁰ de Bertereau, pp. 6, 14, 15.

²⁶¹ Lynette Hunter, 'Sisters of the Royal Society: The Circle of Katherine Jones, Lady Ranelagh', in Hunter and Hutton, pp. 178-197 (p. 179).

²⁶² David Howarth, *Lord Arundel and his Circle* (New Haven: Yale University Press, 1985) pp. 21, 226 fn 31.

²⁶³ Merton, pp. 167, 168.

²⁶⁴ The large number of Paracelsian works that John Dee took with him on his long European journey indicate the significance he attached to them: 88 per cent of bound Paracelsian titles and nearly 100 per cent of his unbound books on Paracelsianism (Roberts and Watson, *John Dee's Library Catalogue*, p. 53).

there were so many travelling adepts that they spawned a new literary genre, the transmutation story.²⁶⁵ Women feature in some of these. Sendivogius' romanticised legend presents his marriage to the widow of Alexander Seton as a disappointment, since she did not have Seton's supposed secret to pass on, but only Seton's book, *Novum Lumen Chymicum*, published under Sendivogius' name in Paris in 1608 and 1609, the time from which the stories of the French women alchemists appear to derive.²⁶⁶ Even though Quercitan's daughter knows that her experiment is ultimately a failure in the eyes of her mentor, since she has not made gold, her account is different because it adds a woman's voice to this genre, a voice which expresses a complex mixture of determination, curiosity, intensity, creativity, deference and assertiveness.

²⁶⁵ William R. Newman, *Gehennical Fire*, (Cambridge, Mass.: Harvard University Press, 1994) pp. 4-5.

²⁶⁶ On the possibly false and romanticised legend of Sendivogius see Stanton J. Linden, *Darke Hieroglyphickes* (Lexington: University Press of Kentucky, 1996) p. 136.

Humanism and women's education

To read, write or act as a patron of alchemy required at least moderate levels of learning in the vernacular language: to read and translate Latin or European texts depended on high levels of education. Humanism was significant in increasing the number of educated European women.²⁶⁷ If there were medieval women alchemists, as the myth of Perenelle Flamel suggests, their histories are not, to my knowledge, supported by extant writings. During the early modern period, humanism led to the highest level of education for a small elite, including prospective queens and the daughters of humanists like Thomas More who could read Latin, Greek, and European languages. It also led to increased education for other women, such as Lady Margaret Clifford, who read widely in the vernacular. It is well known that these women read, wrote and acted as patrons for religious writings.²⁶⁸ They were interested in the nature of the Christian life, the sacraments and meditation, areas which I suggest below to be in continuity with the spiritual aspect of alchemical thought.

The same fluency in language associated with humanism is displayed in European philosophical-alchemical circles, by men and women. Madame de la Martinville writes in Latin and French on alchemy, and the poetess Elizabeth Jane Weston's Latin prefatory poem to Oswald Croll's *Basilica Chymica* displays the erudition of an educated humanist at the Prague court of Rudolf II.²⁶⁹ Croll himself claimed that he learned his alchemical craft through twenty years of peregrinations through France, Italy, Germany, Hungary, Poland and

²⁶⁷ Brenda Hosington, 'Learned Ladies: Éloges de l'Anglaise Savante (1550-1558)', in *Femmes Savantes, Savoirs des Femmes* ed. by Colette Nativel (Geneva: Droz, 1999) pp. 95-106; Anne Lawrence, *Women in England 1500-1760: A Social History* (London: Weidenfeld and Nicolson, 1994) pp. 165-180; Letizia Panizza, 'Humanism', in *A History of Women's Writing in Italy*, ed. by Panizza and Sharon Wood (Cambridge: Cambridge University Press, 2000) pp. 25-30.

²⁶⁸ See Margaret P. Hannay, *Philip's Phoenix: Mary Sidney, Countess of Pembroke* (Oxford: Oxford University Press, 1990) p. x; Schleiner, *Tudor and Stuart Women Writers*, p. 2.

²⁶⁹ Copenhagen: The Royal Library, MS 1776, *Epistola Nobilissime Matrone de Martinvilla 1609*. Paris: Bibliotheque Mazarine, MS 3681 ff. 77-81 *Discours philosophical de Mademoiselle de la Martinville 1610*. Susan Bassnett, 'Revising a Biography: A new interpretation of the life of Elizabeth Jane Weston, (Westonia) based on her autobiographical poem on the occasion of the death of her mother', *Cahiers Elizabethains*, no. 37 (April 1990), 1-8.

Bohemia.²⁷⁰ Humanists were interested in reading antique texts in Latin and Greek, but also encouraged a wider use of the vernacular, to which more women became committed, as patrons and readers.²⁷¹ After the initial focus on diffusion of the Bible in the local language, the scope of vernacular literature increased, including other works of interest to alchemists. A few women apparently took advantage of the vernacular movement to publish on alchemy, Isabella Cortese's *I Secreti* being the prominent early example in Venice. Much later, and also writing in the vernacular, the Frenchwoman Martine de Bertereau used classical stories to defend her position as a woman writing about mining and alchemy, justifying her role as a writer by appeal to antiquity, noting that Greek and Roman women learned in the arts and speculative sciences included Themistoclea, sister of Pythagoras.²⁷²

Some noble ladies commissioned translations (a role which Lady Margaret Clifford performed for Protestant devotional works) or translated themselves (which skill Jeanne du Port and Mrs Litton appear to have exercised on specifically alchemical writings). *The Margaret manuscript* is almost entirely in English, and includes an English version of an alchemical treatise, *Stella Complexionis*, found elsewhere in Latin, and information about other foreign language publications in English.

Alchemy is sometimes perceived as a shadowy sideline of mainstream Renaissance culture, but the influence of the humanist tradition lies behind all the case studies.²⁷³ Isabella Cortese's *I Secreti* reflects the hermetic humanism of Marsilio Ficino, who, with his patron Lorenzo de' Medici, instigated the Renaissance trend of investigating antique texts. The women who wrote to Joseph du Chesne were dealing with a man who had married the granddaughter of the prominent humanist, Guillaume Budé. *The Margaret manuscript's* mentions of Pico della Mirandola and Blaise de Vigenère show an English contact with the type of

²⁷⁰ Croll, 1, p. 3.

²⁷¹ Merton, p. 213.

²⁷² De Bertereau, p. 5.

²⁷³ For example, Gãmini Salgãdo, *The Elizabethan Underworld* (Gloucester: Alan Sutton, 1984).

Italian and French humanism which incorporated alchemy-cabala clothed in imagery of the Jewish *Zohar* and classical myth.²⁷⁴

There may also be traces in *The Margaret manuscript* of German sources: the *Aureum vellus* drew on the classical legend of the golden fleece.²⁷⁵ This tendency to use classical myth in alchemical texts became more pronounced in the seventeenth century, in the work of Michael Maier, Johann Daniel Mylius, and in the circle of Queen Christina.²⁷⁶ It is prominent in the treatise translated in the seventeenth century into English from French by Mistress Litton, which refers to Hercules, Acheron and Cocytus, Mary the Prophetess, “The Dream of Scipio [that] of Poliphilus and [the] Licias of Plato”; the Emerald Tablet, the Pimander of Hermes Trismegistus, “the golden fleece or the Apples of Hesperides”, Pico della Mirandola, and the story of the Flamels.²⁷⁷

The humanist reclamation of pagan sources provided a rich source of imagery for celebration of vernacular tradition. A playful integration of paganism and alchemy in the circle of the alchemist Neptis suggests that some French humanists associated their alchemy with the antique French Druidic movement, mediated by ideas in medieval texts.²⁷⁸ Later, in the mid-seventeenth century, Elias Ashmole claimed that the learning of the Druids was first invented in Britain, whilst describing the German’s *Herthus*, Dame Earth, whose banner bore a rose.²⁷⁹ Less nationalistically, Richard Surfleet prefaces a book of advice on matters including distillation by women by describing the Earth as “soveraigne Empresse”, “a Divine sage”, a celestial body and mother of celestial offspring. She bears not only metals and precious stones in her womb, but man and woman, who are “the verie quintessence and

²⁷⁴ *The Margaret manuscript*, ff. 43r, 43v, 121r; Matton, pp. 111-137.

²⁷⁵ *The Margaret manuscript*, f. 44r.

²⁷⁶ See Michael Maier, *Atalanta Fugiens* in *The Golden Game*, ed. by de Rola; *Luoghi e memorie nel giardino di piazza Vittorio*, ed. by Fratelli Palombi (Rome: Comune di Roma, 1990).

²⁷⁷ Oxford: Bodleian Library, Ashmole MS 1446, ff. 2r-5v.

²⁷⁸ See chapter four of this thesis on du Chesne, the Druid and Bernard Trevisan’s *Allegory of the Fountain*.

²⁷⁹ Elias Ashmole, *Theatrum Chemicum Britannicum* (London: Nathaniel Brooke, 1652) sigs A2, A4.

sumum arcanum of all the extractions and preparations” made from the earth. Pan is the rural God, but it is Gaia “this sacred Goddess” who attracts his greatest praise, for “there cannot be too reverend an estimation of the earth”.²⁸⁰ Implications for women of the humanist connection between pagan imagery, alchemy and Christianity are explored in the next section.

Alchemy, theology and spiritual practice

Private meditation and scriptural study were an accepted and praised part of the daily life of noble and learned women in the early modern period.²⁸¹ Meditation and textual study were also part of alchemical culture for educated Paracelsians, and are suggested by the case studies, mostly in the context of Christian syncretism, and often with instruction from priests or vicars. When Bishop Thornborough invited Lady Knowles to “enter into holy meditation w^{ith} me” on the philosophers’ stone, he did so as an important representative of the Church of England.²⁸² The special piety of Lady Margaret Clifford is emphasised in her daughter Lady Anne’s description of a “religious and blessed lady”, “so religious, devout and conscientious, as the like hath scarce been known”, who “did spend much time in reading the Scriptures and other good books, and in heavenly meditations and in prayers, fastings and deeds of charity”.²⁸³ Through meditation her daughter believed Lady Margaret achieved mystical connection with the divine as “undoubtedly, whilst she lived here in the world, her spirit had more converse with heaven and heavenly contemplations than with terrene and earthly

²⁸⁰ Stevens and Liebault, sigs A3v-A5r.

²⁸¹ *Women's Worlds in Seventeenth-century England: A Sourcebook*, ed. by Patricia Crawford and Laura Gowing, (London: Routledge, 2000) pp. 41-70; Olwen Hufton, *The Prospect Before Her: A History of Women in Western Europe 1500-1800* (London: Harper Collins, 1995) pp. 359-418; Sara Mendelson and Patricia Crawford, *Women in Early Modern England 1550-1720* (Oxford: Clarendon, 1998) p. 225-226, 230; Anne Laurence, *Women in England 1500-1760: A Social History* (London: Weidenfeld and Nicolson, 1994) p. 165; *The Collected Works of Mary Sidney Herbert*, ed. by Hannay, Kinnamon, Brennan, pp. 210.

²⁸² London: Sloane MS 1799, ff. 74-104, at f. 80r.

²⁸³ *Lives of Lady Anne Clifford Countess of Dorset, Pembroke and Montgomery (1590-1676) and of her parents summarised by herself*, ed. by J.P. Gilson (London: The Roxburghe Club, 1916) pp. 18, 4, 23.

matters”.²⁸⁴ Lady Grace Mildmay’s extensive Christian meditations represent a very disciplined approach to spiritual practice, yet are full of vivid imagery and metaphor. For Lady Grace, meditation is an active process in which to experience “being”, in “sheer exultation of faith, the joy, awe and wonder of faith, the beauty and majesty”, and although she had an extensive medical practice, which included some alchemical preparations, her spiritual practice appears to be her foundation.²⁸⁵

The traditionally intimate connection between alchemy and mystical-religious tradition continued in the early modern period.²⁸⁶ Bishop Thornborough, writing a long alchemical treatise to Lady Knowles, emphasises that “It becometh a Bushopp to use Philosophie onlie as a servant to divinitie”.²⁸⁷ The vicar Thomas Tymme, in his introduction to Joseph du Chesne’s *The Practise of Chymicall, & Hermeticall Physicke*, understands theology and alchemy to be closely connected modes of knowledge of the heavenly and natural worlds, arguing “that Halchymie should have concurrence and antiquitie with Theologie”, the one seeming human, the other divine. For Tymme, alchemy is “God’s created handmaid”, whose identity elides with the beginning of time and terrestrial existence when the Earth was created through processes of God’s “Halchymicall Extraction, Separation [sic], Sublimation and Conjunction” and who will also be in operation at the Second Coming when the elements will “by Gods Halchymie be metamorphised and changed” in “that great & generall refining day” in which God makes a new Heaven and Earth, bringing all things to “a christalline cleernes” and reducing all things to a “Quintessence of Eternitie”.²⁸⁸

²⁸⁴ Gilson, p. 24.

²⁸⁵ Linda Pollock, *With Faith and Physic: The Life of a Tudor Gentlewoman Lady Grace Mildmay 1552-1620* (London: Collins and Brown, 1993) pp. 48-91, 68.

²⁸⁶ Mircea Eliade, *The Forge and the Crucible: The Origins and Structures of Alchemy*, second ed. (London and Chicago: University of Chicago Press, 1978) p. 183.

²⁸⁷ London: British Library, Sloane MS 1799, ff. 74-104, at f. 81r.

²⁸⁸ Josephus Quercitanus, transl. by Thomas Tymme, *The Practise of Chymicall, and Hermeticall Physicke, for the preservation of health* (London: Thomas Creede, 1605) sig. A3.

The continuities between science and religion are demonstrated in the work of Paracelsus, whose significant new focus on the use of minerals in medical practice grew out of a magical philosophy with an intensely spiritual orientation. The literature attributed to him, and Paracelsians like Thomas Tymme, Joseph du Chesne, John Thornborough and Heinrich Khunrath, has scientific, medical, and religious aspects, but the religious dimension is paramount, with the alchemical task that of the redemption of the physical world. As Christ redeemed humanity through grace, so Christian humanity is obliged to redeem nature.²⁸⁹

That redemption quest, requiring separation of pure essence from impure material, both in substances of the material world and in the alchemical practitioner, is a process found in all the main case studies in this thesis. This process of refinement of the soul of the practitioner, and of the created world, seems to have been at heart a spiritual practice, forming a continuity with educated women's role as good Christians, caring for the spiritual well-being of their households and communities through prayer, contemplation, the study of religious texts, and practically, by the preparation of medicines. This portal into the spiritual dimension of alchemy was reinforced by women's knowledge of household technology, which had much in common with the alchemist's practical work. Some historians of science stress the use of substances in alchemy.²⁹⁰ However, the primacy of the mystical-spiritual dimension for women alchemists is apparent in many of the case studies, and their otherwise inexplicable descriptions and symbols, which have parallels with Christian sacraments and the life of prayer. A woman reading or hearing Thomas Tymme's view of alchemy as God's created handmaid might well see how, by speeding up the return of matter to eternity through alchemical purification rituals, she could follow the example of Lady Alchemy and act as

²⁸⁹ John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (Cambridge: Cambridge University Press, 1991) pp. 64-67.

²⁹⁰ See for example Newman, *Gehennical Fire*, pp. 92-99.

God's handmaiden to assist in perfecting creation, a potentially urgent task in the face of widespread disease, war and religious schism.

For early modern alchemical writers the mystical-religious context is often provided by different syncretic blends of Christianity, Christian cabala, hermeticism, neoplatonism, neopythagoreanism, and Paracelsianism, all of which are represented in the case studies in this thesis. Christian humanist interest in promoting theological peace and friendly understanding between faiths led them to reinterpret non-Christian sources, not in order to reject Christianity, but to increase its authority and justification.²⁹¹ Marsilio Ficino's advice to Clarice, wife of Lorenzo de' Medici, about the medicinal qualities of frequent and fervent holy prayer, directs her to the Psalms of David, because they contain all the prayers of Christians and Jews, and have the approbation of Mohamet, King of Arabia.²⁹² The Psalms were important to women in the Italian and French academies and in informal female household gatherings in England.²⁹³ Frances Yates argues that they were part of an impetus in the Florentine and French Academies to find a continuous religious tradition of immemorial antiquity linking Christianity to the religions of the ancient world, an urge which appears to have informed interest in alphabets, symbolism, prayer, sacred music and dance, areas which also interested some women alchemists in this study.²⁹⁴ Edgar Wind also argues that there

²⁹¹ James Hutton, *Themes of Peace in Renaissance Poetry*, ed. by Rita Guerlac (Ithaca and London: Cornell University Press, 1984). The idea of friendly conversation between members of different faiths is presented in the significant medieval work *A Testament of Alchemy*, between Morienus, a hermit of Jerusalem, and Khalid, King of the Arabs; and in Johann Reuchlin's *De Arte Cabalistica* between a Pythagorean, Moslem and Christian cabalist.

²⁹² Marsilio Ficino, transl. by Arthur Farndell, 'The Psalter of Jerome translated into the common tongue, Proem to Clarice, wife of Lorenzo de' Medici', unpublished, supplied by Clement Salaman, general editor of *The Letters of Marsilio Ficino* of which five volumes have been published at London by Shephard Walwyn.

²⁹³ Frances Yates, in *The French Academies*, p. 3, identifies the syncretic appeal of the Psalms in the circle of the French Academies. Their significance to Lady Margaret Clifford is apparent in chapter five of this study.

²⁹⁴ Frances A. Yates, *The French Academies*, p. 3. The example of Lady Margaret Clifford, for example, is developed in chapter five: she is described as an alchemist by her daughter Lady Anne and friend Lord Willoughby; Aemilia Lanyer poetically suggests that Lady Margaret is possessed of a strong spirituality, and that she and women in her circle sang psalms; Lady Anne took part in dances at the court of James and Anne with symbolic resonances which find one interpretation as alchemical-hermetic transformations. See also Schleiner, pp. 23-25.

was a philosophy of tolerance, which sought to find a hidden concordance between Christian theology, cabala, and pagan imagery, although for Wind, alchemy was a debased example of this trend.²⁹⁵ The incorporation of syncretist ideas into alchemical literature is illustrated by the 160 emblems of alchemists in Johann Daniel Mylius' *Opus medico-chymicum*, drawn from Egyptian, Hebrew, Greek, Arabian, medieval and contemporary European sources.²⁹⁶ Some women's alchemical writings draw on Mylius' heroes: Hermes, Morienus, Geber, Arnold de Villa Nova, the authors of the *Rosary magni*, the *Turba Philosophorum* and *Ludus Puerorum*, Isaac Holland, Paracelsus, Janus Lacinius, Edward Kelly, and Oswald Croll, as well as Plato and Seneca.²⁹⁷ The references in *The Margaret manuscript* to Blaise de Vigenère suggest English Protestant interest in the work of a French Catholic who writes about alchemy and cabala, and seeks a unifying religious spirit to benefit both those praying and the world, a task which he locates in the sphere of private devotion, particularly contemplation. His attempt to find a true religious spirit draws on scripture, but also on the Jewish *Zohar*, and antique sources including Plato, Zoroaster, and Pythagoras.²⁹⁸

Robert Schuler's study of interpretations of English alchemy from 1600 to 1650 by moderate Anglicans, orthodox Calvinists and radical Puritans, shows how the flexibility of the alchemical mode of thought enabled harmonisation with many varieties of Christian religious belief and experience in the early modern period.²⁹⁹ Where Schuler provides evidence of men finding spiritual benefit from the alchemical tradition, this study suggests that women also engaged with alchemy as spiritual practice. The case studies show a Catholic

²⁹⁵ Edgar Wind, *Pagan Mysteries in the Renaissance* (London: Faber and Faber, 1958, 1968) p. 21.

²⁹⁶ Frankfurt: Lucas Jennis, 1618, reproduced in *The Golden Game*, ed. by de Rola, pp. 133-149.

²⁹⁷ Quercitan's daughter cites the *Ludus puerorum*, p. 56; Isabella Cortese cites Hermes; Madame de la Martinville quotes Paracelsus; *The Margaret manuscript* recommends the work of Isaac Holland, Paracelsus, Janus Lacinius, Edward Kelly. Lady Margaret Clifford reads Seneca.

²⁹⁸ François Roudart, 'Qu'Est-ce que prier dans Des Prières et Oraisons?', in *Blaise de Vigenère*, ed. by Fumaroli, pp. 139-154 (pp. 140-145).

²⁹⁹ Robert M. Schuler, 'Some Spiritual Alchemies of Seventeenth Century England', *Journal of the History of Ideas*, 41 (1980) 293-318, (p. 294).

noblewoman drawing on the neoplatonic alchemical knowledge of Catholic clerics; Calvinist women drawing on allegorical astral imagery in Paracelsianism; and the alchemical practice of an early Puritan noblewoman who married into a Catholic family, being associated, by others, with pious Christianity, Stoicism, and Hermeticism of the elect. Supporting evidence shows an early example of hermetic Anglicanism, in the Bishop of Bristol's chemical treatise to a noblewoman.

When Sarah Wiggess prefaced her manuscript book of alchemical and non-alchemical receipts and philosophy with the motto "Sarah Wiggess hir booke. Live wel, dye never. Dye wel, live ever. 1616" she captured a central metaphor applicable to Christianity and Christian alchemy, designating the death and rebirth of Christ, the significant passages of the human soul, and the alchemical idea that the *prima materia* should pass through a death and rebirth within the alchemical vessel.³⁰⁰ The alchemical metamorphosis Thomas Tymme describes as the refining day of the Second Coming raises the question of how alchemists in his circle perceived the relationship between alchemy, Christian symbols of transformation, and notions of the sacred. In the Christian past, before the twelfth century, a sacrament had a broad meaning designating a wide number of sacred signs and symbols including holy water and oil, blessed ashes, the sign of the cross, and prayers. The designation of seven sacraments was a process through which, amongst other changes, the eucharist became a clerical office with little lay involvement, and extreme unction altered from repeated anointing of the sick to a final anointing of the dying.³⁰¹ Even so, Joseph Martos argues that almost every aspect of medieval Christian life could be connected with one of the seven sacraments.³⁰²

In *Stella Complexionis*, a fourteenth century alchemical text possibly recommended for Lady Margaret Clifford to read in the late 1590s, a medieval association of alchemy and

³⁰⁰ London: Royal College of Physicians, MS 654. Wiggess, Sarah et al., Receipt Book, c. 1616.

³⁰¹ Joseph Martos, *Doors to the Sacred: A Historical Introduction to the Sacraments in the Christian Church* (London: SCM Press, 1981) pp. 65-69.

³⁰² Martos, p. 82.

the passion of Christ is made explicit.³⁰³ The *Turba* describes the force of the alchemical “permanent water” as “a spiritual blood”.³⁰⁴ It seems that this trend continued into the early modern period, as there are many linkages between symbols of the seven sacraments and other sacred signs and symbols in the alchemical texts discussed in this thesis. The preparation of holy water for baptism, and holy oil for extreme unction, find echoes in the alchemist’s purified waters and oils for renewed health, longer life and perfumery. When Lady Grace Mildmay describes Christ as the holy oil, holy water, and sweet perfume, she uses a metaphor whose cultural specificity lies in her preparation of medicinal alchemical oils, waters and, probably, perfumes to purify the home.³⁰⁵ Ashes have Christian and alchemical significance for the stage preceding rebirth.³⁰⁶ In the alchemical ritual something special happens as the material passes through the alchemist’s hands akin to blessing by laying on of hands, and the symbolism of the marriage ritual where husband and wife are joined by the priest is explicitly used as a metaphor for the joining of substances, even by a Bishop, who associates the priest with Hermes’ wind, a phrase whose allusion to the Emerald Tablet of Hermes Trismegistus he expects his female reader to understand.³⁰⁷

The connection between the sacrament of the Mass and the sacrament of the art of alchemy was made explicit before the period under consideration here, in 1526, by the Hungarian Melchior Cibensis, chaplain to Ferdinand I, and just after it, in 1617, by Michael Maier.³⁰⁸ Jung argues that alchemists took the concept of the eucharistic transubstantiation of

³⁰³ *Stella Complexionis*, and references to it in *The Margaret manuscript*, are discussed in chapter four.

³⁰⁴ *The Turba Philosophorum*, ed. by A.E. Waite, p. 65.

³⁰⁵ Pollock, p. 55.

³⁰⁶ Ash Wednesday finds a parallel in the alchemical ashes of the burnt body of conjoined mother and son which are imbibed with tears, put in a dark grave for three days, before quickening. Oxford: Bodleian Library, Ashmole MS *Stella Complexionis*, ff. 62- 98, at f. 96.

³⁰⁷ London: British Library, Sloane MS 1799, ff. 74-104 at f. 100v. Holmyard, pp. 97-8.

³⁰⁸ See: Vienna: Austrian National Library MS 11347, ff. 9-12, from the sixteenth century; *Theatrum Chemicum*, ed. by Elias Ashmole, III, 1602; text transcribed at alchemy website/mass.html. Michael Maier depicts the Virgin Mary feeding a child whilst a priest conducts mass with the motto: "Lapis ut infans, lacte nutriendus est virginali" in *Symbola aureae mensae* (Frankfurt: Lucas Jennis, 1617) reproduced in *The Golden Game*, ed. by de Rola, pp. 113, 115-6.

bread and wine into the body and blood of Christ, and applied a similar concept to the natural world, so that, for alchemists, the *opus alchymicum* and *opus divinum* of the Mass claimed equality.³⁰⁹ This view is partially supported by the work of Bernhard Lang, who identifies similarities between alchemical ritual and sacramental presence in different forms of communion.³¹⁰ In the Eastern church, the rite of the sacred meal, strongly influenced by neoplatonic theurgy, uses ascetism to purify the soul and to prepare sacred substances, in a procedure reminiscent of alchemy.³¹¹ In Thomas Aquinas' paradigm of eucharistic realism, the sacred food changes from the interior: the invisible substance that is the essence of the material changes into the new substance of Christ's body and blood. God can change any substance into another, including the *lapis*, a stone or rock, and although, for Aquinas, beyond the Eucharist God chooses not to change substances, it is easy to see the appeal of this theory of the creation of the *lapis* for alchemists.³¹² Calvin regarded ingestion of bread and wine in communion as symbolising Christ feeding the soul on a parallel level of reality. This idea of Christ's double presence in heaven and in the sacrament, influenced by Augustine and Plato, may have led the alchemist to believe that alchemical transmutations occurred on a parallel level of reality, a view implied in Isabella Cortese's *I Secreti*. Some alchemists were attracted to the ideas of the Lutheran Jacob Boehme, for whom bread and wine constitute "what one may call a natural sacrament even outside Mass".³¹³ For Boehme, the bread and wine included the fifth element he named "tincture", an alchemical term referring to the active principle in a chemical substance. For Boehme, the tincture of bread

³⁰⁹ Carl Gustav Jung, *Alchemical Studies* (London: Routledge and Kegan Paul, 1968) pp. 159-160. Jung shifted from an earlier position in which he argued that although there was no doubt that the allegories of the Church Fathers enriched the language of alchemy it was doubtful how far the *opus alchymicum* could be regarded as a transmogrification of ecclesiastical rites and dogma because the basic root of alchemical ideas was gnostic. See *Psychology and Alchemy* (London: Routledge & Kegan Paul, 1953) p. 343.

³¹⁰ Bernhard Lang, *Sacred Games: A History of Christian Worship* (New Haven and London: Yale University Press, 1997) pp 315, 326.

³¹¹ Lang, p. 315.

³¹² Alchemists attribute alchemical literature to a fictional Aquinas: the Alchemy CD rom lists 40 manuscripts containing items attributed to Thomas Aquinas.

³¹³ Lang, p. 326.

and wine nourished the human spirit in a natural way and so were natural sacraments. In the Eucharist Christ associates his glorified flesh and blood with the tincture, which, as the most spiritual part of the bread and wine, serves to carry Christ's supernatural and intangible reality. The bread and wine are not transubstantiated, and Christ's body is not made tangible.

In the literature associated with Isabella Cortese, Madame de la Martinville, Quercitan's daughter and Margaret Clifford, symbols of transmutation are apparently used in procedures with ritual quality, resulting in evocative connections to communion. Caroline Walker Bynum's work explores how, for medieval Europeans, eating was the most basic way of encountering God, with the prototype meal the Eucharist, and food an important motif of women's piety.³¹⁴ Some of the literature discussed here also shows associations between sacred food, the relationship of spirit, soul and body, and pious women's work. There are examples of the imagery of virgin's milk, purification of the soul, transmutation of the body, the alchemical mass, and associations of Mary, the *rosarium* and the alchemical tradition.³¹⁵ Bishop Thornborough explains his understanding of the transmutation of alchemical medicine to Lady Knowles by using the analogy of digestion: a natural separation of the pure from the impure in the stomach results in the transmutation of herbs, fishes or bread into the flesh of man. He claims a similar process occurs in alchemy where the "Stomachus Struthionis" eats, digests, and separates the pure part of metals. The bishop's choice of foods associated with Jesus, and his comment that these form the diet of men and animals who do

³¹⁴ *Holy Feast and Holy Fast: the religious significance of food to medieval women* (Berkeley: University of California Press, 1987) pp. 2-4.

³¹⁵ In the *Ave Maria* of Melchior Cibensis' alchemical mass, Mary is hailed as the beautiful lamp of heaven, and shining light of the world, before her fertilisation as Virgin with the sperm of the philosophers. According to de Rola, the Hungarian Nicholas Melchior Szebeni composed the mass at the court of Emperor Ferdinand I, circa 1526 (*The Golden Game*, p. 115). Cristina Neagu discusses the possibility that the humanist Nicolaus Olahus (1493-1568) may have been the author ('The *Processus sub Forma Missae*: Christian Alchemy, Identity and Identification', *Archæus* IV (2000), pp. 105-117). The text is transcribed at [alchemy website/mass.html](http://alchemywebsite/mass.html). On the connection between the rosarium and alchemy see Eithne Wilkins, *The Rose-Garden Game: The symbolic background to the European prayer-beads* (London: Victor Gollanz, 1969) pp. 26, 106, and Adam Maclean, *The Rosary of the Philosophers* (Edinburgh: Magnum Opus Hermetic Sourceworks, 1980) p. 1. Both suggest a connection between devotional and alchemical *rosariums* of which the most important is the *Rosarium Philosophorum*, 1550, which they consider to be a meditative device.

not eat meat, suggests a view that not only the sacred food of the Eucharist but also everyday foods have transformative significance.³¹⁶

The problem of sacramental practice becoming sacramental magic, when a ritual is believed to work mechanically by saying the right words and acting the appropriate gestures, so that the faith and the supernatural role of God's grace is forgotten, was a real one for the early modern church.³¹⁷ Similarly, when alchemical receipts were copied with emphasis on materials, technique, and the expectation of an automatic result, they too may have been perceived as magical: the very pronounced emphasis on God's grace, faith and good works in more highbrow alchemical texts suggests an attempt to show that in its purest form, alchemy was indeed a sacrament. For Thomas Tymme, alchemy was a way to see God and by mystery "as in glasse, discern the holy and most glorious Trinitie, in the Unitie of one Hupostatis Divine."³¹⁸

In their Christian task of working with the sacred, humanists looked at antique traditions for methods to make their work more effective. One such philosophy was stoicism, which had a long connection with spiritual alchemy.³¹⁹ It required a pure moral life, and promoted methods for cleansing the heart better to receive the influence of the incorporeal worlds. Stoics associated virtue with "purity of heart" and a clean "cardiac mirror", aims congruent with those of the good Christian: certainly Lady Margaret Clifford's alchemical

³¹⁶ London: British Library, MS Sloane 1799, f. 89r. His statement that herbs, fish and bread is the diet of men and animals who do not eat meat, may indicate advocacy of a form of vegetarianism based on foods associated with Jesus.

³¹⁷ Martos, pp. 87, 96. The supernatural working of the Lord on man's soul, through the Holy Spirit, is recognised by, for example, Philip de Mornay, in *De L'Institution, Usage, et Doctrine du Sainct Sacrement de l'Euchariste* (La Rochelle: Hierosme Hultin, 1598) pp. 717, 765, 837.

³¹⁸ His preface to du Chesne, *The Practise of Chymicall, and Hermetic Physicke*, sig. A3.

³¹⁹ See H.J. Sheppard, 'The Redemptive Theme and Hellenistic Alchemy', *Ambix*, 7 (1959) 42-46, and 'Gnosticism and Alchemy', *Ambix*, VI (1957), 86-101. The women discussed here are Protestants, but Catholic women were also interested in stoicism, which appears to have had a wide appeal to educated women; for example Elizabeth Cary, Viscountess Falkland, a convert to Catholicism, translated Seneca's *Epistles* from Latin. Her other works include *The Tragedy of Mariam* (1613), *The History of the Life, Reign and Death of Edward II* (1625), a translation of Jacques Davy du Perron's *Replye to James Ist* (Douai: 1630), and a translation of Ortelius' *Miroir du Monde* from French. See Purkiss, ed., *Renaissance Women: The Plays of Elizabeth Cary and the Poems of Aemilia Lanyer* (London: William Pickering, 1994) pp. viii-xviii, and Hannay, *The Collected Works of Mary Sidney Herbert*, p. 210.

receipt book stands by the Bible, the Psalms and “All Senecaes works translated out of Latin into English” in the Clifford Great Picture.³²⁰ Lady Mary Herbert apparently also combined an interest in alchemy and stoicism. Her 1590 translation of Philippe de Mornay’s *Excellent discours de la vie et de la mort*, 1576, draws on the writings of Seneca, and addresses themes related to spiritual alchemy, summed up by Lady Mary’s ending: “Die to live, Live to die”.³²¹ De Mornay’s text is associated with the meditative tradition of the art of dying, derived from woodcuts probably first accompanied by a single page of text, written by a Dominican, with the aim of making its ideas available to those with little or no literacy, including, no doubt, many women, in the same tradition as printed Dominican *Rosariums*.³²² De Mornay’s text uses allusions familiar to alchemy: frequent references to Solomon; Seneca’s image of fortune binding some with a golden chain and others with base metal; and discussion of the need for an inner separation of “us from ourselves” which is called Death, “a separation of the pure and clean part of our soul from the uncleane”.³²³ As alchemical imagery addresses the issues of birth, death and a regenerated rebirth, so the meditation on death is an aid to living well, so that “if we marke well, we dye every day, every houre, every moment [...] Our living is but continuall dyeing”: the aim is to “learn in this world to dye”.³²⁴

The ideas of Plato and Aristotle were profoundly important to the alchemical tradition.³²⁵ Ioan Couliano argues that their explanations of the relationship between the world of existence and that of the ideal forms informed the Renaissance science of the

³²⁰ The Appleby Great Picture was painted to Lady Anne’s close instructions in 1646 and is now in the Kendal Art Gallery. For text see Cumbrian Record Office: JAC 332 Inscriptions of the Great Picture at Appleby Castle.

³²¹ Hannay, *The Collected Works of Mary Sidney*, pp. 210, 254.

³²² Nancy Lee Beaty, *The Craft of Dying: A Study in the Literary Tradition of the Ars Moriendi in England* (New Haven: Yale University Press, 1970) p. 3.

³²³ Hannay, *The Collected Works of Mary Sidney*, pp. 214, 243.

³²⁴ See for example the sequence of images in the 'Rosarium Philosophorum', in *De alchimia opuscula* (Frankfurt: C. Jacobi, 1550). Hannay, *The Collected Works of Mary Sidney*, pp. 248-9.

³²⁵ On Aristotle see fn 3 above. Neoplatonism also influenced Renaissance alchemy, in concepts of ideal form, the role of geometry, the creation of the world soul, the idea that emblems were the allegorical expression of sacred knowledge and through Paracelsianism: see Holmyard, pp. 21-24; Roberts, *The Mirror of Alchemy*, pp. 45-50.

imagination. For Plato, these two worlds can be bridged by the philosopher's Eros, whilst Aristotle describes an astral substance enabling resolution of the corporeal and incorporeal. The soul submits messages to the body by spiritual apparatus in the heart, whilst messages can be sent from the world of the existence back to the soul by "phantasms" or images created by the imagination. Couliano argues for a close connection between the idea of the phantasm and scholasticism, western thought generally, and the art of memory, which was, he hypothesises, a form of meditation in which a phantasmic world of the imagination was created by traditional rules, aimed at accessing the incorporeal world.³²⁶

Although it is problematic to make too certain claims about the interior life of early modern women, based on fragmentary evidence, it is certainly possible to apply Couliano's theory to the alchemical practices found in the women's writings in this study, all of which are concerned with the body/spirit earth/heaven relationship and the creation of a medium to join them, which they call the soul, vegetable soul, *spiritus* or astral spirit. In chapter three I argue that Isabella Cortese's *I Secreti* shows the influence of the sort of astral magic promoted by the instigator of Renaissance hermetic-platonism, Marsilio Ficino, as part of active meditative practice.³²⁷ In chapter four I explore how Paracelsian writings associated with Madame de la Martinville become more intelligible within the tradition which Couliano discusses.³²⁸ Sequential images, reflecting stages of the experiment, are associated with the concept of a mediating astral substance, and make more sense in the context of Paracelsian writings which seek spiritual health. Strengthening the human heart, inwardly and outwardly, was part of a wider vision.³²⁹ Joseph du Chesne expounds on the essence of God, first by

³²⁶ Ioan P. Couliano, *Eros and Magic in the Renaissance* (Chicago: University of Chicago, 1987) pp. 6, 34.

³²⁷ Brian P. Copenhaver and Charles B. Schmitt, *Renaissance Philosophy* (Oxford: Oxford University Press) p. 144.

³²⁸ *Religion and Neoplatonism in Renaissance Medicine*, ed. by Pagel and Winder particularly chapter VI, 'Paracelsus and the Neoplatonic and Gnostic Tradition', pp. 125-166.

³²⁹ Every cure, he wrote, should proceed from the power of the heart, "for only thereby can all diseases be expelled [...] The curative power must come from the heart and the disease must be driven into the remotest corner". The physician should "love the sick" and be "known by his love and by his unflinching love for his

contemplation of the great and small worlds, and second by exterior works. His vision stretches from the cosmos to all parts of the animate universe — man, minerals, animals and plants.³³⁰ Oswald Croll explicitly links healing to a Christianity in which the true physician is divinely inspired and “moved with a Samaritan-compassion towards their sick neighbours, of what rank and condition soever”.³³¹ This spiritual quality of the practitioner means that for Croll it is also important that the Paracelsian physician prepare his own medicines. Du Chesne seeks to work with the “universall power of God” implanted in all creatures and to work with the body, soul and spirit in man and substances.³³² For Paracelsus, the astral substance which joins body and spirit can be affected by the imagination, which he seems to regard as an astral force, drawn into the person exerting imaginative power, and impressed on another person or, in alchemy, on materials.³³³ The potential for misuse was recognised by Paracelsus, who believed, like his contemporaries, that women were more likely to abuse this power.³³⁴ However, the implicit corollary of this view is that women could use their imagination for good, a point recognised by Anthony Fletcher as part of the contemporary world view.³³⁵

The long connection between the Old Testament and apocryphal Wisdom books and Marian worship appears to have continued in this period, at least in England, where there are examples of the biblical concept of the woman of wisdom providing a positive context for attitudes to woman alchemists.³³⁶ Robert Fludd, circa 1623, cites Solomon who “sayeth,

neighbour”. A false heart resulted in a false physician, and a man should be judged not by his words, but by his heart (Jacobi, *Paracelsus*, pp.170, 79, 142, 146). In *the Book of the Nature of Man* he stated that the heart is too weak to resist the things that happen to it on a daily basis, and it therefore needs to be comforted by medicine, because “medison is another harte”. Oxford: Ashmole MS 1490, Item 79, *The second Book of the Nature of Man and how to strengthen and comforte the 7 principall members*, f.217r.

³³⁰ Joseph du Chesne, *Le Grand Miroir du Monde* (Lyon: Barthelemi Honorat, MDLXXXVII) I v.

³³¹ Croll, *Philosophy Reformed and Improved in Four Profound Tractates*, p. 7.

³³² Quercitanus, *The Practise of Chymicall, and Hermeticall Physicke*, sigs B3, C3.

³³³ Pagel, *Paracelsus*, p. 122.

³³⁴ Pagel, p. 122.

³³⁵ Fletcher, *Gender, Sex and Subordination in England 1500 – 1800*, p. 235.

³³⁶ Adrian Hastings, *The Oxford Companion to Christian Thought* (Oxford: Oxford University Press, 2000) p. 414.

wisdom entereth into holy soules, and maketh the prophets and freends to God”, and uses this to argue that there had been prophetesses, like the alchemist Mary, as well as the nine Sibyls or Wise Women.³³⁷ For Fludd it is the spirit of wisdom which raises and exalts everything by resurrection after death or by transfiguration in this life. It is by this mystical spirit of wisdom that Elias multiplied the widow’s oil, and Christ the bread and fish.³³⁸ Wisdom “delighteth to inhabit cleane vessels and pure hearts”: women who are worthy are not excluded.³³⁹

Alchemy and household management

Whilst the courts were the best known centres of alchemical practice and patronage, many alchemists also worked in private households, either in their own homes, or under the patronage of an aristocrat, gentleman or perhaps, gentlewoman. The court was in effect an extended domestic household, and the involvement of women at court in alchemy, as patrons or practitioners, provided a role model for women in their own households. Women’s sphere of activity in early modern Europe was primarily within the household economy, as producer, carer and educator of children, and manager of a wide range of activities associated with running households of varying sizes, including medical care.³⁴⁰ The skills of housewifery were numerous, whether in manor house or small cottage, since most production took place in the household and the family consumed everything it produced.³⁴¹ A woman with a household from the middling to upper ranks of society was likely to be responsible for

³³⁷ *The Apocrypha*, Wisdom of Solomon, 7.27. Oxford: Ashmole MS 766, II, f. 52v.

³³⁸ Oxford: Bodleian Library, Ashmole MS 766, II, ff. 21r, 35r.

³³⁹ Oxford: Bodleian Library, Ashmole MS 766, II, ff 32v, 53v.

³⁴⁰ Mendelsohn and Crawford, *Women in Early Modern England*, pp. 209, 256, 303. Fletcher, *Gender, Sex and Subordination*, pp. 232-236, 251. Diane Purkiss, *The Witch in History* (London and New York: Routledge, 1996) p. 94. Wendy Gibson, *Women in Seventeenth Century France* (Basingstoke: Macmillan, 1989) p. 19.

³⁴¹ Alice Clark, and Amy Louise Erickson, *Working Life of Women in the Seventeenth Century* (London and New York: Routledge, 1992, reprint of 1919 with new introduction) pp. viii-ix, x. The removal of production from the home and the masculinisation of previously female trades is accepted by modern scholarship though it now places the transition in the eighteenth century rather than the seventeenth century, where Alice Clark placed it.

cooking, washing, cleaning, making medicines and cosmetics, dyeing, cloth-making, and the distillation of herbal and perfumed waters. In a very rich household, of the sort to which Isabella Cortese's Italian readers were intended to aspire, the production of luxury required additional skills such as making gold and silver inks, dyeing and caring for expensive fabrics, creating pigments for use in artwork and decoration, and the ceremonial decoration of horses. Women without access to land carried out these tasks as servants in richer households.

Although women's spiritual care of their households was undoubtedly important, in less wealthy households there is likely to have been more emphasis on the practical aspects of alchemy. Many of the skills required to run a middling to large household overlap with those used in practical alchemy, though the cost of the materials (such as gold, silver, mercury, copper, lead, antimony, sulphur) make alchemical experiments more feasible in richer families. Women used to employing craftsmen could transfer that knowledge into the alchemical realm: Quercitan's daughter, for example, writes that she commissioned a copper vessel to her own specification, with windows to watch colour changes taking place within the vessel without causing disturbance. She was also able to deploy a servant to watch the vessel when she fell asleep from exhaustion. In *I Secreti* Isabella Cortese presents alchemy, metalwork, dyeing, colouring, craft work, the making of perfumes, and distillation of waters in one unified volume. Lady Margaret Clifford regards mining, on and off the Clifford lands, as part of her role, which is very likely to have had a relationship to her alchemical interests.³⁴² Women's skills in making dyes, inks and colourings overlap with the technical skills and traditions of craft alchemy. Distillation, like the alchemical practice to which it was closely allied, had been practised mainly in the greatest households and in monasteries before the latter were dissolved in 1539: gentry and others then began to equip still-rooms, primarily

³⁴² She was exceptional in pursuing business activities outside her own estate such as mining and metal-working (Richard T. Spence, 'Mining and Smelting in Yorkshire by the Cliffords, Earls of Cumberland, in the Tudor and Early Modern Period', *Yorkshire Archaeological Journal*, 64 (1992) pp. 157-182, at pp. 162, 163, 167).

to distil medical remedies.³⁴³ Alongside practical advice on growing and using vegetables, fruits and herbs, John Fitzherbert in his *Book of Husbandry* writes in praise of the art of distillation as “ a deviding of elements, as the ayre from water, the water from fire, the fire from earth, and the pure from the impure, and to bring also these matters perfect to perfectedness”. This closely resembles the alchemical idea of the distillation of the quintessence, especially as he claims that no greater wonders have been effected than the distilled product.³⁴⁴ Distillation is also prominent in Hugh Platt’s *Delightes for Ladies* whose receipts for spirits of spices, herbs, honey, and rosewater demonstrate a shift from the home distillation of medical remedies to preparation of social drinks and foodstuffs.³⁴⁵

Alchemists used materials and equipment employed in other household work. Although Platt disdains the “wandring and illiterate Alchymist” for placing faith in the athanor, ironically his work also shows the overlap in equipment between technical metalworkers, ladies’ distillatories, and by extension, technical alchemists.³⁴⁶ He recommends that when distilling rosewater at Michaelmas, ladies should use a great stone pot with a narrow mouth, and leaded interior, of the sort used by gold [re]finers to receive *aqua fortis* (i.e. acid).³⁴⁷ Isabella Cortese’s alchemical receipts in *I Secreti* use pork fat, distilled water, and distilled white wine vinegar, as well as simple equipment such as a pestle and mortar, a horse dung slow cooker, and ashes (for distillation).³⁴⁸ A distillatory receipt for the “Heaven of the Philosophers” in *The Margaret manuscript* uses wine, horse dung (for slow cooking), hot loaves of maslim bread fresh from the oven, and vegetables, herbs, flowers,

³⁴³ *'Banqueting Stuffe': The fare and social background of the Tudor and Stuart banquet*, ed. by C. Anne Wilson (Edinburgh: Edinburgh University Press, 1991) p. 25.

³⁴⁴ John Fitzherbert, *Booke of Husbandrie* (London: I.R. for E. White, 1598) p. 104.

³⁴⁵ Hugh Platt, *Delightes for Ladies* (London: Humfrey Lownes, 1611), 1st ed. 1603; C.A. Wilson, *'Banqueting Stuffe'*, p. 25.

³⁴⁶ Hugh Platt, *The Garden of England or An accurate description of all Flowers and Fruits now growing in England* (London: William Leaks, 1653) p. 173. 1st edition, 1603.

³⁴⁷ Platt, *Delightes for Ladies*, B8r.

³⁴⁸ Isabella Cortese, *I Secreti de la Signora Isabella Cortese* (Venice: Giovanni Bariletto, 1574) pp. 23, 24, 27, 31.

seeds, and roots.³⁴⁹ By the end of the period the connection between alchemical and household preparations was presented in print in England. Kenelm Digby's alchemical medicines were set beside remedies using herbs, cordials, wines and spices, everyday ingredients like eggs and barley-meal, and even garden snails (mixed with parsley to cure "the King's evil", i.e. *scrofula*, dermal tuberculosis). His receipts include perfumes to burn, made from damask rose, musk, ambergris and civet, perfumed tobacco for a pipe, and methods for year-long fruit preservation.³⁵⁰ In 1653 Elizabeth Grey's occasionally quasi-Paracelsian medical receipts (using gold, silver, antimony, amber, coral, and lead) were presented alongside those for herbalism, distilled waters, pies and cakes.³⁵¹ It was considered "very necessary for all Ladies and Gentlewomen" to know how to make a huge range of foods (jelly, apple cream, fresh cheese, pickled walnuts) as well as medicinal leaden plasters (from olive oil, red lead, white lead, spanish soap).³⁵² Elizabeth Grey's sister, Alatheia Talbot, is associated with a receipt book aimed at "Gentleman, Ladies and others", combining more overtly chemical material with distilled waters, dyeing, herbalism, gardening, knitting, lacework, horsebreeding, cookery and perfumery.³⁵³

Women's role in the making of herbal and alchemical medicines was part of caring for the sick.³⁵⁴ At gentry level there was an established tradition of social obligation to care for members of the household and estate, handed down from mother to daughter. Anthony Fletcher cites a mass of impressionistic evidence that women were busy as healers and gentlewomen benefactors of rural society. He suggests that the gentlewomen reflected the

³⁴⁹ *The Margaret manuscript*, f. 108v. Maslim bread is made of mixed grains, especially rye mixed with wheat.

³⁵⁰ Sir Kenelm Digby, *Choice and Experimented Receipts in Physick and Chirurgery, as also Cordial and Distilled Waters and Spirits, Perfumes and other Curiosities*, transl. by G.H[artmann] (London: 1668): alchemical medicines, pp. 171, 188, 194; herbs p. 18; perfumes pp. 298-305, fruit preservation p. 306; snails p. 103.

³⁵¹ Elizabeth Grey, *A Choice Manual of Rare and Select Secrets in Physick and Chyrurgy* (London: W.J. Gent., 1653) pp. 2, 87.

³⁵² Elizabeth Grey, *A True Gentlewoman's Delight* (London: W.J. Gent., 1653) title page, p. 58.

³⁵³ Philiastros and Alatheia Talbot, *Natura Exenterata or Nature Unbowelled* (London: 1655).

³⁵⁴ Michael R. McVaugh, *Medicine before the Plague* (Cambridge: Cambridge University Press, 1993) pp. 103-7; Alison Sim, *The Tudor Housewife* (Stroud: Sutton, 1996) p. 86.

best of an established tradition of herbal and alchemical medicine, together with the reassurance and consideration that went with her patriarchal role towards tenants and their families. Their class, rather than gender, gave their work standing; at the same time gender, in the sense of current notions about the female constitution and women's occult sensitivity, gave it meaning.³⁵⁵

On occasion women appear to have attempted to multiply metals in the kitchen. An alchemical practice of a gentlewoman of York included in *The Margaret manuscript* (and therefore from the 1590s or earlier) uses language suggesting not kitchen physic, but a lethal form of kitchen alchemy.³⁵⁶ Filings of *Luna* (silver) are mixed with animated mercury and ground small on a stone with water, and left “till it be like butter, then heate it on y^e fire a littell & it shall be like creame”. Old urine is boiled with living sulphur, the froth skimmed off, salt water dissolved into it, and distilled by filter. A powder is ground in with the matter, put into a crucible and “sett it under yo^r herthe in the Chimnye”.³⁵⁷ Eventually this is melted with “one pennye waighte of sope”. This is not medicinal: the purpose is to turn silver into more silver. Lord Willoughby's statement that Lady Margaret Clifford knows how “of a lyttle red sand to make a Great deale of gold” also suggests gold-making.³⁵⁸

Male alchemists readily used kitchens as laboratories, thus emphasising the continuity between housewifery and alchemy. In the early 1650s, when his daughter married the alchemist and physician Frederick Clodius, Samuel Hartlib allowed his kitchen to be converted into a laboratory.³⁵⁹ In the 1630s Lady Barrington sent Samuel Hartlib receipts and practised kitchen physic.³⁶⁰ In 1649 John Dury's wife was to learn the art of distilling “choice

³⁵⁵ Fletcher, *Gender, Sex and Subordination*, p. 235; Katharina M. Wilson, *Women Writers of the Renaissance* (Athens: University of Georgia Press, 1987) p. xxxi.

³⁵⁶ *The Margaret manuscript*, ff. 52r-v, 'Another practis to make Luna used by a gentlewoman of Yorke'.

³⁵⁷ *The Margaret manuscript*, f. 52v.

³⁵⁸ Cumbrian County Archive: Hothman MS Box 44/4.

³⁵⁹ Newman, *Gehennical Fire*, p. 56.

³⁶⁰ Hunter, 'Sisters of the Royal Society', p. 181.

waters and spirits for spices and herbs” whilst Dury and George Starkey ostensibly entered a business to produce aromatic oils or perfumes, from which Starkey distracted himself with experiments in alchemy, dyeing, brewing, and ice making.³⁶¹ Male alchemists also collected women’s receipts: Theodore de Mayerne not only leaves numerous references to woman alchemists Neptis and Madame de la Martinville, but also records the receipt of a Mistress Fletcher for dyeing leather.³⁶²

Whilst the less successful lower class woman alchemist or alchemist’s assistant might be satirised as a failed housewife or sexually flawed, she was more a figure of fun or pity than fear.³⁶³ The evidence presented in this thesis suggests that, in contrast, the role of female alchemist of rank was, in some circumstances, able to be subsumed within that of good housewife, who upheld the God-given order through her Christian virtue, purity and good works. Isabella Cortese emphasises strongly her wish to be useful in publishing her alchemical and other receipts. Anne Clifford’s account of her mother’s alchemical practice stresses its association with her virtues. However, the examples from France, the writings left by Quercitan’s daughter and Mademoiselle de la Martinville, are less concerned to emphasise their social role, perhaps because they were intended to be private documents.

Women are represented symbolically in alchemical illustrations and texts in hierarchically derived household roles, from Lady Alchimia herself, who presides emblematically over the entire work, to washerwomen, wet-nurses, and child care assistants. The metaphoric association in alchemical tradition of women’s work with washing and cooking draws on and represents this normal part of women’s duty.³⁶⁴ Simple representations

³⁶¹ Newman, *Gehennical Fire*, p. 78.

³⁶² Chapter four, and London: British Library, Sloane MS 2083, f. 98r.

³⁶³ This contrasts with the figure of the witch, whom Diane Purkiss argues was perceived as an anti-housewife, for subversion of the natural order by invading neighbours’ boundaries in various ways. Purkiss, *The Witch in History*, p. 97.

³⁶⁴ John Thornborough's use of the analogy of Lady Alchimia is discussed above. See also Michael Maier's *Atalanta Fugiens*, Emblem 3 "Go to the woman washing sheets, and do thou likewise". Johann Daniel Mylius, *Philosophia Reformata*, Emblem 28, "Ceres, foster mother of the Philosophik child, feeds him", reproduced in

of women do not constitute proof that women were alchemists, or alchemists' assistants: they may just be symbolic material for the male writer or artist. However the art historian M.E. Warlick has examined the use of the figure of the housewife in alchemical emblems in relation to studies of small household workshops in Augsburg. She notes that alchemical emblems did not share the comic misogynist tone of other contemporary emblem books in their treatment of women, but, despite this, suggests a process of marginalisation of real and represented women from the centre of the alchemical laboratory to its periphery. Elsewhere, satires of the alchemist's wife as bad housewife, which highlight woman's failure to care for her family and keep them clean and fed, appear close to social commentary.³⁶⁵

Paracelsian male encouragement of female alchemists took place within their social construction of the household, metaphorical and real. Hugh Platt, in *Delightes for Ladies*, uncontroversially acknowledges the growing of plants for food, distillation and medicine as part of the women's household.³⁶⁶ In *The Garden of Eden*, addressed to "all Gentlemen, Ladies and all others delighting in God's Vegetable Creatures", he develops this household association, suggesting that the more discerning of this readership, not excluding the Ladies, would be interested not only in practical gardening matters, which occupied the bulk of the book, but also in a Philosophical Garden, which he describes in the obscure but identifiable language of Paracelsianism.³⁶⁷ His Philosophical Garden is concerned with "the vegetable work in Physicke", fired by "the stomach of the Ostrich". Platt alludes to J.B. Porta's *Magia Naturalis*, Cornelius Agrippa's *de Occulta Philosophia*, and Doctor Quercitanus, describing

The Golden Game, p. 173. The *Turba Philosophorum*, ed. by Arthur Edward Waite, refers to "cooking", "salting, sublimating, washing and pounding", pp. 161, 35.

³⁶⁵ M. E Warlick, 'The Domestic Alchemist: Women as Housewives in Alchemical Emblems', in *Emblems and Alchemy* ed. by Alison Adams and Stanton J. Linden. pp. 25–47. Theodor de Bry's *Emblemata Saecularia*, 1596. shows the woman of an alchemical household with a pot on her head and the children in disarray (see Warlick, p. 28).

³⁶⁶ Platt, *Delightes for Ladies*.

³⁶⁷ Platt, *The Garden of England*, p. 11. The concept of the hermetic garden continued into the mid-seventeenth century when in his preface, Arthur Dee describes *Fasciculus Chemicus* as a collection of the choicest flowers, growing in the hermetic gardens.

the latter as “an excellent Theorist in Nature, and a great writer in these days” and a “true lover of Hermes Houshold”.³⁶⁸ The phrase “Hermes Household” suggests an interior space, containing and ordering its inhabitants, of different gender and rank. The association of Quercitanus is intriguing, since *Quercitan’s Daughter’s Letters* suggest a woman alchemist aware of, but struggling with, subordinancy to her mentor, who may well be Quercitanus. Platt’s authorities are contemporaries and in some cases close associates of the women writers identified in this study: della Porta was contemporary with Isabella Cortese; Quercitanus’ daughter wrote about the “vegetable work”; *The Margaret manuscript* discusses the stomach of the “Estrich”.³⁶⁹ Sarah Wigges’ receipt book includes a method of “Babtist Porta in his magia” for making chrysolite.³⁷⁰ Platt’s idea of the hermetic household suggests that the mystically-inclined learned woman had her own role in the alchemical-hermetic household. In some cases she may have had the high status role alluded to in *The Margaret manuscript* which uses the analogy of the noble household in which “this Alchimyie is as a Ladie beloved of many, whoe is Chaste and hath may Maides in her howse”.³⁷¹ However, the probability that any hermetic-household role reflected the ambiguities of the wider society is suggested by Richard Surfleet, whose respect for women of antiquity, pagan goddesses and the feminine earth in his foreword to *Maison Rustique*, does not prevent his reprinting of a reminder to male readers from the original French edition that it was through women’s sin that men and women were cast out of Eden, and women, therefore, should be twice as careful not to double their faults by additional sin now.³⁷² Such a double standard could be one explanation of why Lord Willoughby, dedicatee of the English translation of *Maison*

³⁶⁸ Platt, *The Garden of England*, pp. 14, 167-175.

³⁶⁹ Eamon, *Science and the Secrets of Nature*, pp. 134-139, 195-203. *The Margaret manuscript*, ff. 60v-61r: “But you must remember as Paracelsus teacheth when the stomach of the Estrich is wearie of Labor, you muste refreshe it, and still drawe it of. The refreshinge of the stomach of the Estrich is meante, the newe Accuatinge of yor Mercurye agayne, wth the pure sulphurious metallyne Spirite of Antimonye and Marse”.

³⁷⁰ London: Royal College of Physicians, MS 654, ff. 605-8.

³⁷¹ *The Margaret manuscript*, f. 94v.

³⁷² Stevens and Liebault, sig. A6r.

Rustique, praised Lady Margaret Clifford as an alchemical adept whilst asking her not to share her knowledge with his wife. Thus the same ambiguity to women in Paracelsus' thought is displayed towards women alchemists in the household by men in the Paracelsian movement.

Chapter Three

La Signora Isabella Cortese's *I Secreti* and the context:

other Italian women's participation in alchemy

In the first year of Lady Margaret Clifford's life an unprecedented book was published in Venice, in which alchemy was presented by a female author as one of an interrelated set of household concerns for noble ladies. The content of Isabella Cortese's *I Secreti* was not unique, since it formed part of the genre epitomised by the *Secretes* of Alessio Piemontese, the English translation of which is dedicated to Lady Margaret's father, Lord Francis Russell, and appeared in three editions starting from 1558, two years before Lady Margaret's birth.³⁷³

What was unprecedented, as far as I have been able to ascertain, was female authorship of a printed work on alchemy, a fact of significance for other women alchemists with literary interests, such as Lady Margaret. Although Lady Margaret did not read Italian, and therefore may not have read the detail of Cortese's book, she was raised in an atmosphere in which the sort of receipts and household hints it contains were current, and the possibility that she did know about this book through court culture or her contact John Dee is addressed in the description of the diffusion of Cortese's *I Secreti* to France and England at the end of this chapter.

The evidence that Isabella Cortese was intensely and publicly interested in alchemy is provided by the printed book published under her name in Venice, first in 1561 and then in ten subsequent Italian editions up to 1677.³⁷⁴ The version primarily used for this study is the 1574 edition published at Venice by Giovanni Bariletto: *I Secreti de la Signora Isabella*

³⁷³ Franklin B. Williams in his *Index of Dedications and Commendatory Verse* (London: The Bibliographic Society, 1962) p. 161, lists 23 editions, of which three editions are dedicated to Lord Francis Russell, in 1558, 1569, and 1595.

³⁷⁴ This was the earliest version available to me in the Bodleian Library. Other versions were published in 1561, 1588, 1594, 1614 and 1665 (British Library Catalogue), and 1595 (Bodleian Library Catalogue). The Ferguson Collection, Glasgow, has versions from 1561, 1565, 1614 and 1677. The seventeenth century versions have slightly different titles: *Varietà di secreti* and *Secreti varii*. The National Union Catalogue for the United States lists versions in 1561, 1565, 1574, 1588, 1595, 1603, 1619, 1620, and 1677 (queried in the Catalogue).

Cortese: Ne'quali si contengo cose minerali, medicinali, artificiose, e Alchimique, & molte de l'arte profumatoria, appartenenti a ogni gran Signora con altri bellissimi Secreti aggiunti. The book was renamed in 1588 to advertise 'altri bellissimi Secreti aggiunti', and in 1614 the title was slightly amended to *Varietà di secreta* with corrections. By the time the last version was published in 1677 it merited a dedication to Pietro Castelli, one of the foremost physicians promoting Paracelsianism in Italy in the mid seventeenth century.³⁷⁵ Its translation into German by a bookseller, Paulus Kretzner, dedicated to Heinrich Rantzau in editions of 1592 and 1596, suggests that the book was viewed as a profitable and popular business venture.³⁷⁶ The book has 207 pages, made up of a preface signed by Isabella Cortese, a poem, and four *libri*, which present a diverse interrelated field of knowledge. For the twentieth century reader each *libro* has a major theme, although the crossovers between them suggest that the categories were not so watertight in the sixteenth century. The small first book offers popular medical remedies; a substantial second book treats alchemy, metal work and dyeing; a third book concerns glues, mirrors, colourings, treatments for materials, tints and more dyes; and finally the longest fourth book contains many receipts for cosmetics, and distilled perfumed flower waters.

Answers to the many questions posed about *I Secreti* in this chapter would attain greater certainty if the historical identity and biography of Isabella Cortese could be established. In exploring possible avenues for the clarification of her identity I have found suggestive, though not conclusive, evidence. She is not included in the most obvious sources: Tiraboschi's index, the *Dizionario bibliografico degli italiani*, Cosenza's dictionary of humanists and scholars, Litta's listing of celebrated Italian families, Maria Bandini Buti's

³⁷⁵ Charles Webster, *From Paracelsus to Newton* (Cambridge: Cambridge University Press, 1982) p. 6.

³⁷⁶ *Verborgene heimliche kunste unnd Wunderwerd Frawen Isabellæ Cortese in der Alchimia, Medicina und Chyrurgia* (Hamburg: H. Binder, 1592 and Hamburg: Siherenberg, 1596).

Donna d'Italia, nor in the *Enciclopedia italiana*.³⁷⁷ William Eamon, the only writer to discuss her work at any length, has not discovered any biographical material outside the content of her book, nor is anything known of her by historians such as Michèle Pereira and Stefano Caroti.³⁷⁸ Since Cortese was a common Italian name it may not be possible to locate her historically. However, as all the indications point to a well-known and wealthy noblewoman with an estate, horses, access to expensive materials, interest in medicines, mosaics, perfumery, hermetic philosophy, natural magic, and alchemy, it does not seem improbable that her identity might be deduced from archive sources.

A family offering one plausible background for the production of this book of household secrets is the humanist Cortese family of San Gemignano.³⁷⁹ This family was known for its love of letters and poetry, and in an earlier generation, individual members had the sort of contacts to amass the knowledge displayed in *I Secreti*. In the fifteenth century Antonio Cortese established a palazzo at San Gemignano. The family knew the Medici since after Antonio's death his widow, Madonna Tita, entertained Lucrezia Tornabuoni, wife of Piero de' Medici, at San Gemignano.³⁸⁰ Antonio had three sons and one daughter.³⁸¹ The eldest son Lattanzio (1460-?) was married twice: first to Ippolita Saracini, a union producing one son, Antonio; and secondly to Maddalena de' Medici. Under Lattanzio, *Castel Cortesiano* at San Gemignano, located next to the goldsmiths' street, became a symbol of the opulence and hospitality of the Cortese family, and a rich library was established.³⁸² The

³⁷⁷ Girolamo Tiraboschi, *Storia della letteratura italiana* (Modena: Witt Indice Generale, 1787-94); *Dizionario bibliografico degli italiani* (Rome: Istituto della Enciclopedia Italiana, 1983); Mario Emilio Cosenza, *Biographical and Bibliographical Dictionary of the Italian Humanists and of the World of Classical Scholarship in Italy 1300-1800* (Boston: G.K. Hall, 1962); Pompeo conte Litta, *Famiglie celebri italiane* (Milan: G. Ferrari, 1819-82); Maria Bandini Buti, *Donna d'Italia*, 1 (Rome: Istituto editoriale Italiano, 1946) p. 177; *Enciclopedia italiana* (Treves: Istituto Giovanni Treccani, 1931).

³⁷⁸ Letter from Professor Caroti dated 10th January 1998.

³⁷⁹ The information in this paragraph is from *Dizionario bibliografico degli italiani*, pp. 754-5.

³⁸⁰ Yvonne Maguire, *The Women of the Medici* (London: George Routledge & Sons, 1927) p. 105.

³⁸¹ In addition to the two dictionaries cited above see P. Paschini, 'Una famiglia di curiali nella Roma del Quattrocento: I Cortesi', *Storia della letteratura italiana*, XI (1957), 1-5.

³⁸² *Dizionario Bibliografico Degli Italiani*, p. 765.

middle son, Paolo Cortese (1465-1510), became Apostolic Secretary, revised works of St Thomas Aquinas, and set up one of the early household academies, the *Accademia Cortesiana* in Rome, at which recitations of vernacular poetry, singing and other musical performances took place.³⁸³ Significantly for this study he also wrote *De Cardinalatu* in 1510, advising ideal household and other arrangements for cardinals, in the same vein as Castiglione's instructions for the courtier.³⁸⁴ Although the indication of a woman well-connected to Catholic clergy might apply to many Italian noblewomen, there are parallels between the purpose of *I Secreti*, which passes on instructions for women running a household, and that of *De Cardinalatu*, with its recommendations for a cardinal's household. The youngest son, Alessandro Cortese (1469-99), knew Marsilio Ficino, Angelo Poliziano and Pico della Mirandola, and exchanged letters with the latter. San Gimignano was relatively close to Villa Careggi, near Florence, where Ficino lived from the 1460s until his death in 1499. The role of neoplatonic philosophy in *I Secreti* is discussed below. Antonio had one daughter, Caterina, who married Antonio Maffei, a writer and brother of the painter Raphael, so that the sort of practical knowledge of uses of pigments, dyes and colourings displayed in *I Secreti* was closely integrated into this family's network.³⁸⁵ If Isabella Cortese was a member of this family she may have been a descendant of Antonio, son of Lattanzio, through whom this Cortese line continued at San Gimignano until the end of the seventeenth century, or perhaps of Alessandro. Unfortunately the name of Antonio's wife, children and subsequent descendants (or of any other Cortese of San Gimignano of this period) are not extant.³⁸⁶ The validity of this feasible scenario therefore remains an open question.

³⁸³ Michelle Maylender, *Storia delle Accademie d'Italia* (Bologna: L. Capelli, 1926), vol. 2, p. 98, and David Sanderson Chambers and François Quiviger, *Italian Academies of the Sixteenth Century* (London: The Warburg Institute, 1995)

p. 10.

³⁸⁴ Paulus Cortesius, *Pauli Cortesii [...] de cardinalatu libri tres*, in Castro Cortesio, 1510. See also Sergio Bertelli et al., *Italian Renaissance Courts* (London: Sidgwick and Jackson, 1986) p. 98.

³⁸⁵ *Dizionario bibliografica degli italiani*, pp. 754-5.

³⁸⁶ Letter from Valerio Bartoloni, Il Direttore, Biblioteca Comunale, Città di San Gimignano, dated 19th November 1999.

A second plausible hypothesis is that Isabella Cortese had a connection with one of the Cortese known to Giambattista della Porta (1535-1615), whose *Magia Naturalis* is a better known example of the same genre of secrets books.³⁸⁷ The Neapolitan della Porta knew at least two literary Cortese. The Modenese nobleman Giulio Cortese (1530-1598) belonged to at least two Neapolitan academies: in 1546 he was a member of the *Accademia dei Sereni*; in the 1580s he headed the *Accademia Svegliati*, of which della Porta was a member. Giulio Cesare Cortese (?1591-1621+) was a young literary friend through whom della Porta was connected with the main currents of literary Neapolitan life.³⁸⁸ Given these Neapolitan Cortese friends of della Porta, it is intriguing that at some point prior to 1666 there was a famous Marchioness Cortese in Naples, after whom a Neapolitan *Accademia Cortesiana*, for women, was named.³⁸⁹ Initial enquiries with the state archive in Naples have produced no further information on the families of these male Cortese nor on the identity of the Marchioness, but neither have they ruled out continuation of this line of enquiry.³⁹⁰

Other leads are also unresolved. Another well-known Cortese family came from Modena, whose members included Ersilia Cortese (1529-?), an educated woman; and Gregorio Cortese (b.1489-1548), a well-known humanist, Benedictine theologian, Bishop of Urbino, cardinal under Giovanni de' Medici, and organiser of gatherings of patricians and churchmen in Venice.³⁹¹ In *I Secreti* Isabella Cortese states that she had a house in Olomouc in Moravia. Olomouc was a powerful religious centre with a strong bishop and university, and her comment might have led to evidence of a Cortese family with land holdings in

³⁸⁷ Eamon, p. 136, and Giambattista della Porta, *Magia Naturalis* (Antwerp: C. Plantin, 1560, first ed. 1558) which, like Cortese's *I Secreti* covers alchemy, metalworking, distillation, and perfumery.

³⁸⁸ There is some confusion over which Cortese della Porta knew: Louise Chubb cites Giulio Cesare Cortese, mentioning that he also founded the Svegliati, a role attributed by the *Dizionario biografico degli italiani*, vol. 29, pp. 726-8, to the older Giulio Cortese. Louise George Chubb, *Giambattista della Porta, Dramatist* (Princeton: Princeton University Press, 1965) published on internet at <http://tscnet.com/pages/omard1/jporta3a.html>, [May 2000] Chapter 1, p. 12.

³⁸⁹ Maylender, vol. 1, pp. 45-6.

³⁹⁰ Letter dated 11th June 2000 from Il Direttore, Archivio di Stato di Napoli.

³⁹¹ *Dizionario bibliografico degli italiani*, pp. 719-21, and Oliver Logan, *Culture and Society in Venice 1470-1790* (London: Batsford, 1972) p. 71.

Olomouc. However, the State Archive at Olomouc have checked, with negative results, their land ownership records for a house belonging to a Cortese/Cortesi family in the 1560s.³⁹² William Eamon suggests that Isabella Cortese was sister-in-law to Signor Mario Chaboga, Archdeacon of Ragusa.³⁹³ This is one interpretation of the opening words of a passage in *I Secreti* which precedes ten alchemical commandments: “Dico a te Fratel carissimo”. It is not entirely clear who has written this passage but I will suggest below that it seems more likely to have been the work of Abbot Chirico of Cologne, writing to a fellow cleric as his dearest brother, than to be Isabella Cortese’s own voice. Nonetheless, the mentions of the Archdeacon of Ragusa in *I Secreti* suggests that future investigations in Dubrovnik may prove fruitful.

Other possible clues have not found resolution. In the preface to the very late 1677 Italian edition, Antonio Tivanni addresses Signor Pietro Castelli, referring to the gentility of Castelli’s Signora, Isabella Cortese, and emphasising with capitals the words TORRI and CASTELLI, perhaps punning on the towers of the castle/palazzo at San Giminagno.³⁹⁴ Whether Castelli enjoyed a family relationship with Cortese, or admired her as an icon, is unclear, but further research on Castelli’s genealogy might also prove productive. Investigations of the clerics mentioned in her book might also provide leads. Pseudonymous potentialities for Isabella Cortese’s surname are implicit in the meaning of *cortese*: in Ficinian platonic philosophy courtly love is the highest form of platonic love, whose closeness to God and preference for soul to body is linked to the courtly lifestyle.³⁹⁵ The name “Cortese” could therefore be a pun, or emblematic name, to indicate that the book was suitable for women who considered themselves to have courtly aspirations: a *Compagnia*

³⁹² Letter from PhDr Bohdan Kanák, Director, Státní Okresní Archiv, Olomouc, dated 23rd November 1999.

³⁹³ Eamon, p. 164.

³⁹⁴ Isabella Cortese, *Secreti Varii della Signora Isabella Cortese* (Venetia: Appresso Benedetto Miloco, 1677) preface: “non mancandoli per sicuro a sillo le TORRI sue gentilitie: ne stimerò io per altro di haver fabricato, come suol dirsi, CASTELLI in Aria havendo presunto con la VARIETA di questi segreti”.

³⁹⁵ Lauro Martinez, *Power and Imagination* (London: Allen Lane, 1980) p. 460.

della Calza founded by Francesco Boni in 1533 had the *impresse* of a shining sun with the motto “così risplende de Cortesi il Nome”, which led to the belief that this academy was also called *Cortesi*.³⁹⁶ A female name may have been chosen for symbolic reasons, associating soul with the female, and the transmission of certain sorts of knowledge through women. Another alternative is that Isabella Cortese was the author’s real name, with an as yet undiscovered genealogy.

Although it was exceptional for a woman to publish a book of secrets in sixteenth century Italy, this does not disallow Isabella Cortese as author. William Eamon suggests that Isabella Cortese wrote *I Secreti* for private circulation, and that its publication was the result of its exploitation by publishers who saw its popular appeal.³⁹⁷ It is of course a possibility that, like later books of secrets associated with English noblewomen in the mid seventeenth century which were published posthumously, *I Secreti* could have been put together from papers and receipts, which might or might not have belonged to Isabella Cortese.³⁹⁸ However, the book does not read as an amalgamation, but on the contrary gives a good impression of a book written with publication in mind. The preface, which is by “Isabella Cortese”, is credible as the writing of a well educated woman, as are the explanations of how she came by the letters that explain the alchemical practice of a Benedictine priest of Vienna. The supposition that she is a noblewoman is supported, not only by the courtly connotations of her name and title of *la Signora*, but also by her interests in utopian alchemy, the neoplatonic influences, and the aim of creating beauty and the appearance of opulence in the household.

Although *I Secreti* predates other published books by women with alchemical content by a century, it is not altogether surprising to find such a book published at Venice, which

³⁹⁶ Maylender, vol. 2, p. 97.

³⁹⁷ Eamon, p. 165.

³⁹⁸ Claire Lesage refutes the nineteenth century argument of A. Baschet and F. Feuillet de Conches that Isabella Cortese was one pen-name of the author of books of secrets by Alessio Piemontese, Girolamo Ruscelli and Timoteo Rosselli. See 'La Litterature des "secrets" et *I Secreti* d'Isabella Cortese', *Chroniques Italiennes*, 36 (1993), 145-178.

was one of the great printing centres of Europe, with relatively liberal publishing policies.³⁹⁹ Christopher Hibbert identifies the printing of a wide range of material at Venice, from bibles, choir books and classical works, to romances, poetry, playing cards and pornography: to this list can be added books of secrets and alchemical works.⁴⁰⁰ Axel Erdmann suggests that more women authors were published in Italy than other European countries at this time.⁴⁰¹ The content of *I Secreti*, like many others in its genre, would have interested the literate Venetian public, whose environs included mosaicists, tanners, jewellers, gold and silver smiths, iron workers, enamellers, and glass workers.⁴⁰² The cosmetics and waters in the book were familiar to Venetian women among whom powders, rouges, face colourings and scents were fashionable.⁴⁰³ A literate Venetian female audience may have bought the book. In addition to the small number of well-documented highly learned women, who were not necessarily the target market, a moderately learned female audience is suggested at Venice by the education offered to young women in need at the refuges provided by the *ospedali*, which covered music, surgery, ecclesiastical matters and theatrical style.⁴⁰⁴ However, the publication of the book in Venice in the vernacular does not exclude authorship by a noblewoman from another part of Italy, as it was commonplace for works from all over Italy, and particularly Florentine *volgare* writers (to which category Isabella Cortese may belong), to be published in Venice.⁴⁰⁵ The argument that Isabella Cortese was editor and compiler of *I Secreti* is developed throughout this chapter.

³⁹⁹ Logan, p. 74.

⁴⁰⁰ Hibbert, *Venice: The Biography of a City* (London: Grafton, 1988) p. 102. Alchemy CD rom lists 187 printed books on alchemical themes printed at Venice, nearly all in the sixteenth or seventeenth century.

⁴⁰¹ *My Gracious Silence* (Lucerne: Gilhofer & Ranschburg GmbH, 1999) pp. 199-221.

⁴⁰² Hibbert, p. 32.

⁴⁰³ Hibbert, p. 138.

⁴⁰⁴ On learned women see Jane Stevenson and Peter Davidson, *Early Modern Women Poets: An Anthology* (Oxford: Oxford University Press, 2001). On the *ospedali* see Jane L. Baldauf-Berdes, *Women Musicians of Venice: Musical Foundations 1525-1855* (Oxford: Clarendon Press, 1993) pp. 244-246.

⁴⁰⁵ Logan, *Culture and Society in Venice*, p. 71.

In the preface, which is written as though Isabella Cortese were its author, she states as her purpose the investigation of the hidden secrets of nature.⁴⁰⁶ William Eamon, following Marco Ferrari, argues that books of secrets played a key role in disseminating craft information, shaping scientific culture in the early modern era, and preparing the way for the scientific revolution.⁴⁰⁷ He identifies ten authors styled as *professori de' secreti* by their contemporary, Tommaso Garzoni (1549-1589).⁴⁰⁸ From the similarities between their work it seems likely that some of these authors may have known each other, or at least drawn on one another's work. Isabella Cortese's *I Secreti* shares a dedication to Mario Chaboga, Archdeacon of Ragusa, with Timotheo Rossello's *Secreti universali* and offers similar receipts for waters, oils, beauty remedies, flower oils, soaps and colourings.⁴⁰⁹

Whether these books of secrets can be described as fully Paracelsian works is a matter of debate, as they do not refer explicitly to Paracelsus, though they are quasi-Paracelsian in the way they draw on the mythology of the educated humanist who turns his or her back on the academy to search for practical secrets from empirics of any social standing. Eamon notes the likelihood that the prototype and most popular secrets book, *Secreti del reverendo donno Alessio piemontese*, was modelled on the myth of Paracelsus.⁴¹⁰ Alessio Piemontese styled himself as a humanist, trained not only in Latin, Greek, and Hebrew, but also, more exotically, in Chaldean and Arabic, who travelled to seek God's secrets in nature by learning from the experience of all available sources, including women and the uneducated.⁴¹¹ Similarly, Leonardo Fioravanti (1518-1588) claimed to have received a medical degree before travelling to learn about natural philosophy from the experiences of learned doctors,

⁴⁰⁶ *I Secreti*, p. 2r.

⁴⁰⁷ Eamon, throughout.

⁴⁰⁸ Eamon, p. 136. The representatives of this genre are Alessio Piemontese; Giovanni Ventura Rossetti; Giambattista della Porta; Isabella Cortese; Pietro Bairo; Timotheo Rossello; Gabriele Falloppio (pseud.); Leonardo Fioravanti; Girolamo Ruscelli; and Giovanni Battista Zapata.

⁴⁰⁹ Timotheo Rossello, *Della Summa de Secreti Universali in Ogni Materia* (Venice: Giacomo Cornetti, 1588) first published Venice, 1561. Eamon, p. 165.

⁴¹⁰ Venice, 1555, and 104 subsequent editions up to 1699, listed in Eamon, p. 140.

⁴¹¹ Eamon, pp. 140-1.

peasants, religious people, distillers and country women.⁴¹² Giancarlo Zanier describes Fioravanti as a Paracelsian at second or third hand, with an empiric method.⁴¹³ The *professori de' secreti* did not use Paracelsus' complicated terminology and cosmology, but like him, sought to understand the operation of God in the natural world, and to intervene to help nature do better than she could alone by bringing her to perfection.⁴¹⁴ William Eamon argues that *I Secreti* is a typical example of the Italian sixteenth century genre of books of secrets all of which draw on the natural magic tradition for which Paracelsus was a significant source.⁴¹⁵ Isabella Cortese never mentions Paracelsus, nor any of his detailed theories regarding the *archeus*, *arcana*, *astra*, *iliaster*, *semina* or the triad of sulphur, salt and mercury.⁴¹⁶ She follows him in the general sense that she seeks the secrets of nature, rejects book-learning, favours learning by experience and writes in the vernacular. The concept of her book, that methods for studying alchemy and other secrets of nature should be made available to ordinary people, appears to be Paracelsian, as is her statement that peasants know more than the author and her readers from their experience gathering straw and wheat.⁴¹⁷

In 1561, when *I Secreti* was published, Paracelsus' ideas were virtually unknown in England, though they were largely assimilated by 1600.⁴¹⁸ In this process some of the Italian books of secrets, including Isabella Cortese's *I Secreti*, entered the canon of works used and valued by known Paracelsians. Leonardo Fioravanti (1517-1588), whose books of secrets were published at Venice from 1561 to 1564, and was thus a direct contemporary of Isabella Cortese, was perceived by seventeenth century Paracelsians as part of their movement.

Although Fioravanti, like Cortese, never called himself a Paracelsian, and only cites

⁴¹² Eamon, p. 168.

⁴¹³ Giancarlo Zanier, 'La medicina paracelsiana in Italia: aspetti di un'accoglienza particolare', *Rivista di Storia della Filosofia*, 4, 1985, 627-653 (p. 631).

⁴¹⁴ Eamon, pp. 134-9.

⁴¹⁵ Eamon, Part Two, 'The Secrets of Nature in the Age of Printing', pp. 91-266.

⁴¹⁶ For explanations of these terms see Walter Pagel, *Religion and Neoplatonism in Renaissance Medicine* ed. by Marianne Winder (London: Valiorum Reprints, 1985) pp. 132-6.

⁴¹⁷ *I Secreti*, p. 26.

⁴¹⁸ Webster, 'Alchemical and Paracelsian medicine'.

Paracelsus alongside other authors, he was translated into English by John Hester, the translator of Paracelsus and Joseph du Chesne, from 1579 onwards.⁴¹⁹ John Dee located the first edition of Isabella Cortese's *I Secreti* in his library next to Paracelsian works in this genre: the *Capricci medicinali di Fioravanti*, published the same year, another book of secrets, the *Summa de secreti* by Rossello, and Alexander Suchten's Paracelsian work, *Libellus de secretis antimony*, 1570.⁴²⁰

I Secreti, like other secrets books, draws on the natural magic tradition. In her preface Cortese uses the analogy of man as the ape of nature who seeks to do what for nature is impossible.⁴²¹ Giambattista della Porta uses this image in *Magia naturalis* in 1558, and in 1560 in the first Italian edition published, like *I Secreti*, at Venice. He describes art as nature's ape, and explains that the magician by art works upon nature and makes nature his instrument.⁴²² He is more candid about his role as a magician than Isabella Cortese, who avoids magical terminology. However, like *I Secreti*, *Magia naturalis* includes a complete chapter on alchemy, and treats alchemy as not unlike other craft procedures, although nobler: for della Porta the laboratory is the artisan's workshop.⁴²³ At the same time that he and Isabella Cortese were published in Venice, della Porta founded the *Accademia dei Secreti* in Naples. Its membership does not appear to be clearly recorded, as Eamon describes it to be probably composed of Neapolitan noblemen and craftsmen, such as distillers and herbalists,

⁴¹⁹ Eamon, p. 254, disputes that Hester was a Paracelsian, preferring to call him a Fioravantian, although he accepts that he is normally regarded as England's foremost Paracelsian. John Hester translated the following works of Fioravanti: *A short discourse upon chirurgerie* (London: Thomas East, 1580); *A Compendium of the rational secrets* (London: John Kyngston, 1582); *A joyful jewell* (London: John Allde, 1579). In 1652 Fioravanti was published as the leading contributor to a volume which also included 114 experiments of Paracelsus and his perceived followers: B.G. Pernotus, Isaac Holland and Quercitanus. Leonardo Fioravanti, *Three exact pieces, viz his rationall secrets, & chirurgery, renewed and revived* (London: G. Dawson, 1652).

⁴²⁰ Julian Roberts and Andrew G. Watson, *John Dee's Library Catalogue*, nos. 1451, 1452, 1450, 1454.

⁴²¹ The Jewish Roman poet Immanuel Romano compared alchemists to monkeys who imitate nature, and Luigi Pulci, a poet in the circle of Lorenzo de' Medici also compared alchemists to monkeys in Canto 16 of his *Mordante*. (Will H.L. Ogrinc 'Western Society and Alchemy from 1200 to 1500', *Journal of Medieval History* 6 (1980), 103-132 (pp. 108, 112). However, Isabella Cortese's style is not ironic.

⁴²² Eamon, p. 217.

⁴²³ Eamon, p. 219.

employed to carry out specific tasks.⁴²⁴ Idealistic reform instincts of collaboration and improved social conditions lay behind the academy which Charles Webster suggests showed some affinities with Paracelsus' radical social ideas.⁴²⁵ The possibility that Cortese attended cannot be ruled out: women did attend some Italian academies, as shown below; her book bears the hallmarks of Italian nobility, whilst della Porta was an Italian nobleman; and there are similarities in the content of their books of secrets.

As the Paracelsians styled themselves expert humanists who disdained books that they had presumably read, in search of empiric knowledge, so *I Secreti* both uses and rejects humanist style and assumptions. The frontispiece of the 1574 edition shows a woman standing confidently in classical dress with a banner bearing the only Latin words in the book with the stoical motto "PRUDENTIA NEGOTIA NON FORTUNA VINCAT".⁴²⁶ She gazes into a hand held mirror, representing the mirror of science or alchemy, in which the ideal essence of substances may be glimpsed.⁴²⁷ In this and subsequent editions, the start of each book is decorated with classical leitmotifs. However, the text which Cortese attributes to Chirico, Abbot of Cologne sweepingly dismisses all alchemical authorities: Geber, Raymond Lull, Arnold de Villa Nova and all other philosophers are rejected in favour of learning through experimentation and the test of experience.⁴²⁸ The use of vernacular Italian indicates

⁴²⁴ Eamon, p. 200.

⁴²⁵ Webster, *From Paracelsus to Newton*, p. 60.

⁴²⁶ "It is prudence and hard work not luck which wins out." *Negotium* may translate as hard work, business, effort, pains.

⁴²⁷ Ficino drew attention to Plato's analogy of the mirror as the soul in which the image of the divine countenance is reflected. He also wrote of the divinity of the created mind as a mirror in the middle of all things in which one might gaze upon the works of the Creator himself and also contemplate and worship the mind (Charles Trinkaus, *In our Image and Likeness: Humanity and Divinity in Italian Humanist Thought* (London: Constable, 1970) vol. 2, pp. 464-6). Cortese's contemporary Leonardo Fioravanti used the mirror as a metaphor of science in *Dello specchio di scientia universale* (Venice: 1567, 1572). Cesare Ripa, in *Iconologia* (Rome: Lepido Faeij, 1603) p. 444, describes *Scienza* as a woman holding a mirror, indicating that intellect knows of ideal substances as if their essence is accidentally seen in a mirror. The female figure of *Prudenza* (whose name features in the motto on the frontispiece of *I Secreti*) also holds a mirror (p. 416) as does *Operatione Perfetta* (p. 367). *Speculum secretorum alchemiae* ("The mirror of the secrets of nature") attributed to Roger Bacon (c.1220-1292) was published in Latin in the sixteenth century and in English in 1598 as *The mirror of alchimy*. Camillo Leonardi's *Speculum lapidum* was published in Venice, 1502, and *Speculum alchimiae*, attributed to Arnold de Villa Nova, in Frankfurt, 1602.

⁴²⁸ *I Secreti*, p. 19.

a wider intended readership. In this respect her book provides a bridge between the classical study of alchemy in medieval and arabic texts, mainly in Latin, and a wider diffusion of alchemical ideas in vernacular texts to middling strata of society which owes much to the influence of Paracelsus.⁴²⁹

Paracelsus attempted to use the imagination to penetrate the secrets of nature and the cosmos, in ways that could be construed as either magical or religious: the alchemical receipts that Isabella Cortese passed on from Abbott Chirico of Cologne speak ambiguously about the creation of *una terra spirituale* in language influenced strongly by hermeticism and natural magic. The alchemical details which Isabella Cortese passed on from the Abbot explain that there are three principles which operate on two levels: first in nature, and second in philosophy. These are the material, the form and the emptiness (*la privatione*).⁴³⁰ The alchemical medicine is made from the natural sort of material, form and emptiness, which correspond to body, soul and spirit. The right approach is shown by the example of man, in whom the body and soul are united through the emptiness, or spirit. As God made the body of Adam from the body of muddy earth, organised the animal spirit and then infused the rational soul, so in the name of God “faremo noi questo nostro particolare”.⁴³¹ The first task is to make “una terra spirituale” which will enable the spirit and soul to fruit, just as the earth mediates the motion of sky to produce fruits.⁴³² Support for this position is derived from Hermes, whose view of the earth as both nutritious and moist, is applauded, even whilst it is noted that it is normal for the words of the philosophers to be obscure on the meaning of

⁴²⁹ See Ferrari, and Paolo Galluzi, 'Motivi Paracelsiani nella Toscana di Cosimo I^o e di Don Antonio dei Medici', both in *Scienze, credenze occulte livelli di cultura*; and Zanier, 'La medicina paracelsiana in Italia'.

⁴³⁰ 'la privatione' is derived from the verb *privare*, and may also translate as privation, suffering, loss, deprivation, lack, absence. *The Cambridge Italian Dictionary*, vol I, (Cambridge: Cambridge University Press, 1962) p. 603.

⁴³¹ *I Secreti*, pp. 21-2.

⁴³² p. 22.

“questa terra qual ch’essa si sia”.⁴³³ This earth of obscure meaning is, according to Abbot Chirico, a pure earth, without darkness, transparent and very clear, “altrimenti non potria ricevere lo spirito e manco l’anima”: the aim is the union into one thing of the three substances of body, soul and spirit.⁴³⁴ These words present a challenging juxtaposition of two apparently different images of the earth: first, as nutritious, moist and fruitful when animated by soul and spirit, and second, as a pure spiritual earth, without darkness and very clear. These two earths may have been understood at two parallel interrelated levels, a healthy physical earth, which owed its vigour to the co-existing spiritual land which gave it life. This metaphor may have been rooted in ideas of transubstantiation on parallel levels of reality, possibly mirroring the belief, discussed in chapter two, in the double presence of Christ in the sacrament and in heaven.

The influence of Plato was particularly strong in sixteenth century Italy as a result of the reintroduction of the neoplatonic and hermetic philosophy through the translations of the Christian humanist Marsilio Ficino (1433-1499). Whether or not Isabella Cortese’s family had contact with Ficino, the very wide diffusion of hermeticism and neoplatonism through print, letters and the oral tradition during the sixteenth century mean that she had other ways to internalise this philosophy.⁴³⁵ For Ficino, the earth had a spirit, body and soul which could be subject to refinement through man’s participation. By philosophical magic he aimed to purify the spirit of man and earth, and to create an ideal world by bringing down the astral influences of the stars into a purified earth, through the medium of the *spiritus*.⁴³⁶ As part of this process of purification of soul he sought to incorporate the *quinta essentia*, or fifth

⁴³³ *I Secreti*, p. 22: “così la terra nostra mediante lo spirito e l’anima haverà a fruttificare, e per tanto ben dice Hermes, la terra è nutrice & è humida” [“by our mediation of earth, the spirit and soul have a fruiting, and of these things Hermes spoke well, of the earth as both nutritious and moist”].

⁴³⁴ *I Secreti*, p. 22.

⁴³⁵ Nesca Robb, *Neoplatonism of the Italian Renaissance* (London: G. Allen and Unwin, 1935) pp. 59, 212.

⁴³⁶ Frances Yates, *Giordano Bruno and the Hermetic Tradition* (London: Routledge & Kegan Paul, 1964) p. 56.

essence, by making use of those things that abound in a spirit of high purity, such as noble wine, sugar, balsam, gold, precious stones, things with the sweetest perfumes and things that are shiny.⁴³⁷ He also sought the creation of beauty through art and music. By refining the material world, man became closer to God and made earthly life more spiritual. *I Secreti* contains the letters of an unnamed Benedictine brother of Vienna who wrote to Stanislava, moderator of a college at Kracow. These also describe a body, soul and spirit, of which the soul is the unknown part: the Benedictine describes ways of drawing out the astral soul, which he calls the soul of Saturn and the mercury of the philosophers. The Benedictine's description of his loving friendship with Stanislava, based on shared spiritual beliefs and a love of alchemy, echoes the value that Ficino placed on spiritual friendship.⁴³⁸

Unlike Ficino, who used substances as part of his spiritual project but did not, as far as is known, engage in alchemical experiments on metals and minerals, *I Secreti* contains alchemical receipts. Cortese reports a receipt from Abbot Chirico which mixes neoplatonic, hermetic, medieval and Arabic ideas in an experiment with specific substances, based on the assumption of analogies and correspondences between man and the rest of the created world. The creation of the holy earth or spiritual land, in this context, requires camphor because its coldness is believed to congeal spirit and soul.⁴³⁹ The same philosophy of body, soul and spirit continues through the receipt "to fix Camphor":

“e perchè l'anima da sè non opera senza il corpo, ha bisogna d'un corpo e come l'anima dell'huomo non è quella che opera manco il corpo, ma il composito

⁴³⁷ Ioan P. Couliano, *Eros and Magic in the Renaissance* (Chicago: University of Chicago, 1987) p. 139.

⁴³⁸ For a couple of examples amongst many more see Ficino's letter to the physician Giorgio Ciprio, "The true friend foresees his friend's desires and meets them before he asks", in *The Letters of Marsilio Ficino*, vol. 5 (London: Shepherd-Walwyn, 1994) p. 34, and letter to Giovanni Francesco Ippoliti, p. 49 of the same volume.

⁴³⁹ Camphor is a colourless crystalline substance with an aromatic smell and bitter taste, used in pharmacy.

mediante lo spirito, così questo nostro spirito non fa frutto senza l'anima, e l'anima senza il corpo pero mediante lo spirito qual è sostanza mezzana argento vivo” .⁴⁴⁰

The preparatory work involved making a distillation of mercury to produce a sticky water that did not wet the hands, described as the middle substance of living silver, “acqua pretiosa occulta da tutti I Filosofi”.⁴⁴¹ The following stage, making the soul, is emphasised. The spirit enables apparently beautiful things to be made, but it is only with the soul that the alchemist can sustain and conserve the body and make it perfect. Without the soul one cannot make true gold or living silver. The soul is the part which enables the body to move and work.⁴⁴² In this case the soul is made after numerous distillations of “una certa quinta essenza” from cinnabar (mercury sulphide), the product of which is mixed with silver filings, left to stand and mixed again until it forms “una certa rotella al modo d'una materia di ragia bianca trasparente com'una perla”.⁴⁴³ The image of the pearl is common in alchemy: the pearl of great price is a recurring theme in medieval alchemical literature and one of the earliest printed books of alchemy, *The Pretiosa Margarita*, had been published at Venice in 1546. The Arabic theory that all metals are composed of mercury and sulphur is interpreted here as matter (mercury) and form (sulphur). Arabic influence is apparent later in the use of the word *almizadir* in the Benedictine's letters as a name for the sun.⁴⁴⁴

Although this work may be read in the context of transubstantiation, it carries an unstated ambiguity towards Christianity. Were it not for the repeated mentions of clerics its philosophy might be read as non-Christian: Isabella Cortese states that man's form is like the creator's; he or she is doing the creator's work, only better, by superceding nature. She thus

⁴⁴⁰ *I Secreti*, p. 23: “because the soul cannot operate without the body, a body is required, and as the soul of a human being cannot operate without a body, but acquires substance up through the spirit, so our spirit cannot flourish without the soul, or the soul without a body, except through the spirit which is sustained through living silver”.

⁴⁴¹ p. 23. “precious secret water of all Philosophers”.

⁴⁴² *I Secreti*, p. 25.

⁴⁴³ *I Secreti*, pp. 26-7, “a ball of a material of a radiant transparent white like a pearl”.

⁴⁴⁴ See Eric John Holmyard, *Alchemy* (Harmondsworth: Penguin, 1968) p. 75. *I Secreti*, p. 32.

delineates the territory of the natural magician who uses the example of the creator to work with the forces of the planets to animate nature. Although Abbot Chirico's receipt prays "God give you grace", he irreverently produces his own ten commandments for alchemy, ending, almost as an afterthought, with giving glory to God.⁴⁴⁵ God is mentioned at the beginning and end of the alchemical receipts "In the glorious name of God", "May God be praised in heaven", "May God be praised for the treasure", "regard this as a gift from God".⁴⁴⁶ God is asked or thanked for goods sought or received, but there is no overt emphasis on the purification of the alchemist's own soul: the work of redeeming matter into perfection is apparently in the *terra spirituale*, although the suggestion of two levels of working may imply some synchronicity between alchemist and material.

The craft tradition of alchemy is strongly represented in *I Secreti*, the bulk of which comprises technical craft receipts for medicines, alchemy and metal working, glues, mosaics, the making of colours, dyes, and varnish, and in the largest section, perfumes and cosmetics. Receipt books for many kinds of craft, such as painting, building and mosaic making, circulated probably in their thousands in late medieval Italy. Amongst these, *I Secreti* is of interest because its author is named as a woman, and because of the way she mixes alchemy with other crafts, Eamon concludes that Isabella Cortese's entire book can be considered alchemical.⁴⁴⁷ It would be possible to disagree with this statement, on the basis that whilst *Secreti* is indisputably alchemical in the sense that it includes philosophical and symbolic processes as part of technical instructions for chemical experiments, many of the other individual receipts, such as those for hair colouring, do not on their own constitute evidence of alchemy. However, the practical receipts in *I Secreti* are more or less related to the craft

⁴⁴⁵ *I Secreti*, p. 21-2.

⁴⁴⁶ *I Secreti*, pp. 21, 25, 25, 30.

⁴⁴⁷ Eamon, p. 164, where he says "Isabella Cortese's all-purpose *Secreti* (1561) was dedicated entirely to various applications of the art of alchemy".

tradition of alchemy in which transmutations, extraction of the quintessence, and duplicity have a long historical association with dyeing, distillation and simulation. The overlap between these activities is inferred by the way in which receipts of different topics are placed in the four books of *I Secreti*. *Libro secondo*, for example, which is principally about alchemy and metal-working, includes receipts for white soap, colouring white bones black, disappearing ink, removal of letters from parchment paper, and making stone like azure.⁴⁴⁸

By opening *I Secreti* with a small *libro primo* of miraculous medical receipts, Cortese appeals to women's roles as useful informal purveyors of medicines within their household or local community, a duty lauded, for example, as a task of the ideal wife by the Florentine bookseller Vespasiano da Bisticci (1421-78), and respected by the Inquisition.⁴⁴⁹ Italy, and particularly Venice, had a stronger tradition of women practising medicine formally than other parts of Europe, although it is unclear if *I Secreti* would have been used by women earning money from medical practice.⁴⁵⁰ It offers miraculous cures bolstered by the authority of the Pope and others typical of the type of receipt circulating around the Medici court. Cortese describes the preparation of an antidote to plague by bubbling mellow oil and perforated leaf foil in a *bain marie*, pressing and leaving it in the sun when the sun is in leo and the moon in scorpio, adding twenty scorpions, bubbling, suspending, adding various herbs, infusing in wine or *acqua vitae*, adding further herbs, bubbling in the *bain marie* and

⁴⁴⁸ *I Secreti*, pp. 33, 34, 37.

⁴⁴⁹ Maguire, *The Women of the Medici*, p. 5 ff. Ruth Martin, *Witchcraft and the Inquisition* (Oxford: Basil Blackwell, 1989) p. 186.

⁴⁵⁰ In Salerno, Naples and Southern Italy some women had received royal licenses to treat specific diseases from 1307 onwards, and Paul Oscar Kristeller judges that they must have received private instruction from relatives or physicians. Costanza Calenda, daughter of a Neapolitan medical professor, in 1422 achieved the status of doctor of medicine. See Kristeller, 'Learned Women of Early Modern Italy: Humanists and University Scholars', in *Beyond their Sex: learned women of the European Past*, ed. by P. Labalme (London: New York University Press, 1980) pp. 91-116 (p. 103). See also Salvatore de Renzi, *Storia Documentata della Scuola Medica di Salerno*, 2nd ed. (Naples: Gaetano Nobile, 1857) p. 569. On women practitioners in Venice see Monica H. Green, 'Documenting Medieval Women's Medical Practice', in *Practical Medicine from Salerno to the Black Death*, ed. by Luis García-Ballester, Roger French, Jon Arrizabalaga and Andrew Cunningham (Cambridge: Cambridge University Press, 1994) pp. 322-352 (p. 343).

suspending again in the sun.⁴⁵¹ This receipt has similarities with one from the *Fonderie* of Cosimo de' Medici which describes how to make fish oil based on scorpions taken when the sun entered leo.⁴⁵² A note adds that if the most mellow olive oil is not available, then ordinary olive oil can be distilled three or four times to enable the making of the most perfect medicine.⁴⁵³

This idea of the perfection of the material that is to become the medicine through distillation is the basis of alchemical medicine. Distillation was central to the origins of alchemy in Graeco-Egyptian Alexandria, from when the invention of distillation equipment is credited to Maria the Jewess, after whom the *bain marie* was named by Arnold de Villa Nova.⁴⁵⁴ Distillation was an attempt to separate out the quintessence of things, the potentially living matter in which the spirit of the heavens was thought to reside, and this heavenly matter was probably considered health-giving.⁴⁵⁵ Later, in thirteenth century Florence, distilled alcohol was used as medicine. By the sixteenth century contemporary interest in what were perceived to be health- and life-giving distilled essences for medicines and the *acqua vitae* was well established, and is reflected both in *I Secreti* and in other sixteenth century Italian receipt books.

The unusual evidence of a woman's interest in not only philosophical but specific experiments for practical alchemy is demonstrated most clearly in *libro secondo* of *I Secreti*. Traditional alchemical ideas are stated as general principles: the alchemist requires good vessels of earth and glass, knowledge of materials, the correct amount of heat, bellows and other necessary equipment available at all times at the work station, a good knowledge of the

⁴⁵¹ *I Secreti*, p. 4.

⁴⁵² Alfredo Perifano, 'L'Alchimie à la Cour de Côme I^{er} de Médicis', in *Alchemy Revisited*, ed. by Z.R.W.M. von Martels (Leiden: E.J. Brill, 1989) p. 181.

⁴⁵³ *I Secreti*, p. 4.

⁴⁵⁴ Robert James Forbes, *A Short History of the Art of Distillation* (Leiden: E.J. Brill, 1948).

⁴⁵⁵ Frank Sherwood Taylor, 'The idea of the quintessence', in *Science Medicine and History*, ed. by Edgar Ashworth Underwood, vol. 1 (London: Oxford University Press, 1953) pp. 247-265.

testing of gold and silver, and a faithful and secretive servant of good character (though they should never be left alone with the work). The alchemist should never answer questions about the work or let anyone enter the workplace; the art should not be taught to anyone else; and finally when the work is complete the alchemists should thank God and give alms to the poor.⁴⁵⁶

Abbot Chirico's instructions for the preparation of Camphor are based on the alchemical view of animate matter and of the perceived ability of the alchemist to create perfection, either in medicine or in the making of the finest silver and gold, through the creation and joining of body and soul. For Chirico, camphor is a necessary ingredient in making the alchemist's holy earth. In a very long process beginning with distillation through ashes of *acqua vita*, camphor, and sweet almonds, the spirits of *acqua vita* are said to enter and fix the camphor. A second process involves heating living silver (i.e. mercury) in a distillatory pot greased with pork fat until the "earthly part" of the living silver attaches to the bottom of the vessel as a "black earth", whilst a water is distilled off which is thrown away as useless. The blackness is washed off the living silver and repeated distillations made until the pure living silver is separated out, which has become the colour of heavenly blue. Iron is added so that the living silver becomes white and flexible like fine silver; further distillation produces the water of the philosophers. A third process involves the distillation of a fifth essence from cinnabar, further distillation with the addition of fine silver, until a radiant transparent white ball like an oriental pearl is formed. This ball is dissolved in vinegar, distilled, put in the sun, and distilled with *acqua vitae*. The body (the water of the Philosophers, or mercury) and soul (in this case the silver ball) are then joined by distillations

⁴⁵⁶ *I Secreti*, p. 21.

and coagulations: the result is described as both the finest medicine and as a way to make the finest silver or gold.⁴⁵⁷

Mystical terminology of alchemy, used in purely technical receipts, suggests the perception of overlaps between alchemy and other crafts by the writer or compiler of *libro secondo*. The extraction of *luna* from jupiter (i.e. silver from tin) suggests not only the idea of a movement towards the greater perfection and value of silver, but also metalworking and art techniques.⁴⁵⁸ The making of azure blue of *luna* (i.e. silver) reveals the close relationship with the making of paints for use on walls, panels and paintings.⁴⁵⁹ It was common for late medieval receipts to assert that blue paint could be made from silver, although Thompson suggests that the process is a mystery to modern art scholars and speculates that copper in the silver may have enabled a roundabout way of making copper blue.⁴⁶⁰ A water to dissolve *sol* and *luna* and a way of drawing out mercury from Saturn are staples of the alchemical laboratory but the products may have had other uses in distilled waters, facial preparations, and the preparation of art materials.⁴⁶¹ A receipt for potable gold might have been included with the medical receipts but is perhaps here because of its status as a classic alchemical remedy.⁴⁶²

Shared interests between alchemist, household manager, goldsmith, metalworker and art technician are implicit in the rest of *libro secondo*. The making of a cauldron for refining strong water (i.e. acids) would have been useful for alchemist and metalworker.⁴⁶³

Disappearing ink may have been produced for fun as a marvel, or for more serious purposes

⁴⁵⁷ *I Secreti*, pp. 26-8.

⁴⁵⁸ Tin, being a white metal, could be glazed like silver, or by a different process, like gold. Daniel V. Thompson, *The Materials and Techniques of Medieval Painting* (New York: Dover, 1956) p. 190.

⁴⁵⁹ *I Secreti*, p. 44.

⁴⁶⁰ Thompson, *The Materials and Techniques of Medieval Painting*, pp. 154-5.

⁴⁶¹ *I Secreti*, pp. 30, 45.

⁴⁶² *I Secreti*, p. 62.

⁴⁶³ *I Secreti*, p. 48.

in a powerful family with political and business interests to convey as secretly as possible.⁴⁶⁴ The removal of writing from parchment may have allowed censorship, errors to be removed, or for expensive parchment to be re-used, since it had a variety of other uses, including substituting for glass in windows.⁴⁶⁵ Making soap go further helped stretch the household budget, all of whose functions probably required its use.⁴⁶⁶ The making of bricks by firing earth was essential to any building project.⁴⁶⁷ Ways of softening, casting, and hollowing out iron and making borax were staples of metal-workers and goldsmiths.⁴⁶⁸ Azure substitutes, making material the colour of azure, and methods of gilding were artists' knowledge.⁴⁶⁹ The making of beautiful objects suggested by receipts for dyeing bone, making a white vessel or figure, gilding iron and making brass beautiful prefigure the contents of *libro terzo*.⁴⁷⁰

Whilst the medical and alchemical receipts require wealth to obtain the raw ingredients, the receipts in *libro terzo* suggest that the Great Ladies to whom the book is addressed gave much attention to the creation and maintenance of a luxurious culture with beautiful objects. There are instructions for sticking stones, jewels and crystals onto wood, fixing engraved wood together, making mirrors out of metal, and creating imitation pieces of azure. These receipts highlight the relationship between mosaic production and alchemy which is particularly pertinent in the light of the importance of mosaic designs in fifteenth and sixteenth century Italy, when the workshops attached to St Peter's and St Mark's became European centres for their manufacture, attracting artists from all over Europe.⁴⁷¹ In his work on the origins of mosaic gold, J. R. Partington argues that there was an historical relationship

⁴⁶⁴ *I Secreti*, p. 34, "Inchiostro che in quaranta di sparische, & non si vede" ("Ink which disappears in forty days and is not seen").

⁴⁶⁵ *I Secreti*, p. 34 .

⁴⁶⁶ *I Secreti*, p. 37.

⁴⁶⁷ *I Secreti*, pp. 46, 60.

⁴⁶⁸ *I Secreti*, pp. 37-8, 42-3.

⁴⁶⁹ *I Secreti*, pp. 37, 44-5.

⁴⁷⁰ *I Secreti*, pp. 34, 35, 46, 53.

⁴⁷¹ 'Decorative Arts and Furnishing – Mosaics' in *The New Encyclopaedia Britannica*, vol. 17, Macropaedia (Chicago: Encyclopaedia Britannica, 1998) p. 189.

between alchemy and material for mosaics.⁴⁷² The earliest known receipt for the preparation of a purple coloured *aurum musivum* (mosaic gold, crystalline stannic sulphide) is found in a fourteenth century illuminator's handbook, a manuscript of Italian origin, *De Arte Illuminande*. A fifteenth century manuscript from Bologna gives several receipts for the preparation of this *purpurino*. Partington concludes that the preparation of the purple probably evolved in the modification of a method for the preparation of artificial cinnabar (mercuric sulphide). The use of cinnabar, mercury and sulphur, which is recommended in *I Secreti*, was commonplace in alchemical experimentation and can be traced in two ways: first back through Arabic alchemy to the Alexandrian alchemists; second through evidence in the Latin west before the Arabic translations.⁴⁷³ It is also known that Renaissance art made use of the alchemical mercuric sulphide to obtain vermilion pigment for artwork. Ultramarine, made from the semi-precious stone lapis lazuli, was mined in Afghanistan and was fabulously expensive.⁴⁷⁴ Ultramarine of good quality was esteemed as the painter's gold for it cost even more than gold.⁴⁷⁵

Isabella Cortese's book gives instructions on how to know good lapis lazuli, has a receipt for ultramarine blue made from lapis lazuli, and another cheaper version based on mercury and *sal armoniac*.⁴⁷⁶ The same type of series of receipts for excellent blue, fine blue, blue of ultra-marine, are found in medieval painter's handbooks.⁴⁷⁷ It is likely that these blue pigments were used in interior decoration, including murals.

Libro terzo also includes a wide range of instructions for the use and care of gold in the household, in the application of gold in books, washing a work of gold, drawing out stains

⁴⁷² James R. Partington, 'The Discovery of Mosaic Gold', *Isis*, XX (1934), 203-6.

⁴⁷³ On the evidence in the Latin west see Arie Wallert, 'Alchemy and Medieval Art Technology', in *Alchemy Revisited*, ed. by von Martels, pp. 154-161 (p. 155).

⁴⁷⁴ Neil MacGregor, *Making Masterpieces* (London: BBC Education Production and National Gallery Publications, 1997) p. 14.

⁴⁷⁵ Wallert, p. 157.

⁴⁷⁶ *I Secreti*, pp. 85, 90.

⁴⁷⁷ Wallert, p. 157.

of old gold in cloth, and making a fine varnish that gives the appearance of gold.⁴⁷⁸ Although *I Secreti* does not go quite as far as *The Leyden Papyrus* in the latter's attempts to falsify the appearance of gold, nonetheless these receipts are in the same tradition of the Papyrus with its receipts for the coloration and augmentation of gold, colouring in silver, a procedure for writing in letters of gold (one method, amongst many others, uses mercury, gold and gum), methods for testing silver and gold, making copper equal to gold in colour, gilding, and the apparent doubling of gold.⁴⁷⁹ The shared concern of art technician and alchemist are demonstrated in gilding, where the craftsman used mercury's property to combine with gold to form an amalgam. Mercury was rubbed on an object, layers of gold leaf applied, and when heated the mercury vaporised.⁴⁸⁰

The preparation and transformation of substances through dyeing, colouring and tanning is the third main area of *libro terzo*. It explains how to make a red colouring to create an efflorescence, inks, cones of colour made of blackberries, ways of dyeing skins blue, pomegranate, bright green, and red and white on black.⁴⁸¹ Skins are prepared for book covers, white cloth is dyed black and made more beautiful, bone is tinted.⁴⁸² A strong suggestion of a celebratory lifestyle is given by the receipt to make a black star on the forehead of a white horse.⁴⁸³

Finally *libro terzo* has receipts which fall within the traditional concept of women's household roles at a time when extremely precious fabrics were washed seldom if at all: there are ways of caring for and conserving material, with advice on how to conserve colours

⁴⁷⁸ *I Secreti*, pp. 66, 76, 77, 78, 88.

⁴⁷⁹ The Leyden Papyrus X is one of two Greek papyri from circa 3rd century AD, and provides early evidence of the history of chemistry. Earle Radcliffe Caley 'The Leyden Papyrus X', *Journal of Chemical Education*, 3 (1926), 1149-1166.

⁴⁸⁰ Thompson, p. 193.

⁴⁸¹ *I Secreti*, pp. 65, 67, 69, 70, 73, 81.

⁴⁸² *I Secreti*, pp. 69, 83.

⁴⁸³ *I Secreti*, p. 93.

when washing, to wash old satin so that it appears as new, to take out very old stains, or stains from cloth of wool, felt or damask, to lift oil off velvet of any colour except red, and to lift wax from twill or goatskin.⁴⁸⁴ A few receipts for the care of animals are included, to cure a blow to an animal, and pain, colic or worms in horses.⁴⁸⁵

The couple of beauty tips for dyeing the hair black or red in *libro terzo* pave the way for the contents of the last book which almost entirely concerns matters of beautification and perfumery.⁴⁸⁶ This is by far the largest part of *I Secreti*: the women who were intended to buy it might have had intellectual interests in Neoplatonism and alchemy with their implied state of inner harmony and beauty, but they also wanted the skin-deep variety of outer beauty, which involved keeping up with cosmetic fashions. They are shown how to make lipstick and blusher, how to make their hands and teeth white, their skin clear, light, white and youthful, and how to apply white lead to their face.⁴⁸⁷ *I Secreti* also contains fragrances for the head; soap for the hands; perfumed oils made of nutmeg, orange flower, camphor, and carnation; oils and flower waters made from jasmine, orange flower, rose, and lavender.⁴⁸⁸ A sleeping water recalls the Friar's potion given to Juliet, although the latter probably had stronger ingredients.⁴⁸⁹ This is not the only Italian manuscript in which alchemical and beauty tips are combined: a receipt for a water to make a woman beautiful used by the Duchess of Urbino is included in a *Liber secretorum* in Latin and Italian of mainly alchemical matters dated from the fifteenth and sixteenth centuries.⁴⁹⁰ Between the cosmetics and flower waters other types of receipt appear: an oil of sulphur which dissolves metals, many coloured dyes for skins, horns and feathers in many colours, and clay perfumed *pater nostri* which seem to be

⁴⁸⁴ *I Secreti*, pp. 77-9.

⁴⁸⁵ *I Secreti*, pp. 93-4.

⁴⁸⁶ *I Secreti*, pp. 74-5.

⁴⁸⁷ *I Secreti*, pp. 95, 114, 124, 149, 154, 181.

⁴⁸⁸ *I Secreti*, pp. 183-9, 190-2.

⁴⁸⁹ *I Secreti*, p. 198.

⁴⁹⁰ Poppi, Tuscany: Bibliotheca Comunale MS 59, Item 20 (Source: Alchemy CD rom, Version 6).

luxurious rosary beads made of musk, amber, white lead, flakes of Venetian black, the *porporina* of gold and perfumed water.⁴⁹¹

The nexus of activities presented as women's concern includes the preparation of medicines, alchemical work to create perfect silver and gold, and a very wide range of artistic and craft activities which took place within large prosperous households: metal-working, dyeing, colouring, book production, the making of works of art, and neoplatonic, hermetic alchemy.

One theme in *I Secreti* which contributes to its sense of cohesiveness and supports the claim that it is edited by a woman, is the way in which the author gives sources for anything philosophical or alchemical. It appears that she, or her publishers, perceived no danger in associating a noble lady with many of the practical craft activities in *I Secreti*, but that alchemy was a more contentious matter, so that it was prudent to frame that part of the text with the safeguard of references to male authorities in a Europe-wide fraternity of clerical alchemists. Della Porta does this to a lesser degree in the preface to his 1588 edition of *Magia Naturalis* where he mentions Cardinal Este, who protected him.⁴⁹² In his chapter on alchemy, however, he makes no clerical references at all.

Alchemical procedures for making camphor are described as the *particulare* (private matters) of Abbot Chirico of Cologne, presumably the head of an abbey of monks in that German town, whose name possibly suggest Italian roots.⁴⁹³ It is not entirely clear who has written this section. William Eamon attributes it to Isabella Cortese, and it is possible that she addresses the Archdeacon to whom the book is addressed, but it seems more likely that

⁴⁹¹ *I Secreti*, pp. 187, 174, 170. Ornate rosary beads were fashionable: great ladies wore beautiful ornate rosaries particularly during the counter reformation. See Eithne Wilkins, *The Rose-Garden Game*, p. 26. The role of Italian women under restricted practices in the glass bead guilds is discussed in Francesca Trevellato, 'Out of Woman's Hands: Notes on Venetian Glass Beads, Female Labour and International Trades', in *Beads and Bead Makers: Gender, Material and Meaning*, ed. by Lidia Sciama and Joanne B Eicher (Oxford: Berg, 1998) pp. 47-82.

⁴⁹² Clubb, *Giambattista della Porta*, chapter one, pp. 7-8.

⁴⁹³ The saint's name Quiricus, or Kyriate, in Italian was rendered as Chirico.

capitolo uno is a copy of Abbot Chirico's work, addressed perhaps to another cleric, as it begins "Dico a te Fratel carissimo", and later addresses "chiarissimo fratello".⁴⁹⁴ In any case, and however she obtained the information, Cortese is associated with the ideas that follow, which are presented as allied to the material in the rest of her book on medicines, perfumery, dying and distillation.

Before *capitolo secondo* of *libro secondo* is an introduction to a practice of a Benedictine Priest of Vienna. Isabella Cortese writes that in Olomouc a traveller lodged in her house, and through illness became infirm and unable to reach his destination, Kracow. After he died in her house, she opened the letters he carried, which she now prints.⁴⁹⁵ The letters are addressed to Stanislava, moderator of a college of scholars at Kracow who is addressed as dearest friend, by a Benedictine brother. Kracow was a centre of alchemy and Paracelsianism. The Jagellonian University drew students from all over Europe, and Zbigniew Szydlo suggests that alchemy was probably taught discreetly in the faculty of medicine. Paracelsus visited Kracow in 1520 and wrote to a friend there in 1541. In 1569 two Paracelsian works were published at Kracow: *De Praeparationibus* and *Archidoxae*.⁴⁹⁶ It is therefore not surprising to find that alchemy is a subject of interest to Stanislava. The Benedictine writes that since he left his friend he missed his gentle soul and conversation, which has inclined him to work, as a consequence of which he made discoveries in the art which are presented in his letters. He asks Stanislava not to show these secrets to any fools but to use them wisely and signs himself "Vostro quanto fratello Benedetto".⁴⁹⁷ An instruction in *libro terzo* "e seccature delle legne, che noi in Tedesco chiamiamo gegoschiven", suggests that the writer was probably the Benedictine priest of Vienna,

⁴⁹⁴ *I Secreti*, pp. 19, 21.

⁴⁹⁵ Olmuz (alt. Olmütz) is now called Olomouc: it was then in Moravia, just within the boundary of the Holy Roman Empire, equidistant between Prague and Cracov and close to Hungary and Austria.

⁴⁹⁶ Szydlo, *Water Which Does not Wet the Hands* (Warsaw: Polish Academy of Sciences, 1994) p. 22.

⁴⁹⁷ *I Secreti*, pp. 29-30.

reflecting his Austrian-German origins, and that he may have been the source of other alchemical receipts in *I Secreti*.⁴⁹⁸

Clerics do not provide sources for the entire book, however. In just one place Isabella Cortese includes receipts with philosophical implications without reference to a man of the church. The idea and methodology for alternative methods of drawing out the mercury of Saturn is attributed to two secular Italian men: M. Alessandro Saracinello da Orvieto and Lodovico da Spoleto.⁴⁹⁹ In the later parts of *I Secreti*, which concern craft matters associated with creation of beauty in the household and the person through art, dyeing, cosmetics, and distilled perfumed waters, there are no references to the source of the information: neither men nor women are credited. It is implied that these are Isabella Cortese's own receipts, or those she has collected.

The suggestion that Isabella Cortese had alchemist clerical contacts stretching from Venice and Rome, to Olomouc, Kracow, Ragusa, Cologne, and Vienna is not unbelievable. There was considerable trade in the sixteenth century between Moravia, Poland, Russia and Austria.⁵⁰⁰ In humanist circles travel between Italy and Bohemia was common, and elements of hermetic philosophy came to Poland from Italy.⁵⁰¹ Many Moravians studied in Kracow, and some travelled to Padova and Ferrara in Italy for education.⁵⁰² Monks also often travelled between spiritual centres. During the sixteenth century Kracow became a significant centre of Paracelsianism with significant Polish interest in alchemy.⁵⁰³ The interest in "secrets" by churchmen in Cologne is demonstrated by the publication of the first extensive edition of

⁴⁹⁸ *I Secreti*, p. 32.

⁴⁹⁹ *I Secreti*, p. 56.

⁵⁰⁰ Roman Zaoral, 'Morava 1400-1550 v Mezinárodním Kontextu' [paper prepared for exhibition catalogue on art culture in Moravia and Silesia, 1400-1550], pp. 9-10, supplied by author, of the University of Olomouc, November 2000. I am grateful to Piotr Kuhiwczak and Emil Wagner for assistance with translation.

⁵⁰¹ Szydło, *Water Which Does not Wet the Hands*, p. 22.

⁵⁰² Zaoral, 'Moravia', pp. 9-10, fn. 27: between 1463 and 1522, 170 students from Olomouc and 50 from Brno studied at Kracow.

⁵⁰³ Szydło, pp. 23, 25.

Paracelsus in Cologne in 1589 by Johannes Huser with the support of the elector of Bavaria and the archbishop of Cologne.⁵⁰⁴ I have found no sixteenth century evidence of hermetic interests within Catholic women's circles in Cologne, although in the seventeenth century Isabella von H.L. Geist, a Carmelite nun at the convent of Cologne, expressed mystical visions in a devotional emblem book with hermetic imagery.⁵⁰⁵

It is perhaps more surprising for an Italian noblewoman to claim to own a house in Olomouc. However, Olomouc was at a crucial crossing point on the well-worn route from Italy to Krakow, where, as early as the fifteenth century, there was a prosperous Italian community.⁵⁰⁶ Polish-Italian contacts had developed through ecclesiastical, university and trading interests, and one high-born Italian woman, of the Milanese Sforza family, became Polish Queen Bona, wife of King Sigismund I. At least one resident of San Gimignano, the possible home of Isabella Cortese, moved to Krakow.⁵⁰⁷ Henry Valois, son of Catherine de' Medici and Henri II of France, had briefly been King of Poland from 1573 to 1574.⁵⁰⁸

The nature of the relationship between Isabella Cortese and these clerics is unclear. She may have had relations in the church, or she may have exercised patronage. It is probable that a noblewoman would have had at least one family member in the church, who could have acted as a source of power that could be used informally by family members including women. It is possible that Isabella Cortese was related to one of the clerics mentioned in her book, or that she had been introduced to them through family connections. The patronage of

⁵⁰⁴ Cited by Debra L. Stoudt, "'Probatum est per me': The Heidelberg Electors as Practitioners and Patrons of the Medical and Magical Arts', *Cauda Pavonis*, 14 (1995), 15.

⁵⁰⁵ JR Ritman Library, 'The Silent Language Exhibition', No 38, Isabella von H.L. Geist (1606-1675): <http://www.ritmanlibrary.nlsilent> June 1999.

⁵⁰⁶ Harold B. Segal, *Renaissance Culture in Poland: The Rise of Humanism* (Ithaca and London: Cornell University Press, 1989) p. 46. For evidence of Poles settling in Italy, notably at Padua, see Vaczeloia Dyreksja and Archiwów Panstowoaya, *Natio Polonia: Le Università in Italia e in Polonia (s. XIII-XX)*, (Padua: Ministro Beni Culturali e Ambientali, 1990).

⁵⁰⁷ Segal, particularly chapter 2, 'From San Gimignano to Cracow: The Extraordinary Career of Filippo Buonaccorsi, Alias Callimachus', pp. 36-82 (p. 46).

⁵⁰⁸ Segal, p. 256.

alchemists was normal practice for nobility, and Italian alchemists were sometimes priests or monks. Cosimo de' Medici received letters from Don Stefano Giraldi, prior of *San Pancrazio de Florence*, in reply to his questions about alchemy, and Agnolo della Casa, an alchemist at the Medici court, exchanged alchemical letters with the priest Antonio Neri.⁵⁰⁹ The possibility of quite intimate relationships based on occult-intellectual interest is suggested by another example of a relationship between a Catholic churchman and an Italian noblewoman, as well as her daughter, contemporary with Isabel Cortese's book, but in this case based on cabalistic interests. A Franciscan Minorite Friar, pupil of the Franciscan Francesco Giorgio who speculated on cabala and neoplatonism in *De Harmonia Mundi*, published his own cabalistic treatise with a dedication "Alla molto Illustre Signora Taddea Malaspina", devised as dialogues between Archangelus, Signora Taddea and her young daughter Giulia.⁵¹⁰

The title of *I Secreti* implies that all great ladies share an interest in the book's contents, that is in neoplatonism and hermeticism as well as experimental alchemy.⁵¹¹ The field of knowledge and blurred boundaries between the activities described in *I Secreti* infer that women's participation in alchemy within a prosperous Italian household was likely. The example of Isabella Cortese as probable compiler of alchemical material, through her contacts with alchemical clerics across the Holy Roman Empire, raises the problem of whether she is a lone example or whether her book represents the participation of many more women in alchemy in Italy at this time. Three types of suggestive evidence are used to address this question: the cultural context of Italian humanism and the academies and their

⁵⁰⁹ Perifano, in von Martels, *Alchemy Revisited*, p. 181. Florence: Bibliotheca Nazionale MS Palat. 867, vol. 1-6, 8, and Venice: Bibliotheca Marciana MS Italian IV. 187, Gesuati 47.5428 (cited in Alchemy CD rom, Version 6).

⁵¹⁰ *Dechiaratione Sopra Il Nome Di Giesu* [sic], *Secondo Gli Hebrei Cabalisti, Greci, Caldei, Persi & Latini*, cited in Desirée Hirst, *Hidden Riches* (London: Eyre and Spottiswoode, 1964) pp. 28-9.

⁵¹¹ This is the sense of the 1574 version, which is my principal source. A slight variation to the punctuation in the 1594 version offers the reading that it is the art of perfumery (rather than the entire contents) that particularly belong to all great ladies: nonetheless the Great Ladies or their emulators continue to appear to be the target market for the entire book.

relationship with women and alchemy; the skills required to run an elite Italian household and their relationship to *I Segreti* and alchemical practice; and fragments of evidence of specific women alchemists.

Much work has already been done and continues to be done to illustrate the extent of women's education by and participation in the humanist culture of the Italian Renaissance.⁵¹² Women have been shown to have been painters, actresses and poets.⁵¹³ There were women mystics, women who wrote neoplatonic poetry, and women who made a positive contribution to medicine.⁵¹⁴ The participation of humanist women in the debate on alchemy, or in alchemy itself, has not, however, been delineated. Christine de Pisan, whose father was an alchemist, is silent on the subject. However, alchemy was a part of the court life of the Italian Renaissance of which no humanist would have been unaware. The prominent role of the Medici family in fostering humanism was paralleled by its enthusiasm for the pursuit of alchemy and it seems safe to say that women in humanist circles would have known that alchemists and their experiments were near at hand. The position of women in the Italian academies was considered by Frances Yates to be "another of those unexplained avenues which are always opening out on every side".⁵¹⁵ The full relationship between alchemy and the Italian academies is another area of study open for further work, building on the partial accounts that have been made, particularly in relation to the *Accademie dei Lincei, dei Segreti*

⁵¹² See *Women Writers of the Renaissance and Reformation*, ed. by Katarina M. Wilson (Athens: University of Georgia, 1987) pp. 3-98; Michel Bastiaensen, *La femme lettrée* (Brussels: Peeters, 1997), particularly Sophie Basch, 'Gaspara Stampa, Veronica Franco, Isabella di Morra: trois cas de métamorphose poétique', pp. 49-62; Patricia Labalme, *Beyond their Sex: Learned Women of the European Past* (New York: New York University Press, 1980), particularly Margaret King, 'Book-lined Cells: Women and Humanism in the Early Italian Renaissance', pp. 66-90; Stevenson, *Early Modern Women Poets*.

⁵¹³ Germaine Greer, *The Obstacle Race* (London: Secker and Warburg, 1979). Kristeller, 'Learned Women of Early Modern Italy: Humanists and University Scholars', pp. 91-94.

⁵¹⁴ Alessandra Giliani of Bologna (1305-24) was assistant to Mondino, a father of anatomy. In 16th century Italy Loredana Marcello-Mocenigo (d. 1572) was known for the formulae and receipts she devised for plague victims. Catherine Sforza, Countess of Forli, was known for doctoring her soldiers and subjects in times of plague (Autumn Stanley, *Mothers and Daughters of Invention* (London: Scarecrow Press, 1993), p. 145). The poet Vittoria Colonna was a neoplatonist in the tradition of Marsilio Ficino (Margaret King, *Women of the Renaissance*, p. 142).

⁵¹⁵ Frances Yates, *Renaissance and Reform: The Italian Contribution* (London: Routledge & Kegan Paul, 1983) p. 26.

and *dei Secreti*, all of which pursued alchemy.⁵¹⁶ The question of women's involvement in alchemy through the influence of the academies has not been previously directly addressed. It is significant for the question of women and alchemy, because from the 1540s the academies were the chief basis of Italian humanist culture, and Ficinian neoplatonism, as well as significantly influencing humanist alchemists, was the semi-official philosophy of most of the academies.⁵¹⁷ Two questions arise: whether women took part in those academies known to conduct alchemical experiments; and how far women, through other academies, developed intellectual and literary interest in alchemy as philosophy and allegory.

The origins of the academy in gatherings of literary associates or friends in Renaissance villas, palaces or households from the late fifteenth century onwards located their activity in the private sphere, where women could well have taken part, or at the very least been present, without record or publicity.⁵¹⁸ Early initiatives included the Platonic Academy in Florence and the *Accademia Cortesiana* in Rome. No women are listed as members of the Medicean/Ficinian Platonic Academy, and even though David Noble has argued that Ficino had a homosocial orientation it is probable that women were present at gatherings, absorbing the new thinking.⁵¹⁹ Ficino has left at least one letter to a powerful woman, Clarice de Medici, wife of Ficino's patron Lorenzo de Medici, in which he recommends the strong spiritual medicine of holy prayer to overcome bodily and earthly illnesses.⁵²⁰ The value Ficino placed on friendly conversations is probably also significant in the dissemination of his ideas to women.⁵²¹ The membership of the household academy of

⁵¹⁶ See for example, W. Eamon, particularly pp. 210-2, 229-32; and Antonio Clericuzio and Silvia de Renzi, 'Medicine, Alchemy and Natural Philosophy in the Early Accademie dei Lincei', in *Italian Academies of the Sixteenth Century*, ed. by Chambers and Quiviger, pp.175-195.

⁵¹⁷ Cochrane, *Italy 1530-1630*, pp. 72, 247.

⁵¹⁸ David Chambers, 'The Earlier 'Academies' in Italy', in *Italian Academies of the Sixteenth Century* ed. by Chambers and Quiviger, pp. 10-11.

⁵¹⁹ David Noble, *A World Without Women: The Christian Clerical Culture of Western Science* (New York: Alfred A. Knopf, 1992) p. 172. Robb, chapter three.

⁵²⁰ Marsilio Ficino, *The Psalter of Jerome translated into the common tongue*, proem to Clarice, wife of Lorenzo de' Medici, translated by Mr Arthur Farndell, unpublished, copy supplied by Clement Salaman.

⁵²¹ Robb, p. 59.

Alessandro and Paolo Cortesi is not known, but its artistic programme of recitations of vernacular poetry, singing and musical performances suggest that women's exclusion may not have been required. The Cortesi's academy was followed by others sponsored by hospitable papal curia.⁵²² There were echoes of this household approach in the Mantuan entourage of Isabella d'Este, whose literary *côterie* in the early 1520s was referred to as the *Accademia de Santo Pietro*.⁵²³ Isabella d'Este had received a good humanist education in Greek, Latin, astrology and the design of allegorical schemes and an interest in allegorical alchemy seems likely.⁵²⁴ In Naples della Porta's father hosted an informal household academy of philosophers, mathematicians, poets and musicians, as did the adult della Porta at a later date.⁵²⁵

During the sixteenth century the academies became more structured, with rules. This gradual change from informal private to institutionalised public realm may, over time, have closed doors for women. Papers left by Girolamo Ruscelli at his death in 1565/6, published in 1567 as *Secreti nuovi*, claim his authorship of the *Secreti* of Alessio Piemontese (which may have been a model for Isabella Cortese) and the testing of all the receipts by an experimental academy he founded in Naples some years before. He claims that this *Accademia de Segreti* had twenty four active members, plus a local nobleman, a member of his family and one of his ministers, a description leaving open the possibility of female attendance. The activities of this academy are close to the interests of Isabella Cortese: apothecaries, goldsmiths, herbalists, perfumers, painters and colourists are employed, overseen by the academicians.⁵²⁶ Giambattista della Porta's *Accademia de Secreti*, with many of the same interests, was also housed in Naples, and its probable existence before 1563 makes it contemporaneous with

⁵²² Chambers, *Italian Academies of the Sixteenth Century*, pp. 10-11.

⁵²³ Chambers, p. 11.

⁵²⁴ Margaret King, *Women of the Renaissance* (Chicago: University of Chicago Press, 1991) p. 161.

⁵²⁵ Louise George Clubb, *Giambattista della Porta, Dramatist* (Princeton: Princeton University Press, 1965, reproduced on <http://tscnet.com/pages/omard1/jporta3a.html>) pp. 3, 9.

⁵²⁶ Eamon, p. 149.

Isabella Cortese's *I Secreti*. No official roll exists, and, although della Porta describes it as an Academy of curious men, I have found no evidence to suggest that women were excluded.⁵²⁷

If aristocratic Neapolitan social life revolved round the academies, noblewomen were possible participants.⁵²⁸

By the early seventeenth century the institutionalisation of the academies was more advanced. Della Porta was a significant member of the *Accademia dei Lincei* which carried out scientific, botanical, medical, alchemical and chemical research. There are no records of women members: its brothers were bound to each other by love and fraternity and sought (unsuccessfully) to implement ideals of community life. An ambiguity in attitudes to women within the *Lincei* is suggested by the insistence of their founder Cesi, Marchese di Monticello (1585-1630), that chastity was essential, and that the Dutch physician Joannes Eck (1577-1620) could not marry a woman from his hometown.⁵²⁹ Eck, who wished to marry, knew the married Joseph du Chesne, who, as is shown elsewhere in this thesis, worked in partnership with women on serious alchemical experimentation.⁵³⁰ Eck and du Chesne may therefore be representatives of a more liberal attitude towards relationships with women amongst scientific men. A seventeenth century edition of Isabel Cortese's *I Secreti* may drop a literary hint that she had some relationship to the *Lincei*, or was admired by them. She is described as one of the most wise women, who with eyes sharper than the Lynx knew how to penetrate the Arcana, the most hidden in nature.⁵³¹ The metaphor may suggest a link, both with della Porta, who used the emblem of the lynx, and with the Lincei.⁵³² However the reference to the lynx

⁵²⁷ Eamon, p. 200.

⁵²⁸ Eamon, p. 200.

⁵²⁹ Eamon, p. 230.

⁵³⁰ Eamon, p. 230, and chapter four of this thesis.

⁵³¹ Isabella Cortese, *Secreti Varii della Signora Isabella Cortese* (Venetia: Appresso Benedetto Miloco, 1677) preface.

⁵³² Della Porta used the lynx on the title page of *Magia Naturalis*, 1589 (though not on the first edition, 1558).

may be no more than a common metaphor, or even retrospective flattery for the benefit of the male patron of that edition.

Even though the formalisation of the many academies that sprang up in Italy in the sixteenth and seventeenth centuries meant that many did not admit women, some did. The *Accademia di Piacenza* admitted women members such as Ippolita Borromeo and Camilla Valente.⁵³³ The *Accademia del Buttighino*, founded circa 1543, had a presentation of “bellissime et gentilissime donne”.⁵³⁴ The *Accademia degli Intronati*, Siena, did not admit women in 1550, but a dialogue composed by Alessandro Piccolomini for a visit by Cosimo de Medici in 1561 (the same year that Isabella Cortese was first published) in the *Commedie* of the *Accademi Intronati* of Siena attributes the origins of the *Intronati* to Siennese women. The idea that this could be true is interesting firstly as the *Intronati* studied natural philosophy as well as law, music, poetry and the humanities, and alchemical philosophy was one facet of natural philosophy.⁵³⁵ A second reason for its interest for this study is that an *Accademia de' Cortesi* in Siena dating from circa 1580 appears to have links with the *Intronati*.⁵³⁶ By 1614 women poets were admitted to the *Intronati*. The *Accademia Corregiano* of Veronica Gambarà comprised philosophers, theologians, and doctors, and does not appear to have had women members, only an eminent woman principal.⁵³⁷ Similarly the *Accademia degli Alterati* at Florence granted the privileges of the academy to Eleonora of Toledo de' Medici, niece of the wife of Cosimo de Medici.⁵³⁸ The *Accademia degli Accessi* in Palermo admitted two women poets, Marta and Laura Bonanno.⁵³⁹ The *Accademia delle Assicurate* in Siena for gentlewomen who loved letters was protected by the Grand Duchess

⁵³³ Cochrane, p. 219.

⁵³⁴ Maylender, vol. 1, pp. 475-7.

⁵³⁵ Maylender, vol. 3, p. 350.

⁵³⁶ Maylender, vol. 2, p. 96.

⁵³⁷ Maylender, vol. 2, p. 94.

⁵³⁸ Maylender, vol. 1, p. 154.

⁵³⁹ Maylender, vol. 1, p. 30.

of Tuscany, Vittoria della Rovere.⁵⁴⁰ During the seventeenth century the *Accademia dei Rin vigoriti* had illustrious women members,⁵⁴¹ and Queen Christina of Sweden famously set up her own academy, the *Accademia Regia della Laeta di Svezia*, in Rome in 1656 to 1656, for which she chose the topics, including hermeticism and alchemy.⁵⁴² The *Incogniti* at Venice had only male members but its meetings (at which masks were sometimes worn) were open to the public and a large number of women attended and were able to participate in discussions.⁵⁴³

Learned men predominated in the Italian academies, but there were some openings for women – as the exceptional powerful head of an academy surrounded by interesting men (Queen Christina); as an exceptional woman permitted entry on the basis of exemplary skill (like Marta and Laura Bonanno); in a community of women in their own academy (like the *Accademia delle Assicurate*); or as participatory audience (such as the *Incogniti* at Venice). It also seems very likely that through the oral tradition of friendly conversation many more women knew something of the interests and concerns of the academies, raising the problem of the extent to which alchemy as allegory, philosophy or technique was part of the academicians' concerns.⁵⁴⁴

Looking through Jennifer Montagu's listing of the emblems of the Italian Academies it is impossible not to be struck by the images chosen by the academies as their *imprese*.⁵⁴⁵ Some read as references to the craft aspect of alchemy, or allied pursuits such as distillation

⁵⁴⁰ Maylender, vol. 1, pp. 366-7.

⁵⁴¹ Maylender, vol. 5, p. 1.

⁵⁴² Susanna Åkerman, *Queen Christina of Sweden and her Circle: The Transformation of a Seventeenth-Century Philosophical Libertine* (Leiden: E.J. Brill, 1991) pp. 228-9.

⁵⁴³ Dr N. Davidson, seminar paper, 'The *Incogniti* in Venice and the development of the Academy in early modern Italy', All Souls, Oxford, 2 February 2000.

⁵⁴⁴ Conor Fahy uses similar evidence to argue that women writers and intellectuals operated only on the margins of the literary academy, which as an institution did little or nothing to encourage the literary activities of women or enhance their intellectual status. 'Women and Italian Cinquecento literary academies', in *Women in Italian Renaissance Culture and Society*, ed. by Letizia Panizza (Oxford: Legenda, 2000) pp. 438-452.

⁵⁴⁵ Jennifer Montagu, *An Index of Emblems of the Italian Academies based on Michelle Maylender's Storie della Accademie d'Italia* (London: The Warburg Institute, 1988).

or metalwork. An alembic is the *imprese* of the *Accademie de Consumati*; the *Accademie d'Accessi* at Palermo is represented by an alembic containing essences and flowers, positioned on a fire. Other images show an alembic distilling; an alembic on a furnace with two flasks and anvil on which a heated thin bar of iron is beaten by two hammers; bellows in the flame; a cooking pot; flowers and dew; flowers gaining vigour from water in a vase of transparent crystal; a furnace of stone within which a fire heats an alembic which sends out a vapour into a vessel; and a gold bar on an oven. Others have the type of hermetic imagery that crops up in the type of emblematic seventeenth century Renaissance alchemical texts epitomised by the work of Michael Maier and Robert Fludd. A bird flies towards the star of mercury (*Accademia d'Affidati*, Pavia): there is a caduceus (*Accademia d'Disuniti*, Fabriano), a golden chain (*Accademia d'Uniti*, Venezia), a garden with a central fountain shone on by, on one side, the sun, and on the other the signs of the zodiac (*Accademia d'Eccitati*, Este), many representations of eagles and fountains, as well as a labyrinth and a pyramid. These latter *imprese* show the influence of classical myth in the humanist style. Roberto Ciardi explains the *imprese* in terms of their roots in heraldry from which, he argues, they became an erudite intellectual game. He also notes the significance of fire as the essence of the academies, but he does not mention alchemy at all. I suggest that the large number of alchemical and hermetic images would have been recognised as such by members of the academies. Allegorical use of alchemical imagery is accepted by Maylender in his explanation of the *imprese* of the *Accademia degli Ardenti*, Viterbo, a furnace blazing with a crucible, in which a rod of gold bubbles in the flame with the motto *Donec Purum*: Maylender states that the effect on the academicians of the fire and heat of disputation was to make gold, refined and purified.⁵⁴⁶ The context of neoplatonic philosophy in the academies is generally agreed, and that philosophy was, in its Ficinian manifestations, a complete

⁵⁴⁶ Maylender, vol. 1, p. 310.

philosophy of life. The use of the *imprese* may well have been part of the idea of the serious game, which is found in both humanism and alchemy.⁵⁴⁷ It seems necessary to argue this point, because if, as the *imprese* seem to indicate, there is a wide background of alchemical hermetic understanding in the academies as a whole then it can be assumed that women academicians were part of this environment, not necessarily as practising alchemists, but complicit in understanding alchemy as a sophisticated literary and philosophical device.

Whether or not women attended the academies, they had work to do as household managers, a role which arguably took on a particular cultural tone under the influence of Ficinian Neoplatonism. It is well established that those in the upper echelons of Italian society such as courtiers, bishops, statesmen and investors wished to display neoplatonic perfection in their homes in order to express their status and proximity to heaven. To achieve this goal they entered into patronage relationships with craftsmen who had the skills to implement artistic, craft and alchemical schemes.⁵⁴⁸ Isabella Cortese's *I Secreti* purports to offer the techniques and receipts exchanged in such patronage relationships to the wider public, particularly women. This popularising of the secrets of the signorial class is emphasised by the 1574 publishing of her book with Federigo Giorgi's book on practical falconry, which was the signorial sport *par excellence* for men and women, a fact reinforced by its dedication to "Al Illustrissimo S. Carlo Gonzaga, Marchese".⁵⁴⁹ The force of the desire in popular culture to have access to these secrets of the elite is shown by the numerous reprintings of *I Secreti*, and others in its genre, and suggests that those in less wealthy households would also seek to create an appearance of luxury, opulence, and beauty in their more modest homes, and to test out receipts for medical, alchemical, metalworking, artistic,

⁵⁴⁷ See Edgar Wind, *Pagan Mysteries in the Renaissance* (London: Faber and Faber, 1958, 1968) p. 236, and Michael Maier, *Lusus serius* (Oppenheim: Lucas Jennis, 1616).

⁵⁴⁸ Martinez, p. 458.

⁵⁴⁹ *Del Modo di Conoscere I buoni Falconi, Astori, & Sparavieri, di essercitarli, e farli perfetti, di governarli, & di medicarli.*

perfumery and cosmetic matters within the household. Although prescriptive “how to” books may not equate with the reality of women’s lives, the publishers of *I Secreti* believed that a book including alchemical secrets alongside other household matters would sell to women, who were interested in its contents, including alchemy. It is also significant to find a woman apparently mediating between elite and popular culture, a trend also noted with regard to Lady Margaret Clifford in chapter five.

Isabella Cortese was not the first *professor de’ secreti* to offer helpful hints for running the domestic economy. The secrets of Alessio Piemontese, although not specifically targeted at women, include home remedies, distillation, perfumery, dyeing, colouring and metalwork.⁵⁵⁰ The third book is entirely concerned with conserves using oranges, honey, peaches, quinces, fruit syrups and melons, and the fourth book comprises cosmetics, including an oil to make hair appear like gold.⁵⁵¹ A receipt to conserve man’s youth and hold back old age had been obtained in service in the household of a noble Lady.⁵⁵² When Piemontese advises that gentlewomen should not paint their faces with mercury sublime for whom it is “very evil and hurtful” and leave it to goldsmiths, alchemists and physicians, he highlights the close movement of materials between housewifery and the latter professions.⁵⁵³ He offers all sorts of ideas for creating the appearance of opulence: gilding the edges of books and iron with gold foil, and making counterfeit diamonds and the appearance of perfect azure.⁵⁵⁴

Isabella Cortese’s *I Secreti* differs from the other secrets books in its genre by virtue of claiming to be by a woman for women. It draws attention to the wide range of tasks considered appropriate for a noblewoman’s attention and, by implication, to the range of staff

⁵⁵⁰ Alexis of Piemont, *The Secretes of the Reverend Maister Alexis of Piemont*, transl. by William Warde (London: Nycolas England, 1562).

⁵⁵¹ Piemont, f. 75.

⁵⁵² Piemont, sig. A1.

⁵⁵³ Piemont, 101v.

⁵⁵⁴ Piemont, ff. 94v, 166r, 117r.

under her control. The Italian *signora* had duplicate arrangements with the *signor* for her half of the court. At Mantua in 1587 the Duchess had twenty five ladies, seven household officers, seven grooms, and three maids (the Duke's seventy six staff included secretaries, counsellors, gentlemen, pages, valets and bedchamber attendants).⁵⁵⁵ *I Secreti* suggests that alchemy, medicine, perfumery, art, and metalwork were amongst the activities the *signora* might control. Isabella Cortese represents herself as a female patron with a close relationship with alchemists (and makers of medicines, metalwork, perfumery, art and crafts). She is not demeaned by a working knowledge of skilled manual processes: on the contrary she has a good knowledge of materials, and her self-image presents a wealthy woman who values knowledge of technical processes which apparently fall within her household *domaine*.

I Secreti carries an assumption that the married woman running a household had intellectual interests to a certain degree. This adds to evidence against Margaret King's thesis that in the Italian Renaissance a young woman was free to be studious, but that on maturity a choice had to be made between, on the one hand, marriage and a full participation in social life, or on the other, study, no marriage and withdrawal from the world.⁵⁵⁶ King's argument is challenged by Jane Stevenson's research on highly educated women Latinists which indicates that the majority of scholarly women married.⁵⁵⁷ Isabella Cortese's book is pitched at a more middling sort of educated women reader of vernacular literature, whose interest in running a household as a married woman extended to neoplatonic, humanist, Paracelsian and practical alchemical concerns, as well as a broad range of craft skills including metalworking, medicine, and dyeing. There is no conflict with the idea of the court lady managing her

⁵⁵⁵ Sergio Bertelli, 'The Courtly Universe', in Sergio Bertelli, Franco Cardini, Elvira Zorzi, *Italian Renaissance Courts* (London: Sidgwick and Jackson, 1986) pp. 7-38 (p. 10).

⁵⁵⁶ King, 'Book-Lined Cells: Women and humanism in the early Italian Renaissance', in *Beyond their Sex*, ed. by Labalme, pp. 66-90.

⁵⁵⁷ Jane Stevenson, 'Women and classical education in the early modern period', in *Pedagogy and Power: Rhetorics of Classical Learning*, ed. by Yun Lee Too and Niall Livingstone (Cambridge: Cambridge University Press, 1998) pp. 83-109. She cites Battista Malatesta, Isabella d'Este, Clara Lanzavegia, Laura Cereta, Cassandra Fedele and Olympia Morata. Calenda Costanza, the pioneering fourteenth century medical lecturer was also married.

husband's property, home and children, creating the conditions for health and beauty, whilst seeking to understand a certain amount of philosophy and technical material. Cortese passes on household management matters to enable the creation of a beautiful and healthy home, stresses that her aim in publishing is to be useful, whilst also showing that she understands what churchmen have to say about alchemy, without presuming to be an expert herself. Frances Yates summed up Ficino's philosophy as elegant, artistic and refined modern natural magic, with the neoplatonic philosopher singing Orphic hymns surrounded by flowers, jewels and scents in a charmingly healthy and wealthy way of life.⁵⁵⁸ Whilst Isabella Cortese makes no mention of Orphic hymns, her book does indicate a lifestyle of conspicuous wealth dedicated to purifying the soul through alchemical medicinal magic, and, perhaps separately, the use of colour, art, mosaics, flowers (in medicines and perfumed waters) and scents. It is often argued that neoplatonism offered women only an ethereal role as idealised "other" for male philosophers curiously uninterested in actual women.⁵⁵⁹ Isabella Cortese's book, however, shows that she combined aspects of the neoplatonic philosophy with very practical pursuits.

Within the Italian palace, which smaller households sought to emulate, two physical areas spatially reflected two major aspects of alchemy in Italian culture. The *studiolo* was an intimate and private room or apartment for solitary contemplation which was sometimes decorated by alchemical allegory.⁵⁶⁰ The historical development of the *studiolo* out of the fifteenth century *hortus conclusus* (garden of the soul) may correlate to a change from contemplative alchemy associated with the *Rosarium*, to allegorical alchemy drawing strongly on classical tradition. The *studiolo* of Francesco I de' Medici in the Palazzo Vecchio,

⁵⁵⁸ Yates, *Giordano Bruno and the Hermetic Tradition*, p. 80.

⁵⁵⁹ See for example *The Cultural Identity of Seventeenth Century Women: A Reader*, ed. by N.H. Keeble, (London: Routledge, 1994) pp. x, 171. For a discussion of a woman's use of neoplatonic poetry see Ann Rosalind Jones, 'Pernette du Guillet', in Wilson, pp. 219-231.

⁵⁶⁰ Franco Cardini, 'The Sacred Circle of Mantua', in Bertelli, pp. 77-126. See also Giulio Lensi Orlandi, *Cosimo e Francesco de' Medici Alchimisti* (Firenze: Centro Internazionale del Libro, 1978).

Florence, is covered with mythological and alchemical allusions.⁵⁶¹ Much gold leaf is used on frames and ceiling: the alchemically perfect metal highlights the perfection of the sacred space in which the ruling prince and his wife met God through contemplation of allegory. The *studiolo* was a clean, quiet meditative space which expressed a high level of humanist knowledge of the mythology and interpretation of classical antiquity as well as the power and wealth to commission artwork of the highest quality. The alchemist's laboratory, on the other hand, was dirty and dangerous, a place where God and his secrets in nature were sought in the activity of chemical experimentation in vessels, with possibilities of mercury poisoning, exploding furnaces, and scalding. In a smaller household the dirt and danger may have been carried out in the kitchen whilst a corner replaced the *studiolo* as place of prayer and meditation.

A third space bore a relationship to the *studiolo* and alchemist's laboratory, the physical garden as reminder of the *hortus conclusus*. The Medici gardens at Careggi and Poggio a Caiano offered spiritual and physical healing and renewal, a place for poetry and the Muses, herbs and aromatic plants. Franco Cardini suggests that here "the Biblical Eden meets the Golden Age in an ultimate synthesis of scripture and pagan myth".⁵⁶² The garden as earthly paradise was also a meeting of spiritual and practical ideas: garden plants were the source of materials for distilled and other remedies and perfumes. Access to a wealthy family's garden was a privilege, which could be exploited for business and politics as was the case with the Florentine garden of Lorenzo de' Medici at the Palazzo Medici.⁵⁶³ Isabella Cortese's inclusion of *Negotia* in her motto *Prudentia negotia non fortuna vincat* suggests that she understood this.

⁵⁶¹ Cardini, in Bertelli, p. 88, and Orlandi, *Cosimo e Francesco de' Medici Alchimisti*, pp. 227-231, 246-248.

⁵⁶² Cardini, p. 115.

⁵⁶³ Cardini, pp. 77- 126 (p. 99).

The practical purpose of *I Secreti* was to help the *Signora*, or her emulator, to save money and run a prudent and hard-working household. *Prudentia* is emphasised in Cortese's motto, signalling that this book offers no fatalistic easygoing miracle working. Cortese is opposed to idleness and stresses her own wish to be useful in producing the book. The papers from Abbot Chirico point out how easy it is to waste time and money studying alchemical texts for years as he himself had done. The rest of the book offers many tips for saving money in a sixteenth century do-it-yourself kit for creating the appearance of magnificence, for example by creating the appearance of azure; showy books enhanced with gold; and varnish that gives the appearance of gold.⁵⁶⁴ It also helps the housewife save money by repairing and reviving expensive household items that contribute to an atmosphere of opulence: how to draw oil out of paper, wash gold, make old satin seem like new and draw stains off old gold.⁵⁶⁵

Although it can be argued that the content of *I Secreti* appertains to a large household and therefore comes within the broad remit of a woman's duties in the private sphere, the very publication of the book puts Isabel Cortese into the public realm. The mentions of prudence and business negotiation may suggest an association with qualities sometimes regarded as aspects of masculine rather than feminine virtue.⁵⁶⁶ In her preface she explains that she has published on the basis that she wishes to be useful, perhaps implying that she recognises her role as a female writer to be an exception which requires justification.⁵⁶⁷ Her constant references to Catholic male authority stress that the book has male authorisation. The lack of any overt gendered, erotic or female references emphasises the impression that

⁵⁶⁴ *I Secreti*, pp. 88.

⁵⁶⁵ *I Secreti*, pp. 77-78.

⁵⁶⁶ See the comments on *Il Cortegiano* in Pamela Joseph Benson, *The Invention of the Renaissance Woman*, p.75, where Duchess Elisabetta Gonzaga's prudence and strength of spirit is said to be rare even in stern men.

⁵⁶⁷ Benson, p. 4.

Isabel Cortese wishes to be perceived as a virtuous woman who has entered the masculine realm on her own, but with male support and approval.

There is evidence that other early modern Italian women were alchemists, the most compelling of which comes from the circles of Cosimo II and Antonio de' Medici, both of whom were alchemical practitioners with a strong interest in Paracelsianism.⁵⁶⁸ Amongst the considerable evidence of the direct interest and involvement of Cosimo in alchemy in his *Fonderia*, or alchemical laboratory, are two books written mainly in Cosimo's own hand listing fifty four medical and alchemical receipts, often with the name of the person who gave the receipt, including a woman called "Dame Laura" who had at least one male friend with whom she shared alchemical interests, named in the manuscript as "un ami ferrarais de dame Laura".⁵⁶⁹ In Florence in the last year of his life, 1598, Antonio de' Medici gave a manuscript book of secrets and experiments written in his own hand to Caterina de' Medici. It includes receipts for making oils, waters and beauty aids for the skin, hair, and beards, perfumes, perfumed pastes, ointments, and perfumed bars of soap, many of which use materials and processes that overlap with alchemical practice, resembling the parts of *I Secreti* most closely connected with the domestic economy. Throughout this long collection distillation is used, from the first receipt, which makes talcum powder from a distillation of snails and borax. The huge wealth and luxury of the Medici lifestyle is reflected in a process for making a very expensive facial treatment from silver in a reverberating furnace to which distilled waters are later added. An oil for the face uses oriental pearls, distilled vinegar, a spoonful of silver and some gold. A water to whiten the face is made by distilling a mixture of distilled turpentine, mastic, white incense, pork fat, quicksilver and fine silver over a slow fire: vegetables

⁵⁶⁸ Paolo Galluzzi, 'Motivi Paracelsiani nella Toscana di Cosimo II e di Don Antonio dei Medici: Alchimia, medicina "chimica" e riforma del sapere', in Istituto Nazionale di Studi sul Rinascimento *Scienze credenze occulte livelli di cultura* (Firenze: Leo S. Olschki, 1982) pp. 31-62.

⁵⁶⁹ Perifano, 'L' Alchimie à la Cour de Côme I^{er} de Medicis', p. 178.

including asparagus root and onions are then added before further distillations.⁵⁷⁰ Catherine de' Medici's continuing interest in experimental work is indicated when Queen of France by her patronage of Catholic Paracelsian medical doctors, the first of whom was Jacques Gohory,⁵⁷¹ and by the patronage and protection of Bernard Palissy, who used alchemical techniques in his pottery.⁵⁷² The influence of Medici women continued in France and England. Marie de' Medici, queen consort of Henry IV of France, is said to have believed in alchemy sufficiently to give a prisoner in the Bastille, Guy de Crusembourg, 20,000 crowns to prepare the philosophers' stone.⁵⁷³ She employed at least one doctor with enough interest in alchemy to annotate a manuscript of Basil Valentine's *Chariot tryumphal de l'antimoine*: his name was Jean Riolay.⁵⁷⁴ Her daughter Henrietta Maria, who became Queen of England in 1625, was memorialised by a book of receipts which is discussed elsewhere in this thesis.

The letters exchanged in 1603-4 between the semi-anonymous Signora L.L.J. and Angelo della Casa, an alchemist at the court of Antonio de' Medici, suggest that Signora L.L.J. was an active experimental alchemist, working with ordinary metals including silver and mercury, acids such as *aqua regia*, and "philosophical" iron and sulphur.⁵⁷⁵ These letters are not the originals: one hasty hand has copied the first letters together, and a second, much neater hand the rest. In parts they are difficult to decipher, sometimes due to purposeful deletions, begging the question of what has been so powerfully censored.⁵⁷⁶ There are at least

⁵⁷⁰ London: Wellcome Institute Library, Western MS 485, ff. 1r, 6v, 29v, 76r-v. The provenance for this manuscript is a Sotheby's sale notice: the basis of the claim that the hands are those of Catherine and Antonio de' Medici is not clear.

⁵⁷¹ Hugh Trevor-Roper, 'Paracelsianism made Political 1600-1650', in *Paracelsus: The Man and his Reputation, His Ideas and their Transformation*, ed. by Ole Peter Grell (Leiden: Brill, 1998) p. 120.

⁵⁷² Marshall P. Katz and Robert Lehr, *Palissy Ware: Nineteenth-Century French Ceramicists from Avisseau to Renoleau* (London: The Athlone Press, 1996) p. 11.

⁵⁷³ Holmyard, *Alchemy*, p. 238.

⁵⁷⁴ University of Bordeaux, MS 13, *Chariot triumphal de l'antimoine*. Revue et corrigé par M. Jean Riolay, médecin de la feue reine mère, Marie de Medicis (Source: Alchemy CD rom).

⁵⁷⁵ Florence: Biblioteca Nazionale, MS Palat. 867, vol. XIV, f. 101v-124v. Eamon, p. 270. Angelo della Casa has left a large number of other manuscripts and letters concerning alchemy. See Florence: Bibliotheca Nazionale, MS Palat. 867 (Alchemy CD rom).

⁵⁷⁶ I have worked from a photocopy of the original on which, for example, f. 102v is obscured either by crossings out or blurrings. F. 112v is entirely crossed out.

nine letters, which are introduced by the use of capital letters as headings, most usually L.L.G.A.G.C. S.D.; and A.G.C.L.L.G.S.D.P.. The identity of L.L.G. (and thus the participation of a woman) is confirmed by references “alla Sig^{nora} L.L.G.”, and “della Sig^{nora} L.L.G.”.⁵⁷⁷ A.G.C. stands for Agnello della Casa, and S.D. may be a greeting.⁵⁷⁸ The letters from della Casa (A.G.C.L.L.G.S.D.P.) are longer and provide full instruction on alchemical metalworking, in particular on the use of living silver, or mercury, including an aromatic living silver and an experiment with *sol* decocted in living silver to produce the white earth and then the red earth of the great stone.⁵⁷⁹ However la Signora L.L.J. responds from a position of interest and some knowledge, not as a passive receiver. She sets the context for their alchemical correspondence as death, love and life; she discusses the ways in which living silver changes its form and can be dissolved, and the composition of metals, of which she states that the humid part is more subtle than the dry, if made correctly.⁵⁸⁰ Like Dame Laura and her male friend, this is another example of a non-clerical man and woman sharing an interest in practical alchemy and exchanging receipts and experiences. La Signora L.L.J. and della Casa appear to have shared a loving friendship as she writes to him “Si me amas responde, et Vale, si me scirer aliq[] cupes,” and he replies “Vale et me ama q[] te amo”.⁵⁸¹ Unlike the very public printed declaration of Isabella Cortese’s alchemical interest, these are private exchanges, in which alchemical receipts become the focus of a loving relationship, with more in common with the unknown English author of a letter to Mistress Berkeley, who hopes that by sharing alchemical secrets he will win the heart of the woman he admires.⁵⁸² This is no reason, however, to dismiss as insignificant the exchange of knowledge that occurred in the process.

⁵⁷⁷ ff. 104v, 105r.

⁵⁷⁸ Possibly meaning "salutates dixit". I am grateful to Jane Stevenson for this interpretation.

⁵⁷⁹ ff. 117v, 105r.

⁵⁸⁰ ff. 101r, 103, 117.

⁵⁸¹ ff. 116v, 117v.

⁵⁸² Oxford: Ashmole MS 1492, VII, pp. 29-39 followed by two poems pp. 39 and 40.

Other Italian women of families equalling the Medici in opulence and magnificence appear to have had an interest in alchemy. A manuscript written in the hand of Cosimo de' Medici attributes a knowledge of the potentially fraudulent side of alchemy to Caterina Sforza in a receipt "a dare gran peso a uno scudo o ducato de oro senza carigo de conscientia".⁵⁸³ No doubt Cosimo wished to ensure that rivals did not have better information about false coinage than his own court.

The popularity of *I Secreti* amongst Italians is demonstrated by the eleven Italian editions that were published between 1561 and 1677.⁵⁸⁴ Outside Italy it became known in Germany, France, England and New England. The German translations published by Paulus Kretzner in 1592 and 1596 were dedicated to Heinrich Rantzau, who had alchemical interests.⁵⁸⁵ He was approached as a possible patron by Michael Maier in 1590;⁵⁸⁶ and knew Tycho Brahe (an admirer of Paracelsus)⁵⁸⁷ and probably also Brahe's sister Sophie who assisted her brother in his scientific experiments at Hven. The revised German title, *Verborgene heimliche kunste unnd Wunderwerd Frawen Isabellæ Cortese in der Alchimia, Medicina und Chyrurgia*, ensures that there is no danger that she might be construed as offering magical advice: the overt recognition that some of the receipts in the book require miraculous input to succeed places her book comfortably within acceptable Catholic practice whilst suggesting a certain saintliness.⁵⁸⁸ The German title also adds the word "surgery", a significant expansion of content. However, it does not fall within the scope of this study to

⁵⁸³ "to give great weight to a scudo or ducat of gold without blame". Venice: *Experimenti de la Ecc. Ma So Caterina da Forli matre de lo illustrissimo Signor Giovanni de Medici*, cited in Orlandi, 'Cosimo e Francesco de' Medici Alchimisti', p. 18.

⁵⁸⁴ See footnote 1 of this chapter.

⁵⁸⁵ See footnote 3 of this chapter.

⁵⁸⁶ See letter held in the Austrian National Library in Vienna: Codex 9737, Tome II, ff. 27r-30v, and Karin Figula and Ulrich Neumann, 'Ein früher Brief Michael Maiers (1568-1622) an Heinrich Rantzau (1528-1598). Einführung, lateinscher Originaltext und deutsche Übersetzung', in *Archiv Internationales d'histoire des sciences*, 35 (1985) 303-329.

⁵⁸⁷ Webster, *From Paracelsus to Newton*, p. 6.

⁵⁸⁸ 'Hidden Secrets of the Art and Miracles of Isabella Cortese in Alchemy, Medicine and Surgery'.

ascertain any variations in content of the German edition or the reasons for the shift in emphasis of the title.

Although copies of *I Secreti* reached England, no translated English version was published, unlike, for example, the translations of several works of Cortese's contemporary Leonardo Fioravanti, by John Hester. Since Lady Margaret Clifford did not read Italian she would have been dependent on a translator for any detailed comprehension, and in fact the receipts in *The Margaret manuscript* are of a different, more overtly Paracelsian type than the household receipts in *I Secreti*. There *were* other books of household advice with some alchemical content published in England in the early seventeenth century, but not with a female author.⁵⁸⁹

A number of English scholars, not all of whom are known to be alchemists, collected a copy of *I Secreti* in their library. John Dee had a copy of the 1561 first edition in his library when he catalogued it in 1583, adjacent to Fioravanti's *Capricci medicinali*, 1561.⁵⁹⁰ Dee's is the English library most likely to have included a copy of an obscure book of alchemy by a woman. Perhaps more surprising is that a copy of the 1574 version found its way into the Library of Sir Thomas Knyvett (1539-1618) at rural Ashwellthorpe in Norfolk by the time that library was catalogued in 1618: this was probably a consequence of Knyvett's love of Italian language and culture.⁵⁹¹ Michael G. Brennan has argued that the evidence of an early seventeenth century travel diary belonging to Sir Charles Somerset shows that it would have been possible for an English theatregoer, watching Friar Lawrence give Juliet the sleeping potion in *Romeo and Juliet*, to lend credence to the possibility of such sleeping potions being

⁵⁸⁹ For example the works of Hugh Platt, discussed at p. 104 of this thesis.

⁵⁹⁰ *John Dee's Library Catalogue*, ed. by Julian Roberts and Andrew G. Watson (London: The Bibliographical Society, 1990) Item 1451.

⁵⁹¹ David .J. McKitterick, *The Library of Sir Thomas Knyvett of Ashwellthorpe c. 1539-1618* (Cambridge: Cambridge University Library, 1978) p. 76.

available in Italy.⁵⁹² There was also a copy of the first edition of *I Secreti* in the Lumley library at Nonesuch, where Jane Lumley (c. 1537-1577) had received her classical education as a child, and as a married woman worked as a translator.⁵⁹³ The presence of Isabella Cortese's *I Secreti* in these three libraries provides another means by which an Italian speaking English person could have learnt that Italian noblewomen knew about sleeping waters and were accustomed to exchange information on such matters with members of the Catholic clergy.⁵⁹⁴

I Secreti crossed the Atlantic to reach the library of John Winthrop Junior in New England, America by the mid-seventeenth century where it could have been read by his neighbour the poet Anne Bradstreet who referred to science and its transformations in her poetry.⁵⁹⁵

Cortese is mentioned in several seventeenth century printed English texts, in limited ways. In the 1630 edition of Thomas Bonham's *The Chyrgians Closet*, she is safely credited for a distilled rose water receipt to take away spots on the face, rather than anything philosophical or alchemical.⁵⁹⁶ In this long work of mostly medical receipts by Galen, Arnold de Villa Nova, Paracelsus and many Paracelsians (George Baker, Gesner, Fioravanti, Piemontese, Paracelsus, and Joseph du Chesne) dedicated to a female patron, Frances Brydges, Countess of Exeter (1580-1663), only three cosmetic receipts are attributed to women, one to Cortese and two to the mythical Cleopatra who is said to be the source for two methods to restore hair growth and to prevent hair from falling out.⁵⁹⁷ Slightly more

⁵⁹² Michael G. Brennan, 'The Medicean Dukes of Florence and Friar Lawrence's 'Distilling Liquor' (Romeo and Juliet iv. i. 94)', *Notes and Queries* 236 (1991), 473-6.

⁵⁹³ Sears Jayne and Francis R. Johnson, *The Lumley Library: The Catalogue of 1609 edition* (London: British Museum, 1956) p. 253, No. 2254, and pp. 4-5.

⁵⁹⁴ *I Secreti*, p. 198.

⁵⁹⁵ Ronald S. Wilkinson, 'The Alchemical Library of John Winthrop Jr 1606-1676', *Ambix*, XIII (1965,) 139-186.

⁵⁹⁶ Thomas Bonham, *The Chyrgians Closet; or, An antidotarie chyrgicall, drawne into method by E. Poeton* (London: G. Miller for E Brewster, 1630) p. 342.

⁵⁹⁷ Bonham, *The Chyrgians Closet*, p. 283.

adventurous is the inclusion of Cortese's method for making 'oyle of brimstone' in George Baker's *The New Jewell of Health* which was also dedicated to a female patron, in this case Anne, Countess of Oxford.⁵⁹⁸ Two receipts are attributed to her in John Wecker's *Eighteen Books of the Secrets of Art and Nature* (1660): one for an oil to "make the whites of Children's eyes black", and the other for a "sweet oyntment, very pretious", with ingredients including musk, ambergris, and almond oil.⁵⁹⁹

The manuscript evidence of transmission of Isabella Cortese's text shows that the main interest was in her alchemical receipts from Chirico, Abbot of Cologne. In an undated alchemical miscellany in German and Latin now in the Royal Library Copenhagen, Isabella Cortese's name is acknowledged alongside the information in German that the work of camphor originated from the Abbot of Cologne.⁶⁰⁰ It is understandable that a German transcriber would appreciate that Isabella Cortese had obtained her information from an eminent German. However, in the one extract that I have found translated into the English language her contribution is entirely cut out. In the Bodleian Library, Oxford is a manuscript of a *Work of Mr Carnaby of Chichester*, including "the Italian booke translated, of the perfit woorke of Camphora practiced by Cherico Abbott of Colonia. First to make the bodie [...]".⁶⁰¹ Isabella Cortese's text is here known as "the Italian booke" and her identity has been expurgated. The Abbot gets all the credit.

She is named in other manuscript extracts: Glasgow University has one, "Ex libro secretorum de la signora Isabella Cortese", which apparently belonged to a P. Saunders in

⁵⁹⁸ Conrad Gesner, corrected, and published in English by George Baker, *The Newe Jewell of Health* (London: 1576), based on Gesner's *The Treasure of Euonymous* (Zurich: 1569).

⁵⁹⁹ John Wecker, *Eighteen Books of the Secrets of Art and Nature* tr. by R. Read (London: 1660) p. 89. This paragraph draws on Jayne Archer, 'Women and Alchemy in Early Modern England' (unpublished PhD thesis, University of Cambridge, 1999) 3.xxi, who suggests that references to Cortese in printed texts show "evidence of the familiarity of the work of this Italian noblewoman to an English readership"..

⁶⁰⁰ Copenhagen: Royal Library, MS 1733, Item 22: Isabella Cortese, Opera Camphorae und insonderheit die Beschreibung Dirici Der Abts zu Colonia.

⁶⁰¹ Oxford: Bodleian Library, Ashmole MS 1408, X, 4.

1606,⁶⁰² and in the Wellcome Historical Medical Library, London is an Italian manuscript compilation from circa 1600 of parts of the “Secreti” of Isabel Cortese, the “Discoursi” of Mattioli, the “Herbario” of Durante, the “Vinti giorni di agricoltura” of Agostino Gallo, and others.⁶⁰³

Peter Happé suggests that Isabella Cortese may have been well enough known for the audience of *The Devil is an Ass*, first performed in 1616, to understand a joke, or at least an allusion to her. He shows many common words between the list of ingredients preceding mention of the *argentata* of Queen Isabella, and a receipt for *Argentata perfetissima* in *I Secreti*. The use of Italian words (rather than Spanish) coupled with the name Isabella may, he suggests, be a joke for the *cognoscenti*.⁶⁰⁴ Ben Jonson’s audience included women in the circle around Queen Anne who shared an interest in alchemy and Paracelsianism. If Happé is correct then Anne Clifford, Alathea Talbot, and Elizabeth Grey, the three noblewomen most closely associated with mid-seventeenth century women’s alchemical writings probably had a detailed knowledge of Isabella Cortese’s book.⁶⁰⁵

Isabella Cortese was certainly known in France by the mid-seventeenth century. Pierre Borel (1620?-1689) in his hermetic bibliography credits her as “Dona Isabella Cortese, mulier Italica, de secretis librum fecit, in quo quaedam sunt chimica & de lapide Philosophorum”,⁶⁰⁶ whilst Pierre Moet in the introduction to his version of the *Douze Clefs de Philosophie de frere Basile Valentine*, dedicated to Kenelm Digby (1603-1660), draws

⁶⁰² Glasgow: Ferguson MS 322. Saunder’s name is written at the top of the first folio. P. Saunders was the owner of two alchemical manuscripts now in the British Library (MSS Sloane 2006 and 2008) (Source: Alchemy CD rom).

⁶⁰³ S.A.J. Moorat, *Catalogue of Western MSS on Medicine and Science in the Wellcome Historical Medical Library*, I (London: The Wellcome Institute, 1962) p. 137. According to the catalogue this is her “first edition” of 1563, “Cavati de’ Secreti della Signora Isabella Cortese” pp. 1-16.

⁶⁰⁴ Ben Jonson *The Devil is an Ass*, ed. by Peter Happé (Manchester and New York: Manchester University Press, 1994) pp. 171, 229, 230.

⁶⁰⁵ For further discussion of these women and alchemy see chapter five.

⁶⁰⁶ *Bibliotheca chimica; seu, catalogogus librorum philosophicorum hermeticorum* (Paris: 1654) p. 128. A second edition in Latin was published at Heidelberg in 1656.

attention not to her scientific work but to her poetry.⁶⁰⁷ Moet refers to two verses he has seen in “un livre d’une Damoiselle qui s’appelle Dona Isabella Cortesi”. Given the very small contribution of the two verses on alchemy in *I Secreti* to the total content of the book it seems inappropriate to memorialise her as a poet, though perhaps more acceptable to French and Englishmen in the mid-seventeenth century than as a woman scientist or philosopher. It is, however, a sign that she was believed to be a real person, whom Moet could best accept as a poet.

⁶⁰⁷ Paris: Moet, 1660.

Chapter Four

Madame de la Martinville, Quercitan's daughter, circulating manuscripts, and the context: participation by other French/Swiss women in alchemy

In 1589, as Lady Margaret Clifford was entering a business relationship with Richard Cavendish for metallurgy and mining which probably extended to alchemical experimentation, a Frenchwoman named Madame de la Martinville exchanged chemical powders and receipts with the doctor and chemist Joseph du Chesne. I have not found the date of birth of du Chesne's daughter Jeanne, but this chapter presents evidence that suggests she was an alchemist. The Clifford and du Chesne circles were connected when Joseph du Chesne's younger colleague and friend, Theodore de Mayerne, moved to England, where he worked in Lady Anne's circle.

The evidence that women worked on alchemy in the circles around the Paracelsian chemist Joseph du Chesne (c.1544-1609), the pseudonymous Quercitanus, is contained in nine manuscripts comprising alchemical letters, discourses or poems, written between 1609 and the mid-seventeenth century.⁶⁰⁸ One set of attributions refers to Madame de la Martinville, Matrone de Martinvilla, Madame Martin Viel; another to Quercitan's daughter, Mr de Chenis Quercitan's daughter, and Neptis (meaning female descendant). There is also an ambiguous attribution to a learned woman of France. There are two major *œuvres* in which alchemical practices are discussed in philosophical letters whose authorship is attributed to woman, but due to simplifications in the manuscript descent it is problematic to make too certain claims about whether two suggested female authors disguise the same woman writer. However, the letters are supplemented by receipts and translated poetry, which suggest that there were two historical women alchemists, Madame de la Martinville,

⁶⁰⁸ See Table One. I refer to him as Joseph du Chesne except when referring to manuscripts using the name Quercitanus.

an associate of du Chesne, and Jeanne du Port, his biological daughter, whose identities became confused and hidden over time.

Probably the earliest manuscript in this sequence is a letter with the title *Epistola Nobilissime Matrone de Martinvilla ad Dom Quercitanum + 1609*,⁶⁰⁹ which according to annotations on the manuscript, attributed to Isaac Harbrecht, was translated from French into Latin in 1615 in Stuttgart.⁶¹⁰ It opens with a clear reference back to 1589 when Quercitanus gave Madame de la Martinville several alchemical remedies. Twenty years later, in 1609, the year of du Chesne's death, Madame de la Martinville wrote him a letter, recounting some experiments. In 1610, the year after Joseph du Chesne's death, Madame de la Martinville wrote a *Discours philosophical*.⁶¹¹ Like the *Epistola Nobilissime*, the *Discours philosophical* is written in the mixture of chemical and symbolic language that characterises Paracelsian alchemical writings. These two manuscripts support each other as evidence of a woman alchemist in the Paracelsian tradition called Madame de la Martinville, a supposition which is further reinforced by papers belonging to Theodore Turquet de Mayerne (1573-1655), the younger friend and colleague of Joseph du Chesne who moved to England as physician to James I after the assassination of the French King, Henri IV, for whom

⁶⁰⁹ Copenhagen: The Royal Library, MS 1776, ff. 1-12. Although the author is referred to as Matrone de Martinvilla in the title of this Latin document, I refer to her in her native French form throughout: Madame de la Martinville. The possibility that a part of the Theodore de Mayerne papers originated in 1608 is discussed below.

⁶¹⁰ Isaac Habrecht (1589-1633) owned or wrote a number of manuscripts in the Royal Library, Copenhagen.

⁶¹¹ Paris: Bibliothèque Mazarine MS 3681 (2679), no 22, ff. 77-81. The title is written "Discour phal [the h is crossed through indicating abbreviation] de Mademoiselle de la Martinville 1610". Since the first line of text refers to the similarly abbreviated "phes chimiques" in the usual vocabulary of chemical philosophers, I have extended "phal" to "philosophal" throughout.

TABLE ONE

Manuscripts referring to women in the circle of Joseph du Chesne (Quercitanus)

Name	Possible dating	Abbreviated name (where used)
Copenhagen: The Royal Library, MS. 1776, assumed ff.1-12 (from photocopies), <i>Epistola Nobilissime Matrone de Martinvilla ad Dom Quercitanum</i> +1609	Original 1609(?), this translation dated 1615	Epistola Nobilissime
Paris: Bibliotheque Mazarine, MS. 3681, ff.77-81, (from photocopies) <i>Discours philosophical de Mademoiselle de la Martinville</i>	Dated 1610	<i>Discours philosophical</i>
Copenhagen: The Royal Library, MS.1792, ff.1-24, (from photocopies) <i>Copie d'une lettre escripte a Monsieur du Chesne d'une Docte damoiselle de france</i>	Undated, handwriting consistent with 1600-1650	<i>Une docte damoiselle</i>
Oxford: The Bodleian Library, Ashmole MS. 1440 item 6, ff. 48-98, <i>Quercitan's Daughter's Letters: An Alchemical Treatise</i>	Undated, handwriting and other information consistent with mid 17 th century	<i>Quercitan's Daughter's Letters</i>
Glasgow: University of, Ferguson MS. 163, ff. 1-34, (from photocopies) <i>The Copie of a letter sent to me by ye late Madam Martin Viel wch was found after her death</i>	Undated: handwriting and other information consistent with mid seventeenth century.	<i>Madame Martin Viel's copy</i>
Glasgow: University of, Ferguson MS. 163, ff. 57-90, (from photocopies) <i>Quercitan's Daughter's Letters.</i>	Undated: handwriting and other information consistent with mid seventeenth century.	
Glasgow: University of, Ferguson MS. 163, ff. 35- 56, (from photocopies) <i>The worke of Neptis communicated to Quercitanus.</i>	Undated: handwriting and other information consistent with mid seventeenth century	<i>The worke of Neptis</i>
Oxford: The Bodleian Library, Ashmole MS. 1459, Item III (1), ff. 464-5. <i>Rosarium Philosophorum.</i>	Copied and annotated mid seventeenth century	
London: The British Library, MS. Sloane 693 particularly ff.139r-144r <i>Epistola Neptis. Operation de Neptis au Druide communiquée par M. Landrivier Calend. 16[0?]8</i>	Textual references to dates from 1580-1625	The Theodore de Mayerne papers

<p>also references through MS., eg.:</p> <p>ff. 22v-24v, Operatio Analoga Processus Neptis. Tinctura Vitriolo</p> <p>f.127v, Neptis in Epistola ita fecit Oleum</p> <p>ff. 131-7, Medulla operation [...] Druidae, Neptis, Hermetis</p> <p>ff. 145r-146r Oeuvre excellente [...] Ex <u>per</u> M. Mlle</p> <p>f. 148r Advertisement sur le fait de miniere tiré du L.X de la Dite M. Mlle</p> <p>ff. 194v-6r, Observatione de M. de Mlle</p>		<p><i>Epistola Neptis</i></p>
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he, like du Chesne, had worked.⁶¹² His papers refer to methods from and approved by “M. Mlle” and “Observatione de M de Mlle” on a “Methode por faire l’operation du Δ de vie [Sole]ea”.⁶¹³ Since Theodore de Mayerne knew du Chesne and his French circle well, the evidence of his papers carries some weight.

Alchemical writings attributed to a woman correspondent of Joseph du Chesne form the substance of the manuscript *Copie d’une lettre escripte a Monsieur du Chesne d’une Docte damoiselle de france*.⁶¹⁴ The manuscript appears to date from the first half of the seventeenth century. It is written in an early mixed hand, and displays mainly secretary letter forms with a few italics. The slope is quite upright indicating the influence of secretary hand. The letter “t” does not have an ascender which curves far over to the right, and the space between letters within words is also indicative of italic/mixed scripts 1600-1650.⁶¹⁵ In the title of this manuscript du Chesne is referred to by his proper name, but the identity of the author is not revealed, apart from her general description as an anonymous learned woman of France.

The immediate question raised is whether the learned woman of France is Madame de la Martinville or someone else. By the mid-seventeenth century, an English translation of this text (with a large additional passage) had been given the title *The Copie of a Letter sent me by ye late Madam Martin Viel, w^{ch} was found after her death*.⁶¹⁶ Madam Martin[e] Viel is most likely an English phonetic translation of Madame de la Martinville.⁶¹⁷ Another name also became attached to this text by the mid-seventeenth century: Quercitan’s daughter. At least four manuscripts with the title

⁶¹² London: British Library, Sloane MS 693, and Allen Debus, *The French Paracelsians* (Cambridge: Cambridge University Press, 1991) pp. 15, 48.

⁶¹³ London: Sloane MS 693, ff. 148r, 145r-146r, 194v-196r.

⁶¹⁴ Denmark: Copenhagen, Royal Library MS. 1792.

⁶¹⁵ The assistance of Heather Ummel, Paleographer, with this paragraph is gratefully acknowledged.

⁶¹⁶ Scotland: University of Glasgow, Ferguson MS 163, ff. 1-34.

⁶¹⁷ This suggests either that Madame de la Martinville *was* thought to be the learned lady of France, or that she owned a copy of the letter, because she moved in the same circles as the learned lady and du Chesne. An improbable alternative is that there was another woman called Martin[e] Viel.

Quercitan's Daughter's Letters have been located and two viewed.⁶¹⁸ Because of the distinct tone, style and content of the text, and because of other evidence for the interest of Joseph du Chesne's daughter in alchemy, I will discuss *Une docte damoiselle*, the way in which the text has been altered between the French and English versions, and the difference in style and content from the writings of Madame de la Martinville, under the umbrella heading of *Quercitan's Daughter's Letters*.

Quercitan's Daughter's Letters: An Alchemical Treatise has two parts, the first theoretical, the second practical, as do many other alchemical writings.⁶¹⁹ The first is a letter signed by "your most humble affectionate handmayd"; the second contains technical information which provides practical details of her alchemical practices. The catalogue ascribes the handwriting of the entire manuscript book in which it is contained to Elias Ashmole and another hand.⁶²⁰ This item was written by one scribe in a regular mixed hand, and a comparison with other manuscripts written by Ashmole shows that *Quercitan's Daughter's Letters* is written in his hand.⁶²¹ In addition there is an annotating hand described in the catalogue as "the same old hand as those in No.

⁶¹⁸ In addition to Oxford: Bodleian Library, Ashmole MS 1440, and Glasgow: University of Glasgow, Ferguson MS 163, which have been used in this study, there are at least two others which have not been viewed. From the seventeenth century is London: British Library Sloane MS 3729, ff. 19-38 Quercitan's Da[ff]ters letter: an alchemical tract translated from the Latin, with the second part titled "Quercitan's Da[ff]ters letter". Apparently from the early nineteenth century is Philadelphia: the Manly Palmer Hall collection, MS 199 The Theory and Practice of the Philosophers Stone described by Quercitan's Daughter. Copied from an antient manuscript. 1805. (Source: Alchemy CD rom). I have inserted an apostrophe into *Daughter's* throughout this study for ease of understanding. By doing so the suggestion of single female authorship is emphasized. I have considered the possibility that the text has plural authorship by "Quercitan's daughters". Single authorship is supported by the use of the first person in the text, the attribution to a "handmayd", and the manuscript descent claimed to be from "Une docte damoiselle". The possibility that Quercitan's Daughter has symbolic meaning has not been discounted but the arguments supporting authorship by the daughter of Joseph du Chesne are put forward later in this chapter.

⁶¹⁹ See Gareth Roberts, *The Mirror of Alchemy* (London: The British Library, 1994) pp. 65-6.

⁶²⁰ William Henry Black, *A Descriptive, Analytical and Critical Catalogue of the Manuscripts Bequeathed unto the University of Oxford by Elias Ashmole Esq MD FRS, Windsor Herald, Also of some additional MSS contributed by Kingsley Lhuyd, Borlase and others* (Oxford: Oxford University Press, MDCCCXLV) p. 1188.

⁶²¹ See for example Oxford: Ashmole MS 1419 which is entirely in Ashmole's hand, with his autograph and seal on the first page. The intricate capital D of 'Diamond' (f. 53) is identical to that of 'D'ughters; the letters f, p, d and h all show similar characteristics and the Ex at the end of each document is the same. The spacing and layout of some treatises in MS 1419 is the same as MS 1440.6, for example ff. 105-111 or 88-96.

1420". The manuscript is undated but the handwriting is from the mid-seventeenth century, and appears to have been copied from an earlier version into Ashmole's own notebook as his signature appears on page one of the volume.⁶²² A dating of around 1650 accords with the period of Ashmole's most obviously active interest in alchemy: he began to study alchemy in 1648, and edited two alchemical works in 1650 and in 1651.⁶²³ *Quercitan's Daughter's Letters* was therefore probably copied, in England, at much the same time that *Une docte damoiselle* was copied in France.

A comparison of the text of *Une docte damoiselle* and *Quercitan's Daughter's Letters* with the earlier works of Madame de la Martinville shows that the letter of the learned lady/Quercitan's daughter is written with a different tone, style and content from those of Madame de la Martinville, though there are some similarities between the texts. All the manuscripts describe an alchemical process in which spirit is separated from the bodily dross by a process that is both philosophical and chemical. They agree that the work requires philosophical animated mercury and they all include specific time frames for the experiments. A reference to "Philipponus" in the *Epistola Nobilis* is mirrored by one to "Philippony" at Monsieur de la Fin's in *Quercitan's Daughter's Letters*.

However, there are also significant differences. *Quercitan's Daughter's Letters* is much longer, with a more detailed explanation of the experiments and the ideas behind them, and a full story line. Madame de la Martinville's texts do not have a clear narrative, but seek to describe a chemical process using a wide range of materials and images. The key thought process in *Quercitan's Daughter's Letters* is the idea that body (common gold) and spirit (mercury) can be joined by means of something called the vegetative soul. Madame de la

⁶²² The assistance of Heather Ummel, Paleographer, on this date is acknowledged. Black, p. 1188.

⁶²³ Conrad Hermann Josten, *Elias Ashmole 1617-1692*, vol. V (Oxford: Clarendon Press, 1966) pp. 1904-5. Arthur Dee, *Fasciculus Chemicus: or Chymicall Collections*, transl. by Elias Ashmole (London: Richard Myne, 1650) and *Theatrum Chemicum Britannicum*, ed. by Ashmole (London: Nathaniel Brooke, 1652).

Martinville appears to seek an interior fusion of *sol* and *mercurius*. In the *Epistola Nobilis* she describes the fusion in the interior of the *sol* of antimony with *mercurius*; in the *Discours Philosophical* she discusses the interior gold and the interior mercury. Although there may be similarities in the concept of conjunction of *sol* and mercury, the language of interior fusion or mediation of the vegetative soul is different. The idea of a vegetative soul which acts as mediator between body and spirit does not figure in Madame de la Martinville's writings.

Both the *Epistola Nobilis* and the *Discours Philosophical* make extensive use of emblematic symbolism, whilst *Quercitan's Daughter's Letters* puts more emphasis on recording and understanding the experiment, using only one symbolic animal, a double flying eagle. Madame de la Martinville, in contrast, makes copious use of emblems: in the *Epistola Nobilis* she uses a stellar lion, flying eagle, white stone, marriage of *mercurius* with his love, eternal *sol*, dragon, and heavenly *menstruum*; in the *Discours Philosophical* she uses the metaphor of the stone, lily, devouring lion, *rebis* and fountain. Madame de la Martinville also uses a wider range of experimental materials. In the *Epistola Nobilis* she works with mercury, *sol*, *luna*, *aqua fortis*, Cyprian vitriol, the spirit of sulphur, vinegar, distilled *aqua vitae*, tincture of the sun and spirit of wine. In the *Discours Philosophical* her ingredients include mercury, mercury of saturn, resuscitating salts, distilled vinegar, oil of tartar, *sal ammoniac*, antimony, the magnesium of the philosophers, a sulphur and living silver, the invisible sulphur, sulphur and cinnabar of antimony and distilled philosophical vinegar. *Quercitan's Daughter's Letters*, on the other hand, uses only philosophic mercury, *sol*, vegetative soul, lead ore, coppelled silver, oyle of tartar, gold and cinnabar. Very specific equipment is used in *Quercitan's Daughter's Letters* – an egg-shaped vessel, a perpetual lamp, and a copper vessel with windows specially made for the author. These do not appear in Madame de la Martinville's treatises though she refers to a pelican, and various crucibles, receivers and collectors. Finally, both the *Discours Philosophical* and *Quercitan's Daughter's Letters* are

referenced but with different sources. The *Discours Philosophical* is emphatically Paracelsian whilst *Quercitan's Daughter's Letters* does not cite Paracelsus at all, drawing authority from the *Turba Philosophorum*. The works of Madame de la Martinville are dated at 1609 and 1610, and the earliest also refers to a specific date in 1589 when, she says, du Chesne gave her some remedies. *Quercitan's Daughter's Letters* includes no dates at all and can be dated only on the evidence of the handwriting.

In short, Madame de la Martinville is not likely to have been the author of *Une docte damoiselle /Quercitan's Daughter's Letters*. Although both authors were writing in the alchemical tradition and both knew Joseph du Chesne, there are too many differences to conclude that these texts have the same author. I hypothesise, therefore, that the latter texts are very likely to have been written by Quercitan's daughter with some tampering with the text during copying. Madame de la Martinville appears to have a more trustworthy historical identity, whilst from these letters alone Quercitan's/Quercitans daughter could be a fictional device with singular or plural symbolic meaning. There is other evidence, however, which suggests that Joseph du Chesne did have a real daughter who was knowledgeable about alchemy.

The existence of Quercitan's daughter as an historical person with an interest in alchemical literature is tentatively backed up by a separate entry in the Ashmole connection. "The English of the Dutch also in Rosarium Philosophorum" has the annotation "Mr de Chenis Quercitan's daughter".⁶²⁴ The statement by William Black, who catalogued the Ashmole manuscripts, that this is probably the name of the translator, is not backed up by firm evidence, and he does not consider possibilities, for example, that the manuscript was at some stage transcribed or owned by her.⁶²⁵ However, the association of her name with this

⁶²⁴ Oxford: Bodleian Library, Ashmole MS 1459 Item III (1) ff. 464-5. *Rosarium Philosophorum* with marginal annotation at end, "Mr de Chenis Quercitan's daughter".

⁶²⁵ Black, p. 1265.

manuscript, which contains two versions of translated stanzas from the influential *Rosarium Philosophorum*, is potentially significant. The *Rosarium Philosophorum* was first published in Latin, with German verses, at Frankfurt circa 1550.⁶²⁶ No English translation of the *Rosarium* was published (the standard Latin text was published in a German translation) and there do not seem to have been many English manuscript translations. There is one English translation in manuscript in the Ashmole collection, in Edward Barlow's commonplace book dated 2 January 1579.⁶²⁷ This translation has the full text but none of the poems, and whilst illustrations were once pasted on these have all been removed except one.⁶²⁸ For Elias Ashmole, in the mid-seventeenth century, the translated verses may have helped plug a gap in the English translation available to him. The verses in this text are those found after each illustration of the stages of the work, from calcination to perfection. The writing of a woman's name on this translation of the *Rosarium*, suggests knowledge of the esoteric symbolism and language of this key alchemical text, and, if she were the translator, fluency in German (High Dutch) and English, and high intellectual standards which cause her to provide two translations.

The inference of the annotated *Rosarium* manuscript, that the daughter of Joseph du Chesne had an educated interest in alchemy, is reinforced by the biography of the du Chesne family which shows that Joseph du Chesne had a daughter whose upbringing could well have been conducive to development of alchemical, Paracelsian and hermetic interests and beliefs. Joseph du Chesne was the significant hermetic doctor and chemist who, after a period of exile

⁶²⁶ First published: *De Alchimia opuscula complura veterum philosophorum [...] Rosarium Philosophorum Secunda Pars* (Frankfurt: Cyriac Jacob, 1550).

⁶²⁷ In the large Ashmole collection of alchemical manuscripts there is only one attempt at a full English translation: Oxford: Ashmole MS 1487, item 23, Inc: "Here begynnethe the booke of the Rosarye of Philosophers" is annotated that it was the book of Edward Barlow, made 2 January 1579: its 20 illustrations were pasted on and have been removed. Otherwise there are only short extracts. An eighteenth century English translation held at the University of Glasgow formed the basis of Adam McLean's recent edition, due to the lack of any suitable earlier version.

⁶²⁸ The text is very close to that transcribed and edited by Adam McLean from the eighteenth century Glasgow: Ferguson MS 210 with the major omission of the poems. See *The Rosary of the Philosophers*, ed. by Adam McLean (Edinburgh: Magnum Opus Sourceworks, 1980).

in Germany, Basle and Geneva (caused by the persecution of Protestants in France) became court doctor and alchemist to Henry IV of France in 1593. Du Chesne reached the top of the French medical profession, became known for a literary output of drama and poetry, and also acted for a period as a secret agent for Henry IV.⁶²⁹ Allen Debus regards him as one of the important French Paracelsians, and has traced du Chesne's influence on English Paracelsians.⁶³⁰

Du Chesne married Anne Trye, grand-daughter of the humanist Guillaume Budé, during the period (circa 1570s) when du Chesne practised medicine at Lyons, as 'docteur ordinaire' to Francois-Hercule, Duke of Anjou. His medical practice is presumed a success since his bride, Anne Trye, came from a wealthy background with a rich inheritance. Their daughter Jeanne probably received a good education, given her status as only child and the humanist tradition in her female line of descent. Anne Trye's cultural family inheritance, which brought intellectual vigour in a blend of humanism and Calvinism, was exactly the sort to produce an educated daughter. Since Erasmus' famous wish that women should read the Bible in the vernacular, humanists had favoured some education for women.⁶³¹ Jeanne's grandfather Guillaume Budé was internationally known and respected among fellow humanists and himself acted as a principal conduit for the reception of humanist thinking in France. Nancy L. Roelker, who identifies the significant role of French noblewomen in the vanguard of the Huguenot movement, describes Jeanne's grandmother Roberte le Lyeur, Madame Budé (d. 1550) as a correspondent of Calvin who was active in evangelical reform.⁶³² Anne may have influenced du Chesne towards a particular blend of humanism and

⁶²⁹ *Dictionnaire de Biographie Francaise*, ed. by Roman d'Amat et R. Limouzin-Lamothe, 11th vol. (Paris: Librairie Letouzey et Ane, 1967) pp. 1239-1240.

⁶³⁰ Debus, *The French Paracelsians*, p. 33.

⁶³¹ Norman Davies, *Europe: A History* (Oxford; New York: Oxford University Press, 1996) p. 478. On the complex inter-relationship of Calvinism, humanism and women see John Lee Thompson, *John Calvin and the Daughters of Sarah: Women in Regular and Exceptional Roles in the Exegis of Calvin, his Predecessors, and his Contemporaries* (Geneva: Droz, 1992), particularly pp. 4-6.

⁶³² 'The Appeal of Calvinism to French Noblewomen in the Sixteenth Century', *Journal of Interdisciplinary History*, 2 (1972), 391-418.

Calvinism.⁶³³ The inclusion of Paracelsian alchemy in Jeanne's area of interest is supported not only by her father's expertise in this subject, but also by the trend away from Erasmus' negative view of alchemy as deceitful, to the alignment in the late sixteenth century of Paracelsianism with French Calvinism.⁶³⁴

The unexpectedly positive images of women in the marginal glosses to the Calvinist Geneva Bible, 1560, are interesting to read in conjunction with Paracelsian alchemical ideas of women.⁶³⁵ Like Paracelsianism, Calvinism shows ambiguity. Alongside other evidence for strictness towards women, the marginal gloss on Genesis ii. 22 read: "Signifying that mankind was perfect when the woman was created, which before was like an imperfect building".⁶³⁶ This was in marked contrast to interpretations of Genesis that stressed Eve's role in the fall. Joseph du Chesne, and his family, as humanist Calvinists in Geneva, are perhaps most likely to have accepted the new view of Eve. The idea of woman bringing spiritual perfection with her from heaven has neoplatonic resonances and could also have worked with the alchemical idea of the mystical marriage.

In 1580 du Chesne and his wife sold their assets and left the Lyonnaise region, buying property in Gex and Geneva where they had contacts: Jean Budé, Guillaume's son, and a member of Anne Trye's extended family, received his "reception de serment" at Geneva on 27 June 1549.⁶³⁷ They settled here till 1593 when, after the edict of Nantes made France safe for Protestants, du Chesne was called to the court of Henry IV in Paris. Du Chesne had had links with Henry IV in the period when the Protestant case for the French throne was gaining strength: he was a secret agent for Henry from 1589 to 1596, active in the cantons of Berne,

⁶³³ D'Amat and Limouzin-Lamothe, pp. 1239-40.

⁶³⁴ Will Ogrinc, 'Western Society and Alchemy from 1200 to 1500', *Journal of Medieval History*, 6, (1980), 103-132 (p. 114). Hugh Trevor-Roper, 'Paracelsianism made Political 1600-1650', in *Paracelsus*, ed. by Ole Peter Grell (Leiden; Boston; Koln: Brill, 1998).pp.119-133.

⁶³⁵ *The Cultural Identity of Seventeenth-century Woman, A Reader*, ed. by N.H. Keeble (London and New York: Routledge, 1994) p. 2.

⁶³⁶ Keeble, p. 9.

⁶³⁷ Catherine Santschi, *Guide des Archives d'état de Genève* (Geneva: Société auxiliaire des Archives d'Etat, 1973) planche X.

Basle, Schaffhausen, and Zurich,⁶³⁸ and was in the same tradition of the alchemical doctor, chemist and secret agent as John Dee, who travelled in alchemical circles on the continent in the 1580s. Du Chesne was probably in contact with an international circle of alchemists. In Richard Napier's medical and alchemical notes is a receipt for the Electrum of Paracelsus, described as a secret communicated by Quercitanus in good faith to Christopher Rudelio of Scleberg.⁶³⁹ Thomas Tymme, the translator of Dee's *Monas Hieroglyphica*,⁶⁴⁰ also thought du Chesne's work interesting enough to translate his *The Practice of Chymicall and Hermeticall Physicke, for the Preservation of Health*.⁶⁴¹ By du Chesne's death in 1609, Oswald Croll praised Joseph Quercitanus, Physician to the King of France, as one of the best "Hermetick Physicians of this age" alongside Thomas Bovius, an Italian of Verona, and Thomas Muffet, an Englishman.⁶⁴² These men were accustomed to learned women: Croll's *Basilica Chymica* also included a prefatory poem by Westonia whilst Thomas Muffet's learned patron was Mary Herbert.⁶⁴³ It is therefore noteworthy to find connections between women and learned alchemy around the French figurehead of this international circle of Paracelsian alchemists, Joseph du Chesne.

It seems probable that Jeanne du Chesne grew up from child to young woman at Geneva and remained there, as she married a man from Geneva, Joachim du Port. On one hand, then, her upbringing can be seen as an experience of exile from her French roots, of

⁶³⁸ d'Amat and Limouzin-Lamothe, pp. 1239-40.

⁶³⁹ Black, p. 1253, re. Oxford: Bodleian Library, Ashmole MS 1453, Item 1.

⁶⁴⁰ Peter French, *John Dee: The World of an Elizabethan Magus* (London: Routledge & Kegan Paul, 1972) p. 84.

⁶⁴¹ Josephus Quercitanus, *The Practice of Chymicall and Hermeticall Physicke, for the preservation of health*, transl. by Thomas Tymme, (London: Thomas Creede, 1605, reprinted by Theatrum Orbis at London, 1975).

⁶⁴² Oswald Croll and Ulrick Bollinger, *Basilica Chymica* (Frankfurt: 1609): English transl. by H. Pinnell, *Philosophy Reformed and Improved in Four Profound Tractates 1. Discovering the Great and Deep Mysteries of Nature: by that learned Chymist and Physician Osw Crollius* (London: 1657) p. 72.

⁶⁴³ Westonia's poem is excluded in the 1657 English translation. On Kelly and Westonia see Susan Bassnett, 'Revising a Bibliography: A New Interpretation of the Life of Elizabeth Jane Weston, (Westonia) based on her autobiographical poem on the occasion of the death of her mother', *Cahiers Elizabethain*, 37 (1990) pp.1-8. On Herbert and Moffet see, for example, Charles Webster, 'Alchemical and Paracelsian Medicine', in *Health, Medicine and mortality in the sixteenth century*, ed. by Charles Webster (Cambridge: Cambridge University Press, 1979) pp. 306-7.

secrecy and danger around a secret agent father, and also of private discipline of intense alchemical experimentation. On the other hand, her father became accepted into the Genevan bourgeoisie. He wrote a patriotic drama that was first played in 1584 and which seems to have marked his acceptance: a number of important official roles followed. Her husband was also respectable: Joachim du Port was an ‘échevin’ (alderman or principal magistrate) and seems to have had wealth. Thus Jeanne grew up out of exile into a family with bourgeois security and powerful contacts.

The suggestion that she wrote and translated alchemical literature is not anomalous when placed in the context of the family tradition of writing. Joseph du Chesne wrote a considerable body of poetic and medical works, and his complete works were published posthumously in 1648 as *Quercitanus redivivus*.⁶⁴⁴ Budé and Roberte le Lyeur worked together: she helped him in his research on classical authors, “les beaux arts”, mathematics, natural sciences and philosophy.⁶⁴⁵ This indicates a most appropriate family tradition for man and woman to work together on intellectual matters, including alchemical theory, practice and poetry.

Having established that Joseph du Chesne had a daughter who could have written *Quercitan’s Daughter’s Letters*, let us return to *The work of Neptis communicated to Quercitanus* which, on inspection, is a later version of the *Epistola Nobilis*, probably the earliest manuscript discussed in this sequence from 1609. *The work of Neptis* is copied into a notebook dating from the mid-seventeenth century. “Neptis” is Latin for “grand daughter, female descendant”: the female expertise and authorship of the letter is again acknowledged. However, a new element of confusion is the suggested lineage between Quercitanus and the

⁶⁴⁴ *La morocosmie* (1583 and 1601); a tragi-comedy *L’Ombre de Garnier Stauffacher* (1583); *Poésies Chrestiennes* (1594); *Liber de priscorum verae medicinae materia* (1603); *Ad veritatem Hermeticae medicinae* (1604).

⁶⁴⁵ M. Prevost and Roman D’Amat, *Dictionnaire de Biographie Française*, vol. 7 (Paris: Librairie Letouzey et Ané, 1956), pp. 611-2, under Budé.

author of the letters. It is easy to assume that Neptis has become identified with Quercitan's daughter, overriding the identity of the original author, Madame de la Martinville. It is problematic to distinguish whether Madame de la Martinville, at this point in time, was perceived as Quercitan's spiritual daughter, or whether due to the circulation of other works by Quercitan's daughter their identities became blurred. I have shown the evidence in favour of the proposition that Jeanne du Port did write to her father about alchemy, and might have translated verses of the *Rosarium Philosophorum* into English. I prefer the explanation that over time the identity of du Chesne's female ancestor became confused, so that the symbolic name of Neptis was attached to a document associated with Madame de la Martinville. This confusion may have been based on a genuine sense of a spiritual lineage between Joseph du Chesne and Madame de la Martinville. In the process, however, the identity of Madame de la Martinville was eroded and replaced with a vague image of a father's daughter. The passivity of the tags of Quercitan's daughter and Neptis increase a sense of unreality around Jeanne du Port and Madame de la Martinville rather than confirming them as identifiable women.

Another problem is introduced by references in the Theodore de Mayerne papers to *Epistola Neptis, Operation de Neptis au Druide communiquée par M. Landrivier Calend. i68*.⁶⁴⁶ In this French version of the *Epistola Nobilissime*, Madame de la Martinville's name is again substituted with the pseudonym *Neptis*. This time, however, the name Quercitanus is playfully substituted with the Druid, an obvious identification of Quercitanus based on Druid reverence for the oak tree. The 6 of "i68" leans over to the 8 possibly suggesting a date of 1608, which, if correct, would make this a copy of an earliest version. The Theodore de Mayerne papers refer often to Neptis as an alchemical authority, and separately name "M de Mlle". Neptis is associated with Quercitanus and his circle: the reference to Neptis, the Druid

⁶⁴⁶ London: The British Library, MS. Sloane 693 particularly ff. 139r-144r *Epistola Neptis. Operation de Neptis au Druide communiquée par M. Landrivier Calend. 16[0?]8*.

and Don Philippon mirrors the trio in *Quercitan's Daughter's Letters* of the author, Quercitanus and Monsieur Philippon.⁶⁴⁷ This might suggest that Neptis was a pseudonym for Madame de la Martinville which was then also used for Quercitan's daughter. It could mean that they are one and the same woman. However, it is problematic to be too definitive, as there are differences of style, form and content, as well as some similarities, in the writings associated with Madame de la Martinville and Quercitan's daughter.⁶⁴⁸ If the *Epistola Neptis* did date before the *Epistola Nobilissime* then Neptis may have been later interpreted as Madame de la Martinville in the knowledge that she was an alchemical expert, as cited for example by the Theodore de Mayerne papers. These are problematic to date: Theodore de Mayerne died in 1655, and the manuscript includes dates from 1580 to 1625.⁶⁴⁹ Several hands write mainly in French with some English and Latin. These papers suggest a circle of people in France/Geneva who took on pseudonyms as part of their mutual endeavours in alchemy.⁶⁵⁰ They suggest a mingling and merging of identities and names and perhaps a playful enjoyment of mythology in the tradition of the alchemical serious game.⁶⁵¹

Although none of the sources discussed here offers a full provenance, or ratified signature, and the process of copying has altered and confused the issue of identity, other

⁶⁴⁷ London: British Library, Sloane MS 693, f. 156r.

⁶⁴⁸ *Quercitan's Daughter's Letters* and *The Epistola Nobilis* are very different in form and style. The former is written in two sections of theory and practice; where the latter is one treatise. Their imagery and references are different: the latter is more obviously Paracelsian, using for example imagery of the stellar lion. They use different types of ingredients. The former has a more open and readable style, whilst the latter uses more closed, inscrutable language.

⁶⁴⁹ 1580, 1593 (ff. 116v, 116r); 1625 (f. 122v); 1621 (f. 133v); i68 (possibly 1608) and 1610 (f. 159r). London: British Library, Sloane MS 693, ff. 116v, 226r, 122v, 133v, 159r.

⁶⁵⁰ London: British Library, Sloane MS 693, ff. 134v-137v, mentions the Druid, Neptis, Bathodius, Maurice, Beaurardeau, Philippon, Senex Genevens, Druida, Haligraphia, Purpurmantel-Basilu, Trogny and M de la Vallée. Hugh Trevor-Roper ('Paracelsianism made Political', in Grell, *Paracelsus*, pp. 119-133 (p. 130)) states that Theodore de Mayerne, du Chesne and Guillaume de Trogny formed a secret group in Paris to perform alchemical work. Trevor-Roper briefly discusses Neptis as part of this group in 'Harriot's physician: Theodore de Mayerne' in *Thomas Harriot: An Elizabethan Man of Science*, ed. by Robert Fox (Aldershot: Ashgate, 2000) pp. 48-63 (p. 59). He cites British Library Add MS 20921 f.54 to suggest that Neptis was "one Mlle de Martinville" and that she died circa 1609.

⁶⁵¹ E.g. Michael Maier, *Lusus serius* (Oppenheim: Lucas Jennis, 1616). Elias Ashmole displays the same tendencies in using an anagram of his name, James Hasolle, in the subtitle of his edition of Arthur Dee's *Fasciculus Chemicus*.

evidence and the tone of some papers supports the thesis that probably two women in the circle around Joseph du Chesne took part in alchemy. A receipt attributed to “M de la Mlle” in the Theodore de Mayerne papers for an alchemical remedy of mercury and *sol* for children of different ages suggests an area of knowledge particularly relevant for women, especially hints for disguise in food or syrups when children refuse the medicine.⁶⁵² Quercitan’s daughter reveals a mixture of assertion and deference consistent with a woman seeking to mark out her own field of knowledge whilst taking care not to overstep the line with her mentor-father. She acknowledges she has learnt all she knows from him, describing herself as ‘your unworthy Scholler’.⁶⁵³ As she explains what went wrong in the experiment she notes her novice status: she did not know how to make mercury double, nor was she perfectly skilled in fermentation.⁶⁵⁴ She argues that she “may be held blameless” for had the vessel been made of brass, as she had suggested, it could not have broken, a point with which her correspondent did not agree.⁶⁵⁵ She emphasises that this was a joint work by the words, “This was our first mishap”.⁶⁵⁶ Later she criticises herself for being “too greedy to multiply” the powder.⁶⁵⁷ She has “extreame pain” in her head caused by long watching and also perhaps “through excess of joy”, so she left a servant to watch.⁶⁵⁸ The glass broke: “all was lost and mingled irrecoverably with the Ashes”.⁶⁵⁹ She blames herself, her covetousness and disobedience of her mentor’s commands and she asks for mercy “takeing all ye faulte uppon myselfe”.⁶⁶⁰ Finally she describes herself as “Your most humble Affectionate Handmayd”.⁶⁶¹

⁶⁵² London: British Library, Sloane MS 693, ff. 194v-196r. *Observatione de M. de Mlle.*

⁶⁵³ *Quercitan’s Daughter’s Letters*, f. 69.

⁶⁵⁴ *Quercitan’s Daughter’s Letters*, f. 70.

⁶⁵⁵ f. 75.

⁶⁵⁶ f. 75. It is possible that she uses “we” to signify herself.

⁶⁵⁷ f. 90.

⁶⁵⁸ f. 91.

⁶⁵⁹ f. 91

⁶⁶⁰ f. 91.

⁶⁶¹ f. 69.

This sounds like a dependent woman who has enough education and assertion to defend her position.

Isabella Cortese's *I Secreti* had been published several times over by the time the manuscripts discussed in this chapter were written and copied. These private or semi-private documents suggest that at least two women engaged with alchemical theory and practice within a strongly defined intellectual frame in which, variously, the authors seek to learn through experiment, use Paracelsian terminology and emblems, and cite Paracelsus as a principal authority. In terms of Marcus Ferrari's theory that there were two levels of Paracelsian diffusion, in which *I Secreti* was part of a process of popularisation, these women's writings have a different location.⁶⁶² Whilst du Chesne represents the higher professional level of Paracelsian acceptance, the women alchemists with whom he worked are part of the wider reception of Paracelsianism, but not in a popular sense. These humanist women were addressing an intellectual, complex and demanding form of Paracelsian alchemy.

Madame de la Martinville's writings are the most explicit examples of immersion in the Paracelsian tradition discussed in this thesis. The extent of her learned Paracelsianism is best demonstrated in the *Discours Philosophical*, where careful referencing to the works of Paracelsus, Arnold de Villa Nova and Bernard Trevisan not only suggests that it may have been intended for circulation, but also displays her own expertise.⁶⁶³ Where Isabella Cortese rejects the authority of Geber, Arnold de Villa Nova and all other written authority, Madame de la Martinville shows a humanist desire to place her own work within the tradition of the wisdom of antiquity which, for her, has been best interpreted by Paracelsus.⁶⁶⁴ Although the arguments that she pursues and which are discussed below sound

⁶⁶² See chapter three, p. 7.

⁶⁶³ See *The Discours Philosophical*, f. 77v, re. *Archidoxes* and *De Vita Longa*; f. 78r on Paracelsus, Arnold de Villa Nova; f. 78v for Trevisan.

⁶⁶⁴ f. 77v.

rambling to the modern ear, they were coherent alchemical theories within an intellectual body of knowledge framed by Paracelsian ideas. Her claim that the subject of the work of all true chemical philosophers is “philosophical mercury”, which has passed through their hands and is made by their industry, is traditional, although its explication by a woman is not.⁶⁶⁵ She draws her authority from the ancients, stating that in antiquity the “mercury of saturn” was used for its ability to coagulate and dissolve all others in the separation of the good from the earthy.⁶⁶⁶ She cites unspecified philosophers as the source of the belief that Saturn was their hidden sun, because it purged and dissolved the body of common gold.⁶⁶⁷ However, she prefers Paracelsus’ method using antimony, asserting that most true philosophers who have attained the perfection of the [philosophers’] stone, also favour this method.⁶⁶⁸ She refers to Paracelsus’ book on antimony, to his *Archidoxes*, *De Vita Longa*, and his writing on the *ens* of gold, which, she states, had examined particularly the nature of antimony and its parts, sulphur, mercury and salt, and concludes that nothing is more prized than the mercury of antimony.⁶⁶⁹ She writes that antimony is the dissolved stone which in turn dissolves the body and fixes the spirits, which is why, she states, Paracelsus, in his chapter on Saturn, describes mercury as the medium of antimony, which by a certain sympathy receives an invisible sulphur or spirit of Saturn in the congelation. This invisible sulphur runs to the centre of the mercury to stop and retain there the part of the mercury which is of the same substance as gold; it is also the mediator between the two extremes of gold and mercury by means of its

⁶⁶⁵ f. 77r.

⁶⁶⁶ f. 77r.

⁶⁶⁷ f. 77v.

⁶⁶⁸ f. 77v.

⁶⁶⁹ Paracelsus, *Archidoxae* (Kracow: 1569) appears to be the earliest version. There is also *Archidoxa. De tinctura physicomum; de occulta philosophia* (Strasburg: 1570); other versions published at Munich in 1570, Basle in 1570, 1572, 1582, and Strasburg 1574. An English translation of *Paracelsus his Archidoxis: disclosing the genuine way of making quintessences [...] tincture of the philosophers [...] the philosophical medicinal stone* was made by James Howell (Oxfordshire: 1660) with further versions in 1661, 1663. *De Vita Longa* was included in *Archidoxorum* (Basle: 1570). *Ens* is Latin for “entity”. Paracelsus gave an account of five entities: *ens veneni* (poison); *ens naturale* (natural); *ens astrale* (the astral entity); *ens spirituale* (spiritual entity); and *ens deale* (the divine or God-given entity). See Mark Haeffner, *The Dictionary of Alchemy* (London: Aquarian Press, 1991) p. 203.

two qualities, heat and coldness.⁶⁷⁰ Implicit in her argument is the Paracelsian idea of the trinity of salt, mercury and sulphur, or body, soul and spirit, with the body of gold, the mercury of antimony and the invisible sulphur.

As she describes the alchemical process which unfolds, Madame de la Martinville makes extensive use of allegorical images. The devouring lion, the fountain, the white eagle, and the blood of the red lion are mixed with chemical references in classic alchemical symbolism. The authority for these symbols is drawn from Paracelsus' interpretation of earlier alchemical philosophers, or directly from those authors, so that although it might appear that she develops a hermeneutical approach to the interpretation of symbols, her sources are textual and based on received alchemical authority. Paracelsus, she asserts, found that the allegories of the ancients refer to antimony, the lead of the philosophers, as the devouring lion, because it digests all other metallic substances except gold, and its sperm contains the living mercury which it digests at the bottom of its stomach in the red stone.⁶⁷¹ She argues that, according to Arnold de Villa Nova's *Specule Oculto*, this symbol has a relationship to the sign of the mercury of the philosophers.⁶⁷² The image of the fountain is introduced at the point when mercury from the pure sulphur of antimony is fermented with *Sol*.⁶⁷³ By specifically mentioning that this is the fountain in which Trevisan praised his King, Madame de la Martinville signals that at least part of the work is operating on the visionary or meditative level which is the basis of Bernard Trevisan's *The Allegory of the Fountain*.⁶⁷⁴

⁶⁷⁰ f. 78r. Martin Ruland, p. 306, explains that sulphur is the seed of the stone and is of two kinds: one is external, the other internal, born in mercury. The internal sulphur is the power which makes and prepares the body and cannot be separated from it, being in its very heart and substance. It is the soul and ferment of the stone, the husband, the bridegroom, king and husband.

⁶⁷¹ f. 78r. Newman, *Gehennical Fire*, pp. 184-5, associates raw antimony ore drawing in celestial influences with the green lion devouring the sun, and emitting a vivified mercury symbolised by blood. Newton describes "spiritual semen" received by the philosophic gold or star regulus of antimony.

⁶⁷² f. 78r. This complex image may refer partly to the properties of antimony in the purification of gold. The more well-known association is of the green lion devouring the sun in the *Rosarium Philosophorum*, often attributed to Arnold de Villa Nova, where the green lion symbolises mercury: see *The Rosary of the Philosophers*, ed. by McLean, p. 104.

⁶⁷³ f. 78v.

⁶⁷⁴ f. 78v. This allegory is given in full in Martin Ruland, p. 450.

The white eagle is introduced as an image in the extraction of the *regulle* or *rebis* (double thing, or hermaphrodite) from antimony.⁶⁷⁵ The *rebis* contains a sulphur and a mercury which by the hands of the artist are made one matter, and this process of *conjunctio* is described by quoting Paracelsus' enigmatic statement that the *rebis* is transformed into a white eagle, by the aid of nature and the skill of the artist himself, so that out of one two are produced.⁶⁷⁶ A later reference in the same sentence links the white eagle to sublimed mercury.⁶⁷⁷ Whilst the imagery has a transcendental quality, practical instructions follow which appear close to practical alchemy. The transformation in the white eagle is made with the *regulle* or cinnabar of antimony in a powder, mixed with saltpetre from Hungary and a salt.⁶⁷⁸ A substance is made according to art, which is a beautiful flying eagle in the mode of sublimed mercury. This is sublimed and revived with black tartar, lime, a half burnt crust of bread, *sal ammoniac* and low heat. The mercury is captured in a receiver half full of cold water. This makes an excellent eagle (i.e. prepared mercury) for fermentation with the lime of whichever metal chosen, to make decoctions of the *bel oeuvre*.⁶⁷⁹ Later, even more inscrutably, she argues that God has graced Paracelsus with a path shorter and easier than that of those who made long imbibitions in the pelican which feed the *rebis* or lily by its own blood.⁶⁸⁰ A transfer is indicated between the red lion, its red blood, and the flying white eagle.⁶⁸¹ The

⁶⁷⁵ f. 79r. Haeffner, p. 140.

⁶⁷⁶ f. 79r. "Hoc id est rebis per auxilium natureas nec non per arte artistae ipsius spiritus in aquilam albam transmutari sic ut ex duo fiant."

⁶⁷⁷ Ruland, p. 32, gives the eagle as symbol for *sal ammoniac* because of its lightness in sublimation, but he notes that in many places Paracelsus uses it for precipitated mercury. Linden, *Darke Hieroglyphics*, p. 176, provides a diverse iconography for the eagle, including the mercurial spirit. The various meanings of the word sublime (from which sublimation is derived) are suggestive within an alchemical context: it can mean to subject a substance to the action of heat to convert it into a vapour which on cooling is deposited in solid form; to exalt a person; to raise or refine to a high degree of purity or excellence and make spiritually or morally sublime; to transmute a thing into something nobler, higher or more excellent. *Oxford English Dictionary*, p. 3119. Here the implication is that mercury becomes volatile and rises in a white vapour, to which the metaphor of the white eagle is applied.

⁶⁷⁸ f. 79r.

⁶⁷⁹ f. 79r.

⁶⁸⁰ f. 80r. Imbibing is the term favoured by alchemists for soaking, steeping or infusing in a liquid.

⁶⁸¹ f. 80r. Ruland, p. 112, explains the conjunction of male and female in various ways. One is what Paracelsus described as the joining of the congealed spirit within the dissolved body: when the blood of the Red Lion and

blood of the red lion is added to sublimed mercury, creating a sublimation of the flowers of antimony.⁶⁸² Again, this derives from the authority of Paracelsus, whom she quotes. The rose-coloured blood is extracted from the lion and the gluten from the eagle, taking much trouble to ensure that the blood is separated out and no flesh taken.⁶⁸³

This double level of working, simultaneously symbolic and chemical, is also shown in Madame de la Martinville's earlier work, the *Epistola Nobilissime*, which is less structured than the *Discours Philosophical*, and leads the reader into a labyrinth of mysterious secrets and often inscrutable symbolic imagery, suggesting that this was a private letter intended for Quercitanus alone. In the *Epistola Nobilissime* she first accounts for the materials she puts into her vessel, and then appears to describe an interior process reflecting her understanding of the Paracelsian cosmos.⁶⁸⁴ She describes methods to animate mercury, to marry animated mercury with the vitriol of copper and to transmute unrefined antimony (which is associated by analogy with the symbol of the black lion) into various stages of purification (symbolised by images of the red lion, the stellar lion and the azure lion) and the use of sublimated mercury (symbolised as a flying eagle). The dragon is associated with the sulphurous earth, and the blood of the red lion is used to make Azoth.⁶⁸⁵ Within these processes she writes about the tinting of mercury and *luna* to a golden colour, which she associates with the creation of 24 carat gold, and the elixir of medicinal alchemy.⁶⁸⁶ The images of lions and eagles are not disembodied symbols, nor can the practical work be understood without reference to the soul and spirit of the matter. Many of the symbols she uses appear in later

the blood of the White Eagle are united, the Red Lion can become the White Eagle, and be one with it. The Red Lion becomes white in order that the white may become red.

⁶⁸² f. 80v.

⁶⁸³ f. 80r.

⁶⁸⁴ f. 1 and subsequent.

⁶⁸⁵ ff. 9 and 10.

⁶⁸⁶ ff. 5, 5, 6, 6, 7, 1, 8, 12, 11.

published texts as spiritual emblems although I am not aware of a sequence mirroring exactly the series of images described here.⁶⁸⁷

This combined use of images and materials to effect a specific result no doubt reflects the natural magic tradition of which Paracelsus is regarded as an important representative.⁶⁸⁸ Ioan Couliano's application of the concept of the phantasm to Renaissance magic offers one way to attempt to comprehend the purpose of these apparently bizarre images and processes. The alchemist, in this case Madame de la Martinville, seeks to set up a process of change between impure material and heavenly purity. Couliano suggests that the use of the imaginative will to create a phantasm was one method used to catch the secrets of the heavenly world while on earth, using the *eros* of the lover of wisdom and the astral substance of the *spiritus*.⁶⁸⁹ The application of his argument to alchemy provides the hypothesis that after the alchemist prepared the basic ingredients, blessed them and began the chemical operation, he or she created an imaginative picture, the phantasm, according to alchemical tradition, to enable a contact to be made with the spiritual world. This imaginative picture had metaphoric power because it carried multiple meanings, in relation to the colours and shapes viewed in the vessel, in relation to correspondences in the great chain of being, and in relation to the Christian religious tradition which shaped so powerfully the values of the community within which the European alchemist worked.

Although perhaps not immediately obvious, there are parallels between the processes Madame de la Martinville outlines and magical religious ideas found in Christianity, which place this woman alchemist in the tradition of philosopher-scientist-priest ascribed to male

⁶⁸⁷ The starry lion, which is mentioned at f. 1, is shown in Mylius' *Philosophia Reformata*, 1622.

⁶⁸⁸ Newman, in *Gehennical Fire*, particularly at pp. 136-7, and Betty Jo Dobbs, *The Hunting of the Green Lion*, pp. 173-8, have attempted to work out the exact chemical reactions taking place in alchemical receipts, which I do not attempt here.

⁶⁸⁹ Couliano's argument is described in chapter two, p. 86.

alchemists by, for example, David Noble.⁶⁹⁰ Although Jesus Christ is not mentioned in her texts, the idea of the rebirth of the dead body in the spiritual life has clear Christian parallels. Christ's body was risen; as a healer he restored ill and dead bodies to life; he multiplied fishes and loaves at the feeding of the five thousand; and his presence continued to enter the earthly body of the communion bread and wine, making it spiritual and helping human beings enter into purity and perfection. In the *Discours Philosophical*, as in many other alchemical works, the purification of materials (in this case salts) requires that they "die" through reduction in fire, before a revival or resurrection (in this case by the addition of distilled vinegar, oil of tartar and *sal ammoniac*).⁶⁹¹ The revival involves separation of pure from impure (here mercury was separated in the sublimation) followed by further purifications (mercury was mixed with tartar, digested in a *bain marie* and distilled for several days).⁶⁹² As will be discussed in chapter five, Lady Margaret Clifford was specifically praised for her alchemical ability to bring dead bodies back to life. Madame de la Martinville uses the imagery of the pelican, suggesting both alchemical apparatus and a well-known symbol of Christ's self-giving love.⁶⁹³ The lion was associated with Christ as the second person of the Trinity, and with the resurrection, derived from an ancient belief that lion cubs were born dead but brought to life after three days by the roaring of the lion. Thus the blood of the red lion symbolises the blood of Christ and symbol of the resurrected life.⁶⁹⁴ The eagle was a symbol of the ascension, a process mirrored in the vessel for the alchemist in the rising white vapours of subliming mercury.⁶⁹⁵ The lily, another favoured image of Paracelsus used by Madame de la Martinville, was a well-known symbol of the Virgin Mary.⁶⁹⁶ In communion

⁶⁹⁰ David Noble, *A World Without Women: The Christian Clerical Culture of Western Science* (New York: A.A. Knopf, 1992) p. xvi.

⁶⁹¹ f. 77r.

⁶⁹² f. 77r.

⁶⁹³ f. 80r and Edward Hulme, *Symbolism in Christian Art* (Poole: Blandford Press, 1976) pp. 182-3. The crimson spot at the end of the pelican's bill gave rise to the belief that it was feeding its young with its own blood.

⁶⁹⁴ f. 80r-v, and Hulme, pp. 164-5.

⁶⁹⁵ f. 80r and Hulme, p. 184.

⁶⁹⁶ f. 80r and Hulme, p. 190.

the priest consecrated material objects so they became literally or symbolically (depending on religious orientation) the body and blood of Christ with the power of restoration and healing in Christ. The *Discours Philosophical* refers to the production of the “teinture philosophical sancte”,⁶⁹⁷ Quercitan’s daughter seeks to obtain the “liquor of life”, “the blessed liquor of the soule”, and refers to the vegetative soule as “ye holy and heavenly priest joining” spirit and body.⁶⁹⁸ As the priest blesses and sanctifies bread and wine in communion, so the substance of the alchemical work passes through the philosopher’s hands. Madame de la Martinville’s practice can therefore be read as an attempt to make the red blood of the risen Christ and a renewed spiritual body out of matter in private. In one regard these female alchemists may have considered their role similar to a priestess or female *magus*, in commanding the physical elements to change, as Christ also had done. It is also likely that in a world of interconnecting correspondences down the great chain of being, they believed they carried out a spiritual task which assisted in restoring creation to paradise.⁶⁹⁹

The author of *Quercitan’s Daughter’s Letters* presents herself as a learned alchemist-scholar.⁷⁰⁰ She displays some contemporary Paracelsian themes but also shows her Christian humanist background by drawing more strongly on older sources: Aristotle’s theory of the four elements, the *Turba Philosophorum* and the *Book of Morienus*. She uses imagery of sexual generative power, pregnancy and birth. In relation to Couliano’s discussion of the phantasm these images may represent the redirection of the erotic charge towards heaven. She begins with a conventional alchemical discourse of the recreation of the four elements into the form of metals, arguing that everything should be sought and found in its own kind.⁷⁰¹ Each metal is “engendered, formed and produced” by its own sperm or seed, properly

⁶⁹⁷ "the holy philosophical tincture", f. 78v.

⁶⁹⁸ p. 57.

⁶⁹⁹ Arthur Lovejoy, *The Great Chain of Being* (Cambridge, Mass.: Harvard University Press, 1936).

⁷⁰⁰ p. 69, “beying your unworthy Scholler”.

⁷⁰¹ p. 49.

called mercury.⁷⁰² This sperm, mercury, “in which we ought to travaile and buisy our selves”, contains the matter of the stone, and has special sympathy with silver and gold.⁷⁰³ Although the theory is medieval, it is provocative to read the text in relationship to a female alchemist. Whilst several authors argue that male alchemists sought to appropriate the powers of the feminine, Quercitan’s daughter works just as explicitly with the symbolic powers of the biological masculine in this magical transformative sperm. She seeks to create the resurrected body, drawing on the *Turba* to explain that through conjunction, the imperfect and dead body receives and is clothed in perfect brightness by the ferment of his soul.⁷⁰⁴ The resurrected actor is gendered male, in the tradition of Christianity and of the *Turba Philosophorum*, which she cites as a source for creation of a king from the perfect infant, a metaphor used to explain the colour changes taking place in the vessel, from white to “orientall purpurean red”.⁷⁰⁵ This red substance embodies and symbolises the ultimate patriarch: “our king which cometh out of the Fire tryumphing and crowned” has “all power and Authority given him over his subjects”.⁷⁰⁶ Madame de la Martinville also works explicitly with allegories of male generative power. In *The Discours Philosophical* she uses Paracelsus’ “allegory of the ancients”, in which the lion devours the lead of the philosophers, digests it at the bottom of its stomach in a red stone, except for the gold, and finally produces sperm.⁷⁰⁷

The interpretation of the secrets of nature as a pregnancy process has a long tradition in alchemy. Although its first proponent may have been the semi-mythical Alexandrian woman alchemist Cleopatra, it has most often been promulgated by men.⁷⁰⁸ Since Quercitan’s

⁷⁰² p. 49.

⁷⁰³ p. 49.

⁷⁰⁴ p. 62.

⁷⁰⁵ See p. 66. *The Turba Philosophorum or Assembly of the sages* has been translated and edited by A.E. Waite (London: George Redway, 1896).

⁷⁰⁶ p. 66.

⁷⁰⁷ f. 78r.

⁷⁰⁸ For an example of the association of a woman alchemist and birthing imagery see 'The Book of Comarius, Philosopher and High Priest who was Teaching Cleopatra the Divine the Sacred Art of the Philosophers' Stone', in Marcelin Berthelot, *Collection des Alchimistes Grecs*, 3 volumes (Paris: Steinheil, 1887-8), vol. 2, pp. 278-87 and vol. 3, pp. 289-99. See also Jack Lindsay, *The Origins of Alchemy in Graeco-Roman Egypt*, pp. 253-261. In

Daughter's Letters apparently has a female narrator it could be read in the tradition of the symbolic woman alchemist, sometimes depicted as midwife-philosopher. In *Quercitan's Daughter's Letters* this birth process takes place between body and spirit. To follow nature's steps is to introduce form into matter (mercury): to make silver the form is silver, for gold the form is gold. To join matter and form, or body and spirit, something called the vegetative soul is needed "without which nothing is done".⁷⁰⁹ In the joining of spirit, body and soul a purification takes place. The process becomes a spiritual one, and the three parts become one through conjunction. The vegetative soul is significant for its ability to quicken the body with vigour and virtue, and to alter common silver and gold into the *luna* and *sol* of the philosophers. The female philosopher acts as a cross between a priest and a midwife in this extraordinary birth process: the change into *luna* and *sol* happens as the material passes through her philosopher's hands. She acts also as an empiricist, who seeks to learn by experience and recorded experimental work, including work within the soul. She is a student of philosophy whose alchemy is presented within the context of a consistent natural philosophy.

Where *I Secreti* displays a wide field of knowledge of which alchemy is one important part, whose ethos can be discerned in associated activities, the writings of these French women alchemists are finely focused on alchemy as goldmaking, medicine and spiritual-philosophical work. There is no association with the distillation of perfumes, waters, the making of art pigments or metalwork. Alchemy does not slip in as part of a household management package: this is a pure Paracelsian alchemy which uses the imagination and

an unpublished note F. Sherwood Tylour asks whether the text from Comarius to Cleopatra is particularly significant because of its great similarities with the *Rosarium Philosophorum* (Oxford: Museum of the History of Science, MS Tylour 122). This points to the suggestion that medieval male clerics may have appropriated the alchemical tradition and used the *Rosarium* as a guide to their own soul, whilst older traditions on which they drew included women as partners and teachers.

⁷⁰⁹ p. 56.

traditional texts as well as practical equipment, a wide range of costly materials, and sensual testing of experimental results.

Quercitan's Daughter's Letters tell the story of a woman with considerable time and money to spend on alchemical experiments. She has precious manuscripts of receipt (from her teacher-mentor, and from the *Book of Morienus* and the *Turba Philosophorum*).⁷¹⁰ She records her experiments and results to share with her mentor, and takes a critical view of her mistakes.⁷¹¹ Her vessels are made of earth, glass and brass, and, in response to the failure of an experiment, she has a window made in her athanor to watch the colours change: black, white, citron, carnation to purple.⁷¹² After three months (which she regards as quick) simply preparing the initial ingredients, she watches the experiment herself, only leaving a servant to watch when she develops a severe headache.⁷¹³ Her accounts of measurements and amounts are very specific and, despite the Paracelsian alchemical language, in modern terminology she can be regarded as an experimental chemist.⁷¹⁴ She watches what happens, records it carefully, analyses what she believes to have happened in accordance with the theories she has been taught, and amends her approach as she sees fit. She does not mention that she is making medicine, the most documented alchemical activity for women.⁷¹⁵ Her account describes a focused alchemist or mystical chemist, who believes that not only is it possible to

⁷¹⁰ p. 62, The *Turba*; p. 65 Morienus, and p. 66: "I have in these few words S^{ir} described openly (according to my Instructions received from your owne selfe)".

⁷¹¹ pp. 66-7: "I have [...] described [...] ye manuall Operacion w^{ch} I did perform" "I have described alsoe in generall [...] all the Theory [...]" "I have [...] declared to you in Writinge all my manuall operacions having omitted nothing but y^e processes w^{ch} you already have". p. 70 "I could \not make/ one Ounce of my Powder transmute more than 50 of Silver"; "I was not perfectly skilled in the poynt of fermentacion"; p. 71 "I hand not as yett learned the art of animating [...] mercury"; p. 75 "I perceived yt there ws one Errour committed in the very beginning, in that we did not put in Δ enough for ye better Augmentacion"; p. 88 "I had fayled in mistakeinge the Figure 7 for 3"; p. 91 "whether through my servants negligence in attending of the Fire, or whether I had putt too much matter into my Glasse; itt breake in 1000 peeces".

⁷¹² p. 89 (mislabelled 79) "I passed through all the Colours untill I arrived att y^e pure purpurine w^{ch} I took great Joy to see for I had made a Window in my Athanor".

⁷¹³ pp. 79, 91.

⁷¹⁴ See for example, pp. 70, 74, where she cites one ounce of the "red worke" to convert 25 ounces of silver into gold; the use of 9 ounces of powder; 50 ounces silver; and 22 carats.

⁷¹⁵ See for example Linda Pollock, *With Faith and Physic: The Life of a Tudor Gentlewoman Lady Grace Mildmay 1552-1620* (London: Collins and Brown, 1993) on Lady Grace's medicinal practice which included alchemical receipts, and elsewhere in this thesis.

multiply silver and gold but also that she has performed the operation, claiming, for example, that one ounce of her powder would convert twenty five ounces of silver into gold.⁷¹⁶ Her language, however, is not that of the alchemical “puffer”, making a lot of noise about gold-making for profit. She is engaged in the activity of the alchemical-priest, involving preparation of the “Liquor of Life” and the Paracelsian triad of body (calx of gold), soul (the “blessed liquor of the soule”) and spirit (mercury).⁷¹⁷ Animation of antimony and quicksilver requires that they “have passed through the hands of the philosophers”, who know how to give them their true temperature, the temperature of gold.⁷¹⁸

Alchemy as the philosopher’s craft is also outlined in the *Discours Philosophical* where Madame de la Martinville explains three ways of obtaining mercury. Although doubt over whether a physical operation is in process is cast from her initial and alchemically conventional statement that this is philosophical, not common, mercury, she uses the basic materials and methodology of the Paracelsian chemist, in which the role of the senses is significant.⁷¹⁹ This alchemy cannot be understood as a disembodied intellectual or soul process. Even though her explanation that the key to the work takes place as the matter passes through the philosopher’s hands and through the philosopher’s industry, the priestly quality involved in preparing the philosophic holy tincture cannot be separated from physical activity.⁷²⁰ The first method of preparing mercury aims to separate it from gold and silver through digestion in a *bain marie* for thirty to forty days, until the matter becomes black, when the mercury can be cooled off in quantity.⁷²¹ This is based on the concept that to augment gold (or silver), the seed, sperm or mercury of gold (or silver) is required. A second

⁷¹⁶ p. 70.

⁷¹⁷ p. 79.

⁷¹⁸ p. 78.

⁷¹⁹ Paris: Bibliothèque Mazarine, MS 3681 (2679), no. 22, ff. 77-18, *Discours Philosophical de Mademoiselle* f. 77r. On Paracelsianism and the senses see John R.R. Christie, 'The Paracelsian Body', in Grell, *Paracelsus*, pp. 169-191 (p. 273).

⁷²⁰ f. 77r.

⁷²¹ f. 77r.

method is to extract mercury from resuscitating salts found in sublimated water. These salts are metaphorically reduced to death through sublimation, revived with distilled vinegar, oil of tartar and *sal ammoniac*, and then mercury is extracted through sublimation and mixed with crude tartar for further digestion.⁷²² Thirdly she uses antimony, which she praises as the premier metallic substance, the lead of the philosophers, made of a sulphur and a living silver (i.e. mercury).⁷²³ She sublimes a reduction of antimony with *sal ammoniac*, adds red *luna* (silver), and puts the mixture into philosophical distilled vinegar and sulphur until the *luna* stops reacting and is cemented. Madame de la Martinville describes the result of fermenting mercury from the pure sulphur of antimony, with *sol*, as the fountain, which may be a visual image of a chemical reaction taking place in the vessel. A powder of “cinnabar of antimony” is mixed with saltpetre and salt, sublimated, and revived over a low heat with black tartar, lime, a half-burnt crust of bread, and *sal ammoniac*, which mixture, she claims, provides mercury for the “bel oeuvre”.⁷²⁴ Finally she gives a method to obtain mercury from the flowers of antimony, after which a multiplication of gold is described: ten ounces of mercury are amalgamated with calcined gold, put in an athanor for ten to twenty days, until the blackness is removed, the substance becomes white, then red, and the substance proceeds to multiply to the same weight as the mercury.⁷²⁵ Throughout these methods she offers specific weights, guidelines on the amount of heat, and visual clues to measure the success of the experiment.

The reputation of Madame de la Martinville as a fine experimenter in the contemporary French alchemical tradition is suggested from the Theodore de Mayerne papers where she is associated with words to do with testing and observation. A “belle experience et concordance chymique” is said to have been received by Paracelsus from his father, but is

⁷²² f. 77r.

⁷²³ f. 77v.

⁷²⁴ f. 79r.

⁷²⁵ ff. 80r-v.

also valued as “un tres bon secret” because it is similar to one tested by “M. M^{lle}”.⁷²⁶ Another receipt is included “de la dite M M^{lle} qu’elle a esprouvé”.⁷²⁷ Her “methode por faire l’operation du Δ de vie [Sol]ea” is headed “Observatione de M. de M^{lle}”.⁷²⁸

Madame de la Martinville’s field of knowledge extends from making the holy tincture that will multiply metals, to medicines, including those for children. A mixture of mercury of *sol* is dissolved, fixed, coral added, and boiled in an athanor until a white substance like snow forms. The mixture is then distilled many times so that the essence is well washed. The dose for children of five to six years is six grains dissolved in white wine, or if they refuse that, in food or syrup; the dose increases with age, and adults can take eight grains in thistle water, or twelve grains in a pill of theriac. This medicine is said to be good for high fevers, removal of vermin, for blemishes on the face, languid and heavy limbs, gout, and smallpox.⁷²⁹

Although Madame de la Martinville uses an occasional analogy associated with the kitchen, her written texts do not stray into the related fields of cookery, perfumery or preparation of herbal waters. In the *Discours Philosophical* she explains that mercury carries its own sulphur with which it coagulates, a process which the ancients compared to the coagulation of milk, with the sulphurous part a milky substance like cheese or butter. The sulphur is boiled and reduced and the mercury cooled to obtain the “mercury of mercury”.⁷³⁰ She draws her kitchen analogies from antiquity, whilst her writings place her as an active participant in the contemporary tradition of the alchemist-priest-doctor.

Where Isabella Cortese appears to obtain alchemical information from circles including clerics, Madame de la Martinville and Quercitan’s daughter are represented as actively sharing alchemical expertise with a circle around Joseph du Chesne. Du Chesne had

⁷²⁶ ff. 145r-146r.

⁷²⁷ f. 148r.

⁷²⁸ ff. 194v-196r.

⁷²⁹ ff. 194v-196v. The children's medicine is said to be good for high fevers, for removing vermin, for blemishes on the face, languid and heavy limbs, gout, and smallpox.

⁷³⁰ f. 79v.

widespread European contacts and became well known in alchemical circles; he not only gained plaudits from Oswald Croll as one of the best chemical physicians in Europe, but was a significant visitor to Johannes Hartmann, court physician at Kassel.⁷³¹ 1589, mentioned in the *Epistola Nobilissime* as the year when Quercitanus gave Madame de la Martinville alchemical receipts and powders, was a year when there was a strong belief in Europe that there was an alchemical powder which could effect transmutations, in conjunction with secrets passed on in manuscript books, and movements of alchemists around the European courts.⁷³² The John Dee/Edward Kelley interactions were at their peak, and it was widely believed that Kelley had the secret powder of transmutation. 1589 was also the year when du Chesne began work for Henry IV of France as a secret agent in France and Switzerland, and probably made links with the European circle of alchemists some of whom may also have had diplomatic missions.⁷³³ The *Epistola Nobilissime* is evidence of the distribution of alchemical powder in the same year but in another direction, to Madame de la Martinville in France.

The circle within which women alchemists worked may have included members from France, Switzerland and Germany. Madame de la Martinville does not mention contemporaries in her *Discours Philosophical*, but in the *Epistola Nobilissime* she addresses “Dom Quercitanum” from whom she has received powders, and mentions Philiponus’ method of philosophical projection.⁷³⁴ *Quercitan’s Daughter’s Letters* addresses a doctor of physic who has other affairs to attend to that take him far away (a fitting description of du Chesne), and both he and the narrator knows one Philiponny, perhaps an anglicised version of Philiponus, from whom the addressee had received the work, and a Mr de la Fin to whom a

⁷³¹ Moran, pp. 115-118.

⁷³² See for example *The Diaries of John Dee*, ed. by Edward Fenton (Oxon: Day Books, 1998) pp. 229-245; Bruce Moran, *The Alchemical World of the German Court* (Stuttgart: Sudhoffs Archive, Franz Steiner Verlag, 1991) pp. 7, 25, 93; Robert J.W. Evans, *Rudolph II and his World* (Oxford: Thames and Hudson, 1973) p. 199.

⁷³³ d’Amat and Limouzin-Lamothe, pp. 1239-40.

⁷³⁴ *The Epistola Nobilissime* f. 5.

portion of the ferment was sent.⁷³⁵ The Theodore de Mayerne papers suggest that the network involved may have been larger. They depict a circle around “the Druid” and Neptis some of whom made use of pseudonyms. Philipon is indicated as a member of this wider circle, by a marginal note which links him to the Druid and Neptis.⁷³⁶ A reminder of Jeanne du Port’s Swiss upbringing is a man called The Old Genevan. Other male participants are Bathodius, Maurice, Bea[r?]ardeau, Purpurmantel-Basilu, and Basilius.⁷³⁷ This circle seems to have included other women. Apart from Neptis, there are the apparently feminine name forms of Druida, and Haligraphia.⁷³⁸ Also mentioned in relation to Neptis or the Druid are “Monsieur \Q/uané D.M. a Paris”, Trogny, M de la Vallée, M. Landrivier, and Camilles.⁷³⁹ This indication of a circle including a number of women might suggest that *Quercitans Daughters Letters* (without the added apostrophe) could be pages circulated to more than one woman. However the weight of evidence does seem to support the argument that there was one woman, Quercitan’s daughter, who wrote the letters.

It is probable that some of these names were pseudonyms with resonances with the *opus*. A footnote to a French version of the *Epistola Nobilissime* in the Theodore de Mayerne papers mentions “au manuscript du Druide, je trouve Le Livre J +alibi 93”.⁷⁴⁰ The two implied pseudonyms or alibis for du Chesne, “the Druid” and *Quercitanus* or oak tree, are etymologically related: “druid” may mean “oak knower” and refer to secret tree lore.⁷⁴¹ It is

⁷³⁵ ff. 77, 94. The name of the Greek philosopher-mathematician Philoponus could have been adopted as a nom-de-plume.

⁷³⁶ ff. 134v, 156r.

⁷³⁷ f. 134v.

⁷³⁸ f. 134v.

⁷³⁹ ff. 130, 152, 139r-144r, 145r-146r.

⁷⁴⁰ ff. 139r-144r.

⁷⁴¹ Geoffrey Ashe, *Mythology of the British Isles* (London: Methuen, 1990) p. 122. Druids have been associated with oak trees since Pliny. The argument is not for 'pagan survival' as discussed by Ronald Hutton in *The Pagan Religions of the Ancient British Isles* (Oxford: Blackwell, 1991) pp. 284-295. The context for these remarks on Druidism is made in chapter two where the tendency for the humanist movement to incorporate material from pagan antiquity is discussed. Hutton examines two ways in which Druidism has been interpreted in Gallo-British culture: the first is relevant here, as philosophers, healers and benevolent mystics; not as sinister magi who employed human sacrifice (*The Triumph of the Moon: A History of Modern Pagan Witchcraft* (Oxford: Oxford University Press, 1999) p. 9.

also relevant that the *Discours Philosophical* draws on Bernard Trevison's allegory of the fountain, in which the old oak tree from which the fountain flows has central significance. These images of a spirituality of rebirth associated with the earth hark back to pagan antiquity, and the idea of a purer wisdom in the Celtic Druid tradition, as well as other pre-Christian traditions, which in sixteenth century France found a popular focus in the claim on a Gaulish Druidic past.⁷⁴² Guy le Fèvre de la Boderie in *La Galliade* represents the Gaulish Druid priesthood as the font of the wisdom traditions and probably made a strong impression on Blaise de Vigenère, a pupil of Guy's brother Nicholas, whose alchemical work was known in the circle around Lady Margaret Clifford in England in the 1590s.⁷⁴³

Gallic tradition preserved legends of druidesses and other women closely associated with druidism.⁷⁴⁴ Although accounts by Caesar and other classical sources speak of the priesthood as if it were exclusively male, there are literary references to women druids, and it is not impossible that these were known to Christian humanists in sixteenth and seventeenth century France. Both druids and druidesses were closely associated with prophecy and divination, and there is an account of a Druid prophetess in Gaul. The acceptability of the theme of the woman alchemist as prophetess is demonstrated by the development of the legend of another woman from antiquity, Maria the Jewess, into Maria the Prophetess during the seventeenth century.⁷⁴⁵ Celtic representations of the Roman God Mercury holding a caduceus accompanied by his consort the Celtic Rosmerta, who carries her own caduceus, also indicate a female role model for the hermetic tradition.⁷⁴⁶

The relationship of the du Chesne circle to the Rosicrucian movement is tentatively raised by repeated mentions of the book M in a Paracelsian context. The Rosicrucian

⁷⁴² Desirée Hirst, *Hidden Riches*, p. 20.

⁷⁴³ Hirst, p. 73.

⁷⁴⁴ Miranda Green, *Celtic Goddesses, Warriors, Virgins and Mothers* (London: British Museum, 1995) pp. 138-142.

⁷⁴⁵ Patai, 'Maria the Jewess'.

⁷⁴⁶ Miranda Green, *The Gods of the Celts* (Gloucester: Alan Sutton, 1986) p. 97.

manifestos, the *Fama Fraternalis* and the *Confessio* were published in Kassel, Germany, in 1614 and 1615. The narrative of the *Fama Fraternalis* took Christian Rosenkrantz to Damascus, where he translated the book M from Arabic into Latin to bring it to Europe: it contained physic and mathematics. The *Fama* also refers to ‘what secret so ever we have learned out of the book M’, which was said to be found in the vaulted tomb of Christian Rosenkrantz, lit by an inner sun, when it was opened in a date indirectly indicated to be 1604, alongside some of the works of Paracelsus, bells, lamps, songs, and geometric figures on the tomb wall.⁷⁴⁷ Joseph du Chesne died in 1609 and has not been linked to the Rosicrucian movement, but these manuscripts provoke questions about the role of his circle. Madame de la Martinville refers to a hidden sun associated with the lead of the philosophers.⁷⁴⁸ *Quercitan’s Daughter’s Letters* refers on numerous occasions to a manuscript, paper or box M. The “causes and reasons” by which the vegetative soul is added to body and spirit are explained in a manuscript M.⁷⁴⁹ By calcination she makes a calx of *sol* according to the instructions in her teacher’s “paper M”.⁷⁵⁰ Her mentor has instructions for some processes in two sealed boxes marked N and M.⁷⁵¹ She sends him her letters with a small remainder of the ferment made by a process transcribed out of “your paper M”.⁷⁵² The Paracelsian content of these writings has already been demonstrated. The reference here raises the question of whether there was a genuine book or chapter M which contained alchemical receipts, or whether these are allusions to a well developed fiction circulating in alchemical mythology at this time. The Book M appears to have been one amongst a number of alphabetically ordered works in use in this circle. *Quercitan’s Daughter’s Letters* refer to a process in her teacher’s

⁷⁴⁷ See Frances Yates, *The Rosicrucian Enlightenment* (London: ARK Paperbacks, 1972) pp. 44, 239, 244.

⁷⁴⁸ *The Discours Philosophical*, f. 77v, “le ç qu’ilz ont tous appelez leur (sol) occulte don’t ilz purge et dissout le corps de (sol) vulgal”. Brackets indicate use of the symbol for *sol* or gold.

⁷⁴⁹ Oxford: Bodleian Library, Ashmole MS 1440, Item 6 p. 82.

⁷⁵⁰ p. 78.

⁷⁵¹ p. 68.

⁷⁵² p. 79.

“paper N” using mercury extracted from cinnabar.⁷⁵³ The Theodore de Mayerne papers refer to “Annotatio Neptis ad opus ex Kayer M”, “in libro nostro A”, “Le Livre J”, “mon livre X”, a whole section “Ex Libro O, 1610”, and “Ex Lib S Neptis” four times.⁷⁵⁴

In 1604, the date when the tomb of Christian Rosenkrantz was said to be opened, a significant Parisian meeting took place between du Chesne and Jacob Mosanus (1564-1616), physician to the German Landgraf Moritz of Hessen-Kassel (1572-1632). There followed a visit by du Chesne to the Kassel court where he performed alchemical demonstrations for Mosanus in the presence of Johann Hartmann (1568-1631), who proclaimed Duchesne a restorer of spagyric pharmacy.⁷⁵⁵ Du Chesne, Hartmann and Mosanus kept in contact up to du Chesne’s death in 1609.⁷⁵⁶ Oswald Croll died in the same year, and Johannes Hartmann edited his *Basilica Chymica*, presumably authorising the inclusion of Westonia’s prefatory poem.⁷⁵⁷ Andreae had visited Geneva in 1610. Adam Haselmeyer states that he had seen a manuscript of the *Fama* in 1610.⁷⁵⁸ Robert Vanloo claims that Phillippe du Plessis-Mornay knew about the Rose Cross brotherhood in 1611.⁷⁵⁹ Here is the suggestion that in 1609 Quercitan’s daughter, Neptis, du Chesne and his circle could have been using a book referred to in the *Fama*. This raises the question of whether the circle around Du Chesne was some sort of brotherhood, with male and female membership, whose alchemical activities may have influenced the Rosicrucians. The du Chesne circle had esoteric and alchemical aims, which are of course an important aspect of the Rosicrucian manifestos. The *Fama* appears to recognise a woman’s involvement with the book M as part of the brotherhood of the Rosy

⁷⁵³ pp. 79, 82.

⁷⁵⁴ London: British Library Sloane MS 692, ff. 131v, 134v, 139r, 149v, 159r, 174-5.

⁷⁵⁵ Bruce Moran, *The Alchemical World of the German Court* (Stuttgart: Franz Steiner, 1991) p. 116.

⁷⁵⁶ Moran, p. 118.

⁷⁵⁷ Moran, p. 2.

⁷⁵⁸ Yates, *The Rosicrucian Enlightenment*, p. 236.

⁷⁵⁹ Vanloo, in his forthcoming book, cites a letter from M. du Plessis to Madame de Rohan, 26 July 1623 in *Lettres et mémoires de Duplessis-Mornay*, tome IV, années 1618-1623 (Amsterdam: Louys Elzevier, 1651) p. 891, in which he says it is twelve years since he spoke to the Rose Cross brothers whose first base was in Germany. I am grateful to Robert Vanloo for this reference.

Cross: “there are come to sight some books, among which is contained M. (which were made instead of household care by the praiseworthy M.P.).”⁷⁶⁰ The identity of the praiseworthy M.P. is another unsolved problem, but her female gender is implied in the forsaking of housework for alchemical book-making. The manuscripts consulted display no imagery of rose or cross. However it does not seem unlikely that the alchemical interests of the du Chesne circle were a positive influence on a movement whose political purposes became more urgent after the assassination of Henri IV, and that alchemical ideas of the restoration of the created world to a perfected state associated posthumously with the significant and recently deceased Paracelsians du Chesne and Croll may have found a new political form.

Whereas Isabella Cortese’s *I Secreti* aimed at a popular market by its printed suggestion that alchemy was of interest to all great ladies, the manuscripts associated with Madame de la Martinville, Quercitan’s daughter and Neptis reflect a private circle of men and women whose intense alchemical practice is not obviously embedded in household management. They raise the problem of whether this was an unusual exclusive group, or whether it reflects a wider female interest in alchemy in France. This is explored by a brief examination of the cultural context of women and alchemy in court circles, in the French academies, and through the location of the craft of alchemy in alchemical texts and prescriptive manuals of household work. Finally the implications of the Flamel legend, as the first literary landmark representing husband and wife as alchemists, are considered.

Joseph du Chesne moved in humanist court circles in which the tradition of the noblewoman at court using imagery with alchemical associations in the neoplatonic-hermetic mystical tradition seems to have been established prior to the period under discussion here by Marguerite d’Angoulême of Paris and Navarre (1492-1549), grandmother of du Chesne’s

⁷⁶⁰ *Fama Fraternitatis*, in Yates, *The Rosicrucian Enlightenment*, p. 249.

patron, Henri IV.⁷⁶¹ Marguerite encouraged and protected representatives of humanism, including du Chesne's grandfather-in-law, Guillaume Budé.⁷⁶² She not only supported an atmosphere in which neoplatonic ideas flourished, she was a published author. In her poem *Miroir de l'âme pécheresse*, published in Paris, 1531, she used the symbol of the Marguerite-Pearl for union with the divine. This came to carry alchemical-neoplatonic symbolism, although it had Jewish roots: alchemists explained the birth of the pearl as the result of light getting inside the shell and blending with water, while Plato used the myth of the pearl to illustrate the illumination of the soul imprisoned in the body like an oyster in its shell.⁷⁶³ Like the *imprese* of the Italian Academies this suggests allegorical rather than technical use of alchemical symbols.

The influence of the Italian Medici circle was extended in France through the marriage in 1533 of Catherine de' Medici (1519-1589) to Henri II. The Florentine Catherine was the great-granddaughter of Lorenzo de' Medici, and niece of the Medici Pope Clement VII, who is cited in Isabella Cortese's *I Secreti*.⁷⁶⁴ Catherine was significant in the dissemination of neoplatonic ideas in France, and she contributed to the development of French Paracelsianism through her patronage of French Paracelsian doctors. She was patron and protector of Bernard Palissy (1510-1590), whose field of knowledge ranged from pottery, ceramics, enamel, glass-making, garden-design, to philosophy and alchemy.⁷⁶⁵ Three years after the philosopher Ramus encouraged her to emulate the Florentine academy of the earlier Medici, Cosimo and Lorenzo, she supported the formation of the informal academy called the

⁷⁶¹ Yon Oria, 'Platonic Symbolism of Marguerite D'Angoulême in the Royal Courts of France and Navarre (1492-1549)', *Principe de Viana*, 177 (1986), 319-329 (p. 320). Yates, *The French Academies*, p. 6.

⁷⁶² Sherrin Marshall Wyntjes, 'Women in the Reformation Era', in *Becoming Visible*, ed. by Renate Bridenthal and Claudia Koonz (Boston: Houghton Mifflin, 1977) pp. 165-191 (p. 171).

⁷⁶³ Oria, p. 322. In Jewish lore this story was told by Syrus, among others, and probably entered medieval bestiary lore.

⁷⁶⁴ See chapter three.

⁷⁶⁵ See Marshall P. Katz and Robert Lehr, *Palissy Ware* (London: The Athlone Press, 1996) pp. 17, 18, 34, 35. Her patronage appears to have been principally for grotto design for the Tuileries. On her patronage of Paracelsian doctors see chapter 3 of this theses, p. 159.

Pléiade, which extended into the Palace Academy.⁷⁶⁶ Neoplatonic mysticism expressed in poetry was an important dimension of its activity, in which ladies were regarded as symbols of mystical initiation. Margaret of Savoy, sister-in-law of Catherine de Medici, was honoured, with her ladies, in symbolic roles in the *Civitas veri sine mortum*.⁷⁶⁷ However, women were more than symbols: they were also participants. Madame de Retz, a poet who attended the Palace Academy, may have gained her entrée through her husband's close links to the then Queen-mother Catherine de' Medici.⁷⁶⁸ Madame de Lignerolles and other ladies also attended.⁷⁶⁹ Henri III was reported to spend hours closeted with a group of poets, humanists and ladies which may well have included the alchemist-humanist Blaise de Vigenère, member of the entourage of Henri III and his brother the Duke of Anjou, and a defender of women's ability to understand and practise the arts and sciences.⁷⁷⁰ Madame de Retz and other women in Catherine de' Medici's circle were recipients of hieroglyphs from Pierre L'Anglois: however, they may not have shared his view that the symbolism of hieroglyphs was preferable to ignorant and arrogant Paracelsists, and "charbonniers, cendreaux, and souffleurs d'Alchymie", if they followed Catherine's lead in using Paracelsian doctors.⁷⁷¹

A current belief held that a union of particular types of poetry, music and dance

⁷⁶⁶ Yates, *The French Academies*, p. 20.

⁷⁶⁷ "City of truth without death". Yates, *The French Academies*, pp. 111-114.

⁷⁶⁸ Yates, *The French Academies*, p. 105. Madame de Retz' second husband, Albert de Gondi, came from an Italian family introduced into France by Catherine de' Medici.

⁷⁶⁹ Yates, *The French Academies*, p. 4.

⁷⁷⁰ Yates, *The French Academies*, p. 33; Denyse Métral, *Blaise de Vigenère Archéologue et Critique d'Art 1523-96* (Paris: Librairie E Droz, 1939) p. 26; *Blaise de Vigenère, poète et mythographe au temps de Henri III*, ed. by Marc Fumaroli (Paris: Centre V.L. Saulnier, 1994) p. 8.

⁷⁷¹ Hélène de Surgères, Madeleine de Neveau and Catherine Fradonnet (Les Dames de Roches) moved in Catherine's circle. For their hieroglyphes see Pierre L'Anglois, *Discours des Hieroglyphes Aegyptiens* (Paris: 1584) ff. 58v-107r; his criticism of Paracelsians, and that villainous dog Paracelsus, is at f. 3.

had a spiritual power that could help the religious situation in France. In 1560 Jean de Monluc, Bishop of Valence, proposed that the nation turn to God, led by the King, François II, and the royal family. The Queen, he suggested, should direct her ladies and entourage to sing the Psalms of David and spiritual songs, supporting his argument by the example of Moses, whose canticle was sung by dancers accompanied by musical instruments.⁷⁷² De Monluc does not mention it, but the figure of Miriam, sister of Moses, who led the Biblical female dancers, was depicted from the fifteenth to the seventeenth century as a female alchemist.⁷⁷³ Raphael Patai has argued that her legend merged with that of Maria the Jewess, the Alexandrian woman alchemist revered by Zosimus.⁷⁷⁴ This merging may have reflected a perceived connection between sacred verse, dance, music and alchemy. In the *Practica Mariae Prophetissae Maria*, a powerful mystical use of sound is attributed to Maria the Jewess as accompaniment to her alchemical practice.⁷⁷⁵ Lady Mary Herbert, whose associations with alchemy are discussed in chapter five, used French models of measured verse to translate the Psalms with her brother. She regarded dance and music as appropriate forms of worship and incorporated sacred dance into her translation of Psalm 51. John Donne, who was not ignorant of alchemical symbolism, complimented the Sidney's translation of the Psalms by comparing them to Moses and Miriam.⁷⁷⁶ Penelope Gouk has recently demonstrated how music was closely related to natural magic and experimental

⁷⁷² Yates, *The French Academies*, p. 201.

⁷⁷³ Cambridge: St Johns MS G 14. 2. f. 6, inc: Liber Marie Sororis Moysi (15th century, including marginal drawing of Miriam in turban-like head-dress and wimple. Source: Alchemy CD rom). "Maria Hebraea Moysis soror" is the fourth seal in Johann Daniel Mylius', *Opus medico-chymicum*, 1618, reproduced in De Rola, *The Golden Game*, p. 140. See also Raphael Patai, 'Maria the Jewess – Founding Mother of Alchemy', *Ambix*, 29 (1982), 177-197 (pp. 190-1).

⁷⁷⁴ Patai, 'Maria the Jewess, Founding Mother of Alchemy', (pp. 187-192).

⁷⁷⁵ *Artis Auriferae* (Basel: [n.p.]1610) vol. 1, p. 208: "Maria mira sonat breviter quod talia tonat." ("Mary briefly soundeth forth Strange things like Thunder round the Earth"), see translation in *Alchemical Poetry 1575-1700*, ed. by Robert Schuler (New York: Garland, 1995) pp. 420-428.

⁷⁷⁶ Margaret P. Hannay, Noel J. Kinnamon, Michael G. Brennon, *The Collected Works of Mary Sidney*, vol. II (Oxford: Clarendon Press, 1998) pp. 4, 9, 27, 28.

philosophy in seventeenth century England.⁷⁷⁷ The same social group, including Theodore de Mayerne, Robert Fludd and John Dee, produced the patrons, theoreticians and some practitioners, clustered in England around the court and in certain aristocratic households. Gouk concludes that an essential future task is to examine the power exercised by women in the roles of patron, performer, teacher and consumer of music, and the consequences of this power for gendered understanding of the nature of magic and science.⁷⁷⁸ Although her comment is based on English research, it is also relevant for these French circles.

Other examples show that French women at court, and in informal academies, participated in alchemy from the very end of the sixteenth and throughout the seventeenth century. The learned woman Marie le Jars de Gournay (1565-1608) attended Marguerite de Valois' court, and had some contact with the court of Henri IV.⁷⁷⁹ She not only practised practical alchemy between 1598 and 1608, eventually obtaining use of a fire at a nearby glassworks, but defended her interest, arguing that alchemy was worthy of a curious spirit, since illustrious kings and the most intelligent men in France had practised it. Her possible mentor, Jean d'Espagnet, created a new cosmetic from his experiments which included alchemy. Du Gournay wrote poetry about her alchemy, and her learned humanism extended from translating Ovid and Cicero, to her radical argument that all nations had allowed women to be priestesses, and her challenge to the prohibition of women from performing the sacraments.⁷⁸⁰ This suggests an affinity with the circle of the Druid and Neptis, and the evidence of an active priestly role by the women writers Madame de la Martinville and Quercitan's daughter, who, like de Gournay, was also a translator.

⁷⁷⁷ Penelope Gouk, *Music, Science and Natural Magic in Seventeenth-Century England* (New Haven and London: Yale University Press, 1999).

⁷⁷⁸ Gouk, pp. 23, 74, 276.

⁷⁷⁹ Marjorie Henry Ilsley, *A Daughter of the Renaissance: Marie le Jars de Gournay, Her Life and Works* (The Hague: Mouton and Co, 1963) p. 96.

⁷⁸⁰ Ilsley, pp. 94-6.

De Gournay was one of several French women interested in alchemy. Jacques du Bosc may have been referring both to the symbolism in Ovid's poem, and practical alchemy, when he denied that he had ever alleged "the Metamorphoses" to rule the actions of Women, but also noted that women "take such pleasure in the Metamorphoses as it would be impossible to wean them from it".⁷⁸¹ A specific example was the household academy of the mother and daughter Madeleine Neveu and Catherine de Fradonnnet in Poitiers in which, according to Colletet, virtue and science was practised. Catherine was praised as both a learned woman and a good housekeeper.⁷⁸²

How far practical alchemy became part of French household practice in circles outside the courts and academies is unclear. However it appears that the question of whether or not alchemy was an appropriate part of women's household task in France was asked from the second half of the sixteenth century, which suggests that some women did cross the boundary from commonplace distillation to philosophical- alchemical-metalwork. The acceptability of distillation as woman's task is indicated strongly by *L'agriculture et maison rustique*, by Charles Stevens (1504-1564) and Jean Liebault, published in France in the second half of the sixteenth century and translated into English in 1600 with associations with Theodore de Mayerne and Lord Peregrine Willoughby.⁷⁸³ This manual for running a country farm itemises a huge workload for country women: caring for animals (calves, hogs, pigs, pigeons, geese, ducks, peacocks, hens, pheasants); milking, making butter, cheese, and lard; charge of oven and cellar; clipping sheep, keeping their fleeces, spinning wool to make cloth

⁷⁸¹ Jacques du Bosc, *The Compleat Woman*, transl. by N.N. (London: Thomas Harper and Richard Hodgkinson, 1639) Preface to Madame de Combalett, C2, F3.

⁷⁸² Ilsley, p. 183.

⁷⁸³ The English edition has a poetic dedication by Theodore de Mayerne and dedication to Lord Peregrine Willoughby. Last French edition (Paris: Iamet Mettayer, 1598); Charles Stevens, Jean Liebault, *Maison Rustique, or The Countrie Farme*, ed. by Gervase Markham, transl. by Richard Surfleet (London: Bonham Norton, 1600). Lord Willoughby's appreciation of alchemy and at least one woman alchemist, Lady Margaret Clifford, is described in chapter five. The Stevens/Estienne family included learned women: see Elizabeth Armstrong, *Robert Estienne: Royal Printer* (Abingdon: Sutton Courtenay Press, 1986) p. 15, regarding Perrette Estienne who understood Latin with the same ease as if it had been French.

to clothe the family; ordering the kitchen garden, preserving fruits, herbs, roots and seeds; bee keeping; buying linens, clothes, and household furniture. She should be skilfull in natural physic for the benefit both of her “own folke” and others, as well as for animal health.⁷⁸⁴ The remedies the housewife needs to know are “in manner of a country dispensatorie”: other more exquisite remedies are best left to professed physicians of the great towns and cities.⁷⁸⁵ A large section of the book concerns distillation. The owner of a country estate is advised to leave this “to his wife or his farmer’s wife: for indeed such occupation is far better beseeming either of them than him”.⁷⁸⁶ This wife is the target of a discourse on “the manner of distilling of waters and extracting of oylie quintessences” to help her family and neighbours in times of sickness, following the custom of “great Ladies, gentlewomen and farmers’ wives well and charitably disposed, who distil waters and prepared ointments, and such other remedies to succour and relieve the poor”.⁷⁸⁷ The methods explained for distillation are extremely detailed and complex. Country women are expected to have, or develop, a good knowledge of technical processes and the different types of heat produced by coal, hot embers, sand, iron filings, horse dung, boiling water, and wine boiling in fat. A great variety of equipment is described ranging from the simplest method using a pot with a glass held over it to collect vapour, to a huge Italian furnace that needs many servants to watch the fire, cast herbs into it, and put heads on the receivers.⁷⁸⁸ Distillatories made of glass, earth, copper, brass, tin, gold and silver are described. As well as distillation the country wife needs to understand processes of infusion, putrefaction and fermentation.⁷⁸⁹ She is advised to locate the furnace where it will not endanger the house if set on fire, and to be aware of the dangers of distilling quicksilver. Whilst “alchymists” are referred to as source of the terms *per ascension* and *per*

⁷⁸⁴ Stevens, p. 53.

⁷⁸⁵ Stevens, p. 53.

⁷⁸⁶ Stevens, p. 562.

⁷⁸⁷ Stevens, p. 562.

⁷⁸⁸ Stevens, p. 573.

⁷⁸⁹ Stevens, p. 575.

descension the authors take a common sense line in seeking to limit the busy housewife's role to the distillation of oils and quintessences using only material from her garden and orchards. "For as the distilling of mettals, minerals, stones, and other such things which we are not governed and husbanded with man's handie worke, labour and skill, they belong rather unto the Alchymist and extractors of quintessences, or other idle or rich persons".⁷⁹⁰

In *The Practise of Chymicall, and Hermeticall Physicke*, Joseph du Chesne distinguishes common extractions of oils, waters, and ordinary distillation, from precious elixirs and quintessences which are "much laboured, circulated, and wrought, by concoctions, & fermentations, by the meanes whereof all impure and corrupt matter is defeked & separated, the evil quality corrected & amended". Du Chesne uses household analogies to argue his case: in the making of bread, beer and wine the pure has to be separated from the impure, and the same principle applies in medicines. His use of herbal remedies as well as metallic ones also brings his practice closer to that of the ordinary kitchen.

Half a century later, in a different climate in which more women were writing and being published, the first edition of Marie Meurdrac's *La Chymie Charitable et Facile, En faveur des Dames* was published.⁷⁹¹ This is one of very few published books on alchemy with female authorship. It includes philosophy and receipts, and illustrates a development from the earlier private manuscripts discussed above, to this later confident public admission of a French-woman's philosophically-based household craft of alchemy. Like Isabella Cortese's *I Secreti*, this is unashamedly aimed at a female readership, but in contrast to the sixteenth century Italian book it draws authority from female sources, with a dedication to the Countess of Guise, and prefatory poems from at least two women: Angélique Salerne and Mlle D.I..

⁷⁹⁰ Stevens, p. 605.

⁷⁹¹ *La Chymie Charitable et Facile, En faveur des Dames* (Paris: second edition 1674, first edition 1656).

Where *I Secreti* side-steps the problem of female authorship by appealing to male clerical authority, there is no danger that Meurdrac's own voice will not be heard. She tackles her pro-woman argument head-on, explaining that she knows that men always scorn works by women, but matters of poetry, prose, philosophy and government are not to do with sex. She argues that in these matters cultivated women equal cultivated men. The field of knowledge she addresses includes Paracelsian philosophy, alchemical operations, herbalism, other medical remedies, and cosmetics.⁷⁹² She stresses the importance of experience, claiming that her receipts using silver and gold are those she can recommend from experience, and warns against the use of mercury on the face because of the incurable illnesses it causes. She is an overtly Christian Paracelsian, relating the three Paracelsian principles of salt, sulphur and mercury to the holy Trinity. For Meurdrac, the hand of the artist makes the spirit of life, and mercury spiritual, by its separation from the gross.⁷⁹³ However much of her advice is practical, with detail on use of vessels, lutes, furnaces and chemical characters, and receipts including herbal waters, tinctures, plasters, medicines and beauty aids. Her book places alchemical practice and philosophy within the context of other household activities. It is thus a late example of the genre of books of secrets of which Isabella Cortese's *I Secreti* is an early illustration.

It could be argued that the published story of the cabalist-chemists Nicolas and Perenelle Flamel in Paris in 1612 supports the argument of women's participation in household alchemy. The couple apparently work together in the home to produce gold. However, this story, which used to be regarded as historical fact, is now regarded with more scepticism.⁷⁹⁴ Laurinda Dixon argues that Nicholas and Perenelle were real people and

⁷⁹² Meurdrac, see pp. 312-314.

⁷⁹³ Meurdrac, p. 7.

⁷⁹⁴ For the historical fact approach see Eric John Holmyard, *Alchemy* (Middlesex: 1968) pp. 239-249. For a more recent critique see Stanton J. Linden, *Darke Hieroglyphics* (Lexington: The University Press of Kentucky, 1996) p. 208.

Flamel “may have dabbled in alchemy [...] but his reputation as an author and immortal adept must be accepted as an invention of the seventeenth century”.⁷⁹⁵ This invention suggests a relocation of alchemy from the woman’s sphere into a joint endeavour in which a wife passively and silently supports her husband. Perenelle’s value as the alchemystical wife is contextualised as an attribute of the perfect wife.

The hypothesis that Perenelle’s depiction may represent a move away from woman as active household alchemist, towards companionate working of husband and wife with the husband firmly in charge, is supported by a fifteenth century manuscript from John Dee’s library which records a relationship between *Maria and Petronille* [sic], *Experimenta cum Sole*.⁷⁹⁶ Dorothea Waley Singer notes, incorrectly, that Petronella was the name of the wife of Nicholas Flamel.⁷⁹⁷ Yet with only one digit significantly different, and a close similarity of ‘r’ and ‘t’ in the hand, it is an interesting possibility that the name of Flamel’s wife entered alchemical legend *before* the publication of *Le Livre des Figures Hieroglyphiques*.⁷⁹⁸ “Maria” undoubtedly refers to Maria the Hebrew (or, to the Renaissance, Maria Prophetissa), whose legendary status as mother of alchemy was well known.⁷⁹⁹ I am not aware of any alchemical Petronella from the Graeco-Egyptian period.⁸⁰⁰ The fifteenth century dating of this manuscript, the century in which Nicholas died, supports the view that Perenelle was entering legend as an alchemist on her own account, regarded as skilled enough to work with Maria herself. The short receipt in *Maria and Petronille* uses salt, a golden water, a distillation process, and finally “coagula Reginam”, a coagulation of salts from the “Queen” through a drying process. The two women are thus associated with an aspect of alchemy associated

⁷⁹⁵ Laurinda Dixon, *Nicolas Flamel: his exposition of the Hieroglyphical figures 1624* (London: Garland Publishing 1994) p. xvii.

⁷⁹⁶ Oxford: Corpus Christi College, MS 277, f. 28v. *Maria et Petronilla, Experimenta cum Sole*.

⁷⁹⁷ Dorothea Waley Singer, *Catalogue of Latin and Vernacular Alchemical Manuscripts in Great Britain and Ireland* (Brussels: M. Lamertin, 1928-31) p. 125.

⁷⁹⁸ I have adopted the spelling “Perenelle” in this study, but her name is equally often spelt “Perrenelle”.

⁷⁹⁹ Raphael Patai, ‘Maria the Jewess, Founding Mother of Alchemy’, *Ambix* 29 (1982) 177-197.

⁸⁰⁰ Legendary female alchemists from this period are Theosobeia, Isis, and Paphnutia.

with the mythology of the *Luna Queen*. Whilst in the Flamel legend Perenelle is closely defined through her relationship to her husband, in this earlier reference she is located in relation to a tradition of female alchemists working together.

Jayne Archer argues that the Flamels' story was a product of a world "in which natural philosophers, including chymists, were increasingly working outside the universities, following independent research, and in collaboration with their wives", and that the story's popularity resulted from its ever more accurate description of the way in which chemical knowledge was produced.⁸⁰¹ This may have served as a significant symbolic model for other husband and wife alchemist teams during the seventeenth century, such as Thomas and Rebecca Vaughan who jointly carried out chemical experiments.⁸⁰² Stanton Linden identifies the significance of the Flamel legend in its redirection of "alchemy's traditional emphasis on the transformation of base metals [...] toward moral, spiritual and philosophical transformation."⁸⁰³ In this respect it deflects attention from household skills, to moral and spiritual relationship between practitioners, and the exemplary virtue required of the alchemist's wife. The emphasis on a married couple may reflect a cabalistic influence in which the wife becomes a means for the male cabalist to contact the divine. This would explain why Perenelle's own voice is not heard; it is not her story. Where Quercitan's daughter complains and seeks to defend herself, and Madame de la Martinville states her practices, Perenelle is represented as entirely silent, like most of the alchemistical wives who follow.

The copying and transmission of manuscripts about Madame de la Martinville, Quercitan's daughter and Neptis suggests a willingness by seventeenth century men

⁸⁰¹ Jayne Archer, 'Women and Alchemy in Early Modern England' (unpublished PhD thesis, University of Cambridge, 1999) 4, x.

⁸⁰² See Donald R. Dickson, 'The Alchemistical Wife: The Identity of Thomas Vaughan's "Rebecca"', *The Seventeenth Century*, 13 (1998), 36-49.

⁸⁰³ Stanton J. Linden, *Darke Hieroglyphiques*, p. 210.

interested in Paracelsian alchemy to record their names. Jane Stevenson suggests that an unwillingness to record work of women Latin Renaissance poets was not a contemporary phenomenon, but has arisen since the eighteenth century, and a similar process may be at work here.⁸⁰⁴ Some representations of women who appear to fall into the category of Paracelsian alchemist are found during the early seventeenth century. J. Scott Bentley argued in 1986 that Shakespeare's depiction of Helena, daughter of a famous French physician, in *All's Well that Ends Well*, placed her in the Paracelsian tradition.⁸⁰⁵ Helena, an orphaned gentlewoman, receives from her father "some prescriptions/ of rare and prov'd effect" able to "breathe life into a stone, Quicken a rock, and make you dance".⁸⁰⁶ She cures the King of France of a fistula and melancholy, possibly associated with old age, after professed Galenists and Paracelsians have failed, with what the King calls a "tinct and multiplying medicine" as powerful as anything known to Plutus, god of riches, who is here represented as an alchemist who knows the medicine of life.⁸⁰⁷ The King recognises in her "some blessed spirit".⁸⁰⁸ Shakespeare's source is thought to be Boccaccio's *Decameron*, in which Giletta of Narbona is a cunning woman who administers physick by the grace of God. Giletta is a "sage Lady" whose offer to be burnt if she fails to cure, places her by implication in relationship to

⁸⁰⁴ Jane Stevenson, 'Women and classical education in the early modern period', in *Pedagogy and Power: Rhetorics of Classical Learning*, ed. by Yun Lee Too and Niall Livingstone (Cambridge: Cambridge University Press, 1998) pp. 83-109 (p. 94).

⁸⁰⁵ 'Helena's Paracelsian Cure of the King: *Magia Naturalis* in *All's Well that Ends Well*', *Cauda Pavonis*, 5 (1986), 1-3. The date when the play was written is not known, only its first printing in the 1623 Folio. Stanley Wells and Gary Taylor suggest that it is an early Jacobean play (*William Shakespeare: The Complete Works* (Oxford: Clarendon Press, 1986) p. 967). G.K. Hunter in 1959 suggested a dating of 1609, which would coincide with the year of du Chesne's death and the writing of *the Epistola Nobilissime* (William Shakespeare, *All's Well that Ends Well*, ed. by G.K. Hunter (London: Methuen and Co., 1959) p. 16). However he has since revised his dating to "about 1602-5" ('*All's Well that Ends Well*', ed. by G.K. Hunter in *The Arden Shakespeare Complete Works*, ed. by Richard Proudfoot, Ann Thompson, David Scott Kastan (Walton-on-Thames: Nelson, 1998) p. 89).

⁸⁰⁶ *The Arden Shakespeare Complete Works*, 1.3, line 218, p. 95.

⁸⁰⁷ *The Arden Shakespeare Complete Works*, 5.3, lines 101-2, p. 130. From 1593 Maria Prophetissa was presented as Pluto's daughter in *Practica Mariae Prophetissae in Artem Alchemicum*, and reproduced in Schuler: "Filia Plutonis consortia iungit amoris" ("Daughter of Pluto, she unites love's affinities").

⁸⁰⁸ *The Arden Shakespeare Complete Works*, 2.1, line 174, p. 98.

witchcraft.⁸⁰⁹ The play alters the emphasis towards an amateur Paracelsian woman healer whose honest love, blessedness and relationship with heaven is twinned with alchemical themes.

Despite a wish to record women's participation, the confusion arising from the variety of names and texts in the manuscripts discussed in this chapter may partly be a consequence of purposeful obscurity through the use of pseudonyms and alibis. This veiling of identity reflects the tradition of anonymity and secrecy in alchemical literature: the large number of alchemical texts and manuscripts of anonymous authorship, include the most famous, such as the *Rosarium Philosophorum* and the *Turba Philosophorum*, as well as probably thousands of uncredited manuscripts on alchemical themes.⁸¹⁰ Even when not anonymous, male and female alchemists sometimes take pseudonyms or use initials. Anonymity or semi-anonymity may be linked to the tradition of secrecy by which from antiquity alchemists used code, cipher, riddle, paradox and enigma with intentional obscurity. Too direct an approach may have been considered sinful.⁸¹¹ From the start of alchemical mythology texts are attributed to "great names" of the alchemical tradition when Hermes, Isis, and Democritus became authorial identifiers of texts. By the Renaissance a large *corpus* of work had spurious names. Once a "name" entered the tradition it might be attached to other similar works. The use of "authorities" indicated the place of a text in a revealed tradition: the antiquity of alchemy was an important part of its mythology. There are, no doubt, many other alchemical manuscripts whose authorship has not yet been established, and await careful study: the lack of knowledge about minor alchemists, scribes and writers probably makes the literature appear more obscure than it might otherwise be.

⁸⁰⁹ *Decameron*, transl. by William Painter in *The Palace of Pleasure*. Shakespeare, *All's Well That Ends Well*, ed. by G.K. Hunter (London: Methuen and Co., 1959) pp. 145-6, and *The Arden Shakespeare Complete Works*, p. 89.

⁸¹⁰ Roberts, p. 66.

⁸¹¹ Roberts, p. 66.

The tradition by which the secrets of alchemy were passed orally from master to son is also significant.⁸¹² The “Filius Sendivogii” was known under the monogram “J.H.F.S.” and has been identified by Joachim Telle as Johann Harprecht (Fortitudio) Starcke.⁸¹³ Sendivogius and Joseph du Chesne were contemporaries in the circle of Oswald Croll: the son of Sendivogius is contemporary with Quercitan’s daughter. In both cases the reduction in identity of the “son” or “daughter” reinforces the significance of the “master”. In this context it is of note that, even though she and Croll were about the same age, Westonia used the vocabulary of admiring daughter to father figure in her prefatory poem to Oswald Croll’s *Basilica Chymica*, a classic work of hermeticism and alchemical medicine. In this poem she claims special status by expressing her great admiration for Croll: “aeternum Phoebus Apollo mihi est”.⁸¹⁴ It seems, then, that whilst there is other evidence that women learned about alchemy or alchemical medicine from female relatives, in a few instances alchemical “masters” taught or included in their circle women who took on the mantle of a special sort of “daughter”.

The confusion over whether it was Quercitan’s biological or spiritual daughter that wrote the alchemical letters may also arise from the image of the philosopher’s daughter found in the alchemical tradition. If Mr de Chenis Quercitan’s daughter did translate the epigrams of the *Rosarium Philosophorum*, her translation of the accompaniment to *Revivacatio* is:

Heere cometh the Soule from heaven faire & cleere,
And raiseth the Philosophers daughter deare./⁸¹⁵

⁸¹² Roberts, p. 18.

⁸¹³ Joachim Telle, 'Zum “Filius Sendivogii” Johann Harprecht', in *Die Alchemie in der europäischen Kultur- und Wissenschaftsgeschichte*, ed. by Christopher Meinel (Weisbaden: Harrassowitz, Wolfbütteler Forschungen Band 32, 1986) pp. 119-36. I am grateful to Jan Bäcklund for this reference.

⁸¹⁴ Apollo's daughters were the muses.

⁸¹⁵ The German text printed in *De alchimia opuscula* (Frankfurt: 1550), p. 259, reads "hye compt die Seele vom himel schon und clar/ Und macht ausserstehen der philosophi dochter fur (war)". Ruland, p. 357, gives Daughter of the Grand Secret as a synonym for the Philosophers' stone.

Whether she read, translated or copied these words, a reinforcement of her own image as daughter of a philosopher can be imagined, as she wrote “the Philosophers daughter deare”.

A later translation places a slightly different, and less human, emphasis:

Here the Soul descendeth gloriously from heaven
And raiseth up the Daughter of Philosophy.⁸¹⁶

The daughter of philosophy provides an analogy for the revived androgynous body of the philosophers’ stone, which is now raised to the spiritual realm.⁸¹⁷

Even whilst contemporaries kept alive the writings of Quercitan’s daughter and Madame de la Martinville, under different but still female names, these papers show that some seventeenth century men who collected alchemical papers questioned or actively sought to undermine women’s contribution to the tradition. In the case of *Quercitan’s Daughter’s Letters* new pieces of text are introduced, significantly altering the tone and obscuring the sound of a woman’s voice.⁸¹⁸ The parts of *Quercitan’s Daughter’s Letters* added in subsequent to the French *une Docte damoiselle* introduce a quite different voice, with strong opinions and a penchant for defensive criticism of other people. An attack on false alchemists is introduced for the first time in any of these documents: the recipient of the letter is advised to “not willfully wander from the beaten path of truth, in following y^e fancies, and follies of Ignorant and false pretenders to y^e Arte whoe knowe, now intend nothinge but to deceave the covetous and Credulous”.⁸¹⁹ A reference to the parts of the alchemical work referred to traditionally as “Child’s Play and Women’s Work” is introduced, along with a slur on women for defiling men with their sin.⁸²⁰ Within this sequence the traditional colour sequence which

⁸¹⁶ *The Rosary of the Philosophers*, ed. by McLean, p. 94.

⁸¹⁷ The female gender may refer to the philosophic body created from the merging of *Sol* and *Luna*, who perhaps represent father and mother.

⁸¹⁸ The insertions are p. 50 from “but wth Gold Especially” to p. 51 “[...] of all things”; p. 51 “& not willfully wander [...] deceave the Covetous and Credulous”; pp. 56-7 “All is ready to bee done [...] For itt is they t. first defiled us with syn,”; pp. 58-61 “such as Union [...] convert them into their owne nature”.

⁸¹⁹ p. 51.

⁸²⁰ p. 57.

alchemists sought with wonder and delight is inappropriately (in the context of alchemical tradition) referred to as “gaudy colours”.⁸²¹ Sexual imagery is also introduced with references to conjunction in the *Cubili Nuptiali*, the *Thoro Hymento* and the *vase semanario* with “ye Male or Masculine nature operating actually upon the female and ye Female sweetly clasping and embraceing ye Masculine”.⁸²² Finally, without the vegetable work the whole operation is regarded as “senseles & vain” and the body is stated to be “grosse and solid”.⁸²³ This voice, with its undertone of self-aggrandisement and veiled aggression, may belong to a mid-seventeenth century copyist or translator.

As a result of these additions a second new voice, which belongs to an annotator of the manuscript, cannot believe the author to be a woman. When she ends her first letter as “your unworthy Scholler”, and “humbly \beg/ your Acceptance from her ... Your most humble Affectionate Handmayd”, the annotating hand writes “who is?”, which might be taken as a straightforward enquiry into the identity of Quercitan’s daughter if it did not follow an attack on the idea of the authorship of the text by a woman.⁸²⁴ Next to a major insertion into the text of *Quercitan’s Daughter’s Letters* concerning an uncredited and enlarged extract from the *Turba Philosophorum* about the *Ludus Puerorum* and *Opus Mulierum*, the annotating hand writes that the text is not written by a woman. The extract used to make this assertion is:

“Opus Mulierum Weomens Work which is to roast, and Boyle & Cooke, or dyett, & wash, and wringe us, to keep us Cleane. And well they owe itt to our Sex. For itt is they 4 first defiled us with syn”.⁸²⁵

⁸²¹ p. 57.

⁸²² p. 58.

⁸²³ p. 60.

⁸²⁴ p. 69.

⁸²⁵ p. 57.

The annotating hand has underlined “And well they owe itt to our Sex” and written in the margin “Ergo this was not written by Quercitan’s daughter nor in ye person of a woman, but of a man else shee should forget her selfe”.⁸²⁶ The origins of the phrase about child’s play and women’s work in the *Turba* is “ Now, therefore, I have demonstrated the disposition of the white lead, all which follows being no more than women’s work and child’s play”.⁸²⁷ The *Turba* follows with a statement of the value of male and female in the alchemical work, in which “the female rejoices in receiving the strength of the male, because she is assisted by the male. But the male receives a tingeing spirit”.⁸²⁸ The *Turba* does not say that women defiled men with their sin, that women owed men for this and were consequently to be punished by keeping men clean, among a host of other jobs. This is a biblical generalised gloss, possibly sarcastic in origin, rather than alchemical philosophy, utilised by the writer to support the belief that this treatise was not written by a woman. These comments do not support the idea of a symbolic female figure, given the misogynist tone. The author provides no explanation of why a man would claim to be Quercitan’s daughter and sign himself “your most humble Affectionate Handmayd”. Even in a world of secret agents and pseudonyms the use of the name of the daughter of a famous court alchemist would hardly have been uncontroversial. With the benefit of this whole sequence of manuscripts to consult it seems much more likely that the original text (possibly that in *une Docte damoiselle*) was tampered with, and this part inserted. The strong misogynist tone of this paragraph stands out from the rest of the text in which sin and defilement are not issues: the tone is one of wonder at witnessing what is considered to be a philosophical process at work plus technical specificity over experimental details.

⁸²⁶ p. 57.

⁸²⁷ *The Turba Philosophorum*, ed. and transl. by Arthur Edward Waite (London: George Redway, 1896) p. 57.

⁸²⁸ Waite, p. 57.

The idea of the *Opus Mulierum* was a well-known part of the work, and of course biblical views on Adam, and Eve's sin, were commonplace. However, a reading of du Chesne's *The Practise of Chymicall and Hermeticall Physicke* suggests that he was unlikely to have taught his daughter (whether understood as symbolic or real) that women defile men with their sin, and should consequently be restricted to washing and purifying alchemical material. His language is not misogynous, and women's sin is not mentioned, even though Genesis is discussed as the origin of the alchemical work. On the contrary, du Chesne cites the Lady de la Hone as a wise noblewoman who, with a purgative, restored to health Lord de Luynes Formentières when physicians thought him past cure,⁸²⁹ and in explaining "the Hermaphroditicall Nature" he explains the conjunction of "Male and female, fixed and volatile: Agent and Patient: & which is more hot and cold, fire and Ice" in terms of "mutual friendship and simpatic joined in one, and united into one substance: wherein is to be seen the wonderful nature thereof".⁸³⁰ The concept of the union of male and female in mutual friendship and sympathy contrasts strongly with the idea of women's eternal debt in their sin and defilement of men. In a later part of *Quercitan's Daughter's letters* is a description of the soul entering the body by means of the spirit "uniting them so kindly and friendly together" in one body.⁸³¹ This seems more in tune with du Chesne's "mutual friendship and simpatic joined in one", and adds to the evidence that the section on women's sin and defilement was added into the manuscript after it was first written.

At least one other English copy of "Quercitan's daughter's letters" is extant.⁸³² It is part of a manuscript book apparently compiled some time after 1648, and so possibly broadly

⁸²⁹ Quercitanus, *The Practise of Chymicall and Hermeticall Physicke*, first part, Ch X, 3rd page.

⁸³⁰ Quercitanus, second part, Ch III, first page.

⁸³¹ p. 81.

⁸³² Glasgow: University of Glasgow, Ferguson MS 163.

contemporaneous with the Ashmole version. The two have almost the same text.⁸³³ This second English copy also includes the passage on the *Ludus Puerorum* and the *Opus Mulierum* and it states that women “first defiled us wth sin”. There is no annotation, however, that the manuscript was not written by a woman.

In conclusion, it appears that the English versions of *Quercitan’s Daughter’s Letters* were amended from the earlier French one to include more contentious material that set up dissonance with the attribution of female authorship. The addition of more sexually explicit material took the text further from the type of literature that women were expected to write, and the piece on women’s sin and defilement placed women into the category of “other” by the use of the third person plural. Whoever amended this text was interested in displaying power in relation to several groups including women, whom he sought to place in an inferior role to men. The annotator of the Ashmole manuscript then used these amendments to conclude that the text could not have been written by a woman at all.

The manuscripts also contain evidence of positive attempts to discredit the idea that a woman could or should be an alchemist. A most potent attack on a seventeenth century woman was to discredit her sexual status.⁸³⁴ At the of end of *une Docte damoiselle de France* is an additional note, in the same handwriting as the rest of the manuscript, which indicates a powerful dislike of the idea of a woman working in tandem with a man on alchemy. In this note, the failure of the experiment (when the vessel exploded) is explained as the tragic outcome which is God’s punishment for the adulteress with the adulterer.⁸³⁵ This sexual insult conveys the message that it is adulterous for a woman other than a man’s wife to

⁸³³ At the start of the MS is a page of receipts with natal information of the sort an astrologer would record: “Benj: borne 12 of November 1647 h:7 [] Betty: 7 of July 1648 between 11.0/2” and at the bottom of the page is written “?cherchons de Astrologia?”. This indicates a date of later than 1648.

⁸³⁴ Laura Gowing, in *Domestic Dangers: Women, Words, and Sex in Early Modern London* (Oxford: Clarendon Press, 1996) explores the prominent use of the sexual insult in disputes between men and women, and the perceived significance of female chastity for notions of obedience and household order.

⁸³⁵ f. 21: “Eximum est huius historiae bis tragice, speculum, Aliene periculo sapiens sapit, [...] Adulteram cum Adultero punivit Deus”.

correspond with him and to be party to a relationship of some intimacy based on alchemical experimentation. During the seventeenth century the idea of concordance between male-female alchemical partnerships and symbols may have led to concerns about any male-female alchemical relationship other than that of husband and wife. These may have been seen as psychic, if not physical, adultery. Certainly in the period under consideration, some alchemical writing by men was intended to and succeeds in conveying an erotic charge. An alchemical letter to Mistress Berkeley seeks to win her affections, and ends with two love poems based on alchemical imagery: the name of Mistress Berkeley had been obscured but then uncovered by archivists perhaps suggesting that the association of this woman's name with the combined force of alchemical writing and love poetry was considered damaging.⁸³⁶ The metaphysical poets specialised in using alchemical themes to convey an exalted love.⁸³⁷ Even though an alchemical treatise addressed to a noble lady by the alchemist Christopher Taylour emphasises the association of alchemy and the Virgin, it still stresses the need for secrecy and discretion.⁸³⁸ The small number of printed books on alchemy associated with women are almost entirely books of secrets concerned with technical matters and include nothing that could be construed as sexual imagery.

The Flamel story may have influenced other stories about women alchemists, shifting the perception of woman's role from active woman alchemist to perfect helpmate for her husband, with whom alchemy became another area of intimacy. This may have provoked or added to concern that too great an intimacy was implied between any unmarried pairings of man and woman working together as alchemists. It may also have been used to raise moral expectations. In his unpublished text *Truth's Golden Harrow*, Robert

⁸³⁶ Oxford: Bodleian Library, Ashmole MS 1492, VII, ff. 29-39 followed by two poems at ff. 39 and 40.

⁸³⁷ See Stanton Linden, *Darke Hieroglyphics*, pp. 155-6.

⁸³⁸ Oxford: Bodleian Library, Ashmole MS 1392, I, f.56: "the desire of my heart I doe request itt, your Honour suffer not this little booke to be read by any but your silfe; the reasons why are many ... for I have ritt it only for your honour".

Fludd uses Perenelle to discuss the perceived problem of the mismatch between women's open, talkative nature and the occult quality of mystical truth. Perenelle is an example, he suggests, of a woman "by far more discreet and secret than the common sort of woman". Her example, he concludes, shows that it is wrong "to generalise as utterly to extirpe every particularity for men ar[e] bla[c]k as well as women".⁸³⁹ The amount of space which Fludd gives to this discussion suggests that some Englishmen at this time (c.1623) did wish to argue against any involvement of women in alchemy, whilst others, like Fludd, were prepared to make allowances for the virtuous exceptional woman.

⁸³⁹ Oxford: Bodleian Library, Ashmole MS 766, II, ff. 52v-53v.

Chapter Five

Lady Margaret Clifford, an alchemical receipt book, and the context: other Englishwomen's participation in alchemy

The foregoing chapters have considered women's participation in alchemy in Italy and France. We now turn to England, where there is similarly a variety of evidence for women's participation in alchemy. A particularly interesting case is that of Lady Margaret Clifford (1560-1616), who will be the principal subject of this chapter. Lady Margaret is best known through her more celebrated relatives: she was daughter of Francis Russell, Earl of Bedford, and married his ward, George Clifford, Earl of Cumberland. Their only surviving child, Lady Anne Clifford (1590-1676), is well known for her diaries and other historical material compiled on her instructions.⁸⁴⁰ However, Lady Margaret deserves more attention in her own right. Like her sister Lady Anne, Countess of Warwick, she was a cultivated patroness, supporting writers such as Edmund Spenser and Samuel Daniel, and she was a notably cultivated woman, with wide interests which included architecture, and, as I will demonstrate, alchemy.

Where Isabella Cortese is a printed author, and Quercitan's daughter, Jeanne du Port and Madame de la Martinville write in manuscript, the English case study reveals a range of indirect evidence for Lady Margaret's alchemical practice, through an investigation of a manuscript associated with Lady Margaret in the context of her biography. Although there are questions over her accredited authorship of this manuscript, the case for her interest in

⁸⁴⁰ On Lady Anne's writings see: Julius Parnell Gilson, *Lives of Lady Anne Clifford Countess of Dorset, Pembroke and Montgomery (1590-1676) and of Her Parents* (London: The Roxburghe Club, 1916); George Williamson, *Lady Anne Clifford, Countess of Dorset, Pembroke and Montgomery 1590-1676: Her Life, Letters and Work* (Kendal: Titus, Wilson and Son, 1922); David J.H. Clifford, ed., *The Diaries of Lady Anne Clifford* (Stroud: Sutton, 1990); Katherine O. Acheson, ed., *The Diary of Anne Clifford, 1616-1619* (London: Garland, 1995). On her life, see also Barbara Kiefer Lewalski, 'Claiming Patrimony and Constructing a Self: Anne Clifford', in *Writing Women in Jacobean England*, ed. by Lewalski, (London: Harvard University Press, 1993) pp. 125-152; and Richard T. Spence, *Lady Anne Clifford, Countess of Pembroke, Dorset and Montgomery (1590-1676)* (Stroud: Sutton, 1997).

and practice of alchemy does not reside solely in this one document: she engages creatively with alchemy as theory, laboratory work and literary metaphor, through patronage, entrepreneurial activity, networking with friends and experts, receipt of letters and dedications of books on spiritual and humanist themes. Her daughter, Lady Anne, memorialised her mother as an alchemist. From this evidence Lady Margaret emerges as a clearer historical figure than the women in the previous case studies.

Important evidence is contained in a long biographical letter, written chronologically over seven year periods, to Dr John Layfield.⁸⁴¹ She states that she wrote this well into her fifth seven-year cycle, between the years of twenty eight and thirty five.⁸⁴² Only an eighteenth century copy survives, which ends abruptly after 1589, thus omitting the years that would have been most pertinent for this study, and raising the possibility of censorship.⁸⁴³ Despite this, it contains useful information, because of the vocabulary she uses. She describes her life as “a Dance to the Pilgrimage of Grief” in which “still I change and yet the Dance, or thing that makes the sound is sorrow still to me”.⁸⁴⁴ This phrase recalls platonic-humanist sympathies, similar to Christopher Tylour’s comment in an alchemical treatise to a noble lady that “the faithful Antiquity have most Godly affirmed Nature to bee [the] voice of God”.⁸⁴⁵ It also

⁸⁴¹ London: British Library, C26, Althorp Papers, Item 4 is an eighteenth century copy, and is reproduced in George Williamson, *George, Third Earl of Cumberland* (Cambridge: Cambridge University Press, 1920) pp. 285-288. Dr John Layfield was a Fellow of Trinity College, Cambridge, who became Rector of St Clement Danes in 1601, in which year he also helped revise the Bible (Williamson, *Lady Anne Clifford*, p. 40).

⁸⁴² Williamson, *George*, p. 285.

⁸⁴³ For her will, Williamson, *Lady Anne Clifford*, p. 458. It may not be coincidental that this copy letter has been destroyed from her account of 1589 onwards, when her mining and possibly alchemical partnership with Richard Cavendish began, with the consequent eradication of the 1590s when she knew John Dee. It is not unbelievable that a family censor was at work, who did not wish this story, or the details of the breakdown of her marriage, to be told in full.

⁸⁴⁴ Jon A. Quitslund has also argued that Lady Margaret took platonic idealism seriously. See 'Spenser and the Patronesses of the Fowre Hymnes: “Ornaments of All True Love and Beautie”', in *Silent but for the Word*, ed. by Margaret Patterson Hannay (Ohio: Kent State University Press, 1985) pp. 184-202.

⁸⁴⁵ Oxford: Bodleian Library, Ashmole MS 1392, f. 41.

TABLE TWO

Main manuscripts discussed in relation to *The Margaret manuscript*

Name	Possible dating	Abbreviated name (where used)
Cumbrian Record Office (Kendal), Hothman MS 5, <i>Receipts of Lady Margaret Clifford</i>	1590s	<i>The Margaret manuscript</i>
Cumbrian Record Office (Kendal), WD/Hothman/Box 44/4, <i>Letter to Lady Margaret Clifford from Lord Peregrine Willoughby</i>	1599-1600 Autograph.	n/a
Cumbrian Record Office (Kendal) Hothman MS 4, <i>English translation of three works by Arnald de Villa Nova</i>	1590	n/a
Oxford: Bodleian Library, Ashmole MS 1392 ff. 1-60	Mid seventeenth century copy of earlier version by Christopher Tylour, in Ashmole's hand. Includes a possible signature for Christopher Tylour.	<i>To a noble lady</i>
Oxford: Bodleian Library, Ashmole MS 1459 ff. 62-98 <i>Stella Complexionis</i>	Mid seventeenth century copy of a translation by Christopher Tylour dated 1594, in Ashmole's hand	<i>Stella Complexionis</i>
Oxford: Bodleian Library, Ashmole MS 1482 iii <i>Processus Operis</i> , ff. 137r - v.	Belonged to Christopher Tylour (fl. c. 1580-1600). Same hands as Margaret MS.	n/a
Oxford: Bodleian Library, Ashmole MSS 1447 VI and VII.	Attributed to Christopher Tylour's hand by William Black	n/a
Northamptonshire Record Office, Isham Papers, IC 272 <i>Arthur Dee to Mr Aldrich, Norwich.</i>	15 December 1649 Autograph	n/a
London: British Museum, MS Eg 2812, <i>Lord Zouche's Letter Book</i>	c. 1600	n/a

alludes to five year's infertility and ill health early in marriage in the northern climate she found uncongenial, followed by the early death of the two sons she eventually bore, and probable death of other children in the womb or before christening.⁸⁴⁶ She did not obtain the constant love she hoped for from her husband, who was publicly unfaithful with a lady at court, and her ambivalent feelings about his New World journeys turned to dismay as the family inheritance was diminished not only by these hugely expensive journeys but also by Earl George's lavish spending at court. Themes of grief and sorrow are repeatedly stressed in letters, dedications and memorials, and, notwithstanding different approaches to grief in the early modern period, it does seem likely that alchemy offered one avenue, alongside literary patronage, historical research, business interests, and promotion of her daughter's interests, for Lady Margaret to release and transmute her sorrows into creativity. Like her patronage of spiritual writings, and biblical study, alchemy contained a spiritual model for the transformation of earthly pain and sin into the freedom of the heavenly life. As alchemist, Lady Margaret sought the distillation of pure heavenly essences from defiled matter for medicinal use; as devout Christian she was advised to mirror the perfect "celestiall dew" of the tears of Mary, as she cried at the foot of the cross, for Christ the physician.⁸⁴⁷

The best known evidence that Lady Margaret may have been a practising alchemist comes from her daughter, Lady Anne, whose memorials to her mother are heavily influenced by her inheritance suit.⁸⁴⁸ Richard T. Spence argues that Lady Anne would not have left any traces which in her opinion might have jeopardised her claims.⁸⁴⁹ In the Appleby Great

⁸⁴⁶ Lady Anne writes that her mother had only three children "that lived to be christened". Gilson, p. 4.

⁸⁴⁷ L.T. [Thomas Lodge], *Prosopopeia: The Teares of Mary, Blessed and Sanctified Marie, the Mother of God* (London: printed for Edward White, 1596) dedicated to Lady Margaret. In the preface Lodge compares the tears of Marie to "thou lock of Gedeon filled with celestiall dew". See sig. C4 for the reference to Christ "your physition whom desire of gold hath not drawn to you".

⁸⁴⁸ She sought to inherit the baronial titles and estates of her father in priority over Francis Clifford, the male heir. See Spence, *Lady Anne Clifford*, chapter 3, 'The Great Inheritance Dispute', pp. 40-58.

⁸⁴⁹ Spence, *Lady Anne Clifford*, p. 160.

Picture, painted to Lady Anne's close instructions in 1646 for public viewing, thirty years after her mother's death, Lady Margaret is closely associated with four books: a Bible, the psalms of David, an English translation of Seneca's stoic philosophy, and "a written hand Booke of Alkumiste Abstracions of Distillation & Excellent Medicines".⁸⁵⁰ The possibility that this hand-written book is an extant work, *The Margaret manuscript*, is discussed below. Six years later, in 1652, in the Great Book of Records of the Cliffords, written to promote Lady Anne's claim to the family inheritance and intended to be viewed by the immediate family and their descendants, Lady Anne used her mother's practical and philosophical alchemy as emblem of her virtue. Lady Margaret was, she writes:

"a lover of the Study and practice of Alchimy, by which she found out excellent Medicines, that did much good to many; she delighted in the Distilling of waters, and other Chymical extractions, for she had some knowledge in most kinds of Minerals, herbs, flowers and plants".

She indicates that her mother was interested in the natural philosophy that lay behind alchemical practice: "she had a discerning spirit, both into the disposition of humane creatures and natural causes, and into the affairs of the world".⁸⁵¹

Lady Anne cross-refers between alchemy as a practice and alchemy as the image of inner virtue to reinforce the value of her mother's interest, and its close association with spirituality. The statement that her mother was an alchemist is preceded immediately by the information that Lady Margaret's mind was endowed with the seeds of the four moral virtues, Prudence, Justice, Fortitude and Temperance. Later she stresses that her mother was strongly meditative, with a love of goodness and compassion, and uses imagery with alchemical overtones. Lady Margaret was "endowed with many perfections of mind and body", and "had

⁸⁵⁰ See the Appleby Great Picture, on the shelf behind Lady Margaret, and Cumbria Record Office (Kendal), MS Hothman JAC 332, *Inscriptions on the Great Picture at Appleby Castle*.

⁸⁵¹ Gilson, pp. 19-20.

in her the infusion from above of many excellent knowledges and virtues both Divine and humane”. According to a divine, who knew her well, “as gold is tried in the fire, so was her virtue tried in the unkindness, sorrows and misfortunes of this life”.⁸⁵² By establishing her goodness and virtue, Lady Anne sought to establish her mother’s gentility.⁸⁵³ What is interesting here is that she presumed that her mother’s status as a godly woman alchemist would assist, not hinder, this process.

Mary Ellen Lamb takes this line of thought further. She reads into the Appleby Great Picture a sense of communion between Lady Anne and deceased authors and family members, the centrality of solidarity with female relatives, and regards the books associated with Lady Margaret as “a small gender-bound collection”. She implies that the alchemical receipt book was not just an item included to boost her inheritance claim, but that Lady Anne identified and felt a solidarity with her mother’s alchemical interests.⁸⁵⁴

Lady Margaret was practising alchemy during her daughter’s lifetime, after Lady Anne’s birth in 1590 when Lady Margaret was thirty. Lady Anne’s evidence, written during the upheavals of the Civil War, may reflect her longing for earlier security when she still had a supportive mother and a strong network of influential female friends and relations.⁸⁵⁵ She filtered her thirty-year-old memory of her mother through a mid-seventeenth century lens: there is no mention, for example, of her mother’s metalworking and mining interests, nor of her contact with John Dee or Lord Willoughby.

The best contemporary evidence of Lady Margaret’s alchemical practice comes from Lord Peregrine Willoughby de Eresby (1555-1601), who, according to Arthur Dee

⁸⁵² Gilson, pp. 19-20, 30.

⁸⁵³ [No author], *Land and Lineage: the world of the nobility and gentry in England, 1500-1700*, Exhibition Catalogue, (Oxford: Bodleian Library, 1997).

⁸⁵⁴ Mary Ellen Lamb, 'The Agency of the Split Subject: Lady Anne Clifford and the Uses of Reading', *English Literary Renaissance*, 22 (3), 1992, 347-368 (pp. 349, 354, 362, 363).

⁸⁵⁵ This point is supported by Lamb's argument, discussed above.

(1579-1651), was sent to Prague by Queen Elizabeth with Edward Dyer to check on the transmutation claims surrounding Dee and Kelley.⁸⁵⁶ In 1597-8, having distinguished himself in the Netherlands, Lord Willoughby became Governor of Berwick-on-Tweed. He was near the end of his life, in which he had had close contact with intellectual Paracelsians such as Thomas Muffet, the man responsible for the introduction of sophisticated Paracelsianism into England, who had accompanied him on an embassy to Denmark.⁸⁵⁷ Despite his courtly way with words it was therefore no idle flattery when, in 1599 to 1600, he wrote to Lady Margaret from Berwick, describing her as a “noble philosophying lady” who has “learned the art of separation, to draw y^e spirit from y^e body to add to it agayne, things dead to live, livinge things apparent dead, yet having in concealed beinge a multiplied \life/”.⁸⁵⁸ This, he claims, is “wisdom’s works, of a lyttle red sand to make a Great deale of gold”, as did Hermes, Solomon, Ripley and Kelley. He places Lady Margaret in this line of sages and praises her ability to bring dead metal to life:

And now comes my La: of Cumberland knowinge how of dissolved putrefied bodies no good can be looked for w^{ith}out sublimatinge. She brings \a dead body/ into y^e Alembic head of fine conceit, then disgests , then revives it, and lastly proiects that rectefied oyle of Gratiou^snes upon an old bowed plate of Saturne, and by her artifice makes y^e old mans selfe beleave he is not metall mutch inferiour to his grandchild ~~Gold~~ Sol .

Although only forty five, Lord Willoughby describes himself in the letter as “an old Hermite”: the imagery of regeneration of a grandfather reflected his own status, and implied not only that Lady Margaret was an expert alchemist, but that through her knowledge of the

⁸⁵⁶ Northamptonshire Record Office, Isham Papers, IC 272 Arthur Dee to Mr Aldrich, Norwich, 15 December 1649, Autograph. Arthur Dee reports Dee's transmutation of metals "in the presence of Rodolph the Emperor, and other Noble men of those parts as also before my olde L. Willobye and Sr Edwarde Dyer, our Country men, who were sent to Prague, by Q. Eliz: to examine the verity thereof". Therefore Willoughby and Dyer went together, but the date is not clear. It is also possible that Willoughby went more than once, like Dyer. The title "Sir" for Dyer, an honour he did not receive until 1596, may not be relevant, since the account is retrospective.

⁸⁵⁷ Hugh Trevor-Roper, "The Court Physician and Paracelsianism", in *Medicine at the Courts of Europe, 1500-1837*, ed. by Vivian Nutton (London: Routledge, 1990) pp. 79-94 (p. 91).

⁸⁵⁸ Cumbria Record Office (Kendal) WD/Hoth/Box 44/4.

secrets of nature she made him feel young again. This may have reflected a genuine friendship, or a kindness reflecting his aim, shown in the rest of this letter, to console her for her husband's infidelity. He uses the analogy of Lady Margaret and Octavia (notoriously the wife of a flagrant adulterer and profligate), which at this time was publicly suggested by Samuel Daniel's dedication to Lady Margaret of *A Letter sent from Octavia to her husband Marcus Antonius into Egypt*, to re-emphasise that Lady Margaret is a learned keeper of secrets: "Antony was a good fellow, Cleopatra, a sunshine day, And Octavia a ritch clasped boke wherein the secrets of all good wifery is contayned".⁸⁵⁹ However, the type of housewifery symbolised by the "ritch clasped boke" is not for every household, as Lord Willoughby makes it clear that Lady Margaret knows more than he would want his own wife to know: "Good Madame let not my \wife/ open it [the book of secrets] therefore; least she become a proselite, forsake her bible and mistake my name".⁸⁶⁰ He implies that only an exceptional woman who knows how to contain such secrets, control her tongue, stay faithful to her bible, and support her husband, should claim an interest in alchemy as housewifery. Lady Margaret, he suggests, is such a woman.

The detail in Lord Willoughby's letter suggests that he had watched Lady Margaret performing alchemical experiments. A possible third party was Lord Zouche, who in 1600, when deputy Governor of Guernsey, wrote several veiled letters to Lady Margaret which gain greater meaning when read in this light. On 8 August 1600 he apologises for leaving her without notice, and offers his services "if yor Ladishippe be preasant to try out in any matter of importaunce". On 26 February 1600/1 he wrote to her fondly about "my Lo[rd] Governor of Barwick" (i.e. Lord Willoughby) saying he would be "bound unto you both", and expresses his wish to be serviceable to her in any thing she

⁸⁵⁹ Published 1599, see Samuel Daniel *The Complete Works in Verse and Prose of Samuel Daniel*, ed. by A. Grosart (London: Hazell Watson and Viney, 1885) pp. 114-138.

⁸⁶⁰ Cumbria Record Office (Kendal) Box 44/4.

commanded, including use of his own knowledge.⁸⁶¹ Lord Zouche had the means to obtain magical European books, and became increasingly well respected by Lord Willoughby.⁸⁶²

Long before the letter from Lord Willoughby, and even before Lady Anne was born, Lady Margaret began to receive dedications and to initiate English translations of sacred and humanist works, some of which give hints of her interest in spiritual alchemy, hermeticism and links with Paracelsianism. In Lady Anne's summary of her mother's life she explains that Lady Margaret was widely read in English "for though she had no language but her own, yet there was few books of worth translated into English but she read them".⁸⁶³ Like Isabella Cortese, she worked with Paracelsian churchmen. She chose a vicar friend of John Dee, Thomas Tymme, to translate Dudley Fenner's *Sacred Divinitie or the Truth which is according to Pietie*.⁸⁶⁴ Tymme also mediated key Paracelsian authors: he translated a work by Joseph du Chesne and wrote an introductory discussion to Dee's *Monas Hieroglyphica* which he planned to translate.⁸⁶⁵ In view of du Chesne's inclusive approach to women's practice of alchemy and use of the language of friendship between man and woman in alchemical metaphor, it is interesting that Tymme inscribed the manuscript of Fenner's *Sacred Divinitie*

⁸⁶¹ London: British Museum, MS Eg 2812, f. 107v.

⁸⁶² Wotton obtained magical mathematical books for Lord Zouche in Europe. See Henry Wotton, *Reliquiae Wottonianae*, 4th ed. (London: B. Tooke and T. Sawbridge, 1685) 20 November 1590 and 9 January 1591. On 14 November 1597 Zouche stood in for Willoughby in a ceremony in the Lords. In Willoughby's will, written on 7 August 1599 and executed in July 1601, Lord Zouche was the first named executor to whom land was left with responsibilities to pay off debts (CSP, Domestic, 14 November 1597, p. 532, 10 July 1601, p. 65).

⁸⁶³ See Franklin B. Williams, *Index of Dedications and Commendatory Verses in English before 1641* (London: 1962) and Pollard and Redgrave, *The Short Title Catalogue*, which list works by Christopher Shutte, Samuel Daniel, James Balmford, H. Graie, Robert Greene, Richard Greenham, Thomas Lodge, William Perkins, Thomas Saville, Edmund Spenser, and Aemilia Lanyer. Gilson, pp. 19-20.

⁸⁶⁴ Williamson, *George*, p. 292.

⁸⁶⁵ Thomas Tymme, *A Light in Darkness Which Illumineth for all the Monas Hieroglyphica of the famous and profound Dr John Dee, discovering Nature's closet and revealing the true Christian secrets of Alchimy*, ed. by S.K. Heniger (Oxford: New Bodleian Library, 1963). *A Breefe Aunswere of Josephus Quercatanus to the Exposition of Jacobus Aubertus Vindonis [...] Concerning the Spagericall Preparations* (London: 1591). The term "your loving friend" may be an expression of goodwill rather than of intimacy, but implies a connection, such as coreligionist. In this case Tymme may be subordinate socially to Lady Margaret, but in some sense her superior (as her father in God), so that 'friend' becomes a usefully equivocal term. Bruce Janacek discusses the relationship between Tymme's prophetic and devotional literature, and his alchemical studies, and places his Paracelsian alchemical studies within the larger context of his devotional writings. ('Thomas Tymme and Natural Philosophy: Prophecy, Alchemical Theology, and the Book of Nature', *Sixteenth Century Journal*, 4, 30 (1999), 987-1007).

presented to Lady Margaret in July 1590 “Your lovinge friend T.T.”, suggesting the possibility that Tymme and Lady Margaret enjoyed a relationship with shared religious parameters that may have included the Paracelsian tradition.⁸⁶⁶

Other literary dedications to Lady Margaret use hermetic or alchemical imagery often in association with references to her status as a virtuous though wronged wife. As early as 1587 Lady Margaret, with her sister Lady Anne, attracted the dedication of Robert Greene’s *Penelope’s Web*, a humanist discourse on the virtues and graces that could be viewed in “a Christall Myrror of fæminine perfection”, the story of Penelope’s wait for Odysseus. Alongside three virtues of special merit in woman – obedience, chastity and silence – virtuous woman readers, and particularly the two dedicatees, are introduced to “the Aenigmaes of Hermes Trismegistus” which Socrates had offered to wise Apollo. A reference to Octavia, virtuous wife of Mark Anthony, is not, in this case, obviously directed at Lady Margaret. However, by 1590, the theme of the transmutation of sorrow is directly addressed by Peter Moffet who addresses Lady Margaret and her sister Lady Anne in the dedication of *The Excellencie of the mysterie of Christ Jesus* alluding to one as “a tender mother bewailing her first borne” and the other “girding hir selfe with sackcloth for the husband of youth”.⁸⁶⁷ His suggestion that through the mysterie of Christ Jesus they may “finde some cordiall powder, which shall drive away your doleful pensiveness in some parte” which will be “an oyntement of ioye in steed of mourning” sounds Paracelsian, no doubt reflecting a family interest since the author was brother of Thomas Muffet.⁸⁶⁸ Lord Willoughby associates Lady Margaret with Robert Greene’s story of *Philomela*, in which references to antimony as antidote and mercurial potions take second place to the virtuous presence of Philomela which metamorphoses a lustful sea captain into respectful admirer and brings her honour as a

⁸⁶⁶ Williamson, *George*, pp. 292-3.

⁸⁶⁷ London: Thomas Orwin for Raphe Jackson and William Young, 1590. Lady Margaret’s first child Francis, and Lady Anne’s husband Ambrose Dudley, died in 1590.

⁸⁶⁸ The Epistle Dedicatory, dated 17 November.

paragon of virtue.⁸⁶⁹ Edmund Spenser dedicated *the Fowre Hymnes* to her in 1596, using the imagery of infusion of the Holy Spirit as celestial dew from heaven to earth, and the image of female Sapience in her secret heavenly treasury of riches, “hidden within the closet of her chastest bowre”.⁸⁷⁰ The same year Thomas Lodge dedicated to Lady Margaret and her sister-in-law, the Countess of Derby, *Prosopopeia*, a meditation on the tears of Mary, Mother of God, which are described as another form of celestial dew. He associates the two dedicatees with the “qualitie of the Sunne, communicating his beames to all things, inriching everie one without impoverishing himself”, a gift that they can use to test his meditations “as the goldsmith his mettall, trie them at the test of your contemplation”.⁸⁷¹ Samuel Daniel in *A Letter from Octavia to Marcus Antonius*, 1599, dedicated solely to Lady Margaret, associates the wronged wife Octavia with the light of the sun whose “cleernesse hath condemned/ Base malediction, living in the darke” and her “well-tun’d minde” despite everything “still in perfect union stand / With God and man”. As a result, faithful Octavia has achieved a form of inner alchemy, building a more “exquisite/ And glorious dwelling for your honoured name/ Than all the gold that leaden minds can frame”.⁸⁷² The quotation from Aemilia Lanyer’s prose dedication to Lady Margaret in *Salve Deus Rex Judaeorum*, cited at the start of this thesis, uses alchemical imagery to associate Lady Margaret with a sublime heavenly spirituality; later in the poem implying that lady Margaret is the true spouse of Christ.⁸⁷³

Diane Purkiss argues that the poem’s virtuous female dedicatees, and especially Lady Margaret, are not chosen solely for a possible dedication fee, but have a role as readers who

⁸⁶⁹ Robert Greene, *The Lady Fitzwaters Nightingale* (London: R.B. for Edward White, 1592). Lord Willoughby describes springs derived from “pure affections fountayne” of which he has “no philomeles voyce to singe of them”. Cumbria Record Office (Kendal) WD/Hothman Box 44/4.

⁸⁷⁰ See Enid Welsford, *Spenser Fowre Hymns, Epithalamion: A Study of Edmund Spenser’s Doctrine of Love* (Oxford: Basil Blackwell, 1967) pp. 92 ff. An hymne of heavenly love, l. 43-46, An hymne of heavenly beauty, l. 183-252. Jon A. Quitslund argues that without Lady Margaret’s instigation Spenser would not have written the *Four Hymns*. (“Spenser and the Patronesses of the Fowre Hymnes "Ornaments of All True Love and Beautie"”, p. 192.

⁸⁷¹ L.T., *Prosopopeia*, Dedication.

⁸⁷² *The Complete Works of Samuel Daniel*, ed. by Grosart.

⁸⁷³ See p. 1 of this thesis, and lines 1325-28 of *Salve Deus Rex Judaeorum*.

interpret the poem's virtue and thereby affirm Lanyer's work.⁸⁷⁴ Attention has already been drawn to the way Anne Clifford uses alchemy as a reinforcement of her mother's virtue - *Salve Deus Rex Judaeorum* provides another example.

However, Lady Margaret not only associated with writers who could compose an attractive alchemical metaphor, she also had plenty of opportunities to meet alchemists, read alchemical books and use alchemical equipment through her families of birth and marriage, and through the London court circle, which included John Dee. During the years around her birth, the English translation of the *Secrets of Alessio Piemontese*, the prototype secrets book, was dedicated to her father Francis Russell (1527-1585), suggesting that he was more than interested in this subject.⁸⁷⁵ Before the age of eight she may have watched distillation, perhaps of herbal waters, whilst living in the country home of her aunt Alice Elmes.⁸⁷⁶ When at seventeen she married her father's ward George Clifford, prospective Earl of Cumberland, and moved to Skipton Castle, Yorkshire, she entered a household with a strong tradition of alchemical experimentation. Alchemical books, manuscripts and probably experimental equipment were available: in the early twentieth century alchemical material contemporary with Lady Margaret's life, and older, was found in the castle muniments room, and alchemy was well represented amongst the literature, some of which remains. Alongside *The Margaret manuscript*, which is discussed later, was a manuscript fragment relating to alchemy, probably prepared for Henry tenth Lord Clifford (c.1455-1523), her husband's great-grandfather, in the early sixteenth century.⁸⁷⁷ Despite Henry's exile with a shepherd's family

⁸⁷⁴ Diane Purkiss, ed., *Renaissance Women: The Plays of Elizabeth Cary and the Poems of Aemilia Lanyer* (London: William Pickering, 1994) pp. xxxiv-xxxvi.

⁸⁷⁵ William Warde and Richard Androse's translation of the *Secretes of Alessio Piemontese* (London: [various publishers] 1558, 1563, 1566, 1569).

⁸⁷⁶ Northamptonshire Record Office, Transcript 105, Inventory of Alice Elmes of Lilford, 1607, shows a "Lymbeck of tynn" in the "deyrie howse" worth two shillings, and a presumably much more complex "still" "in the chamber over the space" worth 13 shillings and 4 pence. Also in the closet were many glasses, spice bags "and dyvers other things of like with a glass Cubbard" which may or not have been directly to do with distillation.

⁸⁷⁷ Cumbria Record Office (Kendal), Hothfield MS 2.

from which he emerged almost illiterate, he is said to have been “a profound student of medicine and alchemy”.⁸⁷⁸ His grandson Henry Clifford, second Earl of Cumberland (c.1517-1570) and father-in-law of Lady Margaret, was also an alchemist and distiller of waters, and the owner of a good library of books, printed and manuscript, “to which he was addicted exceedingly well towards the latter end”.⁸⁷⁹ I have looked closely for evidence that Earl George might have inherited their alchemical interests, but found none. Lady Anne Clifford makes no mention of any alchemical interest of her father in her detailed description. It can be speculated that Earl George may well have agreed that his wife should keep this family pursuit alive whilst he was occupied at court and on explorations.⁸⁸⁰ Also in the castle muniments room was a 1590 translation of three works by (or attributed to) Arnald de Villa Nova, *Novum Lumen*, *Flos Florum* and *Epistola ad Regem Neapolitanum*.⁸⁸¹ These were written in one of the hands found also in *The Margaret manuscript*.⁸⁸² The Cumbrian Archive assertion that these probably belonged to Earl George may be based on their date and the assumption that as head of the household they were in his possession. Daniel Scott assumed they belonged to the Earl.⁸⁸³ Given the other evidence that Lady Margaret was the active alchemist at this time, I suggest that it is more likely that the translations were for her use.⁸⁸⁴

When George Williamson searched the muniments room of Skipton Castle before 1920 he found “A Catalogue of the Books in the Closet in the Passage Room next the Pantry

⁸⁷⁸ Attachment to letter from Cumbrian Archive dated 22.5.98.

⁸⁷⁹ Gilson, p. xxii, and Williamson, *George*, p. 5.

⁸⁸⁰ Alchemy may have been a part of the dynastic establishment of this particular family, and Lady Margaret's involvement an extension of the normal role of upper class women, of 'carrying' a family's reputation at court or in a new family, as Diane Purkiss has discussed in relation to women playwrights (*Three Tragedies by Renaissance Women* (London: Penguin, 1998) pp. xv, xix).

⁸⁸¹ Cumbria Record Office (Kendal) Hothman MS 3.

⁸⁸² Hand B. See later in this chapter.

⁸⁸³ Daniel Scott, 'Recent Discoveries in the Muniments Room of Appleby Castle and Skipton Castle', *Transactions of the Cumberland and Westmoreland Antiquarian and Archaeological Society*, 18 (1918), 189-210 (p. 197).

⁸⁸⁴ The hand is the Hand B of *The Margaret manuscript*.

in Skipton Castle 28th August 1739".⁸⁸⁵ More works were listed than have survived. The manuscripts included: Arnold de Nova Villa his book called the New Light; A Treatise entituled Woemens Work and Childrens playe;⁸⁸⁶ An old Book of Chemistry and Alchimy, no title, unbound (which could refer to *The Margaret manuscript*); Another Book of Alchimy entituled a Dialogue between Nature and a Disciple of Philosophie, a stitched folio; part of a very old imperfect Manuscript of Alchimy; a very old poem in folio stitch'd, of Alchimy; and a very old Abstract of some Book of Alchimy. The printed books included two versions of *The Compound of Alchymy* (London: 1591), Roger Bacon's *The Mirror of Alchymy* (London: 1597) and a late Paracelsian work from 1606 in Latin.⁸⁸⁷ It seems likely that someone in the Clifford household, and I suggest that this is most likely to be Lady Margaret, was obtaining alchemical works from 1590 onwards to add to others which had been inherited.

Increasingly during the 1590s Lady Margaret was in London, where she moved in court circles which were fascinated by alchemy, as practice and as literary metaphor.⁸⁸⁸ Through her sister, Lady Anne, Countess of Warwick, she was close to the Queen, whose serious engagement with alchemy on a number of levels is discussed below. Lady Anne acted as a significant intermediary between the Queen and John Dee, who had tutored her husband, Ambrose Dudley, Earl of Warwick.⁸⁸⁹ According to Richard T. Spence, who has studied the minutiae of the Clifford household accounts, Lady Margaret's husband Earl George, knew

⁸⁸⁵ I have not found the exact date of Williamson's finds in the muniment's room at Skipton but he makes a general reference to it in the introduction to *George, Third Earl of Cumberland* published in 1920. See also Spence, *Lady Anne Clifford*, Appendix 11. In a paper read in 1917, Daniel Scott (p. 189) states that Dr Williamson had been working on the Hothman papers for a considerable time.

⁸⁸⁶ Perhaps the fragment from the *Turba Philosophorum* discussed in relation to Quercitan's daughter in chapter four.

⁸⁸⁷ *Nova Disquiritio de Helia Artista Theophrasteo* (Marburg: 1606) The full list is transposed in Spence, *Lady Anne Clifford*, pp. 257-259.

⁸⁸⁸ Although Lady Anne states that her mother left Skipton in 1590 this does not appear to be entirely true; she spent much time apart from Earl George but the couple did not separate officially until 1601 and during the 1590s Earl George was often absent, at sea or at court (Spence, *Lady Anne Clifford*, pp. 2-3). Lady Margaret's role in the management of the estates would be a separate study.

⁸⁸⁹ In his diary Dee records that Lady Warwick sent word to Dee of the Queen's speeches; she arranged for the commissioners to visit Dee; and she reported Dee's words of thanks back to the Queen. James Halliwell, ed., *The Private Diary of Dr John Dee and the Catalogue of his Manuscripts* (London: The Camden Society, 1968), pp. 40-53.

Dee and lodged frequently with him: they shared interests in navigation, exploration of the New World and mining.⁸⁹⁰ However, during the 1590s Lady Margaret appears to have established a relationship with Dee in her own right. On 25 October 1593 Dee met Lady Margaret's preacher Mr Gray, noting in his diary his surprise, no doubt because he knew that Lady Margaret was an alchemist, that the preacher had wrangled with him and denied and despised "alchemical philosophers". Dee appears to have cast Lady Margaret's horoscope for he notes against her name '1560, July 8th, hora 2 min of Exoniae mane'.⁸⁹¹ On 26th November 1593 Dee records that 'John [...] came to me from the Lady Countess of Cumberland'.⁸⁹² 'John' may have been the navigator, John Davis, employed by the Earl George and Lady Margaret, who was involved in the loss of books from Dee's famous library whilst Dee was abroad with Edward Kelley. Dee later negotiated with John Davis for the return of stolen books, apparently retrieving most of them.⁸⁹³ This meeting may have been part of the process of the resumption of friendly relations between Dee and the Cliffords, since shortly after John's visit Lady Margaret visited Dee at Mortlake on 3rd December 1593 with the Countess of Kent, Lord Willoughby's sister.⁸⁹⁴ By 1595 the relationship was warm: the Mistress Davis who acted as the Countess' proxy at that year's christening of Margaret Dee, most likely named after the Countess, was probably the navigator's wife.⁸⁹⁵

Lady Margaret had other contacts who took a close interest in the activities of Dee and Kelley. She knew Lord Burghley, whose interest in Edward Kelley's supposed discovery of the philosopher's stone is well documented,⁸⁹⁶ and shared Burghley's interest in mining

⁸⁹⁰ Spence, *Lady Anne Clifford*, p. 8, though no substantiating evidence is given.

⁸⁹¹ *The Private Diary of John Dee*, ed. by Halliwell, p. 1.

⁸⁹² *The Diaries of John Dee*, ed. by Edward Fenton (Oxfordshire: Day Books, 1998) p. 263.

⁸⁹³ *John Dee's Library Catalogue*, ed. by Julian Roberts and Adrian G Watson (London: The Bibliographical Society, 1990) p. 55.

⁸⁹⁴ Fenton, p. 263.

⁸⁹⁵ *John Dee's Library Catalogue*, ed. by Roberts and Watson, pp. 52-55.

⁸⁹⁶ See, for example, Ralph Sargeant, *At the Court of Queen Elizabeth: The Life and Lyrics of Sir Edward Dyer* (Oxford: Oxford University Press, 1935), p. 105.

which, for both of them, may have overlapped with alchemical concerns.⁸⁹⁷ By her sister's marriage to Ambrose Dudley, Lady Margaret was related to Elizabeth's favourite, Robert Dudley, who in 1571 had invested in an esoteric group called "Governor and Society of the New Art" which aimed to make copper out of iron and quicksilver out of antimony and lead.⁸⁹⁸ Lady Margaret's business partner, Richard Cavendish, the MP for Denbigh and translator of Euclid, met Dee in May 1590, shortly after he had entered into a business relationship with Lady Margaret.⁸⁹⁹ On 31st July 1590 John Dee gave Richard Cavendish, under an oath of secrecy, Dee's copy in his own hand of a treatise in French on the philosophers' stone by Denis Zacheire.⁹⁰⁰ Richard Cavendish seems also to have acted as messenger between the Queen and Dee in 1590.⁹⁰¹ A possible other connection between Lady Margaret's household and John Dee is the Mr Leigh who in 1605 had his own closet at Skipton Castle, in which were troye weights, a still head and a trunk of books and manuscripts.⁹⁰² Richard T. Spence describes one Robert Leigh as a local man who was an old friend of Lady Margaret, and John Dee records visits to his Manchester home between 1597 and 1600 by Charles Leigh, who became Receiver of Manchester College, and his brother Robert Leigh.⁹⁰³

During the 1590s Lady Margaret invested in mining and metallurgy, an interest which was probably allied to her alchemical concerns as many alchemists at this period were also involved in mining, following the logical association of the two through the alchemical

⁸⁹⁷ For Burghley's interest see Sargeant, n. 21 above; for Lady Margaret's see Richard T. Spence, 'Mining and Smelting in Yorkshire by the Cliffords', *Yorkshire Archaeological Journal*, 64 (1992), 157-182.

⁸⁹⁸ Derek Wilson, *Sweet Robin: A Biography of Robert Dudley Earl of Leicester 1533-1588* (London: Allison & Busby, 1997) p. 151.

⁸⁹⁹ Richard Cavendish (d. 1601) conveyed letters to Mary Queen of Scots on 1568 and 1569; was a witness against the Duke of Norfolk in 1571-2; suggested legal innovation; and served in the Low Countries at the same time as Lady Margaret's friend Lord Willoughby. He had literary, business and investment interests, and was author of a Protestant religious work, *The Image of Nature and Grace* (London: John Day, 1574).

⁹⁰⁰ 31 July 1590, Fenton, p. 250.

⁹⁰¹ 16 December 1590, Fenton, p. 252.

⁹⁰² Williamson, *George*, p. 306. Troy weights were a system of weights used for precious metals and gems.

⁹⁰³ Spence, *Lady Anne Clifford*, p. 27. John Dee, *Diary, for the years 1595-1601*, ed. by John Eglington Bailey ([n.p.] 1880) pp. 43 and 71.

philosophy which understood the art as one which speeded up the normal process of metallic development to a perfect state.⁹⁰⁴ By 1589 she entered into a 21-year lease of all mines of lead, lead ore and other metals at Gib Moor near Skipton in partnership with Richard Cavendish, which ceased with his death in 1601. Cavendish may have had a long-standing interest in engineering mines: in 1573 a license was granted to Richard Cavendish as maker and user of new kinds of engines invented by him for draining mines of coal and other metals.⁹⁰⁵ It is unlikely to be coincidental that in 1590, the year after entering the partnership with Lady Margaret, Cavendish visited John Dee at Mortlake, and under conditions of secrecy borrowed a copy of the work of the French alchemist Zacheire.⁹⁰⁶ This was not Lady Margaret's only mining venture. In 1594 she wrote to Lord Burghley regarding a patent for sea coal. In 1595 she wrote to Sir Robert Cecil about a patent for iron smelting, after hearing that Cecil and her husband George were seeking a similar patent to her own. In this she may have been associated with William Peterson, who in 1589 obtained for seven years the first patent for the smelting of iron, steel and lead.⁹⁰⁷

Potentially the most exciting evidence about Lady Margaret as alchemist are the 140 pages of alchemical receipts that now comprise *The Margaret manuscript*. In the 1920s Dr George Williamson, an expert on the Clifford family who had access to the Skipton Castle muniments room where the alchemy manuscripts were found, was probably responsible for composing the title which was embossed in gold on the cover at that time: "Receipts of Lady

⁹⁰⁴ Urs Leo Gantenbein of the Zurich Paracelsus Project argues that mining processes for refining ore were closely allied to alchemical ones and that mining towns were important meeting places for those involved in technical, transmutational and medical alchemy. Paracelsus spent time in his youth in Schwaz, a silver mining town in the Austrian Tyrol, and argues that alchemists should travel to the mountains where the metals grow (Alchemy academy discussion group, 10th and 14th November 1999). Fenton notes (pp. 269, 247) that Edward Kelley helped develop abandoned gold-mines in Jilove, south of Prague. On 19th December 1589 Adrian Gilbert offered Dee something "for the mines". On ideas of metallic development, see Gareth Roberts, *The Mirror of Alchemy* (London: The British Library, 1994) p. 51.

⁹⁰⁵ Calendar of Patent Rolls, vol. VI, 1572-5 C66/1098 m. 35, no. 197, 28 October 1573. I am grateful to Sue Maxwell for this reference.

⁹⁰⁶ Fenton, p. 250, 31 July 1590.

⁹⁰⁷ This paragraph is based on Spence, 'Mining and Smelting in Yorkshire by the Cliffords, Earls of Cumberland, in the Tudor and Early Stuart Period', pp. 157-182.

Margaret Wife of George, 3rd Earl of Cumberland for Elixirs, Tinctures, Electuaries, Cordials, Waters, etc., MS circa (1550) with her annotations.”⁹⁰⁸ He probably also wrote the brief description of the manuscript in the catalogue of the Cumbrian Record Office, which provides the additional information that the annotations in Lady Margaret’s own hand were made in 1598.⁹⁰⁹ From Williamson’s descriptions, it therefore appears that this manuscript could offer evidence of Lady Margaret’s own practice of alchemy.

However, although there are good reasons for associating Lady Margaret with the manuscript, on the crucial question of whether it is annotated in Lady Margaret’s own hand extreme caution is required. The annotations do not match the hand shown in her letters, of which a substantial number are extant.⁹¹⁰ The annotating hand writes in an irregular italic with rounded clubbed ‘r’s and ‘t’s, whereas her letter-writing hand, and the matching signature, is in a spiky unjoined secretary style.⁹¹¹ Williamson describes “the strange, cramped and irregular handwriting of the letters from the Countess” and the way in which “Her Ladyship spelled as she liked, in various phonetic or partially phonetic forms, and thought nothing of varying the spelling of a word three or four times, in the same letter”.⁹¹² This description does not apply to the writer of the annotating hand, who spells consistently and accurately. A second possible hand for Lady Margaret is shown in a later letter to her husband from circa 1600. This is more cursive, regular, and shows better spelling.⁹¹³ Since writing masters taught secretary and italic as formal styles, it is far from unknown for people in the sixteenth century to have more than one distinct script. However, even taking this hand

⁹⁰⁸ See Scott, p. 190, and letter from Anne Rowe, Assistant County Archivist, 22 May 1998. Letter from Richard Hall, Archivist, Cumbria County Council, 20 October 1998, and *The Margaret manuscript*. The manuscript was bound in leather by Rivière and Son, London, in 1920, when gold lettering was embossed on the cover.

⁹⁰⁹ See Scott, p. 200, and description attached to letter from Anne Rowe, Assistant County Archivist, 22 May 1998.

⁹¹⁰ For her holograph letters see the Hothfield MSS, Cumbria Record Office (Kendal).

⁹¹¹ See Cumbria Record Office (Kendal), WD/ Hoth/ Box 44 Clifford Letters.

⁹¹² Williamson, *George*, p. xii.

⁹¹³ Cumbria Record Office (Kendal): WD/ Hoth/ Box 44, Letter 10. The dating is based on the apparent references in the letter to Earl George’s infidelity.

into consideration, Richard Hall, Archivist of the Cumbrian Archive, who has compared the hand in Lady Margaret's holograph letters against *The Margaret manuscript*, is also not convinced that the marginal glosses are in her own handwriting: "Even given the more cursive nature of the script in the letters, individual formations do seem just a little too different to be sure that the annotations are in the same hand".⁹¹⁴

A further complication to the suggestion that Lady Margaret annotated the manuscript is that on close examination the annotating hand appears to belong to Hand B, who wrote out most of the receipt book, and may have compiled, copied and annotated its entirety. The main text has two main hands. Hand A, which opens and closes the manuscript, is mid- to late-sixteenth century in style.⁹¹⁵ The hand has characteristic "ds" sloping strongly to the left; the "bs" have looped ascenders and pointed bottom left bowl. Hand B is from the late sixteenth century or early seventeenth century, with a mix of italic and joined writing, and loosely joined letters.⁹¹⁶ It changes format from a style that is slow and careful, to one that is faster and more casual with some disintegration of letter forms.⁹¹⁷ The final pages of the manuscript are in a possible third hand, which might, alternatively, be a small version of Hand A.⁹¹⁸ The annotating hand, which is found throughout the manuscript, is, like Hand B, from the very late sixteenth or early/mid-seventeenth century. The congruence of Hand B and the annotating hand is shown at folios 43-4, where Hand B becomes less regular, and, when writing the names of authors in italics, becomes identical to the annotating hand.⁹¹⁹

The most probable identity of Hand B is the alchemist Christopher Tylour, who may have collected the treatises in Hand A. An alchemical manuscript in the Ashmole collection is annotated "Liber Christopheri Tylour" against a main hand displaying many similarities to

⁹¹⁴ Letter from Richard Hall, 20 October 1998.

⁹¹⁵ Hand A is shown at ff. 1r-5r, 77r-95v.

⁹¹⁶ Hand B is shown at ff. 6v-77r, 95v-130r, 137r-8r.

⁹¹⁷ See f. 48r.

⁹¹⁸ ff. 134r - 135r.

⁹¹⁹ The advice of Heather Ummel, Palaeographer, is gratefully acknowledged.

Hand A. The spacing is consistent, both have regular layout and the ascenders of the ‘d’s slope steeply to the left, whilst the ‘s’s have a curved top with straight stem. There is an annotation making the sort of dismissive comment frequently noted by the annotating italic hand as in *The Margaret manuscript*: “But a vayne worckeinge in this maner”.⁹²⁰ Another manuscript containing notes for medicines and ointments, and ingredients bought, shows many similarities to Hand B: despite the untidy layout the letters ‘f’, ‘d’, ‘s’, ‘b’, and capital ‘T’ are similar.⁹²¹ William Black states that an article on “the last” page of Item VI is in the hand of Christopher Taylour.⁹²² If he is referring to the continuous prose on the page labelled as folios 23 to 24, which is torn and faded, then it does resemble Hand B in *The Margaret manuscript*. The apparent signature of Christopher Taylour elsewhere in the Ashmole collection also matches the letter formations of Hand B.⁹²³ If this presumption is allowed, *The Margaret manuscript* shows Christopher Taylour’s signature of ownership on a treatise in Hand A, and his own hand as writer and annotator of the rest of the manuscript. This adds up to a good case for his compilation of *The Margaret manuscript*, perhaps on behalf of Lady Margaret, and its later annotation, following experimentation, of which receipts worked and which were “vayne workeinge”.

At one stage I thought the name “Robarte Clarke” might hold the clue to Hand B from its frequent mentions and its writing like a signature at folio 24r.⁹²⁴ More likely, however, given the frequent other note of the name, is that it is an acknowledgement of the source of the receipt, with the normal preceding pro omitted.⁹²⁵ Robarte Clarke may have been the

⁹²⁰ Oxford: Bodleian Library, Ashmole MS 1482, iii, *Processus Operis*, ff. 137r - v.

⁹²¹ Oxford: Bodleian Library, Ashmole MSS 1447, VI and VII. William Black, *A Descriptive, Analytical and Critical Catalogue of the Manuscripts Bequeathed unto the University of Oxford by Elias Ashmole Esq MD FRS, Windsor Herald, Also of some additional mss contributed by Kingsley Lhuyd, Borlase and others* (Oxford: Oxford University Press, MDCCCXLV) p. 1174.

⁹²² Black, p. 1174 re Ashmole MS 1447, VI.

⁹²³ Oxford: Bodleian Library, Ashmole MS 1392, f. 59.

⁹²⁴ For example, receipts “to fix the mercury vive of Robarte Clarke” (f. 56) “to make upright tincture of Golde” ending “p. Robarte Clarke” (f. 97) and “to make oyl of salt” ending “pro Robart Clarke” (f.11r).

⁹²⁵ Two other alchemical MSS associated with a Robart Clarke do not show the same hands: London: British Library, Harley 1818 and Copenhagen: Old Royal Library 245.

same London-based alchemist mentioned by the writer of a different manuscript connected with the Dee-Kelley circle who includes a receipt “De Spiritu Salis: from Rob. Clerk. London” and may have been known to Christopher Taylour.⁹²⁶

The manuscript contains much helpful material for dating purposes, which supports the hypothesis that the older texts in Hand A were written between 1550 and before 1590, compiled with newer texts in Hand B in the 1590s, and the whole manuscript then annotated in the late 1590s, a time when Lady Margaret was engaged in other forms of patronage, and the period when she came to be regarded as an expert alchemist. The possibility that Hand A belonged to an elderly man writing in the later 1580s/1590s in the style of an earlier period is suggested by a note, in Hand B, after the first treatise in Hand A, *Opus longum longum phisicum Antiquorum*, that “This aforesaid worcke w^{ch} was taught unto Sir Ed: Dyar is a moste longe tedious worcke”.⁹²⁷

Edward Dyer (b. 1543) was friendly with John Dee by 1566 and by 1576 had interests in metallurgy.⁹²⁸ by the time he visited Prague Ralph Sargeant considers he was probably the leading English amateur alchemist.⁹²⁹ Since other receipts in *The Margaret manuscript* show associations with the Kelley circle at Prague it is probable that this receipt was seen by Edward Dyer during this later period. The second treatise in Hand A, *A Treatise on Cachelah*, is annotated “Liber Christopher Taylour” in Christopher Taylour’s signature of ownership. It is very lightly annotated by Hand B, without the normal critical annotated comments. It is possible that this treatise was written circa 1550 and collected by Christopher Taylour, who appears to have been active as a collector, writer, and translator of alchemy circa 1585-1600.⁹³⁰

⁹²⁶ Copenhagen: Old Royal Library 245, f. 2r. I am grateful to Jan Bäcklund for this reference.

⁹²⁷ *The Margaret manuscript*, f. 6r.

⁹²⁸ Sargeant, pp. 38-40, 42, 99.

⁹²⁹ Sargeant, p. 99.

⁹³⁰ Manuscripts in the Ashmole collection, Oxford, show that Christopher Taylour was interested in medicine, mystical philosophy and medieval alchemy and was active as an alchemical manuscript writer, translator and

Whilst there is room for doubt over the dating of Hand A, Hand B writes in the 1590s. There are many explicit or implicit references to dates in the 1590s, particularly in an extensive reading list on alchemy of over thirty printed books and manuscripts at folios 42v-44r.⁹³¹ Although some authors cited are consistent with a date circa 1550, a substantial number of texts referred to were published later than the 1550 date suggested by the Archive for the main text. Works by the Paracelsians Alexander Suchten,⁹³² Blaise de Vigenère,⁹³³ B.G.L. a Portu Aquitano,⁹³⁴ and works published in the 1590s by Jodocus Grewer,⁹³⁵ Edward Vogel,⁹³⁶ and the compilation *Aureum Vellus*⁹³⁷ point to a date for this part of the manuscript

collector from circa 1586–1600. (See Ashmole MS 1406, annotated “Liber Christopher Taylour 1600”; Ashmole MS 1410 signed and dated 1585 by Christopher Taylour; Ashmole MS 1434 “Liber mei Christopher Taylour 1586”; Ashmole MS 1459 “by me Christopher Taylour 1584”; Royal Library MS 242 dated 1579). He translated, compiled or collected alchemical or related literature in manuscript on subjects including surgery, medicaments, the philosophers’ stone, the mystical meaning of number, a secret alchemical alphabet, the vegetable work, and mystical occult philosophy. The authors he collected included John Dastin, Raymund Lull, Pearce the Black Monk, John Bumbelem, Edward Kelley, Isaac Holland, B. Pernoti a Portu Aquitanus and Thomas Charnock. (See Ashmole MSS 1392 Item I; 1406, Item II; 1434; 1447, Item VI, VII, IX; 1450; 1459 Item 7; 1482, Item ii; 1492 Item IX).

⁹³¹ ff. 42v-44r.

⁹³² The work of Alexander Suchten is referred to many times in the main hand with two sources, one printed and one in manuscript: “a booke made by Alixsander A Suchten of Φ [antimony] and is printed” and another by him “unto his freend Mr John Baptista de Seepach and was never printed” which is “bound together herein” (f. 37r). The earliest version of Suchten’s work on antimony, *Liber unus de secretis antimonij*, ed. by M. Toxites, was printed at Strassburg, 1570, with later versions at Basle in 1575 and 1598, and versions in German in 1604. Other works by Suchten were published in the seventeenth century.

⁹³³ A date-specific reference is made to “the Books made by Blaise Vigenere printed in the French tongue, att Paris 1587 there are foure or 3 volumes of them, they are most excellent Bookes, looke well unto them for they are cabalistical” (f. 43v). Blaise de Vigenère’s *de la Penitere* was published in 1587 at Paris.

⁹³⁴ A book by B.G.L. a Portu is suggested reading: “yo muste allsoe peruse the Regina seu Canones aliquat philosophici de lapide philosophico: sett fourth in printe by B.G.L. a Portu” (f. 43v). In 1596 at London John Hester published an English compilation of works attributed to Paracelsus and other authors, which included Isaac Holland (who is also widely referred to in *The Margaret manuscript*, eg. f. 44r) and B.G.L. a Portu Aquitano: The Bodleian Library has an earlier version dated possibly at 1583 published in London by H. Middleton.

⁹³⁵ The reader is referred to “Petrus Bonus [...] in a littell Booke made by one and lately printed called Jodoci Greveri presbyteri secretu et Alani philosophi” (f. 43r). Jodocus Grewer’s *Alani philosophi dicta de lapide philosophico* was published in 1599.

⁹³⁶ f. 43v: “Ewaldo vogelio Belga, where makes an expositione on Geber and Raimonde Lulli. It is a good booke”. Vogel was author of *De lapidis physici conditionibus liber. Quo decorum ab ditissimorum auctorem Gebri et Raimundi Lulli metto dua continetur explicatio* published in 1595.

⁹³⁷ There are textual references in the annotating hand to “Aureum vellus printed in Duche wth picters” (ff. 48v, 44v). *Aureum Vellus* was printed in German (High Dutch) in Basle, 1604, with beautiful pictures, in the style of the famous *Splendor Solis* series. An earlier version, printed in 1598 at Rorschach, is cited by Adam McLean in his edition of *Splendor Solis* (Grand Rapids, MI: Phanes Press, 1991), introduction.

in the late 1590s at the earliest. Hand B also writes about matters dating from the 1590s or later, which are discussed below.

The archive dating of the annotations at 1598 is confirmed by the annotated date “1598” against the title *The preparation of the drawne stone*, which is also annotated C.T.⁹³⁸ A specific reference to *Aureum Vellus* also suggests 1598 as the earliest date for the annotations.⁹³⁹ The similarities of Hand B and the annotating hand, and the hurried messy layout with many insertions and a sense of urgent excitement, suggest that this part of the manuscript may have been annotated very soon after it was first written, by someone in close touch with European trends in alchemical publication.

Dates of original source material in the 1590s, possibly copied out at a later date circa 1598, also emerge from mutually reinforcing references throughout *The Margaret manuscript* in Hand B to a circle around Edward Kelley at Prague, known also to John Dee and recorded in his diary. Kelley’s methods are referred to three times, and the “Sir” suggests a date after his knighting by Rudolf II in 1589.⁹⁴⁰ His brother Thomas Kelley, who settled in Prague, is cited as the source of receipts, referred to as “Sr Edward Kelles brother”.⁹⁴¹ Dee’s diary records that Thomas Kelley was in England in 1589, visited Dee on 23rd December 1589, and in 1590 delivered letters from Dee to his brother, whom Dee now called “Sir Edward Kelle Knight at the Emperor’s Court at Prague”. Dee records receipt of a letter from Thomas Kelley on 17 March 1593. Sir Edward Dyer is reported in *The Margaret manuscript* to have seen a receipt attributed to Thomas Kelley carried out, and Dyer’s opinion is doubted.⁹⁴² A

⁹³⁸ f. 38.

⁹³⁹ *Aureum Vellus*, an early version of the *Splendor Solis*, published at Rorschach 1598, is mentioned in *The Margaret manuscript* at f. 44r.

⁹⁴⁰ See a receipt “for the falling sickness” (ff. 25r-26r) and “A worcke of the Smerell stone” (also referred to in its parallel form of the Emerell stone in the text) is “pro Sr Ed Kelle” (f. 63v).

⁹⁴¹ The instructions “To make the excellent waters out of Saturne to Dysolve Perle for Medicyne: And to open the Bodies of Mettales” were “hadd of Sr Edward Kelles brother” (ff. 19r-20r), as was “An excellent Turbith & oyle” for provoking sweat and vomits” (ff. 20v-21r).

⁹⁴² “But Sr Ed Dyer he did see it downe” (ff. 19r-v). In a further note Dyer’s opinion is doubted: “Whereas it is sayde before by Sr Ed Dyar that he did see mercury precipitate & dissolved into an oyle [...] I doe rather beleave that the Tincture is to be drawne out from the precipitate of our mercury of mercury”(f. 25v).

treatise “taught unto Sr Ed: Dyar by a frenche gentleman, that Mr Webb brought over sea into Englande” probably refers to the Mr Webb who in 1591 sought Dyer’s release at Prague on behalf of the Queen.⁹⁴³ Thomas Webb is also linked to Edward Dyer in Dee’s diary, in 1591, and on several occasions with Dee from 1592-4, notably on 28-29 August 1593 when Dee’s diary records “Mr Webb and the philosopher came”.⁹⁴⁴ However, the reference to Dyer as “Sir” indicates a date after his knighting in 1596.⁹⁴⁵ The Duke of Brunswick, given the context probably the one who lived at Prague, is the source of a method “To make a golden or silver tree to growe in a glasse, from mercury pro the Duke of Brunswick.”⁹⁴⁶ The references to a Mr Digges may refer to Dee’s close friend Thomas Digges the mathematician, who had some interest in alchemy, or perhaps the William Digges who spent a day engaging in philosophy with Dee.⁹⁴⁷

In view of Lord Willoughby’s letter addressing Lady Margaret as a “noble philosophying lady” it is of the greatest interest to find more than one reference to Lord Willoughby in *The Margaret manuscript* as part of the Kelley circle. “My L: Willoughby” has named a receipt of silver for pains in the head “the Vitrioll of Luna”.⁹⁴⁸ More significantly he also brought back “A Mercuriall Water to dysolve Sol and to make an Elixer thereof given by Sr Ed: Kellye unto the Lorde Willobye att his departure from him att his house neer Prage”.⁹⁴⁹ John Dee knew Lord Willoughby from whom he received one employee, Bartholomew Hickman.⁹⁵⁰ However, more significant for this study is the meeting

⁹⁴³ Thomas Webb’s report is transcribed in Michael Wilding, 'Edward Kelly: A Life', p. 15. *The Margaret manuscript*, f. 5v.

⁹⁴⁴ Fenton, pp. 253, 255, 258, 259, 261.

⁹⁴⁵ Sargeant, p. 125.

⁹⁴⁶ f. 57r.

⁹⁴⁷ Stephen Johnston, 'Like father, like son? John Dee, Thomas Digges and the identity of the mathematician', in *John Dee: Interdisciplinary Studies in English Renaissance Thought*, ed. by Stephen Clucas (Dordrecht: Kluwer, 2001). Fenton, p. 254.

⁹⁴⁸ “An excellent preparation of Silver for paynes in the Heade and other Diseases, called by my L: Willoughby the Vitrioll of Luna” (f. 20r).

⁹⁴⁹ f. 21v.

⁹⁵⁰ Fenton, p. 268, 2 Dec. 1594.

recorded by Dee on 3rd December 1593: “The Lord Willoughby, his bountiful promise to me. The Countess of Kent, his sister, and the Countess of Cumberland visited me in the afternoon. The Lord Willoughby dined with me”.⁹⁵¹ This meeting of Willoughby, Dee and Lady Margaret in 1593 could very well have been an occasion for the swapping of alchemical receipts, possibly centred on information or materials brought back from Prague by Lord Willoughby and perhaps in this way fulfilling his promise to Dee. If he did so on the same day that Lady Margaret also visited Dee, it is credible that she also obtained, or arranged for her alchemist to later obtain, other receipts and references from John Dee’s library.

A second circle of association between this manuscript and the Dee/Kelley circle is indicated by the close association of both with Christopher Tylour. In addition to his signature of provenance and the possibility that his is Hand B there is also textual evidence. A treatise within *The Margaret manuscript*, ‘The preparation or makeinge of the drawne stone’, is emphatically annotated “C.T.” with the date 1598. This annotation alone would not be enough to link the manuscript specifically with Christopher Tylour, but other evidence strongly supports this. A little known alchemical text, *Stella Complexionis*, which is referred to within this treatise, is the subject of a separate manuscript in the Ashmole collection which ends “by me Christopher Tylour 1584” and is queried by William Black, the cataloguer of the Ashmole manuscripts as Tylour’s translation.⁹⁵² This is probably correct as Christopher Tylour owned a copy of the Latin original.⁹⁵³ A manuscript now in Copenhagen adds evidence to support Christopher Tylour’s involvement with the treatise on ‘The preparation or makeinge of the drawne stone’.⁹⁵⁴ It is not only inscribed “Liber Christopher Tylour” in

⁹⁵¹ Fenton, p. 263. The confirmation that John Dee is describing Peregrine Bertie, twelfth Lord Willoughby (1555-1601) is given by Dee’s record of Willoughby’s date of birth as 12th October 1555 at Wessel in Gelderland (Halliwell, p. 1).

⁹⁵² *Stella Complexionis* is not a known alchemical text (for example it is not listed by Dorothea Waley Singer) though it alludes to many well-known alchemical authorities such as Arnold de Villa Nova, Rex Morienus, Hermes, Rex Alexander, Plato, and Geber. See Oxford: Bodleian Library, Ashmole MS 1459, and Black, *A Descriptive, Analytical and Critical Catalogue*, p. 1261.

⁹⁵³ Oxford: Bodleian Library, Ashmole MS 1450.

⁹⁵⁴ Copenhagen: Old Royal Collection, MS 240.

several places but includes references to many of the same works discussed in this section of *The Margaret manuscript*, notably Isaac Holland's *Opus Mineralium*, in English, with sayings of B. Pernoti a Portu Aquitanus; writings attributed to Raymund Lull, in English; and *Stella Complexionis*, per J. Bubelem 1384. The other substantial item in *The Margaret manuscript*, 'A treatise on Cachelah', is also annotated "Liber Christopher Taylour".⁹⁵⁵

Jan Bäcklund names Christopher Taylour as part of an alchemical circle around John Dee and Edward Kelley.⁹⁵⁶ Christopher Taylour's books show he was in a position to obtain literature closely associated with Edward Kelley and bearing the influence of John Dee's *monas*.⁹⁵⁷ His copy of *The Philosophical Effects of Mercury in his Tryumphe* includes a series of volumes inscribed with the *monas* sign and two of the volumes bear the signature of Edward Kelley.⁹⁵⁸ Another manuscript inscribed 'Liber Christopher Taylour' includes 'Carmen Edwardii Kelle'.⁹⁵⁹ Elias Ashmole copied out a treatise ending with the initials C.T. followed by an apparent signature of Christopher Taylour which not only bears the *monas* sign but discusses its meaning as "number of One, Chaos, Hylus, the Green Lyon", and cites Dr Khunrath "who was my masters master", linking Taylour to European alchemical circles known to Dee.⁹⁶⁰ The sort of alchemy that interested him overlapped with that of Dee and Kelley. He owned works that reveal an interest in the mystical meaning of number, geometric patterns, cabala, a secret alchemical alphabet, as well as traditional alchemical texts.⁹⁶¹ Based

⁹⁵⁵ *The Margaret manuscript*, ff. 77r-95r.

⁹⁵⁶ Jan Bäcklund, 'In the Footsteps of Edward Kelley', in *John Dee: Interdisciplinary Studies in English Renaissance Thought*, ed. by Stephen Clucas (Dordrecht: Kluwer, 2001).

⁹⁵⁷ Bäcklund, 'In the Footsteps of Edward Kelley'.

⁹⁵⁸ Copenhagen: Old Royal Collection, MS GKS 247.

⁹⁵⁹ Copenhagen: Old Royal Collection, MS 242.

⁹⁶⁰ Oxford: Bodleian Library, Ashmole MS 1392, f. 39. Dr Heinrich Khunrath (1560-1605) was an influential Paracelsian alchemist with a strong cabalist-spiritual emphasis. He visited Dee in Europe in 1589 (Fenton, p. 239). In this manuscript his name is spelt Khunradt and Ghunradt. The repeated use of an accent over the letter "u" by Hand B/annotating hand may suggest that Christopher Taylour had spent time in Germany where this was customary, unlike England where it was rarely done (Samuel A. Tannenbaum, *The Handwriting of the Renaissance* (London: George Routledge & Sons Ltd., 1930)).

⁹⁶¹ See Oxford: Bodleian Library, Ashmole MSS 1482, 1392, and 1406, Item 11, A Treatise on the numbers one and two, and of Unity and Chaos, annotated [by the author] "Liber Christopher Taylour 1600".

on the dating of Christopher Taylour's other books, it is most likely that his contribution to the manuscript was made between 1584 and 1600.

There are two possible identities for Christopher Taylour. In the lists of alumni of the University of Oxford is a Christopher Taylo(u)r of Yorkshire, *plebeii filius*, the son of a common man, who matriculated from Oriel College on 2nd July 1585 aged 20.⁹⁶² The more likely candidate, however, is the Christopher Tailer or Taylor, who was vicar of Bradford from 1568 until 1595, when he was succeeded by Caleb Kemp.⁹⁶³ His will, dated 1598, leaves bequests to his wife Alice, his son Nathaniell, and to his daughters Alice, Marie and Nester. He does have a substantial number of books, which were to be divided into three parts, two parts for Nathaniell, and the other part divided between Marie and Alice – suggesting that he had at least two daughters who read.⁹⁶⁴ The will also lists Robert More as an executor, with responsibility for sharing out the books. More was the Puritan Rector of Guiseley, which living he obtained through the Earl and Countess of Cumberland, along with the Earls of Bedford, Warwick, Oxford, and Willoughby.⁹⁶⁵ There is therefore a direct link between the Cliffords, Lord Willoughby and the vicar Christopher Taylo[u]r. It suggests that the vicar may have prepared the receipt book for Lady Margaret towards the end of his life, or that Robert More obtained the manuscript for her after Taylo[u]r died in 1598. The Bradford Cathedral records suggest a possible ambiguity in, or development from, Christopher Taylo[u]r's use of Catholic words and Puritan links with More. The alchemical receipt book also shows two aspects, an interest in medieval alchemical texts, including one which presents the preparation of the stone in terms of

⁹⁶² Joseph Foster, *Alumni Oxoniensis: the members of the University of Oxford 1500-1714* (Oxford, London: Parker and Co, 1891-2). Spelling of Christopher Taylour/Taylor: The Alumni lists give Taylor; Oriel College have Taylour (letter from Mrs E. Boardman, Archivist, Oriel College, 14th December 1998).

⁹⁶³ Letter dated 1st July 2001 from Astrid Hansen, Honorary Archivist, Bradford Cathedral.

⁹⁶⁴ The will is held by the Borthwick Institute of Historical Research, York.

⁹⁶⁵ Spence, *Lady Anne Clifford*, p. 9.

Christ's passion, as well as the new Paracelsianism.⁹⁶⁶ The alchemical writer Christopher Taylour's comparison of laboratory work with the life of prayer also supports the hypothesis that he was a vicar.⁹⁶⁷

Christopher Taylour *has* left evidence that he had a noble lady as a patron. In *A mystical treatise of occult philosophy or the philosopher's stone addressed to a lady* he addresses the lady using the humble submission conventional for a client to a patron, suggesting that he is "not able to learn your honour little further", and noting "your honour are want to measure and Judge ye Errours of your Honours Wellwillers. And yett your honour may very well esteeme me vaine presumptious y[e]t I have soe boldly busied myselfe to goe about to write of this".⁹⁶⁸ He responds to the noblewoman's request to address her theoretical doubts about alchemy.⁹⁶⁹ She already has, he explains, the deepest understanding in natural philosophy but has a zealous desire to know more. Lady Margaret is a likely candidate as this honourable lady. If he were the Vicar of Bradford, he would have known Lady Margaret whose main residence was nearby at Skipton: the Cliffords were a powerful presence in the area, and several other Taylours were in their employ, including Anne Taylour, whom Lady Margaret employed as governess to her daughter.⁹⁷⁰

The name of Robarte Clarke may also link *The Margaret manuscript* to the Dee-Kelley circle. A Robert Clerk of London is named in one of the Copenhagen manuscripts linked with the Dee-Kelley circle.⁹⁷¹ A number of Robert Clarkes are listed amongst the

⁹⁶⁶ 'Miss Margaret Lister's notes on the clergy of Bradford Parish Church/Cathedral', supplied by Astrid Hansen, 1st July 2001. Oxford: Bodleian Library, Ashmole MS 1459 *Stella Complexionis* includes penance, preparation through cleansing, taking and breaking the stone, a discussion of the role of blood, the passing out of the body of the soul through great pain, the separation of spirit and soul in the tears, which are mixed with the ashes of the body and buried in a dark grave for three days, after which the Stone is said to quicken and become alive "and will do good to all men".

⁹⁶⁷ Ashmole MS 1392, *To a noble Lady*, f. 56.

⁹⁶⁸ Oxford: Bodleian Library, Ashmole MS 1392 ff. 1-8.

⁹⁶⁹ Ashmole MS 1392, Item 1.

⁹⁷⁰ Mrs Anne Taylour was wife of William Taylour, and Stephen and John Taylour were amongst Earl George's trusted officers. Spence, *Lady Anne Clifford*, pp. 12, 188.

⁹⁷¹ Copenhagen: Old Royal Library MS Gks 245 f. 2r.

Cambridge Alumni, including “Robert Clarke, Matric. pens. St Johns 1585”; and more promisingly, due to his Cumberland connections, “Robert Clarke, Adm. sizar at Queens’, Mar 30, 1583. Of Cumberland. BA 1586-7. MA 1590”.⁹⁷² Further evidence is required before any supposition can be made that this Robert Clarke found employment with the Earl and Countess of Cumberland after receiving his MA in 1590.

Taking the evidence together, the hypothesis that *The Margaret manuscript* was compiled and annotated in the late 1590s by Christopher Taylour, a local Paracelsian vicar who knew members of the Dee-Kelley circle, including Lady Margaret’s friend Lord Willoughby, has much to commend it.⁹⁷³ It may have been compiled for Lady Margaret, or passed to her after Taylour’s death by Robert More. Although this means that the text is probably not authored by a woman, it offers the opportunity for a reading of this complex alchemical document from a noblewoman’s point of view, as patron or recipient.

The Margaret manuscript offers the reader a rich stratum of contemporary Elizabethan alchemy, presented entirely in English, with medieval as well as neoplatonic, Paracelsian and cabalistic references and material.

References to standard medieval authorities such as Raymund Lull, John Dastin, Arnald de Villa Nova and Jean de Mehun are supplemented by references to less well known authors including Johannes Sammer’s book on the stone of the philosophers, and the text *Stella Complexionis*, in which the preparation of the stone is presented using metaphors of Christ’s passion.⁹⁷⁴ Although it is not possible to be certain, Lady Margaret may have had

⁹⁷² John Venn, *Alumni Cantabrigienses* (Cambridge: Cambridge University Press, 1922-54).

⁹⁷³ If the manuscript (or parts of it) came to the Cliffords after Christopher Taylour died other problems require explanation: for example, how did Christopher Taylour know Lord Willoughby? If Christopher Taylour is not Hand B, the question of who assisted Lady Margaret or wrote the manuscript which she later obtained remains to be answered.

⁹⁷⁴ *The Margaret manuscript*, f. 43r. Glasgow: University Library, Ferguson MS 196, 17th century, "Written by an Alderman of Pariss to his sonne at his departure out of this worlde in anno 1432 by John Sammer" (re. the elixir and red and white stone). Oxford: Bodleian Library, Ashmole 1459 f. 98 Taylour’s translation of *Stella Complexionis* ends: “Another Tytle to ye worke. The Starr of ye Complexion of the perfect Maistry of the secret Art of Alchimie, made & composed by the famous philosopher John Bunbelem of England, & by him dedicated to Richard the 2nd King of England: in the year of our Lord & Saviour 1384”.

access to an English manuscript translation of Arnald de Villa Nova's *Novem Lumen, Flos Florum* and *Epistola and Regem Neapolitanum* and English fragments of early sixteenth century alchemy.⁹⁷⁵ Similarly it is possible that she had access to the older material that came to light at Skipton Castle in 1739.⁹⁷⁶ Some of the medieval texts are overtly gendered, with emphasis on women's sin and penance, their role in the work of purification, and the use of the metaphor of pregnancy as explanatory of alchemical processes.⁹⁷⁷

Jon Quitslund has suggested that Lady Margaret took seriously the idealistic platonic philosophy of Edmund Spenser's *Fowre Hymns*, for which she and her sister Anne were patronesses.⁹⁷⁸ Platonic ideas are implicit in much alchemical philosophy, but the suggested reading in *The Margaret manuscript* of Giovanni Francesco Pico della Mirandola's *Conte della Concordia, Libri iii, De Auro*, suggests a specific interest in the Italian neoplatonic tradition and its discourse on love.⁹⁷⁹

However platonic dreams of winged ascent to a golden heaven are counterbalanced by a more analytic intellectual Paracelsianism than is displayed in the French manuscripts discussed in chapter four. The main writer of *The Margaret manuscript* shows a critical knowledge of the literature of the 1590s or early 1600s in various languages in manuscript and print, and owns or has access to a substantial collection of alchemical-Paracelsian books. This is demonstrated most clearly in a reading list included within the treatise "The preparation or making of the drawne stone", associated with Christopher Tylour.⁹⁸⁰ Twenty nine texts are recommended, of which seven are by Paracelsus, whose name is emphatically

⁹⁷⁵ Cumbria Record Office (Kendal), Hothman MSS 2 and 3.

⁹⁷⁶ These include *A Treatise entituled Woemens Work and Childrens playe*, various old manuscripts of alchemy, George Ripley's *The Compound of Alchymy*, 1591, and Roger Bacon's *Mirror of Alchymy*, 1597. See Spence, *Lady Anne Clifford*, pp. 257-259.

⁹⁷⁷ For example, *Stella Complexionis*, uses the vocabulary of penance, and pregnancy; the text on *Woemen's Work* addresses purification.

⁹⁷⁸ Jon A. Quitslund, 'Spenser and the Patronesses of the Fowre Hymns: "Ornaments of All True Love and Beauty"', p. 200.

⁹⁷⁹ *The Margaret manuscript*, f. 43r. The dubious attribution, discussed by Lynne Thorndike, *History of Magic and Experimental Science* (New York: Macmillan, 1923), V, p. 540, does not affect this point.

⁹⁸⁰ *The Margaret manuscript*, ff. 42r-44r.

repeated.⁹⁸¹ The combination of references to Paracelsus, Isaac Holland and a Portu Aquitanus suggest familiarity with the English Paracelsian compilation printed at London, 1596 and possibly also in 1583.⁹⁸² Bernard Treves' reply to Thomas of Bologna, printed in Paris, 1564, cited by Lynne Thorndike as part of the Paracelsian revival, is noted, as are the secrets of Jodocus Grewer.⁹⁸³ *Aureum Vellus*, which includes the *Splendor Solis*, with its semi-mythical references to Paracelsus, is referred to "in duche with picters".⁹⁸⁴ Blaise Vigenère is named for his cabalistic books "printed in the french tongue, att Paris 1587". The author is aware of the debates over Paracelsianism: Gaston Dulce's defence of the art of transmutation against Erastus (who wrote hard-headed Protestant attacks against magic) is included;⁹⁸⁵ "Robert Tauladane in his booke againste Braceschus" refers to Tauladanus' book against Giovanni Bracesco, the interpreter of Geber.⁹⁸⁶ The writer's knowledge of these matters is much wider than that contained in one manuscript: there are several references to

⁹⁸¹ Paracelsus his booke of Vexatione (ff. 42v, 43v), Paracelsus his seaven bookes of naturall things, And alsoe his book of Graduatinge Waters (f. 43r) and Paracelsus his booke de Gradationes (f.43r), Paracelsus his Manuale (f. 44r), Paracelsus his booke de Tinctura physicorum, Paracelsus his Archidoxes, Paracelsus his Booke of the Compositione of Mettales (f. 44r). His name is emphasised at ff. 44r, 61r.

⁹⁸² John Hester, ed., *An English compilation of works attributed to Paracelsus, and other authors, including 'certaine secrets of Isacke Hollandus concerning the vegetall and animall water': A hundred & fourteen experiments & cures; translated out of the Germane tongue into the Latin. Whereunto is added certaine [...]. Workes by B G a Portu Aquitano. Also certaine secrets of Isacke Hollandus concerning the vegetall and animall water. Also the spagyric antidotarie for gunne-shot of Josephus Quirsitanus*, (London: 1596). The Bodleian Library has a version possibly dating from 1583 (Tanner 880), dedicated to Walter Raleigh.

⁹⁸³ Both references f. 43r.

⁹⁸⁴ *Aureum vellus, Aurei vellis, oder, Der guldin Schatz: un dunstkamer tractatus quintus & ultimus*, (Basle: 1604) is in German (i.e. High Dutch), and has fine illustrations. Adam McLean, in his introduction to *Splendor Solis*, cites an earlier version of the *Aureum Vellus* in 1598 at Rorschach, and a French version, *La Toyson d'Or, ou La Fleur des trésors*, translated by L.I., (Paris: 1612). In the mid seventeenth century William Backhouse made a translation from the French (see London: British Library Sloane MSS 2503/3613). Elias Ashmole also prepared a copy for himself (Oxford: Bodleian Library, Ashmole MS 1395). McLean links the *Aureum Vellus* with the *Splendor Solis* series, suggesting that both pertain to the Trismosin legend, and spring from a common new impulse in symbolism during the late sixteenth century, begun by the *Rosarium Philosophorum* in 1550.

⁹⁸⁵ "Gaston Clavens Subpreses Nivernem" (f. 43r), referring to Gaston Duclou or Clavens, a legal magistrate of Nevers, published 1590 (Lynn Thorndike, *History of Magic and Experimental Science*, V, p. 666).

⁹⁸⁶ f. 51r, and Thorndike, V, p. 546, who notes that Tauladanus, published in 1561 in Gratarolus, frequently notes Lullian writers and Geber with approval.

books owned and cross-references to matters taught elsewhere in this “book”.⁹⁸⁷ Christopher Taylour’s treatise to a noble lady is also explicitly Paracelsian.⁹⁸⁸

An explicitly magical Hebrew-cabalist influence colours the two treatises in *The Margaret manuscript* associated with Christopher Taylour, something not encountered in the Italian or French texts, even though the Frenchman Blaise de Vigenère is an important source for *The Margaret manuscript*. In his treatise to a noble lady, Christopher Taylour mixes Hebrew references to the tabernacle, Jehovah, and Shamarin [sic]⁹⁸⁹ with Christian and alchemical language and discussion of the *monas*, as well as revealing that his master’s master was the cabalist-chemist Dr Khunrath.⁹⁹⁰ This suggests that these alchemical-cabalist ideas and secrets were shared with some women, and most probably with Lady Margaret.

The high intellectual level of the mind behind *The Margaret manuscript* is illustrated by the positive emphasis on the work of the Frenchman Blaise de Vigenère, whose work is amongst *the* most sophisticated examples of Christian humanist-Paracelsian-cabalistic-alchemical writing. A cursory glance at the receipt book might suggest that his advice is purely technical: for example, as a source on the graduation of copper, refining it through grades of heat, “very much good doctrine dispersedly in his Books, of Venus”.⁹⁹¹ However de Vigenère’s books discuss Venus in sophisticated humanist terms that combine cabala, alchemy and classical mythology.⁹⁹² A technical process for making spiritual a material

⁹⁸⁷ “And alsoe by another Booke w^{ch} is among my bookes” (f. 37r); re Rouillisco Pedemontanus’ book in French, it “remayne amongst my bookes” (f. 43v); marginal annotation re Geber “And is amongst my bookes” (f. 43v).

⁹⁸⁸ Oxford: Ashmole MS 1392, f. 8, cites Suchten, and at f. 10 discusses Paracelsus’ definition of the quinta essence.

⁹⁸⁹ The word “Shamaim” is used in ‘The naturall Chymicall Symbol or short Confession of Doctor Kunwrath’. See Oxford: Bodleian Library, Ashmole MS 1459.

⁹⁹⁰ Oxford: Bodleian Library, Ashmole MS 1392, ff. 1-59.

⁹⁹¹ *The Margaret manuscript*, f. 6r.

⁹⁹² In *Les Images aux Tableaux de platte peinture* (Paris, 1578; Paris 1597) de Vigenère proposes that the myth of Prometheus represents the alchemical separation by fire and discovery of the hidden secrets of nature. He finds representations of the three Paracelsian substances, salt, sulphur and mercury, in the mythology of Minerva’s birth, and comments on the castration of Saturn and the birth of Venus in detail from the point of

called *electrum* is strongly associated with Paracelsus and de Vigenère in *The Margaret manuscript*.⁹⁹³ Paracelsus' method of refreshing the stomach of the *estrich* (an aspect of mercury) through drawing off (distilling) the *electrum* to make it more spiritual is described,⁹⁹⁴ and de Vigenère's teaching of the making of *electrum* as prepared gold, by the graduation of the body of *Sol* in tincture, is endorsed "he hath written exceedinge well".⁹⁹⁵ Cabala is suggested by the comment on making *electrum*: "this worke is the doublinge of a Circle".⁹⁹⁶ At the end of his treatise to a noble lady, Christopher Taylour draws a circle containing a triangle, square and circle with the motto "All of One, All into One".⁹⁹⁷

The main author appears to have become increasingly interested in the detail of alchemical and Paracelsian images as the manuscript was put together, and to be looking for correlations between chemical process and symbolic images. Paracelsus' *De Tinctura Physicorum* is listed in the book list, but its detailed imagery is used only towards the end of the manuscript.⁹⁹⁸ In *A very good practice and philosophicall* the medieval imagery of Bernard Trevisan's fountain and the purification of the King and his clothing in gold is discussed in detail.⁹⁹⁹ Number symbolism is used to describe mercury *vive* "in which [the numbers] 2. 3. 4. are mystically inclosed as in a chest" before the unfolding of a process in

view of the philosophical chemist. The falling of the generative parts of Saturn (lead) into the sea (salt) gives birth to Venus and Vitriol, which for de Vigenère represent two aspects of copper, whose sympathy enables vitriol to convert iron into copper. The joining of Venus/Vitriol and Mercury results in the production of a child, called *Amour* for its great friendship, agreement and equality, and *Cupidon* because it is desired by all. This child is a seed fallen from sky to sea to form Venus, who is also named philosophic Vitriol, and *Ziniar* (Arabic for the light of beauty which tints other metals into gold and acts as sovereign medicine of the human body). (Sylvain Matton, 'Alchimie, Kabbale et Mythologie chez Blaise de Vigenère: L'Exemple de sa Théorie des Eléments', in *Blaise de Vigenère, poète et mythologue au temps de Henri III*, ed. by Marc Fumaroli (Paris: Centre V.L. Saulaier, 1994) pp. 111-137 (pp.135, 130)).

⁹⁹³ Classically *electrum* was an alloy of gold and silver. Other meanings for *electrum* are given in the Oxford English Dictionary: an alloy of copper, nickel, and zinc. Paracelsus addressed the making of *electrum* in *Das Manuale de lapide philosophico medicinali*, Sudhoff, XIV, pp. 421-432.

⁹⁹⁴ ff. 60v-61r.

⁹⁹⁵ ff.121r, 128r.

⁹⁹⁶ f. 121r.

⁹⁹⁷ Oxford: Bodleian Library, Ashmole MS 1392, f. 60.

⁹⁹⁸ *The Margaret manuscript*, f. 44r.

⁹⁹⁹ *The Margaret manuscript*, ff. 121r-130r.

the philosophical egg.¹⁰⁰⁰ Many of the symbolic images used are also found in *Splendor Solis* and its predecessor, named in *The Margaret manuscript*, the 1598 version of *Aureum Vellus*.¹⁰⁰¹ The colours of the rainbow are observed, and as a chemical process apparently continues, Paracelsian terms are introduced: the Lily, said in Paracelsus' Manual to be the mercury *vive* of gold; the stomach of the *estrich* where *electrum* is purged; the sharpening effect of the Eagle, which is described as vulgar mercury animated with a golden oil of vitriol, to become the Lily, or mercury *vive*.¹⁰⁰² An annotation against a receipt for *A good Turpett Mineral* introduces the symbols of the blood of the red lion, the white eagle and the green lion, to explain chemical processes.¹⁰⁰³ These images are introduced as an annotated layer onto an alchemical sequence of the death and raising or animation of the dead body, and may have represented significant stages in a perceived transubstantiation process.¹⁰⁰⁴

The prayer which Christopher Tylour passes on to the noble lady suggests that prayer and laboratory work can be perceived as similarly significant activities: he asks the wisdom of God to help him to be “a Familiar Instructor in place of prayer in ye Laboratory & in my whole life as well active as contemplative”.¹⁰⁰⁵ For Christopher Tylour, the alchemical philosophy he relates to a noble lady is “ye Imitateing of God according to man's ability” understood in relation to the transubstantiation.¹⁰⁰⁶ He uses terminology similar to that of Isabella Cortese on the creation of “una terra spirituale” involving two parallel worlds, the Great and Little. Cortese's cleric describes the spirit as “privatione”, a middle substance

¹⁰⁰⁰ *The Margaret manuscript*, f. 122v.

¹⁰⁰¹ For *Aureum Vellus* see f. 44r. The images include: an island in the midst of the sea; the bird flying by night without wings, whom the celestial dove with perpetual ascension and descension changed into the blackness of a raven's head; which afterwards became a peacock's tail, and in time took on the feathers of a swan; the deepest redness of the world which expels all accidents from the body; the black, upper part of mercury named the crow's bill or head (*The Margaret manuscript*, ff. 125r-v).

¹⁰⁰² *The Margaret manuscript*, ff. 126v-127v.

¹⁰⁰³ f. 188v. Paracelsus, in *De tinctura physicorum*, uses the first two terms; the third is known from the Ripley Scrowle, though Christopher Tylour (Oxford: Ashmole MS 1392, f. 46) claims it as a name for the *monas*.

¹⁰⁰⁴ See for example f. 48r.

¹⁰⁰⁵ Oxford: Bodleian Library, Ashmole 1392, f. 56.

¹⁰⁰⁶ Oxford: Bodleian Library, Ashmole MS 1392, f. 56.

between matter and form which translates as “denial” or “being deprived of”: Taylour describes how the Aetheriall Spirit, a middle substance between matter and form, replenishes the emptiness of the “Globe of the Earth” and mediates to create a body in the virginal womb of the greater World. Unlike Cortese, however, Taylour is explicit about the relationship with communion: the body is the philosopher’s stone, the spirit of Gold and Jesus Christ, and the little world “is consubstantiall to ye parent”.¹⁰⁰⁷

In the seventeenth century Gabriel Naudé and John Davies articulated one humanist stance by describing how the terms Wisdom, Philosophy, Natural Magic and Cabala were sometimes considered to represent the same thing in different traditions.¹⁰⁰⁸ *The Margaret manuscript* emphasises cabala and magic and has just one reference to wisdom, as the fountain from which health and riches flow, although Christopher Taylour distinguishes “those learned in Godly wisdom”, like David, Solomon and the apocryphal Wisdom of Solomon, from the scholastically learned.¹⁰⁰⁹ Other people represent Lady Margaret and her alchemy as part of the tradition of the biblical woman of wisdom, drawing on the sapiential books of the Bible, in which Wisdom appears in feminine guise.¹⁰¹⁰ The establishment of her wisdom is probably more important than the alchemy for which it provides a safe context. Lady Anne’s account, in which she also praises her mother’s alchemical and distillatory skills, considers the latter “so eminent [...] both for her piety and prudence, that to her may very fitly be applied that saying of Solomon, Proverbs 31.29 ‘Many daughters have done well, but thou excellest them all’ ”¹⁰¹¹ The biblical question answered by Solomon is “Who can find a virtuous woman?”, and this most excellent daughter to whom Lady Margaret is

¹⁰⁰⁷ Oxford: Bodleian Library, Ashmole MS 1392 f. 40.

¹⁰⁰⁸ Gabriel Naudé, *The History of Magick* transl. by John Davies (London [n.p.] 1657). A French version was published at the Hague, 1653. Jane Stevenson, 'Female Authority and Authorisation Strategies in Early Modern Europe', in *This Double Voice*, ed. by Danielle Clarke and Elizabeth Clarke (Basingstoke: Macmillan, 2000) pp. 16-40

¹⁰⁰⁹ *The Margaret manuscript* f. 51r. Oxford: Bodleian Library, Ashmole MS 1392, ff. 20, 13, 14, 40.

¹⁰¹⁰ These are Job, Proverbs, The Song of Songs, Wisdom of Solomon and Ecclesiasticus.

¹⁰¹¹ Gilson, p. 28.

compared is trusted by her husband, is hard-working, helps the poor and needy, clothes herself in strength and honour, opens her mouth with wisdom and kindness, and is called blessed by her children and husband. Lord Willoughby also associates Lady Margaret's alchemy with Solomon, "wisdom's works", and Ecclesiastes 8 which begins "who is the wise man? And who knoweth the interpretation of a thing? A man's wisdom maketh his face to shine". Lady Anne describes her mother's daily reading of the book of Job after the death of her second son Robert on 14th May 1591 at Lady Anne's Hertfordshire home, a point reinforced by the dedication that year of Henry Peacham's *A Sermon upon the last three verses of the first chapter of Job* to Lady Margaret and her sister Lady Anne under the Clifford crest.¹⁰¹² The association of alchemy and Job had precedents, and was popular in seventeenth century alchemical circles: in the 1620s Robert Fludd considered that "a more excellent description of the materiall Elixir cannot be made by the wisest Alchemist or deepest philosopher" than Job 28.¹⁰¹³ Lady Anne depicts her mother with the psalms of David and says that before her death she often quoted from Psalm 24, "The Earth is the Lord's, and all therein is".¹⁰¹⁴

Whilst the woman of wisdom who is associated with alchemy marries and carries out many normal activities within society, the image of the Virgin in alchemy requires a different type of apprehension, apparently pointing to an exceptional and unusual quality of the soul, in matter and in the human being. I have discussed how some of the imagery of alchemy can be related to the Virgin Mary and the process of the birth of Christ in chapter four. Christopher

¹⁰¹² Williamson, in *George*, p. 289, cites Lady Anne Clifford. Williamson in *George*, p. 291, says this copy of Peacham cannot be found. The three verses include the phrase: "Naked came I out of my mother's womb, and naked shall I return thither: the Lord gave, and the Lord hath taken away".

¹⁰¹³ Thomas Charnock (fl. 1560s) addressed Queen Elizabeth on the book of Job as an alchemical source, whilst describing Queen Elizabeth's grandfather Henry VII as the "second Salamon" [sic] for his wisdom. Allan Pritchard, 'Thomas Charnock's Book Dedicated to Queen Elizabeth', *Ambix*, 26 (1979) 56-73 (pp. 64, 70). On alchemical interpretations of Job see also Raphael Patai, *The Jewish Alchemists: A History and Source Book* (Princeton, New Jersey: Princeton University Press, 1994), p. 24. Fludd cited Job (22: 23-4 and 28:1). See Robert Fludd, on Job 28, verse 1-6, in Oxford: Bodleian Library, Ashmole MS 766, f. 10r. *Truth's Golden Harrow*.

¹⁰¹⁴ Gilson, p. 20.

Taylor writes that “the Virgin Alchimy is a cleane and an Immortall Virgine who [...] requireth a mentall or spirituall man such as in my time I have as yett seene fewe [...] they only [tha]t from ye Soule thirsteth, after knowledge of Nature, and whoe w_ith a true Godly desire hath exercised themselves in chymicall matters may search and enter into to those inward partes of nature”.¹⁰¹⁵ In *The Margaret manuscript*, the term *Lac Virginis* is frequently used for the quintessence of mercury after it has been sublimed, calcined and distilled.¹⁰¹⁶ Virgin’s milk carries symbolism of the food of Christ, which is both spiritual and physical: since Mary’s pregnancy was of divine origin so was her milk, yet the infant Jesus suckled on it. The alchemical *lac virginis* is also miraculous: it “resolveth all Bodyes and doth wonderfull strainge matters by the effect therof”.¹⁰¹⁷ In Christopher Taylor’s translation of *Stella Complexionis*, the tears from the great weeping of mother and son, joined in the vessel, as they experience the excruciating pain of fire, are believed to contain the spirit and soul that leaves their joined body: the tears are to be collected with great diligence, imbibed with the ash of the body, buried in a dark grave for three days, before the quickening of the resurrected body or stone.¹⁰¹⁸ The virgin Mary, in her unity with Christ, thus offers a female model for the acceptance and transmutation of suffering into the resurrected life, an image poignantly expressed to Lady Margaret elsewhere in the metaphor of her tears as “celestiall dew”.¹⁰¹⁹

The location of Lady Margaret’s alchemical practice in a much wider field of knowledge is indisputable, yet *The Margaret manuscript* is an entirely alchemical document, suggesting its production to order by a specialist. It comprises mainly hands-

¹⁰¹⁵ Oxford: Bodleian Library, Ashmole MS 1392, ff. 8-9.

¹⁰¹⁶ *The Margaret manuscript*, f. 114v.

¹⁰¹⁷ f. 115v.

¹⁰¹⁸ Oxford: Bodleian Library, Ashmole MS 1459, ff. 96-97.

¹⁰¹⁹ L.T., *Prosopopeia*, dedicated to Lady Margaret, and in the preface to the reader compares the tears of Marie to “thou lock of Gedeon filled with celestiall dew”.

on, experimental alchemy and medicine, often merged with a philosophical-mystical aspect implicit in phrases such as “animated”. Where a practical point for a receipt can be discerned, it is often medicinal. The medicinal receipts often make distilled oils, based on gold, antimony, red lead, silver, or mercury.¹⁰²⁰ Sometimes the dosage and method of taking the medicine is explained. Other receipts seek to make or increase gold and silver by transmutation, sometimes starting with silver onto which a spiritualised or animated substance is projected to make gold, or by “fixing” silver into gold.¹⁰²¹ An alternative beginning is to take lead and seek to turn it into silver, using *aqua fortis*, *sal armoniac*, and *crocus martis*.¹⁰²² A gentlewoman of York provides a method for increasing silver, using animated mercury, silver, saltpetre and sulphur.¹⁰²³ Gold is “grown” (increased in volume) in a glass by distillation using mercury, *aqua regale*, gold, and powders of alum, verdigris, and red arsenick.¹⁰²⁴ In one case the gold produced is said to have been through the standard goldsmiths’ test of eye, touch and hammering.¹⁰²⁵ With the more philosophic treatises there appears to be another spiritually defined and secret purpose.

This receipt book is designed to be used in a well-equipped laboratory with many expensive ingredients. Vessels range from simple equipment like an “egge glasse” and bath, to “a great glasse bodye with a head and receaver”, “burninge glasse”, “a Lamp in an Oven that maye have gentle heat w_ithin and perpetuall”, “a large retort of glasse”, furnace, vapour bath, *balneo maria*, strong earthen retorts, glass mortar and pestle, and a reverberator.

Different grades and types of fire are specified, using variously sand, white sand, ashes, a

¹⁰²⁰ See: "To prepare and make ye oil of Sol" (ff. 7r-17v); "to make the excellent waters out of Saturne" (ff. 19r-20r); "an excellent preparation for paynes in the head" (f. 20r); "an excelent turbitt and oyle" (ff. 20v-20r); "a Mercuriall water" (ff. 22r-23r); "for the falling sicknesse" (ff. 25r-26r); "preparatio pro Elixir" (f. 97r); "to make oyl of Salt" (f. 98r).

¹⁰²¹ "A worcke wch I had of one Jacobus" (f.23r). "To transmute Luna into perfect Sol" (f. 53r). "Fixatio Luna in Sol" (ff. 53v-54r).

¹⁰²² "A proved worcke by mr Eden to tourne Mercury of Saturn into perfect Luna" (f. 51v).

¹⁰²³ "Another practis to make Luna used by a gentlewoman of Yorke" (ff. 52r-v).

¹⁰²⁴ "To make a golden or silver tree to growe in a glasse" (f. 57r).

¹⁰²⁵ "A Treatise of Cachelah" (ff. 77r-94v).

“circle fyer”, and a good cementing fire. Gold, silver, antimony, purified sulphur and its common form as brimstone, saltpetre, sal armoniac, iron, copper, tin, lead, red lead, tartar, rain water, sea salt, pumice stone, coral, pearl, wine vinegar, and spirit of wine are all used. An expensive ingredient is time, of which much is required: the *longus opus*, for example, is described as a long tedious work of three years.¹⁰²⁶

A sharply critical mind observes, experiments, tests receipts and evaluates results. Some methods are castigated in annotations: “I doubt this is but a vitrioll made out of the Sulphur and not of the Luna examen these thinges wel, and you shall fynde the desayte therof”; “These resaites are desaites and but vayne toyes”; “this [...] did prove of noe worth”.¹⁰²⁷ Others are assessed as good methods that work, with advice on further reading and better materials.¹⁰²⁸ The manuscript demonstrates a movement away from faithful acceptance of medieval treatises to an intelligent assessment based on informed knowledge of best current practice and theory, and experimental testing. The difference of the world-view in which this experimentation took place from that of modern science does not diminish the contribution of this type of critical analysis to the beginnings of a modern approach to science.

Works available in French by Rouillasco and de Vigenère are noted in expectation that they will be read, either in the original or in translation.¹⁰²⁹ The treatise on *Cachelah* is annotated “translated out of a french coppye”.¹⁰³⁰ Hand B not only owns books in French, but

¹⁰²⁶ f. 6r.

¹⁰²⁷ ff. 27v, 23v.

¹⁰²⁸ f. 24r; 1r, “John Dastyn is a good author”; f. 45v, “a practice is excellent”; f. 59r, “Note well this practis and prove it”; f. 18v, “Salte of Hallensis is the best for this purpose”; “the Epistle of Andree de Blawen Medici is a most excellent learned Epistle”.

¹⁰²⁹ ff. 43r-v. for example, “Blaise de Vigenere, printed in the frenche tongue [...] looke well unto them”; and Philip Rouilliasco Pedemontanus’ “great booke of the Theoricke and practice of Alchymie written in french and never yett printed [...] and it is translated into englishe and remaynes amongst my bookes”. This entry is annotated: “Note there is another written booke in frenche of Rouilliasco, wch is of preparinge of mercuriall waters or his Aqua Vite”.

¹⁰²⁹ f. 43v.

¹⁰³⁰ f. 77.

admires French alchemical writers, and knows of at least one French philosopher's visit to England accompanied by Mr Webb.¹⁰³¹ An interest in social rank in France is suggested by the comment that Gaston Clavens, author of *Apologie of the arte of making sylver and golde* is Subpresident of Niverne.¹⁰³²

Although the author repeatedly cites Paracelsus, and shows a familiarity with German alchemical vocabulary by the use of the term *spitzglasse* for antimony, there is no suggestion that German books have been consulted except *Aureum Vellus*, “in duche”, for its pictures.¹⁰³³ The only possible mention of a German place is “A worcke which I had of one Jacobus, dwelling att Hamborowe” which may refer to Hamburg. Interestingly John Dee described Heinrich Khunrath as living at Hamburg when they met at Bremen in 1589, and since Christopher Tylour describes Khunrath as “my master's master”, this Hamburg reference could be another link between Tylour, Dee and Khunrath.¹⁰³⁴ Connections with Bohemia, especially Prague, and frequent mentions of the German Paracelsus and Polish author Alexander Suchten, have already been noted. Christopher Tylour's admission to the noble lady that his master's master was Dr Khunrath indicates his role as mediator between the leading German alchemist-cabalist and a female audience in England.

The question of an indirect link between Denmark and *The Margaret manuscript* requires address, partly because of the mention of two important contributors, Christopher Tylour and Robert Clarke, in alchemical manuscripts now held in Copenhagen. In addition two key sources, Edward Dyer and Lord Willoughby, travelled to the Danish court. In 1582 Lord Willoughby was accompanied by Thomas Moffet, before the latter's reputation as an

¹⁰³¹ Blaise de Vigenère, “printed in the frenche tongue” and “printed in frenche” is enthusiastically recommended as an author. The first receipt, the *Opus longum longum*, was noted as having been taught to Sir Edward Dyer “by a frenche gentleman, that Mr Webb brought over the sea into Englande: And S^r Ed: did give him 200 [!?] for y^e worcke” (ff. 43r, 128r, 5v).

¹⁰³¹ f. 43r.

¹⁰³² f. 53r.

¹⁰³³ ff. 77r, 44r.

¹⁰³⁴ Fenton, p. 239, 27th May/6th June 1589. Oxford: Bodleian Library, Ashmole MS 1392, *To a noble lady*, f. 39.

acknowledged Paracelsian was established, and they met Severinus, Paracelsian physician to the Danish court. Willoughby returned to Denmark in 1585. Dyer was sent to the Danish court in 1589 at the time James VI claimed his bride, Anne, whose English court included women who valued alchemical knowledge.¹⁰³⁵

The Margaret manuscript also refers to local networks within England. Whilst the London connection is implied (by courtier links and the references which overlap with John Dee's diary) there are also northern links to "the gentlewoman of Yorke", and the unknown "honest Mr John the Goldsmythe", Mr Eden, Mr Crompton, Barnard Hill, honest Mr John Remis, John Missant, John Ritell and an anonymous daughter who proved a receipt.

Lady Margaret can be considered as an exceptional example of an English woman with alchemical interests, or as a better documented version of a more widespread phenomenon. There is a great deal of evidence for the latter, though I am restricted in this study to a brief consideration of the influence of the court, the role of informal intellectual groupings, and manuscript traces which associate women with alchemical philosophy and receipts, and form links between alchemy proper, domesticity and the language of love.

Alchemical ideas and practice flourished at the court of Elizabeth, as they did around the courts of the Medici and Henri IV.¹⁰³⁶ Elizabeth did not write about alchemy, but she seems to have taken it seriously.¹⁰³⁷ As head of state she assessed alchemists who required her approval to practise: her job was to safeguard coinage and to protect workable secrets for the crown. Apparently fraudulent foreign alchemists received short shrift: Cornelius de Alneto was locked in the Tower, and John Peterson of Lubeck failed to

¹⁰³⁵ For example Alatheia Talbot and Elizabeth Grey. Jayne Archer discusses Queen Anne's use of alchemy ('Women and Alchemy in Early Modern England' (unpublished PhD thesis, University of Cambridge, 1999) 1 xx-xxi).

¹⁰³⁶ Archer (1 i-xx) discusses alchemy and Queen Elizabeth.

¹⁰³⁷ The subjects she did write about (for example, Seneca, the Psalms, and Boethius' *Consolation of Philosophy*) also interested Lady Margaret Clifford and Lady Mary Herbert. Elizabeth, *The Poems of Queen Elizabeth I*, ed. by Leicester Bradner (Rhode Island: Brown University Press, 1964).

sell her three vessels of *Sol*, *Luna* and *Mercury* respectively.¹⁰³⁸ She seems to have placed more trust in experts and courtiers who were not primarily alchemists, such as Edward Dyer, Lord Willoughby, and John Dee.¹⁰³⁹ Elizabeth showed some interest in Dee's alchemical-cabalistic philosophy, reading the *Monas Hieroglyphica* with him at Greenwich in 1564, though she was at that period particularly interested in his cartographic expertise. Whether it is significant for the later development of the Virgin Queen mythology that the heraldic device at the end of the *Monas* depicts a female Virgo, it is certain that Elizabeth later gave Dee money for alchemical experiments.¹⁰⁴⁰ It was probably his Paracelsian medical skill which led her to ask him in 1564 to convey from the continent her dying blood relative, the Marchioness of Northampton.¹⁰⁴¹ Her surgeon, George Baker (1540-1600), was another early advocate of chemical medicine who perhaps brought the image of Lady Alchimia to her notice through her depiction in his *The Newe Jewell of Health*.¹⁰⁴²

Towards the end of her reign Elizabeth seems to have encouraged alchemical imagery as part of the “mystical politics” of the court, drawing on the natural affinity between golden age mythology, the hermetic-cabalist quest to restore paradise, and alchemical emblems in which gold was the symbol of purity and the perfect state towards which base metals strove.¹⁰⁴³ In Edmund Spenser's *Faerie Queene*, for example, the gardens and landscapes provide a setting in which heaven and heavenly healing is associated with gold and light: the chaste lady with fair yellow locks wears beaten gold; Belpheobe, born in the womb of

¹⁰³⁸ English State Papers, (Elizabeth) vol. XIII, 23; XL, 32, 44, 49, 53; XLII, 30; LXXV, 66; CCXXXIX, 76; CCXLV, 130; CCXLVII, 36.

¹⁰³⁹ Roberts and Watson, p. 8.

¹⁰⁴⁰ James Crossley, *The Autobiographical Tracts of Dr. John Dee*, p. 21. C.H. Josten, 'A Translation of John Dee's "Monas Hieroglyphica" (Antwerp: 1564) with an Introduction and Annotations', *Ambix*, XII (1964), 84-222 (p. 88, 147), and plate III. Roy Strong has discussed how Astreae-Elizabeth's association with Virgo-Venus enabled the virgin queen to also symbolise the goddess of love, in the neoplatonic tradition of the union of love and chastity. Strong, p. 47. Fenton, p. 252.

¹⁰⁴¹ Josten, p. 88.

¹⁰⁴² See Pritchard, 'Thomas Charnock's Book Dedicated to Queen Elizabeth'. George Baker, *The Newe Jewell of Health* (1576). Baker became President of the Royal College of Physicians in 1597.

¹⁰⁴³ Vaughan Hart, *Art and Magic in the Court of the Stuarts* (London: Routledge, 1994) p. 30.

Morning Dew to her mother Chrysogonee, applies Paracelsian cordials for a broken heart; Una, the one true daughter of the King, has an “angels face/As the great eye of heaven shyned bright [...] heavenly grace”.¹⁰⁴⁴ Stuart Hart argues that representations of Elizabeth show her embodying solar and lunar themes, and also identified with Mercury in the *Faerie Queene*, establishing the type of the British Mercurian monarch, with Elizabethan Protestantism represented as a return to the ancient Egyptian theology of Hermetic mythology.¹⁰⁴⁵ Jayne Archer argues that Elizabeth consciously adopted the image of Lady Alchymia.¹⁰⁴⁶ These two strands of thought together suggest that Elizabeth wished to be seen as embodying the alchemical trinity of *sol*, *luna* and mercury to enable her to act from contemporary notions of both masculine *sol* and feminine *luna*, and to change mercurially between them. Her chastity enables the role of Lady Alchimia to become a variant on the theme of the Virgin Queen. John Davies’ address to her as “an Alchymist divine” in *Hymns to Astraea*, 1599, who turns gross iron into “the purest forme of gold”, draws on the idea of her biological and spiritual chastity which weds her to heaven and her people, and mirrors the chaste purity required by the female alchemist to wield transformative power. Archer argues that chastity was central both to Queen Elizabeth’s identification and self-presentation as Lady Alchymia, and as a biblical Wisdom figure who signified the possibility of a spiritual transformation of material reality.¹⁰⁴⁷ This is supported by the combined biblical and hermetic-alchemical material in a dedicatory poem to Queen Elizabeth in Henry Lok’s *Ecclesiastes* in 1597, which addresses her “To you thrice sacred Princesse of this Ile”, perhaps recalling the thrice sacred nature of Hermes Trismegistus, and compares “the heavenly words of holy David’s sonne” to the “quintessence of holy creed, Lives pure Elixir,

¹⁰⁴⁴ Edmund Spenser, *The Faerie Queene*, ed. by A.C. Hamilton (London: Longman, 1977) I, iii, 4; III, vi. The 1590 edition of *The Faerie Queen* (J. Wolfe for W. Ponsonbie) was dedicated to Earl George Clifford, Lady Margaret’s husband (Williams, *Index of Dedications*, p. 41). Chrysogonee means "Golden Born".

¹⁰⁴⁵ Hart, pp. 6, 155, 156.

¹⁰⁴⁶ Archer, I, ii-xix.

¹⁰⁴⁷ Archer, I, iii.

which is sought of all”. In the dedication Lok offers “to your thrice sacred Maiestie” “the purest liquor drawne out of the heavenly fountaine of Salomon[’]s inspired wisdom” by whose shining beames she governs. He then compares her to the sun in “the cleere brightnes of your shining virtues.¹⁰⁴⁸

Where Elizabeth’s use of the image of Lady Alchimia was associated with the Virgin Queen, Archer suggests that Queen Anne assumed attributes of Alchimia which Elizabeth suppressed, through participation with her ladies in Ben Jonson’s masques *Blackness* (1605-6) and *Beauty* (1608-9). Archer argues that these represent hermetic alchemical transformations, associating Niger, the Aethiopian river, and Aethiopia, the moon, with the black earth or *chemia* with which the origins of alchemy are associated.¹⁰⁴⁹ Although the association of feminine identity, water and the moon is traditional, that of noblewomen and the dark moon goddess Hekate, which Jonson gives as another name for Aethiopia, is not. The participating court ladies (including Lady Margaret Clifford’s daughter, Anne) become “the first form’d Dames of earth”, “the Daughters of Niger”, “Aethiope Dames” who enter the ocean to “leave theyr blacknesse, and true beauty to receive”, in a re-enactment of the alchemical nigredo, or rebirth out of blackness. For court women to re-enact a feminine alchemical transformation through purification out of the waters of black Ethiopia, through the ocean and then wholesome dew, into a state of perfection, the new Elysium where they live in arbors of myrtle and gold by the fountains of lasting youth and chaste delight, makes a strong association with literary alchemy. As the nymphs stream into Albion they personify the sort of images associated with alchemy in the Italian academies. *Splendor*, dressed in

¹⁰⁴⁸ Henry Lok, *Ecclesiastes, Otherwise called the Preacher Containing Salomon’s Sermons or Commentaries (as it may probably be called) upon the 49 Psalmes of David, his father* (Blackfriars: Richard Field, 1597) prefatory poem by M.C., whom Franklin B. Williams suggests may be one Cosworth (*Index of Dedications*, p. 29). See also sig A, ii-iiiiv.

¹⁰⁴⁹ Archer, I, xx, and Ben Jonson, *The Characters of Two royall Masques. The one of Blacknesse, the other of Beautie, personated by the most magnificent of Queenes Anne Queen of Great Britain, etc.* (London: Thomas Thorp, 1608).

flame, holds a branch bearing a red and a white rose. *Germinatio* wears green and gold; *Venustas* silver, a veil, pearls and lilies; *Dignitas* bears a golden rod; *Perfectio* wears gold and holds a golden compass with which she draws a circle; *Harmonia* is in a place with a subtle maze, and the two fountains of youth and pleasure by which musicians are attired in priest-like clothes of crimson and purple.¹⁰⁵⁰ These symbolic women take on a different meaning for female identity when enacted by real women, painted black, including a pregnant queen who perhaps conveys the guise of black birth-giving goddess. The use of dance, one ending in the figure of a diamond, another “elegant, and curious”, embodying “turning”, in imitation of heaven, accompanied by priest-like musicians, is suggestive of the theme introduced in relation to the French court, of dance as a form of spiritual alchemy.

Many courtiers, male and female, at the courts of Elizabeth and Anne were interested in literary and medicinal alchemy.¹⁰⁵¹ It is possible they watched alchemical demonstrations at court and they were certainly aware of alchemical ideas and allusions in literature prepared for consumption in court circles.¹⁰⁵² Women in these circles had been given varying degrees of education, and some participated in informal networks which provided support for their active involvement in literature, business, estate management and current debates. These informal networks comprised the nearest English version of the Italian or French academies. In these circles alchemy was often practised and deployed as literary metaphor. Stanton J. Linden has described the great variety of themes, motifs, images and ideas drawn from alchemical allusion in the work of famous writers, some of whom are connected with the circles of educated women discussed below.¹⁰⁵³ The closeness of Philip Sidney to his sister’s

¹⁰⁵⁰ Jonson, *The Characters of Two royall Masques*, sig. D2.

¹⁰⁵¹ Queen Anne’s daughter Elizabeth the Winter Queen was strongly associated with the Hermetic movement (see Frances Yates, *The Rosicrucian Enlightenment*) and her daughter-in-law Henrietta Maria, daughter of Henry IV, employed Theodore de Mayerne as her physician. A book of secrets, *The Queen’s Closet Opened*, was attributed to Henrietta Maria and published in 1655 during her exile, with political connotations.

¹⁰⁵² Henry Gillard Glindoni’s painting of John Dee performing an experiment before Queen Elizabeth shows many female courtiers present.

¹⁰⁵³ Stanton J. Linden, *Darke Hieroglyphickes*, (Lexington: The University Press of Kentucky, 1996) pp. 2, 3, 92, 160-162.

academy at Wilton is well known; Robert Greene dedicated work to Lady Margaret; John Donne knew Anne Lady Clifford, and had a special relationship with Lucy Russell, Countess of Bedford.¹⁰⁵⁴ There is not space here to discuss alchemical metaphor and allusion in all the literary texts addressed to or by women in these circles but it would undoubtedly repay further work.

Robert Dudley was not the only member of his family to keep himself informed about alchemy.¹⁰⁵⁵ Three successive generations of Dudley women acted as patrons, students and supporters of John Dee. Jane and John Dudley employed Dee as tutor to their children: Ambrose, (who married Lady Margaret's sister Anne), Robert, and Mary, Lady Sidney (d. 1586). Dee records Mary writing often to him, inviting him to court and tending him with "very pithy speches" and "divers rarities to eat" when his health was poor.¹⁰⁵⁶ Her daughter, Lady Mary Herbert, Countess of Pembroke (1561-1621), has been the subject of debate regarding the extent of her interests in what has been variously regarded as alchemy or chemistry. Some scholars accept at face value John Aubrey's account of her lifelong interest in what he calls chemistry, her laboratory at Wilton, and her employment of Adrian Gilbert (in the laboratory), Mr Boston (who sought the philosopher's stone), and Thomas Muffet.¹⁰⁵⁷ Other scholars recognise that extreme caution is required when using Aubrey as a source, although Margaret P. Hannay suggests that he is more likely to make up references to sex than to what she describes as chemistry.¹⁰⁵⁸

¹⁰⁵⁴ Linden cites *Astrophil and Stella* for alchemical diction (p. 92); poetry to Lucy Russell (p. 162); Greene (pp. 85-6). Greene dedicated *Penelope's Webb*, 1587, to Lady Margaret.

¹⁰⁵⁵ See Allan Pritchard, 'Thomas Charnock's Book Dedicated to Queen Elizabeth', at p. 66 regarding an alchemist-philosopher retainer of Dudley; and Derek Wilson, *Sweet Robin* (London: Allison & Busby, 1997) p. 151 regarding the 'Governor and Society of the New Art', a body incorporated in 1571 to make copper out of iron and quicksilver out of antimony and lead.

¹⁰⁵⁶ Crossley, *The Autobiographical Tracts of Dr John Dee*, pp. 11-12.

¹⁰⁵⁷ John Aubrey, *Aubrey's Brief Lives*, ed. by Oliver Lawson Dick (London: Secker & Warburg, 1949) p. 139; Charles Webster, 'Alchemical and Paracelsian Medicine', in *Health, medicine and mortality in the sixteenth century*, 301-333, p. 306; Peter French, *John Dee* (London: Routledge & Kegan Paul, 1972) p. 129.

¹⁰⁵⁸ For example, *Early Modern Women Poets*, ed. by Jane Stevenson and Peter Davidson (Oxford: Oxford University Press, 2001) p. 86; Hannay, ' "How I these studies prize": The Countess of Pembroke and

Hannay has examined substantiating evidence for Aubrey's comments. She argues that Lady Mary lived in a household where science, particularly chemistry, was valued: she notes that her brother Philip worked closely and studied with the chemist John Dee; that Thomas Muffet claimed that Philip corrected various scientific authors; and the presence in the household of first Muffet, a doctor with other scientific interests, and then Matthew Lister, "more than her physician". In support of the claim that Lady Mary employed Adrian Gilbert she identifies two nearly identical receipts: Adrian Gilbert's Cordiall Water. and a *tragea Comitisse Pembrokieae*.¹⁰⁵⁹

Hannay's account implies that there is a significant difference between alchemy, which she associates with Mr Boston's quest for the philosophers' stone, and a more rigorous approach to chemistry, which she associates with Thomas Muffet.¹⁰⁶⁰ Following Lawrence Principe I suggest that when alchemy is defined as having practical, intellectual and mystical aspects, there is no dissonance in finding both these aspects mentioned in relation to Mary Herbert's household, where she apparently had contact with well educated male Paracelsian doctors as well as less educated craftsmen. By placing this example alongside the evidence for Lady Margaret Clifford's alchemical interests, this range of alchemical activity takes on more significance.

Jayne Archer has begun the process of comparison of the alchemical interests of Lady Margaret Clifford and Lady Mary Herbert. She identifies their similarities as important Puritan patrons, attracting clients who conceived literary creativity and the influence of their patrons in quasi-alchemical terms.¹⁰⁶¹ Lady Mary is also a dedicatee of Aemilia Lanyer's

Elizabethan Science', in *Women, Science and Medicine 1500-1700*, ed. by Lynette Hunter and Sarah Hutton (Stroud: Sutton, 1997) pp. 108-121 (111).

¹⁰⁵⁹ Hannay, (113).

¹⁰⁶⁰ Hannay (113).

¹⁰⁶¹ Archer, 2.2.iv, xxii. Mary Ellen Lamb's questioning of the extent of Mary Herbert's literary patronage ('The Countess of Pembroke's Patronage', *English Literary Renaissance*, 12 (1982), 162-179; 'The Dramatic Circle', *The Yearbook of English Studies*, 11 (1981), 194-202), is countered by the assessment of other scholars including the editors of the recent *Collected Works of Mary Sidney Herbert*, Margaret Hannay, Noel Kinnamon

Salve Deus Rex Judaeorum. Both women form part of what scholars have interpreted as Lanyer's configuration of an "enduring community of good women" stretching from Eve to contemporary Jacobean patronesses",¹⁰⁶² and "an interpretative community of female virtue", whose female representatives were perhaps chosen by Lanyer for their power as affirmative woman readers.¹⁰⁶³

There are also connections between Edward Dyer, and *the Margaret manuscript*, and separately with Lady Mary. Aubrey asserts that Dyer was a special friend of Lady Mary, based on an admiring couplet he sent her when she was fourteen.¹⁰⁶⁴ Dyer, like Lady Mary's brother Philip, had strong connections to John Dee.¹⁰⁶⁵ Edward Dyer is referred to several times in *the Margaret manuscript*, and Dyer knew Lord Peregrine Willoughby, Lady Margaret's friend.¹⁰⁶⁶

It is not possible to take this discussion to a final conclusion. Aubrey's account must be treated with caution, and, unlike the case of Margaret Clifford, there is no letter mentioning Lady Mary's alchemical interests, nor an alchemical receipt book possibly associated with her, nor an account by one of her children. However, the possibility that alchemy was a thread with practical, intellectual and literary aspects in Mary Herbert's life, gains more support when considered alongside the case of Margaret Clifford.

There is a different tone to the interest in alchemy recorded in the Killigrew and Thornborough families, both of which contained elements seeking responsibility and

and Michael Brennan, who discuss her role as a patron (pp. 12-15). Jane Stevenson and Peter Davidson describe her as "the most celebrated literary patron in late-Elizabethan England" (*Early Modern Women Poets*, p. 86).

¹⁰⁶² Barbara Kiefer Lewalski, 'Imagining Female Community: Aemilia Lanyer's Poems', in her *Writing Women in Jacobean England*, pp. 213-241 (p. 213).

¹⁰⁶³ Purkiss, *Renaissance Women*, p. xxxv.

¹⁰⁶⁴ Aubrey, p. 139.

¹⁰⁶⁵ Fenton, p. 327, describes Dyer as one of Dee's most loyal friends.

¹⁰⁶⁶ See above, pp. 249-250.

respectability at court as well as less restrained tendencies, expressed for example in piracy, scandals in love, and possible misuse of chemistry.¹⁰⁶⁷

It seems that there may have been a number of women conversant with alchemy in the circle of Sir Robert Killigrew (1579-1633), who himself had a lively interest in alchemy and physics.¹⁰⁶⁸ One explanation for the identities of Lady Knollys and Mistress Berkeley, whose texts are discussed below, relates them to the Killigrew family.¹⁰⁶⁹ Sir Robert and his wife, Lady Mary, raised their large family in an intellectual milieu in which the education of daughters as well as sons was valued.¹⁰⁷⁰ The family were accustomed to learned women: Henry Killigrew, Robert's father, married first one of the distinguished Cooke sisters, Katherine, who was not only educated in Latin, Greek and Hebrew but wrote poetry including a description of the cosmographical garden which included a wood bearing gold-petalled roses.¹⁰⁷¹ John Harington's admiration for her poetry is noted by Bathsua Makin, who herself promoted women's education.¹⁰⁷² His second wife, Robert's mother, was Jael, also quite educated and a friend of Isaac Casaubon. There is no specific evidence to indicate that Robert's wife Mary Killigrew was directly interested in alchemy, but her home was a centre of intense cultural life incorporating both the artistic and scientific. John Donne was a

¹⁰⁶⁷ Both Bishop Thornborough and Robert Killigrew were drawn into the Overbury scandal, as I describe below. Robert Killigrew's father Henry, and his uncle William, were staid, conscientious and well educated government officers at court, but his three other uncles are described by Amos C. Miller as pirates who were lawless and violent (*Sir Henry Killigrew: Elizabethan Soldier and Diplomat* (Amsterdam [sic]: Leicester University Press, 1963) pp.1-9). Robert's wife Mary was described by a Countess of Warwick as "a cunning old woman who had been herself too much, and was too long versed in amours" (DNB, Killigrew, Sir Robert, p. 110). The marriage of Sir Robert's daughter Elizabeth (1622-1681) to Francis Boyle was not approved by the Boyle family, who did not think highly of the Killigrews, and their suspicions were confirmed when in 1652 she became Charles II's second mistress and bore an illegitimate daughter, Charlotte (J.P. Van der Motten, *Sir William Killigrew (1606-1695): His Life and Dramatic Works* (Gent: Rijksuniversiteit te Gent, 1980), p. 15).

¹⁰⁶⁸ Van der Motten, p. 24.

¹⁰⁶⁹ The sister of Elizabeth Knollys was Frances Howard, who was connected to Sir Robert Killigrew through the Overbury affair (DNB). Sir Robert's sister, Elizabeth Killigrew, married Sir Maurice Berkeley.

¹⁰⁷⁰ Sir Robert bequeathed to his daughters Katherine, Elizabeth and Mary £1500 and a yearly sum of £40 for their education and maintenance until the age of 18 or until they married. J.P. Van der Moten, p. 12.

¹⁰⁷¹ Katherine married Henry Killigrew, whose brother William was father to Robert, Mary's husband. This poem "on D.B. Sylva" is excerpted in Louise Schleiner, *Tudor and Stuart Women Writers* (Bloomington: Indiana University Press, 1994) pp. 43-4.

¹⁰⁷² See fn 248 below.

friend, whose poetry on alchemical themes sometimes addressed to women is described by Stanton J. Linden.¹⁰⁷³ In 1622 and 1623, Constantijn Huygens met the Dutch scientist Cornelius Drebbel, the musician Jacques Gaultier, John Donne and the widow of Sir Walter Raleigh at the Killigrews.¹⁰⁷⁴ Susanna Åkermann points out that Huygens was not only a poet, composer and architect, but that his interests in flowers, perfumes, paint, salves, and large collection of chemical papers have remained largely ignored.¹⁰⁷⁵ Huygens' large library had representatives of magical, philosophical and Paracelsian works, including Libavius' *Alchymia* and the *Monas Hieroglyphica*, books to assist in running the household, as well as *Playes of Killigrews* (Oxford: 1666) which featured the dramatic works of Sir Robert's son Thomas.¹⁰⁷⁶ Mary continued a correspondence with Constantijn Huygens after Robert's death.¹⁰⁷⁷ Their daughter Elizabeth (1622-1681) married Francis Boyle, brother of the famous scientist Robert Boyle. Sir Robert shared an interest in alchemy with Sir Walter Raleigh, whom he visited in the Tower. At that time Raleigh accepted payment to finance his experiments from a woman, Lucy Apsley, wife of the lieutenant general of the Tower of London, whose daughter Lucy Hutchinson later explained that her mother thus "acquired a great deal of skill, which was very profitable to many in her life".¹⁰⁷⁸ The continuing involvement of Elizabeth Throckmorton with the Killigrews as a widow may or may not reflect her engagement with Raleigh's ideas. Nonetheless, she appears to have owned Sir

¹⁰⁷³ *Darke Hieroglyphicks*, pp. 164-174.

¹⁰⁷⁴ Van der Moten, p. 24.

¹⁰⁷⁵ *Rose Cross over Europe*, p. 146.

¹⁰⁷⁶ *Catalogus der Bibliotheek van Constantijn Huygens* ('s- Gravenhage: V.P. Van Stockum & Zoon, 1903) p. 25, item 255; p. 44, item 104, 106; 118, 119.

¹⁰⁷⁷ Peter Davidson and Adriaan van der Weel, *A Selection of the Poems of Constantijn Huygens* (Amsterdam: Amsterdam University Press, 1996) pp. 197-8. She appears to have accused him of neglecting and refusing to help a son of the Killigrew family.

¹⁰⁷⁸ Lucy Hutchinson, *Memoirs of the Life of Colonel Hutchinson* ed. by Neil Howard Keeble (London: Dent, 1995) p. 13.

Walter's receipts, and, interestingly, chose to pass them on to the learned woman Bathsua Makin, who noted John Harington's admiration for the poetry of Catherine Killigrew.¹⁰⁷⁹

Hartlebury Castle, home of the hermetic humanist Bishop John Thornborough (1551-1641), is described by the anonymous translator R.N.E. in 1623 as a place for "all men of learning", "an Apollinian [sic] retreat, as a living Library, a flourishing Academy, or a religious Abbey" where Thornborough carried out his "divine studies" and "most rare secrets" for profit and the health of man, which were approved both by patients and physicians.¹⁰⁸⁰ Visitors included Robert Fludd, who dedicated to him *Anatomiae Amphitheatrum*, 1623 (the year before Fludd argued that some women could be alchemists).¹⁰⁸¹

The symbolic role of a wife of Thornborough in the hermetic household is perhaps suggested by the reinvention of the role of the alchemical Mary, sister of Moses, in the work of the Venetian John Baptist Lamb, translated by R.N.E. and dedicated to Bishop Thornborough. Where Moses' alchemical work was to make vessels of pure gold in the temple, where Noah built the Ark, Moses the Tabernacle, and Solomon the Temple, the contribution of Mary, sister of Moses, was hospitality.¹⁰⁸² This completely new early seventeenth century gloss on the alchemical Mary suggests that the whole business of caring for and welcoming visitors into the household was now perceived in these circles as spiritual-alchemical housewifery. In the Thornborough household this included the medical

¹⁰⁷⁹ The Hartlib Papers, CD rom, Disc 2, (Michigan, USA: UMI and The University of Sheffield, 1995) at Ephemerides 1650 Part I, Hartlib, 27/1/48B. On Bathsua Makin see Frances Teague, *Bathsua Makin, Woman of Learning* (London: Associated University Presses, 1998); Schleiner, *Tudor and Stuart Women Writers*, p. 45; Makin, 'An Essay to Revive the Ancient Education of Gentlewomen in Religion, Manners, Arts & Tongues. With an Answer to the Objections against this Way of Education London, 1673', in Teague, Bathsua Makin, *Woman of Learning*, p. 126.

¹⁰⁸⁰ John Baptist Lamb, *A Revelation of the Secret Spirit. Declaring the Most Concealed Secret of Alchymie*, transl. by R.N.E. (London: John Haviland, 1623) The Epistle Dedicatory. An annotation at the start of the book suggests that R.N.E. is Richard Napier Esq. For discussion of John Thornborough see Allen G. Debus, *The English Paracelsians* (London: Oldbourne, 1965) pp. 104-5.

¹⁰⁸¹ Oxford: Bodleian Library, Ashmole MS 766, *Truth's Golden Harrow*.

¹⁰⁸² Lamb, p. 12.

preparations made by his second wife Elizabeth (née Bayles), who is probably the Lady Thornborough who provided the receipt for syrup of elder included in a mid-seventeenth century book of secrets for women.¹⁰⁸³ More than offering medicaments, however, alchemical “hospitality” suggests also the task of preparing the spaces and the ambience in which spirituality, natural philosophy and alchemical preparations could be tested, practised and discussed. It implies presence, though not necessarily full participation.

Intellectual engagement is shown, however, by the detailed letter on philosophical alchemy sent to Lady Knowles in 1614 by John Thornborough.¹⁰⁸⁴ Lady Elizabeth Knollys was an educated woman who received dedications on historical and meditative subjects.¹⁰⁸⁵ She also had alchemical connections.¹⁰⁸⁶ Through her youthful marriage to the elderly courtier William Knollys she moved from a Catholic home into Puritan circles with links to the Earl of Leicester and the Willoughby family.¹⁰⁸⁷ Her father-in-law Sir Frances Knollys (1514?-1596) championed Puritanism alongside Sir Walter Mildmay, whose daughter-in-law Lady Grace Mildmay has left records providing an important example of a woman distilling and preparing medicines on a large scale for her community.¹⁰⁸⁸ Elizabeth Knollys’ sister Frances Howard also knew the Thornboroughs. The year after Elizabeth received Bishop Thornborough’s alchemical letter, Frances was tried for poisoning Sir Thomas Overbury whilst Mrs Thornborough was arrested as a suspicious person due to her intimacy with the

¹⁰⁸³ W.M., *The Queens Closet Opened: Incomparable Secrets in Physick, Chyrurgery, Preserving, Candyng, and Cookery* (London: Nathaniel Brooks, 1658) p. 267. Lady Hoby, who also distilled medicines, was a close friend of Lady Thornborough: they walked in the fields together, visited each other when sick, went shopping and offered hospitality to each other and their husbands (*The Private Life of an Elizabethan Lady*, ed. by Moody, pp. 104, 156, 114, 127, 128, 129, 132).

¹⁰⁸⁴ The detailed content of this letter is discussed in chapter two.

¹⁰⁸⁵ Joshua Sylvester’s *The Parliament of Vertues Royal*, 1614; Luis de la Puente’s *Meditations upon the mysteries of our faith*, 1624; William Camden’s *Annales*, 1625, and *A History of the Howards*, and William Roper’s *Life of Thomas More*, 1626 (see Franklin, *Index of Dedications*, p. 112).

¹⁰⁸⁶ Thornborough calls her Lady Knowles which I use to describe the manuscript; the usual twentieth century spelling is Knollys.

¹⁰⁸⁷ Her sister-in-law Lettice (1540-1634) married Walter Devereux, Robert Dudley and Sir Christopher Blount. The daughter of her brother-in-law Henry married Sir Henry Willoughby, and her other brother-in-law Thomas distinguished himself in the Low Countries aiding Lord Peregrine Willoughby (DNB, Knollys, Dudley).

¹⁰⁸⁸ Linda Pollock, *With Faith and Physic* (London: Collins and Brown, 1993).

accused and her mother, her knowledge of alchemy, the making of powders and waters, and procurement of poisons.¹⁰⁸⁹ The deceased Simon Forman, who had worked for Thornborough at Oxford, was a suspect, but it was Anne Turner, the lower status female intermediary who was hanged. Within one year a glaring discrepancy is illustrated between the type of spiritual alchemy proposed in the Bishop's letter to Lady Elizabeth, and the possible participation of her sister, and the Bishop's wife, in a sordid chemical poisoning.

Sir Robert Killigrew was also named in the Overbury scandal, and a letter "written in a peculiarly rough hand of the time of Queen Elizabeth", addressed to a Mistress Berkeley, may have been intended for his sister Elizabeth.¹⁰⁹⁰ The letter, which is accompanied by two poems, may never have been sent, but demonstrates that for the writer, discussion of the philosopher's stone and "this admirable medicine" is a means by which he hopes to win the love of a younger woman. The letter appears to follow up conversations for he aims to "declar unto you the meaning of all that which in dark spiech's I have sayd unto you". In this process he addresses her as a potential alchemist, who has "heroic and honorable desires" planted in her breast and is "nourished by virtuous education", and "good genius" given by grace. The first poem uses the sort of neoplatonic stellar imagery applied to Elizabeth: "the honorable rayes which rest within your face". He drops feminine images from the alchemical repertoire into his text, thus associating her with the qualities of heaven. The psalmist phrase "the queen of virtue is very glorious within" reinforces his many comments on her goodness, and when he calls her a "faire daughter of the philosophers" he invokes the imagery of the ascent of the feminine soul in the *Rosarium Philosophorum*.¹⁰⁹¹ A subtext of longing provides a counterpoint: his aim is to "satisfie yt which you seem to desier". His comments on the

¹⁰⁸⁹ Cal. S.P.Dom 1611-18, pp. 336, 345.

¹⁰⁹⁰ Oxford: Bodleian Library, Ashmole MS 1492, Item VII, ff. 29-40, and Black, p. 1371. A second possibility is Lady Townsend, an Elizabethan beauty whose marriage to Lord Barkeley in 1597 discontented the Lord Chamberlain, according to the account of Roland Whyte to Sir R. Sidney, 18th February 1597 (Arthur Collins, *Letters and Memorials of State*, p. 91).

¹⁰⁹¹ f. 38. See also Psalm 45:13, "the king's daughter is all glorious within".

union of masculine and feminine principles read as lover's longings in the light of his final offer: "love me according to your virtues, and I will honor you according to my power". In poetry he explains how "her honorable rayes" stir him up, he intends to give her the greatest joy, and finally, slipping into the language of bawdry he explains that he is studying "to mount up your delight", sighing, praying and asking Mistress Berkely to "fill your heart with myself".

This is not, however, purely poetics. The writer offers to teach her about an educated sort of alchemy, one in which "reeding with diligent inquisition" is the first major element. He does not use the mythology of the Paracelsian turning his back on the inherited medieval tradition but advises her to read all available literature, because one book builds on another. Secondly he recommends "faithfull honesti joyned with devout prayer unto god" and "due homadg unto the divine powers". The aim seems to be angelic communication, for he says the truth is given to a few by "good Angels, which instruct us in the heights of Science" and defend practitioners from illusion. Although the aim is to make the Elixir, a water of unspeakable virtue and an admirable medicine, his final word is that he is speaking of mysteries: "and yet good lady I must be understood figuratively".¹⁰⁹²

At some point Mistress Berkeley's name was inked over, to be later uncovered by archivists. Whether an identity was being protected, perhaps in the light of the Overbury scandal, perhaps because this love came to nothing, or was illicit, or whether this is an example of censorship of the concept of female alchemist, it is impossible to say.

Indications of several women alchemists of lesser social station are indicated in manuscripts that circulated in the period under review. An anonymous Jewish woman expert is cited in an alchemical script which Raphael Patai believes was copied from older

¹⁰⁹² f. 31.

manuscripts in Spain and Venice.¹⁰⁹³ Its content has similarities to the interests of Venetian women indicated by Isabella Cortese's *I Secreti*. The manuscript discusses tinting, writing in gold lettering, gilding, dyeing metals, increasing the weight of gold, purification of gold, separating gold from a gilded vessel, gold and silver making, work with pearls and crystals, and ways of making lapis lazuli, musk, and amber. The receipt translated by Raphael Patai states that "I heard from a woman expert" about the treatment of silver peelings by melting in a pot, stirring with an iron spit.¹⁰⁹⁴ Equally anonymous are the proper names of the gentlewoman of York (of whose receipt "to make luna" several copies were made),¹⁰⁹⁵ the unknown daughter in *The Margaret manuscript* who proved a receipt to "fix" silver into gold,¹⁰⁹⁶ and "my gentill daughter Megg" whose name is mentioned in a receipt copied out by Simon Forman, preceding the poem normally attributed to Arnold de Villa Nova, "I am mercury mighty flos florum".¹⁰⁹⁷

Sometimes women supplied or received alchemical papers. John Dee recorded on a manuscript of alchemical receipts and other alchemical matters, "Receyved at Manchester by Ed. Arnold from Mistress Marie Nevl 1597 Dec 17". On folio 1 Dee wrote that that "Mistress Mary Neville" had sent it from Chichester.¹⁰⁹⁸ An eighteenth century owner of *Splendor Solis*, dated circa 1582, recorded that it had been bought at one stage from "Mrs Prieman, who was neice to the famous Mr Cyprianus".¹⁰⁹⁹

Distillation, as in France and Italy, was part of women's domestic role. At the court of Queen Mary and Queen Elizabeth women not only cared for robes, jewels and royal books, manufactured clothing, cooked, and nursed: they prepared cordials, food and cosmetics in a

¹⁰⁹³ Patai, *The Jewish Alchemists*, pp. 454, 381-392.

¹⁰⁹⁴ Patai, *The Jewish Alchemists*, p. 391.

¹⁰⁹⁵ *The Margaret manuscript*, f. 52. University of Glasgow: Ferguson MS 163, f.136, *The Gentlewoman's Work in York* [seventeenth century in English].

¹⁰⁹⁶ ff. 53v-54r.

¹⁰⁹⁷ Oxford: Bodleian Library, Ashmole MS 1490, f. 143.

¹⁰⁹⁸ Oxford: Corpus Christi MS 226. In his diary Dee notes her nativity, and death in 1598.

¹⁰⁹⁹ Although this date seems very early, that does not invalidate the provenance. See London: British Library, Harley MS 3469.

still house for the use of the Queen and her entourage.¹¹⁰⁰ Two named female chamberers who dealt with distilled goods are Bridget Chaworth-Carr, who had four bottles of sweet waters in 1584, and Elizabeth Marbery, who earlier had been keeper of a large coffer containing thick syrups used as tooth-pastes.¹¹⁰¹ The households of the nobility also often appear to have had still-rooms, which household manuals suggest were in women's sphere of interest.¹¹⁰² Even in the smaller household with just a kitchen, distilled and alchemical preparations were sometimes made. The gentlewoman of York cited in *The Margaret manuscript* cooked her metals in the hearth.

The experience of another “Gentelwoman in Yorke” is recounted in the common place book of Sarah Wigges, whom Jayne Archer suggests is connected to the Speght family of Yorkshire, which included writers, educated women, goldsmiths and physicians amongst its members.¹¹⁰³ Her receipt book covers a wide range of household-based activities, in which alchemical practice and theory is included.¹¹⁰⁴ Sarah Wigges may have started to compile this book when she was sixty three as the frontispice, after claiming virtuous ownership with the motto “Sarah Wigges./ hir Booke. Live wel, dye never: Dye wel, live ever./” adds “1616 Climactera – The perilous time of ones life att every 7 or 9 yeres end, or at the end of 63 yeres when 7s and 9s meete./”¹¹⁰⁵ Two other dates occur: a sympathetic cure for toothache by Richard Wigges, “taught 1625”, and a long illegible story apparently concerning King Edgar

¹¹⁰⁰ Caroline Merton, 'The Women who served Queen Mary and Queen Elizabeth: ladies, gentlewomen and maids of the Privy Chamber, 1553-1603', (unpublished doctoral thesis, University of Cambridge, 1992) p. 81.

¹¹⁰¹ Merton, p. 82.

¹¹⁰² At Skipton Castle in 1605 there was a “styling house” at the gallery end and a Mr. Leigh had in his closet troye weights, a coffer, a buffet, a still head and a trunk of books and manuscripts. There was a separate kiln, cellar, brewhouse, pantry and buttery (Williamson, *George*, p. 306).

¹¹⁰³ Archer discusses this manuscript in full in her thesis: see particularly 6.vii. Rachel Speght, born c.1597, wrote *A Mouzell for Melastomus* (T. Archer, 1617) and *Mortalities Memorandum* (J. Bloome, 1621). Her father James Speght (c. 1564-1637) from Horbury near Wakefield was incorporated into the London Society of Goldsmiths. Thomas Moundford, Rachel's godfather, was six times president of the Royal College of Physicians: his receipt for cordial water appears in Alatheia Talbot's *Natura Exenterata* (1655). Barbara Lewalski discusses Speght's life and work in 'Defending Women's Essential Equality: Rachel Speght's Polemics and Poems', in *Writing Women in Jacobean England*, ed. by Lewalski, pp. 213-241.

¹¹⁰⁴ London: Royal College of Physicians MS 654. Wigges, Sarah et al., Receipt Book, c. 1616, f. 524.

¹¹⁰⁵ If so, she was born in 1553 and lived until later than 1616.

and alchemy, ending “Englised [...] by PE 1627”.¹¹⁰⁶ There is more than one hand and parts of it are gleaned from male experts. It is possible that these papers were the shared experiences of husband and wife, as the main hand writes “this healped my husband in great extremity”, but also “this did help my Wyfe”.¹¹⁰⁷ However if, as seems probable, Sarah Wigges wrote the title page, her hand probably wrote those parts on medicine, cookery, and counterfeiting gems, and she could have compiled the other more philosophical parts, including notes on Basil Valentinus and a description of “The Philosophical Work”, although there are no cross annotations to prove without doubt that she did so.¹¹⁰⁸ Nonetheless, the manuscript suggests that Sarah Wigges had a broad field of interest, from cooking, preservation of fruit, perfumery, the making of soap, cleaning materials, cordials, oyles, restoratives, herbal and chemical medicines, making false gems, distillation and philosophical alchemy. Alongside harmless herbal remedies is evidence of dangerous work with mercury in the household: a way of “killing” mercury involves taking quicksilver and mingling it with spittle in a piece of broken glass or in an oyster shell, “stirring them toogewater wth yo^r fingar untell it looke blacke”.¹¹⁰⁹ Wigges has an early example of a woman’s use of Paracelsus’ plaster of gum resins.¹¹¹⁰ A girdle to be worn next to the skin for twelve to fifteen days “to take away an itch” is made of eggs, quicksilver in which a material is soaked, and hung on the line to dry.¹¹¹¹ There are many female remedies for menstruation, ointment to apply after childbirth, for a sore breast, for a pregnant woman who falls, and for worms in children. She

¹¹⁰⁶ ff. 273, 467.

¹¹⁰⁷ ff. 278, 318.

¹¹⁰⁸ ff. 331-339 is in a small tight hand; ff. 340-484 is a later, difficult to read hand. Most of the rest is in the same consistent well spaced hand with similar ruling and annotations about women sources. The title page and these pages share use of a distinctive ruled double line. The end pages collated upside down on counterfeiting could well be in Sarah Wigges' hand (ff. 605-608).

¹¹⁰⁹ f. 17.

¹¹¹⁰ ff. 116-118.

¹¹¹¹ f. 423. The material is named as "cersby" which I have not identified.

draws widely on the experience of doctors and women for remedies.¹¹¹² Though she may glean men’s experience, there is a definite pro-woman stance towards midwifery, in the comment that “This medicyne will marre the practise of yor men mydw[i]fes and maye gaine much money it you keepe it private.”¹¹¹³ Female members of the family are a special source: Mother Wigges who is “good at medicines and preserves” is cited many times,¹¹¹⁴ and as well as Mother Speght, Sarah Wigges’ mother,¹¹¹⁵ there are mentions of “my sister”, “my sister Proctor”, “my sister Lowe” and occasionally “my sealf” – in this study an unusual and therefore powerful assertion of a woman’s expressed sense of identity.¹¹¹⁶ She makes textual references: an oil is “much like that in Fioravanti which he called the balme Artificiato”.¹¹¹⁷ Another hand in the manuscript also refers to women experts: a midwife, “my daughter Miller” and Mrs Turk, “who cured many”.¹¹¹⁸ This hand appears to have copied a long extract from Basil Valentine’s *Triumphal Wagon of Antimony*. A third and difficult-to-read hand has taken notes from *The Breviary of Health* “compiled by Andrew Boord, doctor in Phisick, an englishman”, London 1587.¹¹¹⁹ “A philosophical worke” is also very long and hard to read.¹¹²⁰

Isabella Cortese’s Italian women readers were invited to counterfeit the luxurious appearance of gold and azure. It is interesting to find Sarah Wigges citing Cortese’s contemporary, “Babtist Porta in his magia”, for making the green gemstone

¹¹¹² She cites Doc Culstone (f. 64), Dr Gulston (f. 100), Dr Allott (f. 103), Dr Speght (ff. 164-5); and Mo. Speght (f. 106), Mrs Okam (f. 248), Mrs Clearke (f. 252), Mrs Haevie (f. 253), Mrs Walsam (f. 259), Mrs Hudnall (f. 266), and the midwife Phillis Mattock (f. 317).

¹¹¹³ f. 264.

¹¹¹⁴ ff. 33,36-7, 39, 41, 42-3, 60-66, 281.

¹¹¹⁵ See f. 106 “ffor pissing in bedd” which is annotated “my one” and “Mo Speght”, perhaps indicating that her mother had given her this remedy in childhood. At ff. 164-5 she cites “my father Dr Speght”.

¹¹¹⁶ ff. 172, 318-9, 112.

¹¹¹⁷ f. 176.

¹¹¹⁸ f. 331.

¹¹¹⁹ f. 340.

¹¹²⁰ ff. 478-483.

chrysolite from crystal powder, *crocus martis*, and a little *minium*. At the end of a note on how to counterfeit diamond from a sapphire or amethyst, by depriving them of their colour, she writes that a “Diamond wthout fault, of the weight of a pepper corn, is worth 10 florens”. To learn more about making a hard substance like amber she recommends “Read the History of Anderes Libavius”.¹¹²¹ Like her Italian contemporaries, Sarah Wigges sought ways to create the appearance of luxury: unlike them she states baldly her wish to make money, just as the annotating hand in *The Margaret manuscript* advises, “make this noble oyle of Golde for medicine. Looke well unto it, carefull ye make it. Minister it wisely, and become Riche & famose”.¹¹²²

And thus we see that household management and alchemy shade into each other; with examples of alchemist great ladies, alchemist housewives, women who seek to make the elixir, to live out spiritual alchemy, and to make money from alchemy. There also appears to be a wide familiarity with alchemical imagery and metaphor amongst educated women. To be a woman alchemist in England appears not to have been anomalous, but to have engaged in an activity understood by some other contemporary women.

¹¹²¹ ff. 605-8.

¹¹²² *The Margaret manuscript*, f. 9v.

Conclusion

This thesis has sought to show that there is evidence to suggest that women were alchemists. In the process it has addressed the problem of distinguishing between symbolic and real representations of women. A great variety of fragmentary evidence has been cited, none of which can be ascribed with absolute certainty to female authorship, but, together, these excerpts suggest strongly that there were women who read and wrote about alchemy, whilst others were aware of the more general applications of the alchemical metaphor of knowledge.

The thesis has attempted to explain women's participation in alchemy as authors, translators, patrons, and practitioners, and has begun an investigation of an area of overlap between alchemical and female cultures. Continuities have been demonstrated with household work, spiritual practice, and women's learning in some Christian-humanist circles, particularly around the courts. The full delineation of the overlap is complex, since alchemy encompasses technical and philosophical-spiritual aspects. The idea that alchemy was a thread that ran through many levels of society in this period was addressed in the Introduction. The issue of whether there was a specifically female culture is problematic, since there is a range of female narrative, and women's cultural opportunities were affected by social position, intellectual circles and economic circumstances. Despite these important caveats, however, women were sanctioned by early modern society to engage in identifiable spiritual, intellectual, social, economic and practical matters. The work of Sara Mendelsohn and Patricia Crawford points to activities and ideas with which women as a group were culturally authorised to engage. They describe these as household-based and life-enhancing, concerned with giving birth, rearing children, attending death, sustaining and healing life by growing and preparing food and medicines, and caring for the spiritual and physical needs of the household and wider community. They argue that feminine piety in the household was seen as springing from impulses connected to female experience and that many women saw

religion as a vocation that transformed every facet of existence, including daily activities, social and family relationships and the use of space. Women's culture, they suggest, was closely connected to the forces of life, death, and sexuality, and to women's attempt to infuse sacred meaning into mundane experience.¹¹²³

A substantial body of scholarship shows that women read, translated and sometimes wrote about religion, and that women participated in other writing as patrons and translators.¹¹²⁴ Jane Stevenson demonstrates that very learned women studied antique languages, wrote Latin poetry, and participated in European networks of learning and friendship.¹¹²⁵ Caroline Merton has begun to examine the exercise of informal power by rich, well-connected early modern women close to Queen Elizabeth.¹¹²⁶ The issue of boundaries to women's participation in the wider culture outside the household emerges in the research for this study on Lady Margaret Clifford who, in addition to intellectual and practical alchemical interests, commissioned architecture and literature, instigated social projects, engaged in a significant pro-woman lawsuit, commissioned historical studies, and invested in New World expeditions and mining projects.¹¹²⁷

From the outset of this study some areas of overlap between the themes and ideas which Mendelsohn and Crawford associate with female culture and those found in alchemical writing and practice were apparent. Alchemical culture was concerned with metaphors of

¹¹²³ *Women in Early Modern England 1550-1729* (Oxford: Clarendon Press, 1998) pp. 203-211, 225-6, 230, 255. This argument is backed up by evidence in household manuals and spiritual diaries, such as that of Lady Grace Mildmay.

¹¹²⁴ See Margaret P. Hannay, *Philip's Phoenix: Mary Sidney, Countess of Pembroke* (Oxford: Oxford University Press, 1990) p. x, Louise Schleiner, *Tudor and Stuart Women Writers* (Bloomington: Indiana University Press, 1994) p. 2.

¹¹²⁵ 'Women and classical education in the early modern period', in *Pedagogy and Power: Rhetorics of Classical Learning*, ed. by Yu Lee Too and Niall Livingstone (Cambridge: Cambridge University Press, 1998) pp. 83-109; and 'Female Authority and Authorisation Strategies in Early Modern Europe', in *This Double Voice*, ed. by Danielle Clarke and Elizabeth Clarke, (Basingstoke: Macmillan, 2000) pp. 16-40.

¹¹²⁶ 'The Women who Served Queen Mary and Queen Elizabeth: ladies, gentlewomen and maids of the Privy Chamber, 1553-1603', (unpublished PhD thesis, University of Cambridge, 1992).

¹¹²⁷ See Richard T. Spence, *Lady Anne Clifford, Countess of Pembroke, Dorset and Montgomery (1590-1676)* (Thrupp: Sutton, 1997) pp. 7-11.

sexuality, conception, birth, death, rebirth, and redemption of the soul (metallic and human), as well as the preservation, healing and prolongation of human life through alchemical medicines. Some alchemists appeared to seek to bring sacred meaning into the material world. As this research proceeded, other similarities became apparent: the practical aspect of alchemy had much in common with the female household technology role, including the keeping up of appearances by using one thing to appear to be another, and its wider spiritual aspect found non-chemical expressions, for example in music, dance and prayer.

Although the study does find an area of intersection between female and alchemical culture, the delineation of the extent of this overlap has not been fully mapped. To do this would require other studies, including an analysis of the extent of alchemical material in collections of women's receipt books and commonplace books, such as those in the Wellcome Institute Library. However, the theoretical continuities which I have discussed here and in chapter two are supported in different ways by each case study. Isabella Cortese's *I Secreti* presents alchemy as a natural companion of women's activities in medicine, perfumery, craftwork and good housekeeping. Quercitan's Daughter and Madame de la Martinville engage with alchemical metaphors of birth, death and sexuality. Lady Margaret Clifford's alchemical practice is associated with exemplary housewifery, and the tradition of the woman of wisdom.

The alchemical metaphor was applied with various degrees of sophistication in women's writings. As a structural metaphor it explained abstract ideas about the relationship between heaven and the earthly creation, using culturally specific language. An underlying association of the alchemical metaphor of knowledge with healing the Creation has emerged as significant for understanding educated women's practice. The elixir, which cured and made perfectly healthy what were perceived to be sick human and metallic souls and bodies by reconnecting them with heaven, was produced through spiritual and scientific work, and

overlapped not only with spiritual contemplation, but with medicine, metalworking, and the allied areas of technology and investment in mining. It seems that some female practitioners used ritual magic, prayer and material processes as they made medicines to cure human illness and to bring imperfect metals to perfection. The alchemical metaphor of heaven is unusual in western literature for being concurrently immanent and transcendent rather than purely hierarchical: this complexity is illustrated in Isabella Cortese's book, where the neoplatonic relationship between heaven and earth provides the background for a riddle in which earth that is nutritious and moist is also transparent and pure, prodding thought from the known object of the earth to a wider intangible abstract concept of heaven that bears back on the health of the earth. Madame de la Martinville uses metaphorical Paracelsian language to associate set stages in long processes of sublimation and distillation with specific images of lions, eagles, and blood, suggesting a multi-layered activity which mirrors meaning back on itself. A further epistemological function of the alchemical metaphor may have been to help advance thinking and knowledge. The congruity of chemical processes with Paracelsian images is tested in *The Margaret manuscript*, where a developing critical relationship with the wider alchemical metaphor can be observed. A wider circle of elite women engaged with the alchemical metaphor of knowledge in literature where, for example, tears of grief become celestial dew, and the Queen becomes Virgo or Lady Alchimia.

This study has suggested that for some educated women, such as Quercitan's daughter and Lady Margaret Clifford, the spiritual aspect of the alchemical metaphor was significant. Although, for the modern analyst, these women's efforts to control and understand nature's secrets in the confines of the closet, still-room or kitchen may be categorised at the borderline of lay religion and magical practice, it is likely that some early modern practitioners perceived it as a form of lay spirituality. Where many male alchemists, including those who help the women in the case studies practise alchemy, were employed to assist God's work, as

priests, vicars, and even bishops, women's religious domestic practice was well established. In the case studies women bless matter as it passes through their hands, whilst conveying on it symbolic meanings which they believe to have the effect of transmutation and rebirth. This suggests that domestic alchemy was in a sense complementary to the priestly role in communion, a public status closed to women. This may not have been such a huge step from ordinary female culture; for example, women were the prime actors at childbirth, when mother, female relatives, midwife and gossips were present in the bedroom which was transformed into an enclosed dark space lit by candles like a small chapel.¹¹²⁸ Before the mother resumed contact with the outside world she went through a spiritual and social purification process in churching. Women were thus accustomed to the idea that their bodies and souls were part of a birthing process, an attitude which in alchemy was extended to the natural world. Hints have emerged in this study that in the Paracelsian alchemist's household women may have taken responsibility for spiritual aspects of housekeeping and maternity, involving blessing the spaces in the home, the food that was eaten, and the children that were born, activities in which they aimed to make matter spiritual.¹¹²⁹ This corroborates findings elsewhere that many early modern women sought to transform every facet of daily life through their religious life, and supports the idea that a quasi-priestly alchemical role would be acceptable if practised quietly at home.¹¹³⁰

The diversity of ways in which women from differing cultural levels related to the alchemical metaphor is striking. Many different types of female alchemist have been presented in this thesis: solitary or sociable; working entirely in the domestic sphere, or

¹¹²⁸ Adrian Wilson, 'The Ceremony of Childbirth and its Interpretation', in *Women as Mothers in Pre-Industrial England*, ed. by Valerie Fildes (London and New York: Routledge, 1990) pp. 68-107.

¹¹²⁹ On spiritual hospitality see discussion of the Thornborough circle in chapter five. On parental blessing and curses see Keith Thomas, *Religion and the Decline of Magic*, pp. 602-3.

¹¹³⁰ Mendelson and Crawford, p. 226.

taking alchemy outside the home; counterfeiting appearances, or believing in genuine transformations. Women read alchemical theory and receipts, including literature attributed to Paracelsus, for use in kitchens and workshops. They used alchemical themes in poetry, and may have participated in intellectual alchemical meditation as suggested by the Italian *studiolo*, and by the literary interests of gatherings within Italian academies, French salons, and literature addressed to some women around the English court. The association of women and alchemical activity and ideas does appear to be a thread running through many levels of early modern society.

This study begins a discussion of the problem of how these women accommodated their female gender to alchemical philosophy and practice. Their position was replete with ambiguity. Even though Paracelsian remedies did sometimes effect cures, female practitioners were limited not only by the small difficulty that their knowledge system did not produce real gold, but also by cultural restrictions.¹¹³¹ Their struggle with the requirement to defer to male alchemical authority permeates their writings. Isabella Cortese downplayed her contribution by passing on her philosophical secrets from male experts rather than rewriting them as her own work, yet was confident enough to write a questioning preface. Quercitan's daughter showed requisite humility, signing herself "your unworthy Scholler" and "Your most humble Affectionate Handmayd", yet also vigorously defends her point of view. Lady

¹¹³¹ Hugh Trevor-Roper argues that Paracelsian remedies improved on previous methods and effected cures: they were more agreeable, and milder doses, use of mineral waters and baths, and pain relieving narcotics and opiates including laudanum were all beneficial (*Renaissance Essays* (London: Secker and Warburg, 1985) p.157). Of the large literature on women's role in early modern Europe, see Olwen Hufton, *The Prospect Before Her: A history of women in western Europe 1500-1800* (London: Harper Collins, 1995); Katharina M. Wilson, *Women Writers of the Renaissance and Reformation* (Athens: University of Georgia Press, 1987); Colette Nativel, *Femmes Savantes, Savoirs des Femmes* (Geneva: Droz, 1999). For Italy, see *Women in Italian Renaissance Culture and Society*, ed. by Letizia Panizza (Oxford: Legenda, 2000); and Panizza and Sharon Wood, *A History of Women's Writing in Italy* (Cambridge: Cambridge University Press, 2000). For France, see Linda Timmermans, *L'Accès des Femmes à la Culture (1598-1715)* (Paris: Honoré Champion Éditeur, 1993). For England see Anne Laurence, *Women in England 1500-1760: A Social History* (London: Weidenfeld and Nicolson, 1994); Patricia Crawford and Laura Gowing, *Women's Worlds in Seventeenth-century England: A Sourcebook* (London: Routledge, 2000); Mendelson and Crawford, *Women in Early Modern England 1550-1720*; Fletcher, *Gender, Sex and Subordination*; Hannay, *Silent but for the Word*.

Margaret Clifford's entrepreneurial mining stopped when it conflicted with her husband's wishes, and Lord Willoughby's praise of her as a "noble philosophising woman" is at the expense of his wife. Sarah Wiggles asserted women's prerogatives over male midwives, but only collected, rather than analysed, male alchemical writings.

This study suggests that in some cases ambiguous readings of texts were possible. Some women were able to insert themselves into the neoplatonic-Paracelsian-alchemical world view, finding role models from antiquity, emphasising aspects they felt comfortable with, overlooking misogyny and the expected male readership of key texts. The well-rehearsed argument that some male alchemists may have been attracted to alchemy for the birth-giving feminine creativity it conferred on them is confronted and complemented by the example of women alchemists impregnating feminine matter with masculine spirit-sperm. By their active agency they seem to alter the traditional stereotyping of male-female, spirit-matter, active-passive, even though, no doubt, they continued to read that they were passive, cold, weak, and polluting in some alchemical texts.

Ambiguous interpretations are also suggested regarding the relationship between the monastic alchemical tradition (of spiritual reading, writing and practice alongside manual and craft work) and the qualities of silence, chastity and obedience prescribed for all noble- and gentlewomen.¹¹³² It is possible that historians who use "silence, chastity and obedience" too tightly to explain restrictions to female expression may miss interpretative subtleties.¹¹³³ In the alchemical tradition silence, obedience and chastity

¹¹³² Many of the significant alchemists of the Middle Ages were clerics whose alchemy developed in the absence of women's company: Thomas Aquinas was a Dominican, Roger Bacon a Franciscan, Ramon Lull was a Christian missionary, George Ripley was a canon at Bridlington priory, John Dastin and Michael Scott were members of a religious order. Arnold de Villa Nova is an important married exception, although he was educated by the Dominicans.

¹¹³³ Mary Ellen Lamb, 'The Cooke Sisters: Attitudes toward Learned Women in the Renaissance', in Hannay, *Silent but for the Word*, pp. 107-125. Anthony Fletcher describes silence, chastity and obedience as a set of negatives (*Gender, Sex and Subordination*, pp. 121-122). The complexities of the relationships between stereotypes, prescriptions and social reality are well examined by Mendelson and Crawford, in *Women in Early Modern England 1550-1720*.

were prime virtues: by assuming that their consequence was to stifle expression, assertion and communication between men and women, modern scholars have strengthened a patriarchal historical viewpoint that recognises little contribution from women to early modern knowledge. It is clear from the case studies that these early modern women were not rigidly controlled by prescriptions to be silent, chaste and obedient, but that the alchemical model offered one positive understanding of these contemplative virtues, which reflected the medieval monastic roots of alchemy. The mutuality of some of the virtues required by the alchemist with those considered necessary in the good woman, may also reflect the ambiguous gendering of alchemy, Lady Alchimia, and manual tasks in general.¹¹³⁴

When Robert Greene dedicated *Penelope's Web* to Lady Margaret Clifford and her sister, he argued that every virtuous woman should strive for the virtues of obedience, silence and chastity, a theme which he illustrated with learned mythological references, and sought to interlace with comedy.¹¹³⁵ Lady Margaret attracted other works, including a transcript of the satire *The Prayse of Private Life* in which a tongue-in-cheek appreciation of the Solitary Man finds him “silently meditating”, his bed “sweete and chaste” and his life led in the fear of God so that he is loved by all.¹¹³⁶

General injunctions to early modern women to be silent have been read by social and feminist historians in the light of the unequal power relations that resulted in the

¹¹³⁴ Margaret Pelling has shown the ambiguous gendering of medical roles associated with manual labour and contact with the body, in 'Compromised by gender: the role of the male medical practitioner in early modern England', in *The Task of Healing: Medicine, Religion and Gender in England and the Netherlands 1450-1800*, ed. by Hilary Marland and Margaret Pelling (Rotterdam: Erasmus, 1996) pp. 101-33.

¹¹³⁵ Robert Greene, *Penelope's Web* (London: T.C. and E.A., 1587).

¹¹³⁶ Norman Egbert McClure, *The Letters and Epigrams of Sir John Harington, together with The Prayse of Private Life* (Philadelphia: University of Pennsylvania Press, 1930) pp. vii, 329, 332, 335, and London: British Library Add MS 30161, “copied from the Original Manuscript in Skipton Castle”. The attribution by McClure of this discourse to John Harington is disputed by Peter Beal, who argues that it is more likely to be the work of Samuel Daniel. Beal catalogues the original (his DAS 45) as presented by Daniel to Lady Margaret circa 1605-6, and as probably the manuscript catalogued as 'The Praise of Private Life' in the list of 'Books in the Closet in the Passage Room next the Pantry in Skipton Castle, 1739', referred to at p 221 of this thesis. (Peter Beal, *Index of English Literary Manuscripts, 1450-1625* (Mansell: R.R. Bowker Company, 1980), I, pp. 123, 205.

punishment of the scold's bridle and powerful barriers to publication of women's writing.¹¹³⁷ However the feminine virtue of silence had an active devotional expression which was particularly suited to alchemical work. The alchemists' meditative silence for prayer, learned study in a devotional context, and laboratory work, had much in common with the hours of meditation, prayer, devotional reading and experimental alchemy in which some early modern noblewomen engaged.¹¹³⁸ The silence recommended to all alchemical pupils was not the silence of subjugation dulling the mind and preventing access to knowledge, but of the fortunate member of a privileged well-connected group, for whom silence was also intended to be a prerequisite for mystical experience, a concept epitomised by the mid-seventeenth century *Mutus Liber*, which opens with an engraving of a man and woman holding a finger to their lips, indicating silence.¹¹³⁹ The analogy of Lady Margaret Clifford with "a ritch clasped boke wherein the secrets of all good wifery is contayned" emphasises the concept of the containment and bounding of knowledge, whose silent context is further reinforced by a subsequent reference to the dangers of proselytes.¹¹⁴⁰

Chastity, like silence, provided another important boundary in the early modern code of female morality which was linked to a woman's enclosure in her household and possession by her husband.¹¹⁴¹ It was also regarded as a powerful tool for alchemists. A chaste soul was required by every elite alchemist regardless of gender. Some early modern male alchemists may have adopted literal celibacy as a positive choice to enhance the opportunities for the

¹¹³⁷ On the stereotype of the scold see Mendelson and Crawford, *Women in Early Modern England 1550-1720* pp. 65, 69-70; on barriers to publication see Elizabeth Tebeaux and Mary M. Lay, 'The Emergence of the Feminine Voice, 1526-1640: The Earliest Published Books by English Renaissance Women', *JAC*, 15.1, 1995 at <http://jac.gsu.edu/jac/15.1>.

¹¹³⁸ See for example, Linda Pollock, *With Faith and Physic: The Life of a Tudor Gentlewoman Lady Grace Mildmay 1552-1620* (London: Collins and Brown, 1993), and on Lady Margaret Hoby, who is estimated to have spent more than half her time in religious acts, see *The Private Life of an Elizabethan Lady*, ed. by Joanna Moody, pp. xix, xxxv, xxxvii.

¹¹³⁹ See Adam McLean, *A Commentary on the Mutus Liber, Including the Mutus Liber* (Grand Rapids, MI: Phanes Press, 1991).

¹¹⁴⁰ Cumbria Record Office (Kendal): WD/Hoth/Box 44/4 Letter from Lord Willoughby to Lady Margaret Clifford.

¹¹⁴¹ Hannay, *Silent but for the Word*, p. 4. Fletcher, *Gender, Sex and Subordination*, p. 120.

soul to commune with divinity, following the example of medieval monastic alchemists.¹¹⁴² When the monastic pursuit of the chaste soul lost contact with real women it had fearsome consequences in institutionalised misogyny.¹¹⁴³ However this study has found a variety of concepts of chastity associated with symbolic and embodied women in early modern neoplatonic-Paracelsian alchemy which suggests its ambiguous meaning in this period. The problem of the sexual energy surrounding the chaste lady is highlighted through contrasted stereotypes in a receipt in *The Margaret manuscript*, in which "Alchimye is as a Ladie beloved of many, whoe is Chaste and hath many Maides in her howse [...] who to kepe their Mistres that she be not violated doe prostitute [...] themselves".¹¹⁴⁴ Queen Elizabeth, who faced constant reminders of her own problematic female sexuality, did not discourage the poetic emphasis of Lady Alchimia's status as a chaste virgin, which increased the impact of the Virgin Queen mythology.¹¹⁴⁵ For others, the concept of the chaste marriage with fidelity between partners for life allowed for loving and platonic friendships between men and women.¹¹⁴⁶ All of the women in the main case studies are in contact with men who are not their fathers, husbands or brothers (although those relationships were also significant).¹¹⁴⁷ Isabella Cortese appears to have male alchemical friends within the church. Madame de la Martinville and Neptis are part of a circle of male and female alchemists. Quercitan's daughter is in contact with Monsieur de la Fin. Lady Margaret Clifford's close male friends

¹¹⁴² On sexual renunciation and voluntary celibacy see David Noble, *A World Without Women*, p.175.

¹¹⁴³ On the *Malleus Maleficorum* and the witch persecutions see Helen Rodnite Lemay, *De Secretis Mulierum with Commentary* (New York: State University of New York Press, 1992) pp. 1-3, 14, 58. The idea that women's sin would be an impediment to the male alchemical work is implicit in the idea contained in a Lullian work on alchemy that a man who "knows" a woman actually or in a dream cannot make the philosopher's stone. Gareth Roberts, *The Mirror of Alchemy* p. 79.

¹¹⁴⁴ *The Margaret manuscript*, f. 94v.

¹¹⁴⁵ See chapter five.

¹¹⁴⁶ Margaret Clifford received dedications on the topic of the chaste marriage (e.g. Robert Greene's *Philomela. The Lady Fitzwaters Nightingale* (London: R.B. for Edward White, 1592), and appears to have believed in it. She was faithful to her husband despite his overt infidelity and refused to remarry after his death despite numerous offers.

¹¹⁴⁷ The importance of male mentors as receptive audience for early modern women writers is recognised see Tebeaux and Lay, 'The Emergence of the Feminine Voice', p.1.

include Lord Willoughby, Richard Cavendish, Thomas Tymme, and Robert Leigh. It is possible that her particularly strong association with virtuous chastity was one factor in her freedom to have male friends, alongside her wealth, power, absent husband and contact with Paracelsian men.

On occasion, male alchemical writers use alchemical imagery as they describe the virtuous chastity of their love object, with the purpose of proceeding towards sexual consummation.¹¹⁴⁸ The rendering of women chaste and silent in writings by men has, of course, been long appreciated.¹¹⁴⁹ In the alchemical writings in this study women do not write about men erotically, and this seems likely to reflect the power of the concept of chastity in delineating women's expression, unless in an entirely religious context and concerning, for example, Jesus as the beloved.¹¹⁵⁰ Virtuous chastity is strongly stressed in literature addressed to Lady Margaret Clifford, for reasons which are evident in the description of Joseph du Chesne and the learned woman of France as adulterers in their alchemical liaison. These active women are constrained by cultural notions of chastity, whilst passive representations of women demonstrate men's freedom to express the desire they feel.

It is also possible that women did not internalise the "other" in the imaginative alchemical interior world in the same way as men. Where men were following or seeking to penetrate the secrets of nature by seeking a feminine soul, women were themselves associated with the material, the soul, and the natural world: they contained the *prima materia* within

¹¹⁴⁸ For example Oxford: Bodleian Library, Asmole MS 1492, Item VII, *Letter to Mistress Berkeley*.

¹¹⁴⁹ Joan Kelly-Gadol argues that in "the Renaissance of Chastity" the sexual component of courtly love which had enabled medieval aristocratic women sexual freedom was modified into asexuality in a narcissistic experience of the beloved as mediator of male feeling. For Kelly, neoplatonic spiritual love, in which the male-female relationship becomes symbol or allegory, masks and expresses the dependency of the Renaissance noblewoman, who is not loved for herself, but is rendered passive and chaste. Kelly's emphasis on sexual expression as an indicator of woman's power reflects the interests of 1960s/1970s feminism, and overlooks the potential value of sublimated sexual energy within a religious context, for men or women. Her heavy dependence on Castiglione's prescriptions means that her hypothesis is not always supported when tested against wider evidence of the reality of women's lives: for example, Kelly-Gadol, pp. 152-159.

¹¹⁵⁰ Aemilia Lanyer, addressing Lady Margaret Clifford, describes Christ as "the Husband of thy Soule". *Salve Deus rex Iudæorum*, p. 53, hand numbered pages in Bodleian Vet A2 f.99.

themselves. The secrets of life, birth and death which alchemy sought to understand were core concerns of a female culture in which women inter-related in female spaces through birthing, childbearing and the sustenance of life using nutrition, medicine, and the religious life. The case studies offer occasional glimpses of women testing alchemical imagery. Jeanne du Port, for example, appears to experiment with the image of the philosopher's daughter, traditionally symbol of the risen soul or the philosopher's stone, which also described her station, as a philosopher's daughter.

Obedience to father and husband was a third primary prescription advised in early modern women, a requirement mirrored in the obedience of humanity to God, subject to ruler, and alchemist son to expert master. Alchemy did not conflict with obedience where it was regarded as part of housewifery, an extension to the distillation of medicines, waters, perfumes, herbalism, hospitality and useful prayer. Whilst participation in alchemy did not require her to break rules of obedience, it also gave her the opportunity to challenge patriarchal authority. Isabella Cortese's name challenged stereotypes simply by appearing in print. Quercitan's daughter speaks back to her mentor, refusing to take the blame for a mistake resulting from a method she had queried. Margaret Clifford's alchemical practice would probably have been sanctioned by her husband as his own family had a long tradition as alchemists. Despite her public humiliation, she appears to have followed the ideal of the virtuous wife loyal to the end, whilst using the freedom that arose through his frequent travels abroad, separation and death, to challenge male authority by attempting to take a leading role at the cutting edge of the Elizabethan economy, in mining and New World sponsorship, and by arguing vehemently for the right for her daughter to inherit over the legal male heir. Sarah Wiggess apparently protests, in the privacy of her notebook, that women should learn skills to keep business from male midwives.

Although women could subvert notions of the female virtues of silence, chastity and obedience to seek knowledge, these virtues were also used as tools of prescriptive control, alongside efforts to render women passive, particularly in the seventeenth century. Catherine Belsey's description of divergent seventeenth century trends affecting women at middling and upper levels of society, has significance for women's alchemical literature. Even though there were increasing ventures into print by women at upper and middle levels of society, and more self-expression using alchemy as metaphor in private and public by middle class women, the representation of woman as passive ideal wife associated with her husband's soul (rather than her own) emerges as a striking aspect of seventeenth century alchemical literature.¹¹⁵¹ It finds its clearest expression in the seventeenth century male construction of the ideal female alchemist as alchemystical wife, the most well-known of which is Perenelle Flamel.¹¹⁵²

The Flamel story is not the only evidence for control or obfuscation of the voices of women alchemists. Whilst during the seventeenth century the concept of the silent alchemystical wife developed into a popular aspect of the alchemical transformation story, the idea of the active woman alchemist expressing her own account of her practice was unpopular in some quarters. All the case studies in this thesis show evidence of rewriting or annotation between 1616 and 1660 with significant consequences. Around 1660 the stories of all the main case studies continued to be of some contemporary interest, but during this

¹¹⁵¹ Catherine Belsey, *The Subject of Tragedy: Identity and difference in Renaissance drama* (London: Methuen, 1985) p. 149. Deborah Harkness has attempted to show that Jane Dee had an active role as wife of a natural philosopher (John Dee), helping to ensure his business was profitable, overseeing the work of philosophical assistants and protecting her husband's privacy. ('Managing an Experimental Household: The Dees of Mortlake and the Practice of Natural Philosophy', *Isis*, 88, June 1997, pp. 247-262. Harkness (p. 259) claims to view the "experimental household" through Jane's eyes, but her argument is hindered by the lack of surviving evidence from Jane Dee and reliance on speculation. Similarly any case for Rebecca Vaughan as an active alchemist rests entirely on her husband's account: there is no extant evidence from Rebecca.

¹¹⁵² In the Flamel story, at Paris in 1612, just two years after Madame de la Martinville's *Discours Philosophical* was written, with an English translation in 1624, Perenelle is presented as both practically supportive (a rich widow who shares her husband's interests and silently accepts whatever he wishes to do) and as representative of the philosopher's stone, the body which in the final stage of the work exerts a spiritualising effect on the male alchemist. See Artephius, *Trois traitez de la philosophie naturelle*, transl. by P. Arnauld (Paris: Guillaume Marette, 1612) and Nicholas Flamel, *His Exposition of the Hieroglyphicall Figures*, transl. by Eirenæus Orandus (London: T.S., 1624).

period of copying and rewriting their histories were subject to alterations which make it harder to hear the original woman's voice.¹¹⁵³ Isabella Cortese's *I Secreti* was translated, excerpted and republished in Italian. *Quercitan's Daughter's Letters* were translated, and copied into English by Elias Ashmole and others in the mid seventeenth century, when accounts of Madame de la Martinville and Neptis were also in circulation. Theodore de Mayerne's papers concerning Neptis and Madame de la Martinville appear to date from the 1620s and 1630s. An important part of the account of Lady Margaret Clifford's alchemy was written and represented by her daughter in the 1640s and 1650s.

A major theme in the diffusion of the case studies is the retrospective attempt to silence women's voices or specific traces of alchemical activity. Censorship is the most obvious method, though for varying motives. Mistress Berkeley's name may have been inked over to protect, or hide, her identity. The unknown annotator who argues that the author of *Quercitan's Daughter's Letters* could not have been a woman appears to have been resistant to the idea of any alchemical writing by a woman. Another type of silencing arises through confusion of identities hidden behind pseudonyms in the transmission and copying of manuscripts, a process affecting the manuscripts about French women alchemists. A more subtle approach to silencing is idealisation, by eliminating magical aspects of alchemical practice and increasing emphasis on religious perfection. Isabella Cortese is transmuted into a wise woman in Italy, and miracle worker in Germany, but in the odd fragment that found its way into an English receipt book her name was lost. Lady Anne Clifford's eulogy on her

¹¹⁵³ Jane Stevenson argues that it is modern, not early modern, scholarship that has caused the names of early modern women Latinists to vanish from history, noting that a continuous tradition of women who wrote in Latin can be traced from antiquity to the 18th century, which was better known to contemporaries than it is today. See: 'Women and classical education in the early modern period', in *Pedagogy and Power: Rhetorics of Classical Learning*, ed. by Yun Lee Too and Niall Livingstone (Cambridge: Cambridge University Press, 1998) pp. 83-109.

mother's virtues and affinity with heaven makes no mention of John Dee, magic-cabalism, or mining investments, of which Lady Anne may have disapproved.

Since chastity before marriage and fidelity within it was the heart of the code of female honour, to accuse a woman of being unchaste was a serious attack.¹¹⁵⁴ The boundary of virtuous and immodest behaviour varied.¹¹⁵⁵ It is not difficult to see how a casual reading of some alchemical texts might suggest erotica, and certainly one mid-seventeenth century annotator thought that the intellectual partnership of *une Docte damoiselle de France* and *Monsieur du Chesne* warranted description as adulteress and adulterer. Fifty years later, Anne Bodenham's Paracelsian wizardry was described as a tale of whoredom.¹¹⁵⁶

The use of obedience to increase women's passivity has not emerged overtly in the diffusion of the case studies. It is, however, appropriate to speculate whether Lady Margaret Clifford's feelings about Earl George in the lost part of the letter to Dr Layfield may have been removed because it showed her to be less than loyal, since her unhappiness with his behaviour was common knowledge. In this she differs from model alchemystical wives whose complete and unbelievable pliability to their husband's wishes is recounted with never a hint of the smallest rebellion. Thomas Vaughan describes his adored wife Rebecca as "a most loving, obedient wife" who brought him "Happiness, and Content".¹¹⁵⁷ He regarded their marriage as a close companionate one, and she appears to have represented a sublime aspect of the feminine in his psyche, since she appears to him in a dream in the guise of the muse Thalia.¹¹⁵⁸ His use of "we" to describe their joint alchemical experiments does provide further evidence of women's participation in alchemy, but it does not alter the silence of

¹¹⁵⁴ On chastity and honour codes see Fletcher, *Gender, Sex and Subordination*, p. 101ff; on the stereotype of the whore see Mendelson and Crawford, *Women in Early Modern England*, pp. 70-71.

¹¹⁵⁵ Fletcher, *Gender, Sex and Subordination*, pp. 114-115.

¹¹⁵⁶ Diane Purkiss, *The Witch in History* (London and New York: Routledge, 1996) p. 147.

¹¹⁵⁷ Cited from British Library: Sloane MS 1741 by Donald R Dickson, 'The Alchemystical Wife: The Identity of Thomas Vaughan's 'Rebecca'', in *The Seventeenth Century* 13 (1998), 34-46 (p. 41).

¹¹⁵⁸ Dickson, p. 43.

Rebecca's own voice. Whether she accepted acquiescently her role of obedient helpmeet, and how he featured in *her* dreams, is unknown.

Although the primary focus of this thesis is on what women have apparently written as active participants in alchemical culture, it has proved impossible not to take some account of other accounts, in which women sometimes have a small role, quite often as passive assistants to their husbands. A tension between active, passive and fragmented representations of women alchemists is also found in other studies of female culture. Catherine Belsey, for example, argues that whilst it was possible in the sixteenth century to conceive of a woman as a unified rational being, such as Paulina in *The Winter's Tale*, in both the sixteenth and seventeenth centuries there was an instability in texts about and attributed to women, which reflected contests for women in the family and society and struggles to install women as subjects, a struggle which women resisted through adultery, witchcraft and prophesying.¹¹⁵⁹ This raises the question of whether alchemy was also an area in which women struggled to demonstrate their agency and resist passivity. There are certainly examples of both in this thesis. Lady Margaret Clifford's alchemical practice emerges as one amongst a broad range of interests that have a unity when approached through the alchemical metaphor of knowledge, though all the evidence for this comes from others' representations of her practice. Quercitan's Daughter's alchemical letter expresses her struggle to be heard, and to resist both the role of passive assistant, or to be defined as a failure by her male mentor. Isabella Cortese's apparently active role as author of a book of secrets is less certain in the light of her pronounced deferral to male experts and authority. Marie le Jars de Gournay writes poetry to defend her alchemical practice against accusations of foolishness. Yet in the diffusion of these stories, and during the first half of the seventeenth century, there is also an increased focus on woman as subject, particularly as a silent and obedient wife.

¹¹⁵⁹ Belsey, pp. 150, 197.

Suggestions that some men in the seventeenth century sought to suppress the idea of the woman alchemist have been found, although, during the period 1560 to 1616 the women in the case studies are apparently supported by men who help them to access knowledge. The evidence presented in this thesis about women's participation in alchemical culture is therefore complex, but perhaps suggests a movement from active sixteenth-century women who sometimes struggle to be heard by men who are ambivalent about how knowledgeable women should be, to increasingly passive and silent mid-seventeenth century representations.

By suggesting one trend towards passivity and silencing, I am not excluding the possibility of other, divergent processes, nor the possibility that there could have been active female alchemists in the mid-late seventeenth century. The delineation of alchemical trends in this period is a complex and continuing area of historical research. Christopher Hill argued in 1972 that alchemy and magic were strongly associated with radical movements in the Interregnum with the consequence that after 1660 alchemy was part of the package of interests of the radicals that were generally rejected.¹¹⁶⁰ However in 1992 J. Andrew Mendelsohn argued that on the contrary, after 1660, alchemical medicine found a new home at the courts, exemplified by Charles II's return from France with an alchemist, Nicholas le Fèvre, as his apothecary-in-waiting.¹¹⁶¹ This raises the problem of ascertaining whether women associated with the courts continued to take an interest in alchemy.¹¹⁶²

One aspect in this enquiry is how far court and aristocratic women were affected by a trend, identified by Lynette Hunter, for the movement of certain relevant activities out of the household, or out of rooms which were women's preserve. Hunter discusses

¹¹⁶⁰ Christopher Hill, *The World Turned Upside Down* (London: Penguin, 1972) pp 287-296.

¹¹⁶¹ 'Alchemy and Politics in England 1649-1665', *Past and Present* 135, May 1992, pp 30-78, 30.

¹¹⁶² Hero Chalmers argues that Margaret Cavendish's protestations in favour of the rational capacity of all matter is redolent of the Paracelsian tradition, and particularly Johann Baptista Van Helmont. ('The Feminine Subject in Women's Printed Writings, 1653-1589', Unpublished DPhil thesis, Oxford, 1993, p. 104). However Cavendish's anti-experimental bias, discussed by Chalmers at p. 90, places her in a different category from the women alchemists discussed in this thesis.

the shift from the female space of the kitchen to the male domain of the laboratory, suggesting that it is part of a wider trend to separate gender-distinguished spaces, associated with, for example, the work of the butler and housekeeper.¹¹⁶³ This movement warrants more study in its own right, but indicative events include the first stand-alone still-house at Ham House in 1670, which though built for a woman, may represent a shift over the boundary of the previously usual female domain,¹¹⁶⁴ and the opening of the first chemical laboratory of the University of Oxford in the basement of the Ashmolean Museum in 1683, bringing alchemy back (from the medieval monasteries) into an institutionalised environment which entirely excluded women.¹¹⁶⁵

Another aspect of the enquiry into whether women at court continued to practice alchemy comes from the evidence that popular culture associated practical alchemical secrets with women in Royal circles during the 1650s. The desire for and belief that ordinary people should know the secrets of the elite led to publication of a cluster of secrets books which foregrounded the medical/scientific interests of the exiled Queen Henrietta Maria and two of her female friends, the sisters Elizabeth Grey, Countess of Kent (1582-1651) and Alatheia Talbot, Countess of Arundel (1584-1654).¹¹⁶⁶ Henrietta Maria was a Medici, as well as daughter of Henri IV. She employed Theodore de Mayerne, the close friend of Joseph du Chesne, as her doctor.¹¹⁶⁷ The sisters' mother, Lady Shrewsbury, a friend of Lady Margaret Clifford, was interested in Italian alchemy and had a business interest in extracting lead from

¹¹⁶³ Lynette Hunter, 'Sisters of the Royal Society: The circle of Katherine Jones, Lady Ranelagh', in Hunter and Hutton, *Women, science and medicine*, pp. 178-197(pp. 188-9).

¹¹⁶⁴ Archer, 5.xi.

¹¹⁶⁵ Anthony V. Simcock, *The Ashmolean Museum and Oxford Science 1683-1983* (Oxford: Museum of the History of Science, 1984) pp. 1-3.

¹¹⁶⁶ Lynette Hunter suggests that the printers are likely to have thought they could make money out of these books in a climate of growing unease at the beheading of Charles I. ('Sisters of the Royal Society', p. 179). On Elizabeth Grey and Alatheia Talbot see this thesis, chapter one, p. 29, chapter two, p. 68, 92.

¹¹⁶⁷ *Women, Science and Medicine 1500-1700: Mothers and sisters of the Royal Society*, ed. by Hunter and Hutton (Stroud: Sutton, 1997) p. 180.

its ore.¹¹⁶⁸ The sisters' youth and early adulthood was also strongly influenced by the court of Elizabeth. None of these women are published directly under their own name, and the accredited authors, W.M., W.J., and Philiastros are anonymous.¹¹⁶⁹ These books all display a range of household concerns. The *Choice Manual* of Elizabeth Grey's *Rare and Select Secrets*, includes distillation, tinctures, a Paracelsian salve and mineral receipts, and offers mild technical medical alchemy amidst receipts for herbal medicines and pies. *Natura Exenterata*, by Philiastros, and associated with Alatheia Talbot, goes further, including receipts for extracting quintessences "of all manner of Herbs, flowers, roots, flesh, blood or Eggs", and a table of chemical symbols and receipts including quintessence of quicksilver, brimstone, antimony.¹¹⁷⁰ *Natura Exenterata* conveys the atmosphere of a woman's notebook, by including many female sources, writing about alchemy in language reminiscent of kitchen physic, and like Isabella Cortese, including material on dyeing and perfumery. Lynette Hunter suggests that Alatheia Talbot may have obtained chemical knowledge from Robert Boyle and Katherine Jones.¹¹⁷¹ Hunter's description of an original manuscript by Jones suggests a content akin to Talbot's *Natura Exenterata*, technical recipes using symbols derived from alchemy. Hunter makes no mention of any magical-spiritual aspect.¹¹⁷² However, in the context of looking back to an earlier, more stable and probably romanticised

¹¹⁶⁸ David Howarth, *Lord Arundel and his Circle* (Yale University Press, New Haven and London, 1985) pp. 21, 226 fn. 31. On friendship with Lady Margaret see the Shrewsbury Papers MS 708, f. 135, and Lady Margaret's will in Williamson, *Lady Anne Clifford*, p. 458. On mining, see M. B. Donaldson, *Elizabethan Monopolies* (Edinburgh and London: Oliver and Boyd, 1961) p. 158.

¹¹⁶⁹ W.M., *The Queen's Closet Opened. Incomparable Secrets in Physick, Chirurgery, Preserving, Candyng, and Cookery; As they were presented to the Queen by the most experienced persons of our times, many whereof were honoured with her own practice, when she pleased to descend to these more private Recreations. Transcribed from the true copies of her MAJESTIES own Receipt-Books by W.M. one of her late servants*, (London: Nathaniel Brooks, 1655). W.J., *A Choice Manual of Rare and Select Secrets in Physick and Chyrurgery; collected and practiced by the Right Honourable, the Countesse of Kent late deceased* (London: 1653). Philiastros, *Natura Exenterata* (London: 1655).

¹¹⁷⁰ Philiastros, p. 375. See fn 111, chapter one of this thesis.

¹¹⁷¹ Hunter, 'Sisters of the Royal Society', p. 182.

¹¹⁷² Hunter, p. 182. I have not been able to examine this manuscript (Welcome MS 1340).

golden era of alchemy, we can also note the interest in mining and transmutations of Talbot's mother, the Countess of Shrewsbury, Mary Cavendish Talbot.

This thesis suggests that during Alatheia's childhood and early adulthood women in her mother's circle participated in the circulation of intellectual and practical alchemical documents, making it much less surprising that she owned a table of chemical symbols and associated receipts. What Philiastrus does not publish, though, is the magic and cabala that has been identified in some case studies. He associates Alatheia Talbot with household Paracelsianism without the philosophy, without the priestly-midwife role, and without the soul and spirit. Although *Natura Exenterata* is important evidence for women's household alchemy in the mid seventeenth century, it sheds little light on the magical-spiritual context in which women practised alchemy. The mystical politics of the courts of Elizabeth and Anne/James with which Alatheia had been brought up had collapsed with a decapitated king and his Queen's exile.¹¹⁷³ Henrietta Maria and her women may have still nursed a hidden belief in regal power, wisdom and creativity derived from correspondences with a neoplatonic sun, moon, and mercury, but the mood of the country had changed, and no hint of neoplatonism is given in these receipt books designed for public consumption. Mystical politics found a new hidden route in the exclusively male institution of freemasonry, in which Alatheia's husband, Thomas Howard, Earl of Arundel, appears to have been a significant early figure, and in which Elias Ashmole, whose collected alchemical manuscripts have been so crucial in this study, was an early initiate.¹¹⁷⁴ For women the doors of Freemasonry were barred.

¹¹⁷³ Hart, *Art and Magic in the Court of the Stuarts*, p. 191.

¹¹⁷⁴ He is said to have been Grand Master of Freemasons, 1633-35. G.E.C. and The Hon. Vicary Gibbs, *The Complete Peerage* (London: St. Catherine Press, 1910), vol. 1, "Arundel", p. 257.

Whilst examples of hermetic alchemy can be found throughout the seventeenth century it is possible that the magical aspect of alchemy began to be downplayed, alongside a continued use of alchemy as spiritual metaphor and chemical technique, and publication of quasi-Paracelsian technical books of secrets from which magic was largely expurgated. Even though a new wave of women's alchemical writings emerged in the English Interregnum in the middling and higher levels of society, the cultural power of the neoplatonic-Paracelsian-chemical metaphor does not appear to have regained the force it held at the courts of the Medici, Henri IV, Elizabeth and James.

Hugh Trevor-Roper argues that by 1655 Paracelsianism had lost its identity, following its disintegration in central Europe during the Thirty Year's War.¹¹⁷⁵ Looking at the spiritual-magical alchemical practices of the women in the case studies from the perspective of mid-seventeenth century Italy, France and England, it seems likely it had depended on their proximity to the occult philosophy of power, at the courts of the Medici, Henri IV, Elizabeth and James, where alchemists offered to assist those who ruled in creating a version of heaven on earth in which there was an orderly upholding of the status quo. Where the social order was questioned for other reasons, such as in the Overbury scandal, then alchemical practise was potentially threatening. For the middling levels of society alchemy was more likely to be perceived as dangerous, foolishly expensive, or disorderly behaviour threatening to society: women might then be stereotyped as proselytes or unchaste whores. Surprisingly, none of the women in the case studies is vilified as a witch, suggesting that social position and intellectual circle, rather than gender, separate the theoretical figure of the witch in a disorderly and threatening world from the aspiration to create a perfectly ordered cosmos, by God's elite female alchemist. The pursuit of the purification of a variously defined "soul",

¹¹⁷⁵ Trevor-Roper, 'The Court Physicians and Paracelsianism', p. 92.

was part of the work of restoring the fallen earth to heaven. As Aemilia Lanyer advised Lady Margaret Clifford, the health of the soul, figured as perfect gold growing in the veins of earth, was an essential part of the second Adam's "most blessed Paradice ".¹¹⁷⁶

This thesis has sought to make a contribution to the understanding of early modern women's intellectual and practical knowledge, and of social aspects of alchemical practise across a number of European countries. Previous studies have examined other aspects of women's learning and craft work, suggested European networks of male alchemists, and have begun to examine the English context of women's alchemical interests. This study seeks to break new ground, by examining women's alchemical practice in several European countries, though there is scope for further work by scholars based in other European countries with access to alchemical manuscript collections. This research suggests that some women in Paracelsian circles read, wrote and experimented with alchemy, had access to European networks of alchemical knowledge, and moved in circles in which it was not unusual for women to know something about alchemy in its philosophical, technical and metaphorical dimensions.

This, then, is a thesis primarily about a group of women who appear to have explored their environment according to a Paracelsian-alchemical worldview. It is hoped that this research will lead historians of women, science and philosophy to reconsider the delineation of women's activity in this area, and to explore further the suggestion that early modern women's participation in alchemy was not an exceptional and insignificant occurrence, but that between at least 1560 and 1616 it was part of a pattern of learning and enquiry in several European countries.

¹¹⁷⁶ See p. 1 of this thesis.

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