Sustainability and Recycling in Fifteenth-Century Manuscripts

Hannah Katharine Ryley

Worcester College

University of Oxford

DPhil in English pre-1500

Michaelmas Term 2016

Abstract

Sustainability and Recycling in Fifteenth-Century Manuscripts
Hannah Katharine Ryley
Worcester College, University of Oxford
DPhil English pre-1500
Michaelmas Term 2016

This thesis examines the sustainability of fifteenth-century manuscripts. It analyses the durability of manuscripts, and the ways in which people recycled and reused their books. During the long fifteenth-century (here, 1375-1530), book production in England flourished, driven by increased demand for books. Yet while the fast-developing commercial book trade produced new books in great quantity, significantly, older books were also sustained, recycled and reused.

Although there is awareness within medieval scholarship of recycled manuscript components, such as flyleaves, no sustained study has yet been undertaken into recycled and reused materials in fifteenth-century manuscripts, or into book production's practices and processes of reuse. In addition, previous book history studies of recycling have focused on the book material reuse that followed the Dissolution. By contrast, this study offers a broader exploration of sustainable practices in fifteenth-century manuscript culture, as well as in-depth analysis of manuscript examples, to argue that book producers made and reused books in sustainable ways.

The introduction outlines key concepts and relevant scholarship, such as studies that follow the material turn, and ecocriticism. The four chapters that follow address sustainability from different angles, focusing primarily on the evidence both in and written on books themselves. Chapter 1 explores the craftsmanship of parchment-making through contemporary recipes and physical evidence in manuscripts. Chapter 2 presents case studies of parchment reused sustainably in books, as off-cuts, quire guards, flyleaves, pastedowns, limp covers, and palimpsests. Chapter 3 surveys spaces reclaimed in books for opportunistic mark-making, in the form of doodles, jottings, and short verses. Chapter 4 presents three surveys of second-hand books and the inscriptions written onto their leaves. A conclusion draws together the findings.

This thesis augments and nuances current scholarship by arguing that fifteenth-century reuse and recycling of book materials were customary aspects of book production and symptomatic of more widespread sustainability in manuscript culture.

Contents

Acknowledgements

I would like to thank my supervisor Prof Dan Wakelin for his clear-sighted suggestions, for helping me to shape this project and bring it to completion. Throughout the thesis, Dan supported all aspects of my academic development. I appreciate his ongoing advice. I am grateful to my examiners, Prof Julia Boffey and Dr Jane Griffiths for engaging with the fruits of my research in such a positive, constructive way. My viva was an intellectually rewarding experience, and Julia and Jane continue to support my progress.

Thank you to my fellow Oxford medievalists for the intellectual and literal nourishment, especially in the form of seminar wine and impromptu suppers. Thanks to everyone at Oxford's Academic Writing Group, lead by Dr Alice Kelly, for your academic generosity and productivity strategies. I am so pleased to have met members of the international academic community at conferences, summer schools, and at the Huntington Library. I would like to thank Prof Mishtooni Bose, Prof Neil Cartlidge, Dr Colleen Curran, Cavaliera Cristina Dondi and Dr Geri Della Rocca de Candal, Prof Alex Gillespie, Prof Simon Horobin, Prof Heather O'Donoghue, Dr Nick Perkins, Dr Orietta da Rold, Prof Kathryn Rudy, Prof Corinne Saunders, Prof Adam Smyth, Prof Kathleen Tonry, and Dr Laura Varnam. The following generously shared unpublished research with me: Dr Carrie Griffin and Prof Michael Johnston, Jess Henderson, Dr Aditi Nafde, Dr Daniel Sawyer, and Dr Jamieson Weetman.

Thanks to Worcester College for awarding me the Wilkinson Assistant Dean & Junior Research Fellowship. This role, alongside the Martin Senior Scholarship, enabled me to complete my doctorate. I am especially thankful to Prof Ben Morgan and Prof Kim Dora for their leadership, to all my fellow dean team members, and the Junior Dean network. Thanks to Dr Laura Ashe and Dr Daniel McCann for their generous support as college advisors, and to the Provost Sir Jonathan Bate and Lady Paula Byrne for their guidance and for inviting me to join some very lovely dinners and celebrations! For acquiescing to my requests for books, thanks are due to Dr Jo Parker, Dr Mark Bainbridge, and Kamila Pecher. These books now supplement the College library's already impressive book history collection. Thanks to all the fellows and staff for your friendship and assistance throughout my time at Worcester, in particular to Jo Bates, Rhian Perridge, Elizabeth Smith, and the porters' lodge team.

My doctoral research would not have been possible without access to various collections of medieval manuscripts. To the Bodleian Library reading room staff,

especial thanks for hefting heavy manuscripts for me! Thank you to Colin Harris and Dr Martin Kauffmann for all your advice. I would also like to thank the following research collections for welcoming me: in Cambridge, the University Library, Gonville & Caius College Library, St John's College Library, and the Wren Library at Trinity College; in London, the British Library, Lambeth Palace Library, and Gray's Inn Library; in California, the Henry E. Huntington Library; in addition, Eton College Library; Exeter Cathedral Library; and Worcester Cathedral Library. Images are included in the supplement to the thesis by kind permission of: the Bodleian Library, the Wren Library at Trinity College, Cambridge, the Henry E. Huntington Library, Lambeth Palace Library, and by permission of the Master and Fellows of St John's College, Cambridge. Also, I would like to extend my gratitude to the Henry E. Huntington Library for awarding me the Gilbert & Ursula Farfel Fellowship in 2015.

I am deeply grateful for the disability support that I received during my DPhil, and for an invaluable period of suspension. Thanks to all the library support workers who helped me by photocopying or lugging books across Oxford, especially Shuping Dang. Thanks also to Sarah Bailey for keeping me as mobile as possible!

For checking my French and Latin translations, *merci beacoup* and *gratias ago*: Tom Barrat, Dr Claire Harrill, Seph Henderson, Dr Kylie Murray, Dr Lizzie Sandis, and Costy Scarpa. For checking my sums and my forays into late medieval currencies, *Danke* Katie Ball. For introducing me to the vagaries of real-life sheep husbandry, thanks to Drs Yvonne and Martin Nicholas.

Enormous thanks to all my friends for putting up with me (and, in many cases, for putting me up) during my thesis: Seb and Dr Claire Allen-Johnstone, Tom Barrat, Beth Bathurst, Dr Edwina Christie, Dr Emily Dolmans, Dr Gareth Lloyd Evans (medieval storytelling partner-in-crime), Kim Fuellenbach, Rosy Hall, Dr Claire Harrill, Jess Henderson, Seph Henderson, Louisa Hotson, Dan Jeffries, Katie Kevis, Dr Jason Lee, Dr Emily MacGregor, Tom Maitland, James Misson, Dr Kylie Murray, Dr Alex/Ally Paddock, Shokoofeh Rajabzadeh, Dr Lizzie Sandis, Dr James Dylan Sargan, Costy Scarpa, Dr Linus Schumacher, Chris Williams, Sian Witherden, Dr Tom White, Drs Sarah and Tom Wright, and Dr Danielle Yardy. To 4A, 27EC, the Corner Crew, the Worcester Duck Appreciation Luncheon Society and the Secret English Nerd Society: you know who you are and I salute you!

Finally, thanks to all four generations of the Ryley family, to my godparents, and particular thanks to my parents Simon and Diane, and my sister Imogen. I could not have done this without your support.

List of short forms

Common abbreviations (for example, s. for shillings, or repr. for reprint) are not listed here and are abbreviated silently throughout this thesis. Where locations are already indicated by the name of a library or collection (for example, Exeter Cathedral, Worcester Cathedral, and Eton College) collection locations are not repeated. Full information about each item can be found in the Bibliography.

Short Form	**Title, or library location**
Bindings Thesaurus	Ligatus, University of the Arts, London, *The Language of Bindings Thesaurus*, online <http://www.ligatus.org.uk/lob/> (accessed 5 January 2017).
BodL	Bodleian Library, Oxford.
BPPB	Jeremy Griffiths and Derek Pearsall, eds., *Book Production and Publishing in Britain 1375-1475* (Cambridge: CUP, 1989).
British Library Catalogue	*British Library Catalogue*, online <http://explore.bl.uk/primo_library/libweb/action/search.do?mode=Basic&vid=BLVU1&tab=local_tab&> (accessed 5 January 2017).
British Library Illuminated Catalogue	*British Library Catalogue of Illuminated Manuscripts*, online <http://www.bl.uk/catalogues/illuminatedmanuscripts/welcome.htm> (accessed 5 January 2017).
BRUC	A. B. Emden, *A Biographical Register of the University of Cambridge to 1500* (Cambridge: CUP, 1963).
BRUO	A. B. Emden, *A Biographical Register of the University of Oxford to A. D. 1500*, 3 vols. (Oxford: Clarendon Press, 1957, 1958, 1959).
BT	*Bosworth-Toller Anglo-Saxon Dictionary*, online <http://www.bosworthtoller.com> (accessed 5 January 2017).
CCCC	Corpus Christi College, Cambridge.
CHBB II or *III*	*The Cambridge History of the Book in Britain*.
CHLBI I	*The Cambridge History of Libraries in Britain and Ireland*.
Christianson, *Directory*	C. Paul Christianson, ed., *A Directory of London Stationers and Book Artisans, 1300-1500* (New York: Bibliographical Society of America, 1990), online <http://hdl.handle.net/2027/heb.08874.0001.001> (accessed 15 January 2017).
Clarke, *Crafte*	Mark Clarke, ed., *The Crafte of Lymmyng and the Maner of Steynyng: Middle English Recipes for Painters, Stainers, Scribes and Illuminators*, EETS o.s. 347 (Oxford: OUP, 2016).
CUL	Cambridge University Library, Cambridge.
CUP	Cambridge University Press.

DIMEV	Linne Mooney, Daniel W. Mosser, Elizabeth Solopova, Deborah Thorpe, David Hill Radcliffe, eds., *The Digital Index of Medieval English Verse*, based on the *Index of Middle English Verse* (1943) and its *Supplement* (1965), online <http://www.dimev.net> (accessed 5 January 2017).
DMLBS	R. E. Latham and others, *Dictionary of Medieval Latin from British Sources*, online <http://www.dmlbs.ox.ac.uk/publications/online> (accessed 5 January 2017).
Dutschke, *HEHL Catalogue*	C. W. Dutschke, *Guide to Medieval and Renaissance Manuscripts in the Huntington Library* (San Marino: Huntington Library, 1989).
EETS	Early English Text Society.
Farming Glossary	John L. Fisher, ed., *A Medieval Farming Glossary of Latin and English Words*, revised by Avril and Raymond Powell (Essex: Essex Record Office Publications, 1997).
GCC	Cambridge, Gonville and Caius College Library.
Hardwick and Luard, *CUL Catalogue*	C. Hardwick and Luard, eds., *A Catalogue of Manuscripts Preserved in the Library of the University of Cambridge*, 6 vols. (Cambridge: CUP, 1856-1867).
HEHL	Henry E. Huntington Library, San Marino, CA.
IMEP	*Index of Middle English Prose*, IV, VIII, X, XI, XIII, XVI, XVII, and XIX.
James, *GCC Catalogue*	M. R. James, ed., *A Descriptive Catalogue of the Manuscripts in the Library of Gonville and Caius College*, 2 vols. (Cambridge: CUP, 1907-1908).
James, *SJC Catalogue*	M. R. James, *A Descriptive Catalogue of the Manuscripts in the Library of St John's College*, Cambridge (Cambridge: Cambridge University Press, 1913).
James, *TCC Catalogue*	M. R. James, ed., *The Western Manuscripts in the Library of Trinity College, Cambridge: A Descriptive Catalogue*, 4 vols. (Cambridge: CUP, 1900-1904).
LMES	Linne Mooney, Simon Horobin, and Estelle Stubbs, *Late Medieval English Scribes*, online <http://www.medievalscribes.com> (accessed 5 January 2017).
MED	Robert E. Lewis, gen. ed., *Middle English Dictionary*, online <http://quod.lib.umich.edu/m/med/> (accessed 5 January 2017).
MLGB	N. R. Ker, ed., *Medieval Libraries of Great Britain: A List of Surviving Books*, Royal Historical Society Guides and Handbooks, 3, 2nd edn. (London: Offices of the Royal Historical Society, 1941; 1964).
MMBL	N. R. Ker and A. J. Piper, eds., *Medieval Manuscripts in British Libraries,* 5 vols. (Oxford: Clarendon Press, 1969-2002).
Muzerelle, *Vocabulaire codicologique*	Denis Muzerelle, *Vocabulaire codicologique*, online <http://codicologia.irht.cnrs.fr> (accessed 5 January 2017).
OED	*Oxford English Dictionary*, online <http://www.oed.com> (accessed 5 January 2017).
OUP	Oxford University Press.

PBE	Alexandra Gillespie and Daniel Wakelin, eds. *The Production of Books in England 1350-1550* (Cambridge: CUP, 2011).
Quarto Catalogue	*Quarto Catalogue,* II, III, V, IX, and X.
Seymour, *Chaucer Catalogue*	M. C. Seymour, ed., *A Catalogue of Chaucer Manuscripts*, 2 vols. (Aldershot: Scholar, 1995).
SJC	St John's College Library, Cambridge.
Summary Catalogue	*Summary Catalogue*, II.i, II.ii, IV, and V.
TCC	Trinity College Library, Cambridge.
Thomson, *Worcester Catalogue*	Rodney M. Thomson and Michael Gullick, eds., *A Descriptive Catalogue of the Medieval Manuscripts in Worcester Cathedral Library* (Cambridge: Published on behalf of the Dean and Chapter of Worcester Cathedral by Brewer, 2001).
UP	University Press.

Transcription conventions

All transcriptions are semi-diplomatic and follow the manuscripts' use of **I** and **j**, **u** and **v**, and their word-division and capitalization. Expanded abbreviations are marked with italics. Bold type is used when graphs are discussed as visual phenomena.

Symbol	Represents
[ct]	Square brackets surround cancelled letters (either by washing, scraping, or other damage), and any legible letters are placed within the square brackets.
[…]	Square brackets around an ellipsis indicate my selective omission of part of the transcription (also used where I omit part of a quotation from a secondary source).
/	Indicates a line break, or follows manuscript punctuation.
^ ^	Carets indicate an interlineated word, or words, which may function as corrections. These are placed as close as possible to the relevant word or phrase.
< >	Angled brackets indicate graphs or words that are difficult to read.

Introduction

Imagine a fifteenth-century English manuscript-book.[1] It is made from leather covers over wooden boards, sewing threads knotted over leather thongs, which hold the outer boards onto the parchment leaves that make up the book block.[2] It is bulky, and brings with it an animally whiff, and the scent of mould, dust and must. Throughout the manuscript the parchment quality seems reasonably consistent, but, if we flip through the book to look more closely, it becomes apparent that there are occasional folios with pock-marks and tears. Some of this damage has been repaired; some of the repairs have fallen apart.[3] The book's physical structure also incorporates reused bits of other, older books. There are flyleaves, pastedowns, maybe even palimpsests.[4] The book bears the hallmarks of medieval scholarly use, with marginal annotations that muse on the main text, refer to other texts, and provide finding aids. But this manuscript also carries signs of other jottings, doodles, scribbles: signs of "nonreading" or other uses, marks made in the book that bear no relation to the main text.[5] If we turn to one of the last leaves, it becomes apparent that this manuscript is marked, discreetly, with a brief scribbled line of writing. It would be easy to overlook it. The cursive hand is different from the more formal execution of the main text, and notes a few numbers and letters. These indicate the second-hand price – or perhaps a valuation – of the book.[6] Though this book is imaginary, each instance of parchment materiality, repair, recycling, reuse, and the note of its re-circulation is taken from the real case studies explored later in this thesis.[7] This imaginary manuscript gathers

---

[1] Throughout this thesis I refer to manuscripts interchangeably as manuscripts, books, or manuscript-books. Where necessary, print or paper books are noted specifically.

[2] See chapter 2 for examples of binding board reuse.

[3] See chapter 1 for discussion of parchment's animal origins, durability, and more on damage and repair.

[4] See chapter 2 for more on these signs of reuse, as well as reinforcing strips, quire guards, and limp wrappers.

[5] See chapter 3 for case studies of marginal reuse. The idea of "nonreading" is drawn from Leah Price's work, *How to Do Things with Books in Victorian Britain* (Princeton: Princeton UP, 2013), p.8. The language of the "use" of books is inspired by William H. Sherman, *Used Books: Marking Readers in Renaissance England* (Philadelphia: University of Pennsylvania Press, 2008), p.xiii, and p.4.

[6] See chapter 4 for discussion of book prices, in addition to other forms of second-handedness.

[7] Reuse includes the particular sense of *upcycling*, defined in the *OED* as "reusing waste materials to create a product of higher value or quality," first attested in 1994. However, the word also carries a contemporary cultural connotation – a tongue-in-cheek definition from the *Urban Dictionary* captures this, describing *upcycling* as: "the practice of taking garbage and turning it into frankenstein objects that hippies buy," online <http://www.urbandictionary.com/define.php?term=upcycle> (accessed 5 January 2017). I am keen to avoid any flicker of this implication in this thesis, and favour instead the terms *recycling* and *reuse*.

together a host of possible signs of production, handling, and circulation.[8] What is more, these features of fifteenth-century manuscript culture demonstrate sustainable practices.

Fifteenth-century manuscript culture was generally disposed to make books well, and to make them to last. There are of course exceptions; but as Michael Sargent has put it, "the production of medieval manuscript books was based on the expectation of longevity, rather than obsolescence."[9] Parchment's longevity is still a topic of discussion today: recent debates in the UK (February 2016) noted the advantages of recording parliamentary statutes on parchment, and remarked on its potential for durability.[10] This durability and longevity was achieved by medieval people through practices and processes that were what I shall call *sustainable*. Medieval manuscripts' material features, such as repaired parchment leaves, overwritten palimpsests, and fragments from other books bound in as flyleaves, constitute physical "residues" of the past, many of which signal that they were made and sustained well.[11] These features inform this thesis's wider and deeper investigation into the nature of material reuse in books. In particular, these physical residues prompt further questions about the wider context of medieval manuscript culture and its evident and varied capacity for material durability and sustainability. Indeed, the very survival of medieval manuscripts suggests that sustainable practices in medieval book production, handling, and circulation brought about the extraordinary durability of these objects.

---

[8] For this I draw on Price's distillation of the "three modes" of doing things with books: reading (here adapted for my purposes to making), handling, and circulation, in *How to Do Things with Books*, pp.5-6 and p.8.

[9] Michael G. Sargent, 'What do the numbers mean? A Textual Critic's Observations on some Patterns of Middle English Manuscript Transmission', *Design and Distribution of Late Medieval Manuscripts in England,* ed. by Margaret Connolly and Linne R. Mooney (York, The University of York: York Medieval Press, Boydell and Brewer, 2008), pp.205-244, at p.220; others make similar assertions, such as Chiara Ruzzier, who notes that "Bibles, and indeed most medieval manuscripts, were designed to last a long time, and were passed on from generation to generation", in 'The Miniaturisation of Bible Manuscripts in the Thirteenth Century: A Comparative Study', *Form and Function in the Late Medieval Bible*, ed. by Eyal Poleg and Laura Light (Leiden: Brill, 2013), pp.105-125, at pp.110-111.

[10] David Rundle, 'Parliament and the Vellum Debate, Part I', online, 6 March 2016 <https://bonaelitterae.wordpress.com/2016/03/06/parliament-and-the-vellum-debate-part-i/> (accessed 5 January 2017). For details of the proposal, see House of Commons, 'Vellum: Printing Record Copies of Public Acts', online, 11 May 2016 <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7451> (accessed 5 January 2017); see also Rowena Mason, 'Tradition of Recording UK Laws on Vellum May Be Saved', *Guardian,* 15 February 2016 <http://www.theguardian.com/politics/2016/feb/15/lords-overruled-recording-laws-vellum-goat-calf-skin> (accessed 5 January 2017).

[11] John Dagenais draws on Walter Ong's assertion that "Written words are residue," in 'That Bothersome Residue: Toward a Theory of the Physical Text', *Vox Intexta: Orality and Textuality in the Middle Ages*, ed. by A. N. Doane and Carol Braun Pasternak (Wisconsin: The University of Wisconsin Press, 1991), pp.246-259, at pp.247-8.

What this thesis argues, then, is that the material remains of fifteenth-century manuscript culture offer a possible history of these sustainable practices.

In manuscript culture, books can be traced through a sequence of stages: production, handling, and circulation. Books may seem to be a coherent whole, especially to us today accustomed as we are to the mechanised production of print paperbacks, or to digital interfaces. However, then (as now) all books were made from component parts, in a range of materials. The assembly of fifteenth-century books was often fluid in nature, and "production was just one stage in the dynamic life cycle of a manuscript."[12] That production could be "ad hoc", occurring in fits and starts over time,[13] it could be commissioned from clerks or a stationer, it could be bought ready-made or second-hand, or it could be the result of do-it-yourself modes of production.[14] Studying the "stratigraphy" of such manuscripts – essentially, manuscript archaeology – by looking back, from a seemingly fully-formed book, to the origins of the various materials that come together to form it, can help answer a plethora of questions.[15] How were these materials made, and how did they come to be so durable, so potently available for reuse? In what ways did people recycle book materials? After the production of books, in the handling phase, did people reuse their books in other ways, for purposes other than reading? What about second-hand books, and their possession and circulation? These four questions are the basis of the four chapters in this thesis and form the underpinnings of an argument for the prevalence of sustainable practices in late medieval manuscript culture. This story of manuscript materiality moves from animals in the field, through the processing of raw skins into parchment, on through myriad makers, handlers, users, and reusers, to manuscripts' circulation in society. Thus, this thesis considers fifteenth-century manuscripts at various stages in their life-cycle and assesses their sustainability from a number of angles.

---

[12] Michael Johnston and Michael Van Dussen, 'Introduction: Manuscripts and Cultural History', *The Medieval Manuscript Book: Cultural Approaches,* ed. by Michael Johnston and Michael Van Dussen (Cambridge: CUP, 2015), pp.1-16, at p.3.

[13] Arthur Bahr refers to Ralph Hanna's work on the *ad hoc* practices that produced many vernacular manuscripts, 'Miscellaneity and Variance in the Medieval Book', in Johnston and Van Dussen, *The Medieval Manuscript Book*, pp.181-198, at p.181.

[14] Julia Boffey, 'Manuscript and Print: Books, Readers and Writers', *A Companion to Medieval Poetry*, ed. by Corinne Saunders (Chichester: Wiley Blackwell), pp.538-554, at p.542.

[15] J. P. Gumbert, 'Codicological Units: Towards a Terminology for the Stratigraphy of the Non-Homogeneous Codex', *Segno e testo: International Journal of Manuscripts and Their Transmission,* 2 (2004), 17-42, at p.18; Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca and London: Cornell UP, 2007), p.48, discuss the "strata" in books.

Date range

The period selected for this study of manuscript sustainability is, loosely, a date-range known to literary scholarship as the "long fifteenth century": the late fourteenth century through to the very early sixteenth century.[16] For example, a collection of English and Scottish literature by Douglas Gray covered a typical long fifteenth century period, stretching from Chaucer's death (1400) to the Reformation (1534 Act of Supremacy).[17] Scholars with more of an interest in late medieval book history have sometimes broadened or narrowed this date-range to 1350-1550, or 1375-1475, or have associated it more closely with the decades around the advent of printing in England, in 1476.[18] Throughout this thesis, the range of the long fifteenth century is relaxed, and always inclusive.

Within this inclusive date range lie thousands of surviving manuscripts.[19] Surviving copies suggest "something like a tenfold increase in vernacular book production between 1350 and 1475", and others have suggested a "spectacular transformation" in the production rate of vernacular books in Britain from 1375 to 1475.[20] But aside from the relatively high rate of survival and production, why the fifteenth century? Admittedly, one could well explore the sustainability of books from the fourteenth or thirteenth centuries, or, for that matter, the sixteenth century. The long fifteenth century was a period that saw the development of English vernacular literature, the increasing spread of literacy, and dynamic change in the activities of book production, and, as Alexandra Gillespie and Daniel Wakelin note, at this time people "made, used and apparently wanted, or at least were able to obtain and

---

[16] Matthew Woodcock, 'England in the Long Fifteenth Century', *A Companion to Medieval Poetry*, ed. by Corinne Saunders (Oxford: Wiley Blackwell, 2010), pp.501-519, at p.501.

[17] Douglas Gray, 'Introduction', *Oxford Book of Late Medieval Verse and Prose* (Oxford: OUP, 1989), pp.3-44, at pp.3-5; this focus is also reflected in the later companion volume, Helen Cooper and Sally Mapstone, eds., *The Long Fifteenth Century: Essays for Douglas Gray* (Oxford: Clarendon Press, 1997).

[18] Emma Cayley and Susan Powell, eds., *Manuscripts and Printed Books in Europe 1350-1550: Packaging, Presentation and Consumption* (Liverpool: Liverpool UP, 2015); *BPPB* covers the years 1375-1475; Alexandra Gillespie and Daniel Wakelin, 'Introduction', *PBE*, pp.1-11, at p.4.

[19] Manuscripts may be "dated" or "datable" to the fifteenth century, Clemens and Graham, *Introduction to Manuscript Studies,* p.121.

[20] James Raven, *The Business of Books: Booksellers and the English Book Trade, 1450-1850* (London: Yale UP, 2007), p.13; A. S. G. Edwards and Derek Pearsall, 'The Manuscripts of the Major English Poetic Texts', *BPPB*, pp.257-78, at p.257, note that in the "seventy-five year periods on either side of 1400 […] one is speaking of a difference between a rate of production that leaves extant about thirty manuscripts and one that leaves extant about six hundred"; also, Sargent, 'What Do the Numbers Mean?', p.243.

preserve, more books than their forebears."[21] Though they mention it in the introduction to their landmark collection of essays on late medieval English book production, Gillespie and Wakelin's book then largely ignores the particular issue of *preservation* that is central to this thesis. Their collection of essays does suggest the vital, burgeoning, and changing nature of fifteenth-century manuscript production, but what does existing scholarship say about the sustainability of the manuscripts produced at this time?

Scholarship on the reuse or recycling of books is more commonly concerned with their damage, discard, dispersal, or destruction as fragments, waste, or scrap. Such comment is usually limited to a side-note, or is focused largely on the post-Reformation and post-Dissolution period. For our period, whatever terms are used for the life-cycles of books and book materials, there are often only fleeting references to recycling or reuse. An example of passing reference to reuse is a fragment of Chaucer's *Troilus and Criseyde* preserved as a binding strip in another manuscript in the mid-fifteenth century, which has been mentioned by Ralph Hanna, and also by Linne Mooney and Estelle Stubbs, in scholarship addressing issues other than recycling.[22] Erik Kwakkel mentions the economy of recycled materials in a chapter on ownership and miscellanies, and again in his work on discarded parchment.[23] Catalogues too make brief reference to recycling, such as Richard Gameson's remarks on fragments reused in fifteenth-century bindings in a catalogue of the Canterbury Cathedral collection.[24] Numerous studies take a later, post-medieval emphasis, and frequently dwell on the aftermath of the Dissolution; many of these refer to the popular accounts of Leland and Bale.[25] N. R. Ker's study concentrates attention on the period *c.* 1520

---

[21] Gillespie and Wakelin, 'Introduction', p.3, and pp.8-9.

[22] Ralph Hanna discusses the fragment of *Troilus and Criseyde*, ll. 764-98, preserved in Hatfield House (Herts.), Cecil Papers, Box S/1, verso, in *Introduction to English Medieval Book History: Manuscripts, their Producers and their Readers* (Liverpool: Liverpool UP, 2013), p.142; also, Linne R. Mooney and Estelle Stubbs, *Scribes and the City: London Guildhall Clerks and the Dissemination of Middle English Literature, 1375-1425* (The University of York: York Medieval Press, 2013 repr. 2014), p.68, p.79, and p.106.

[23] Erik Kwakkel, 'Late Medieval Text Collections: A Single Author Typology Based on Single-Author MSS', *Author, Reader, Book: Medieval Authorship in Theory and Practice*, ed. by Erik Kwakkel and Stephen Partridge (Toronto: University of Toronto Press. 2012), pp.56-79, at pp.72-3; Erik Kwakkel, 'Discarded Parchment as Writing Support in English Manuscript Culture', *Manuscripts Before 1400*, *English Manuscript Studies 1100-1700*, 17 (2013), 238-261.

[24] Richard Gameson discusses the recycling of fragments, in *The Earliest Books of Canterbury Cathedral: Manuscripts and Fragments to* c. *1200* (London: The Bibliographical Society, the British Library, the Dean and Chapter of Canterbury, 2008), pp.34-7.

[25] For example, Christopher de Hamel, *Cutting Up Manuscripts for Pleasure and Profit* (Charlottesville: Book Arts Press, 1996), p.6; C. Y. Ferdinand, 'Library administration (*c.* 1475-1640)', *CHLBI I*, pp.565-591, at p.581.

to *c.* 1570, firmly focussing on the growing dominance of printed copies, and the effects of the Reformation and Dissolution of the monasteries (1536-1541) on book production and trade.[26] I am not taking such research to task for ignoring sustainability in the fifteenth century – sound arguments underlie these scholars' focuses and agendas. Nevertheless, the particular nexus of issues addressed in this thesis has not yet been explored to the extent that it warrants. As Gillespie reminds us, at least of physically recycled materials, "old books supplied handy material to binders long before the Reformation."[27] This thesis takes this reminder to heart: it extends attention beyond this handy binding material and refocuses on the many parts, and wholes, that make up the pre-Reformation period's manuscripts.

Subjects of study

So, what are medieval manuscripts? What does *manuscript* mean? *Manuscript* comes from the Latin words *manu* ("hand") and *scriptus* ("written"), and one of the most straightforward definitions of this word is simply something that has been handwritten.[28] However, *manuscript* does not just refer to writing, or indeed to literary texts: it also refers to books as physical objects. Moreover, as material things too, manuscript-books operate in multiple ways. Adam Smyth and Gill Partington point out books' complicated "two-faced" nature, being at once "totems: carriers of culture, values, beliefs" and, at the same time, "quotidian objects: material and ephemeral things."[29] This thesis emphasises manuscripts' simultaneous carrying of values and existence as material things. The following chapters pick up on this: books can carry economic, spiritual, and educational values (particularly chapter 4), as well as existing as materials, such as parchment (especially chapter 1), and as books, which were read and written on (chapter 3), and were reconstituted, sometimes as whole books, or in piecemeal parts (chapter 2). Manuscripts are not just handwritten things, then, nor are they just literary works, nor indeed just material incarnations, but complex and sometimes conflicted carriers of all these values and more.

Medieval manuscripts occur in a range of physical incarnations, including fragmentary, reused or recycled forms. But thanks to the representation of medieval

---

[26] N. R. Ker, *Pastedowns in Oxford Bindings* (Oxford: Oxford Bibliographical Society, 2000).

[27] Alexandra Gillespie, 'Bookbinding', *PBE,* pp.150-172, at p.161.

[28] *OED, manuscript, adj.,* etymology: borrowed from Latin; also, manuscript in Peter Beal, *A Dictionary of English Manuscript Terminology 1450-2000* (Oxford: OUP, 2008), p.244.

[29] Adam Smyth and Gill Partington, 'Introduction', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014), pp.1-14, at p.8.

culture in modern culture,[30] in exhibitions, at historical attractions, or on television programmes, today manuscripts tend to be conceived in the popular imagination as lavishly illuminated treasures.[31] Mainstream representations largely do not capture a sense of their lively diversity of form, their humdrum ephemerality, or their sustainable potential. Manuscripts could be valuable treasures, of course, but they could also be made from rough-and-ready parchment, for example (chapter 1), or to 'make-do-and-mend' specifications (chapter 1 for repaired parchment, and chapter 2 for book materials reused in other books). And whether or not they were cheaper, scrappier, and made to lower grades of production, fifteenth-century books could go on to carry esoteric notes and doodles (chapter 3) and a range of attributed values, including many different forms of second-handedness (chapter 4). Many of these material forms suggest that there were options and opportunities for sustainable practices in book production.

How were these many physical incarnations known to their makers and users? Fifteenth-century references to what we would now call manuscripts would name these material objects *codex* or *liber*, both from Latin words for tree bark, or *bok*, from the Old English *boc*. The word *bok* or *boc* ultimately derives from the same Germanic base that gives us *beech* today, so a similarly woody origin.[32] Wood had long provided a durable surface for inscription, and it was a common material for bookbinding. Leah Price notes the double etymology of *liber*, which medieval commentators traced to either *liberare*, the act that texts were supposed to perform, as well as to the word for bark, a surface on which words could be inscribed.[33] This double etymology conveys a similar idea to Smyth and Partington's view of books as two-faced "totems" and

---

[30] On this note, Michael Camille describes the manuscript, in its "recent history", as undergoing a transformation from a "family heirloom to something of a mass commodity fetish representing 'Merry Olde England'," in 'Preface', *Mirror in Parchment: The Luttrell Psalter and The Making of Medieval England* (London: Reaktion Books, 2013), p.12.

[31] Alexandra Gillespie discussed the widespread understanding of manuscripts as "treasures", in her keynote lecture, 4th Biennial BABEL Working Group Meeting: 'Off the Books', Toronto, Canada (9 October 2015). In addition, see: the 'Royal Manuscripts: Genius of Illumination' exhibition at the British Library, London (11 November 2011-13 March 2012); the 'Marks of Genius' exhibition at the Weston Library, Bodleian Libraries, Oxford (21 March-20 September 2015); the 'Book of Kells' exhibition at Trinity College, Dublin. Countless historical attractions also feature the integration of 'snippets' or images plucked from luxury manuscripts, particularly illuminated miniatures. An example of a television series is Janina Ramirez's *Illuminations: The Private Lives of Medieval Kings*, Oxford Film and Television collaboration with the British Library for the BBC, 2013.

[32] *MED, bok, n.,* sense 1a and etymology; *DMLBS, liber, n.,* sense 2.1 and 2.2; *codex* or *caudex, n.,* sense 1.1.c, *BT* connects *boc* with both beech-trees and books.

[33] Price, *How to Do Things with Books*, p.5.

"quotidian objects", suggesting the duality – and complexity – of books, as both cultural and physical objects.

Although these definitions of *liber* and *bok* pertain to the entities we would call manuscripts, medieval people would have used *bok* to refer to other handwritten documents, as well as conceptual divisions in a written work, and *liber* originally denoted a roll (as did the word *volumen* which developed into our word *volume*).[34] This capaciousness of reference reached yet further: medieval books were understood to take their place in a wider contemporary culture of writing on things (and discussed with reference to writing onto books in particular in chapter 3). A recent collection has emphasized the variety of spaces for reading.[35] People also wrote on scrolls and scraps of parchment,[36] and on wax tablets, the medium on which many first learned to write.[37] In addition to these writerly surfaces, fifteenth-century medieval people would have seen writing in public spaces.[38] Brasses and engraved inscriptions on stone tombs survive in medieval churches across Britain;[39] there would have been many wall-paintings,[40] and surveys of churches have uncovered graffiti runes, as well as

---

[34] G. S. Ivy, 'The Bibliography of the Manuscript Book', *The English Library Before 1700*, ed. by Francis Wormald and C.E. Wright (London: The Athlone Press, 1958), pp.32-65, at p.32.

[35] Mary C. Flannery and Carrie Griffin, eds., *Spaces for Reading in Later Medieval England* (Basingstoke: Palgrave Macmillan, 2016).

[36] Erik Kwakkel, 'Commercial Organization and Economic Innovation', *PBE*, pp.173-191, at p.187; and throughout 'Discarded Parchment'.

[37] Clemens and Graham, *Introduction to Manuscript Studies*, p.4; Élisabeth Lalou, ed., *Les tablettes à écrire de l'Antiquité à l'Epoque Moderne*, Bibliologia, 12 (Turnhout: Brepols, 1992); Richard H. Rouse and Mary A. Rouse, 'The Vocabulary of Wax Tablets', *Vocabulaire du livre et de l'écriture au Moyen Age: Actes de la table ronde Paris 24-26 septembre 1987*, ed. by Olga Weijers (Turnhout: Brepols, 1989), pp.220-30.

[38] For a complementary study of sixteenth-century graffiti, see Juliet Fleming, *Graffiti and the Writing Arts of Early Modern England* (London: Reaktion Books, 2001).

[39] For surveys, see Nigel Saul, *English Church Monuments in the Middle Ages: History and Representation* (Oxford: OUP, 2009), pp.335-65; and Sally Badham, *Medieval Church and Churchyard Monuments* (Oxford: Shire Books, 2011), pp.45-6.

[40] For example, Roger Rosewell, *Medieval Wall Paintings* (Oxford: Shire Books, 2014), pp.53-7; and see examples of medieval wall-paintings restored by The Churches Conservation Trust, 'Wallpaintings Uncovered', online <http://www.historyextra.com/wallpaintings> (accessed 5 January 2017).

English and Latin names, lettering, and phrases scratched into the walls.[41] However, writing was not just engraved, painted, or scratched into surfaces; texts on parchment were pasted up on to walls of Westminster Abbey in the late fourteenth century,[42] and throughout the Middle Ages tapestries commonly featured embroidered writing.[43] In addition to these relatively public or large-scale instances of writing, lettering was also found on objects at a more intimate scale, including domestic items such as pottery[44] and personal accessories such as belts, rings, and brooches.[45] So, the wider culture of things inscribed with writing was varied in materials, scale, and accessibility.

They also varied in their sustainability: some materials that were written on could be extremely durable; others were highly ephemeral. Surfaces, such as stone or metal, were expected to be long lasting, but wax and food were not.[46] As Roger Chartier comments, writing on wax tablets was made with the possibility of erasure, therefore it was "necessarily ephemeral."[47] In the medieval church, Matthew Champion has contrasted the transient "wisps" of burned *ex-voto* candles with graffiti, which possess a "sense of permanence." Many of these graffiti inscriptions are "prayers made solid in stone."[48] But just because stone or parchment *can* be long-lasting does not mean that all medieval stone monuments or parchment manuscripts

---

[41] For a specific study of medieval wall graffiti, see Kirsty Owen, 'Traces of Presence and Pleading: Approaches to the Study of Graffiti at Tewkesbury Abbey', *Wild Signs: Graffiti in Archaeology and History*, ed. by Jeff Oliver and Tim Neal (Oxford: Archaeopress, 2010), pp.35-46. *DIMEV* notes examples of graffiti found on walls: Barrington in Oxfordshire, Duxford in Cambridgeshire, Great Bardfield in Essex, Landwade in Cambridgeshire, and Ridgewell in Essex. Norfolk Medieval Graffiti Survey, online <http://www.medieval-graffiti.co.uk> (accessed 5 January 2017); Suffolk Medieval Graffiti Survey, online <http://www.medieval-graffiti-suffolk.co.uk> (accessed 5 January 2017). Matthew Champion, *Medieval Graffiti: The Lost Voices of England's Churches* (London: Ebury Press, 2015), gives an image of a prayer inscription at p.8, images of Lydgate's inscription at St Mary's church, Lidgate, Suffolk, and other inscriptions at pp.130iii-v.

[42] Rosewell, *Wall Paintings*, p.53.

[43] For numerous examples and discussion of placards and scrolls in tapestries, see: Adolfo S. Cavallo, *Medieval Tapestries in the Metropolitan Museum of Art* (New York: Metropolitan Museum of Art, 1993), p.34.

[44] Ben Jervis, *Pottery and Social Life in Medieval England: Towards a Relational Approach* (Oxford: Oxbow Books, 2014), p.51.

[45] For belts or girdles decorated with letters, and appendices of inscriptions on objects, see Roberta Gilchrist, *Medieval Life: Archaeology and the Life Course* (Cambridge: Boydell, 2012), p.175, appendices at pp.527-8 and p.529; and details of an inscribed ring and brooch are noted in *DIMEV*.

[46] Though some food could be smoked or cured, food was seasonal, and milk and meat went off quickly, see C. M. Woolgar, 'Meat and Dairy Products in Late Medieval England', *Food in Medieval England: Diet and Nutrition*, ed. by C. M. Woolgar, D. Serjeantson, and T. Waldron (Oxford: OUP, 2006), pp.88-101, at p.95; and J. Birrell, 'Procuring, Preparing and Serving Venison', *Food in Medieval England*, pp.176-188.

[47] Roger Chartier, *Inscription and Erasure: Written Culture from the Eleventh to the Eighteenth Century*, trans. Arthur Goldhammer (Philadelphia: University of Pennsylvania Press, 2007), p.4.

[48] Champion, *Medieval Graffiti*, p.172, and p.214.

have survived. While particularly well-made and well-kept parchment possesses the material properties that enable an array of sustainable outcomes – explored in this thesis – the same vagaries that apply to other materials also apply to it. Like most medieval wax or food, plenty of fifteenth-century parchment is lost to us forever. What matters for the ensuing discussion is that there was a wider range of sustainability in material culture, that parchment manuscripts took their place on the same spectrum of ephemerality to durability, and that durability could make possible sustainable practices.

Rather than considering all these other media, this thesis is a focussed exploration of sustainability in fifteenth-century manuscript culture. That said, I consider the physical properties of manuscripts in a wider context of "manuscript culture", which Martha Dana Rust has defined as "the network of beliefs and practices – pedagogical, technological, economic, devotional, agricultural, among others – that constituted the milieu of medieval book production and use."[49] This inclusive understanding of a book-related medieval milieu opens up manuscripts to highly cross-disciplinary study, and positions them at the intersection of various beliefs and practices. Thus, the following chapters encompass the practices of animal husbandry, craftsmanship, salesmanship, and piety, among other aspects of medieval socio-economic and cultural life. As a result, it is not just fifteenth-century books that populate this thesis, but also many of the people and places that gave rise to the production of books, were involved in their handling, and enabled their circulation.

Sources

Although this thesis considers the contexts for making books, the sources for this research are mostly vernacular medieval manuscripts themselves. The manuscripts discussed in this thesis were mostly made in England and are dated or datable to the long fifteenth century, or were made earlier but are considered for the signs of their circulation in the fifteenth century. Though the primary sources selected for study in this thesis share, on the whole, their period of production, handling, and circulation, in other ways they are remarkably wide-ranging. Occasionally themes or groupings of manuscripts emerge, such as a survey of books for damaged parchment (in chapter 1), a series of Chaucer manuscripts (in chapter 2), and a scattered group of books marked with sale prices (in chapter 4). However, these groupings should not be taken to be

[49] Martha Dana Rust, *Imaginary Worlds in Medieval Books: Exploring the Manuscript Matrix* (Basingstoke: Palgrave Macmillan, 2007), p.9.

more widely representative.[50] The manuscripts chosen for this thesis feature many different texts, by different authors; hail from a variety of genres; and demonstrate an array of production values and provenances. This diversity is deliberate, and it shows that sustainability was a feature not just of any one milieu or tradition. My samples should not, though, be considered necessarily representative of the larger body of extant medieval manuscripts, or of manuscripts from the long fifteenth century, or indeed representative of medieval manuscripts in their own time. Sometimes they may well be, but we cannot ever know, with certainty, the 'true' picture of medieval manuscripts in their own time, partly because of losses. In any case, such a picture would have been equally inaccessible to contemporaries.

Rather, this thesis sees manuscripts as sources for tentative *possible* histories. And though much evidence is lost irrevocably, or is not yet legible to us, manuscripts can carry traces of their participation in medieval culture in their material fabric, in signs such as the form of parchment, evidence of repair and reuse of book materials, and in many kinds of written markings. As Julia Boffey has noted in one of her own studies of manuscript and print culture, "The focus is very much on material documents and material books, and its arguments have been prompted by lines of investigation deriving from these artefacts."[51] The same is true of this thesis: the lines of investigation into sustainable practices explored here are written notes and tangible traces. I draw on a range of approaches and fields of study, but above all else, this thesis is a work of book history. The main methods used in each chapter (outlined at more length in due course) will be familiar to book historians as commonplace techniques, such as undertaking surveys of catalogues, or case studies of particular books, or offering palaeographical and codicological interpretations of manuscripts. Nonetheless, these and other supplementary methods are inflected by a flexible, interdisciplinary, and cross-disciplinary outlook. This thesis also draws on approaches and ideas from ecocriticism, sustainability studies, archaeology, material culture studies, anthropology, sociology, and animal studies, among others. However, concepts and key ideas drawn from these fields are used selectively throughout this thesis and are always grounded in book history.

---

[50] Seymour, *Chaucer Catalogue*; C. Paul Christianson, 'Evidence for the Study of London's Late Medieval Manuscript-Book Trade', *BPPB*, pp.87-108.

[51] Julia Boffey, *Manuscript and Print in London c.1475-1530* (London: The British Library, 2012), p.6.

Theoretical underpinnings

Drawing on these theoretical models might help us to define the sustainability of fifteenth-century books in ecological and social terms. As has been hinted at, manuscripts are made of animal skins, as well as other organic products, and they are also vehicles for education, status display, and piety, among other socio-economic roles. They can be described as nonhuman objects, matter, stuff, artefacts, things, commodities, but they were crafted by skilled craftsmen – at this time, almost exclusively, and by definition, by hand. This dichotomy makes them part of a much wider theoretical conversation about the relationship between humans and nonhumans. This subject has been addressed by a number of different fields of enquiry, especially ecocriticism, which Greg Garrard has defined as "the study of the relationship of the human and the nonhuman,"[52] as well as in ecology, which for Rebecca Douglass is "the science or study of interconnectedness."[53] So how do my concerns with sustainability in the long fifteenth century's manuscript culture match up with all these possible forms of human/nonhuman relations?

This material turn has foregrounded the question of human and nonhuman relationships, especially where the nonhumans are material entities. How do people affect the things around them, and do things impact people too? The 'material turn' to such questions has been influential across the disciplines from philosophy, anthropology and sociology, to archaeology, cultural geographies, and book history.[54] 'Thing theory', developed by Bill Brown, has been notably influential and widely adopted in literary studies.[55] While I acknowledge and draw upon the work of vibrant materialism, object oriented ontology, and thing theory, this thesis moves away from some of their more obsessively 'thingy' preoccupations in favour of exploring the material culture of books, but without denying human agency.[56] This thesis engages with books and the relations between books and people, as part of material culture.

---

[52] Greg Garrard, *Ecocriticism* (Oxford: Routledge, 2012), p.5.

[53] Rebecca Douglass, 'Ecocriticism and Middle English Literature', *Medievalism and the Academy II: Cultural Studies*, ed. by David Metzger (Cambridge: Brewer, 1998, publ. 2000), pp.136-63, at p.136.

[54] Dan Hicks and Mary C. Beaudry, 'Introduction: Material Culture Studies: A Reactionary View', *The Oxford Handbook of Material Culture Studies,* online <10.1093/oxfordhb/9780199218714.0001> (2012); Patrick Joyce and Tony Bennett, 'Introduction', *Material Powers: Cultural Studies, History and The Material Turn*, ed. by Tony Bennett and Patrick Joyce (London: Routledge, 2010), pp.1-21, at p.7.

[55] Bill Brown, 'Thing Theory', *Critical Inquiry,* 28:1 (2001), 1-22; Bill Brown, 'Objects, Others, and Us (The Refabrication of Things)', *Critical Inquiry,* 36:2 (2010), 183-217.

[56] John Frow argues persuasively that a materialist approach should *not* neglect the human, in 'Matter and Materialism: A Brief Pre-History of the Present', *Material Powers*, pp.25-37, at p.32.

Moving away from the idea of "mind being imposed on matter" the anthropologist Nicole Boivin describes "the history of human engagement with the material world" as "rather a history in which mind and matter, and form and substances continually bring each other into being."[57] Much of material culture studies is interested in "deepening our insight into how persons make things and things make persons."[58] It is exactly these relations, between humans and nonhumans – in this case medieval manuscripts and their component materials – that are explored here. Of course, on the one hand, to argue for sustainable activities in fifteenth-century manuscript culture, and the human agency that is involved, risks obscuring the ways in which "things" also "make persons." This thesis, on the other hand, does not overlook the reciprocal agency/role of the manuscript in shaping human agents: the opportunistic adaptations and sustainable activities by people, described in this thesis, were made possible by the very form and physical characteristics of parchment (chapters 1 and 2), by the open invitation of marginal spaces in books (chapter 3) and by manuscripts' relatively reliable durability (all chapters).

Books are understood in this thesis as being closely involved with craftsmanship. The human agency involved in the processes of bringing a manuscript into being is illuminated by the sociologist Richard Sennett's study of craftsmanship as a mode of relation between humans and nonhuman things. In so doing, human agency is put back in the picture. Craftsmanship is, to Sennett, "an enduring, basic human impulse, the desire to do a job well for its own sake."[59] The idea of this enduring impulse is pertinent to chapters 1 and 2, where the production of book materials is discussed, in particular production of parchment, and the repair, reuse and recycling of parchment. The emphasis on craft has filtered through into manuscript scholarship, with Jonathan Wilcox describing a relatively recent collection of essays as "materially committed, craft conscious scholarship about medieval manuscripts."[60] This thesis builds on the commitment of that collection by staying aware of materials and craftsmanship and the ways in which, together, these enabled the production, handling, and circulation of manuscripts. It also follows the

---

[57] Nicole Boivin, *Material Cultures, Material Minds: The Impact of Things on Human Thought, Society, and Evolution* (Cambridge: CUP, 2008), p.23.

[58] Christopher Y. Tilley, *Handbook of Material Culture* (London: Sage, 2006), p.2.

[59] Richard Sennett, *The Craftsman* (London: Penguin Books, 2008), p.9.

[60] Jonathan Wilcox, 'Introduction: The Philology of Smell', *Scraped, Stroked, and Bound: Materially Engaged Readings of Medieval Manuscripts*, ed. by Jonathan Wilcox (Turnhout: Brepols, 2013), pp.1-14, at p.8; for more on craft in scribal work, see Daniel Wakelin, *Scribal Correction and Literary Craft: English Manuscripts 1375-1510* (Cambridge: CUP, 2014), pp.101-183.

conviction, reinforced by Sennett's ideas, that medieval parchmeners, book producers, and book users, made and repaired books well, with the expectation of longevity. Investigating the making, repair, and reuse of books from the fifteenth century deepens our insight into the sustainable activities of craftsmanship.

The crafting of medieval manuscripts was influenced by other factors, such as social and economic considerations. These books were made for many purposes in fifteenth-century society, and its intersecting social and economic systems, and were attributed use-values.[61] Manuscripts were, after all, luxury goods, and even scrappier books made more cheaply were still luxuries inaccessible to most.[62] As manuscript production began to develop during the fifteenth century, the cheaper options it enabled were still relatively expensive compared with living costs.[63] Although this context is worlds away from early twentieth-century America, about which Thorstein Veblen wrote, many medieval manuscripts embody what he called "conspicuous consumption."[64] Whether or not late medieval England is regarded as proto-capitalist, then, as now, people liked to display their wealth through luxury goods.[65] Taking this into account, this thesis pays attention to economic considerations, such as the different values attributed to parchment, particularly where it is used or reused in a 'waste not, want not' fashion (chapters 1 and 2), the use of marginal spaces for jottings and doodles, rather than scrap or other writing supports (chapter 3), and second-hand books and their various attributed values (chapter 4). So how did these pressures affect books?

As well as being subject to social and economic pressures, manuscripts are subject to other pressures over time. Of course, sometimes manuscripts were destroyed suddenly, by fire or flood, or altered dramatically, such as someone clipping out miniatures for a scrapbook.[66] However, not all change was sudden. Rather than a residual stasis, then, there is a "constant flux",[67] and a "fluidity" to long-lasting

---

[61] Sherman discusses use-values, in *Used Books*, pp.177-178.

[62] H. E. Bell, 'The Price of Books in Medieval England', *The Library*, 4th ser., 17 (1937), 312-332, at p.330.

[63] See chapter 4 for the discussion of the cost and price of books.

[64] Thorstein Veblen, *Theory of the Leisure Class* (New York: Funk and Wagnalls, 1967), p.64.

[65] For a discussion entitled 'Were There Any Capitalists in Fifteenth-Century England?', see Christopher Dyer, *Everyday Life in Medieval England* (London: Hambledon Press, 2000), pp.305-327; display of books as status-enhancing items is mentioned by Laurel Amtower, *Engaging Words: The Culture of Reading in the Later Middle Ages* (New York: Palgrave Macmillan, 2000), p.11, and p.32.

[66] See de Hamel, *Cutting Up Manuscripts*.

[67] Johnston and Van Dussen, 'Manuscripts and Cultural History', p.5.

manuscripts, "which so often saw accretion and development over time."[68] As well as experiencing dramatic transformations, over time manuscripts change with a "glacial slowness."[69] The steady buckling of parchment in slightly-too-humid conditions, or the gradual pull of packthread stitching through parchment in use, or the fade of ink testify to this ongoing, slow change. Manuscripts' incremental mutability resonates with some recent philosophy of materiality, which explores this slowness of being, and the staying-power and durability of things.[70] For example, Jane Bennett has outlined three important "thing powers", and names "slowness" as one of these.[71] Ironically, acknowledging the gradual change underway in manuscripts also emphasizes their durability over time, enabling their continued existence and their sustainable use and reuse.

Sustainability

In using the term *sustainability*, I acknowledge that I am bringing a loaded, modern term to bear on medieval manuscripts. By exploring their sustainability, I am approaching manuscripts with "a body of theoretical concerns unavailable to their 'original' readers and beyond the intent of their writers," and for the purposes of my thesis, 'writers' must be extended to include makers, users, and reusers.[72] However, although many of the theoretical underpinnings discussed here were unavailable to fifteenth-century people, there are a few points of possible contact or congruence in modern and medieval thinking about sustainability.

The kinds of sustainability under consideration – whether medieval or modern – require some definition. The call for papers for a British ecocriticism symposium in 2013, on 'Literature and Sustainability', noted that the concept "has entered a wide range of spheres within socio-politico-cultural life" and that, if "notionally a catalyst for change" it can also be "a buzzword, a smokescreen, a tick in

---

[68] Wilcox, *Scraped, Stroked, and Bound*, p.8.

[69] John Dagenais, 'Decolonizing the Medieval Page', *The Future of the Page,* ed. by Peter Stoicheff and Andrew Taylor (London: University of Toronto Press, 2004), pp.37-70, at p.38 and p.40.

[70] My work moves away from vibrant materialism proper by asserting the importance of the human agency that helped bring about manuscripts. For vibrant materiality, see Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke UP, 2010); and for articulation of the human/nonhuman "mesh" see Timothy Morton, *Ecology Without Nature: Rethinking Environmental Aesthetics* (Cambridge, MA and London: Harvard UP, 2007), p.175.

[71] The two other "thing-powers" she identifies are "porosity and contagion" and "inorganic sympathy", in Jane Bennett, 'Powers of the Hoard: Further Notes on Material Agency', *Animal, Vegetable, Mineral: Ethics and Objects*, ed. by Jeffrey Jerome Cohen (Washington, DC: Oliphaunt Books, 2012), pp.237-72, at pp.252-4.

[72] Elizabeth Scala and Sylvia Frederico, 'Introduction', *The Post-Historical Middle Ages*, ed. by Elizabeth Scala and Sylvia Frederico (Basingstoke: Palgrave Macmillan, 2009), pp.1-12, at p.7.

a box, a fundraiser."[73] Though this statement expresses anxiety about the sincerity of interest in sustainability, the concept itself is still useful and meaningful for ecocritical work, so long as careful attention is paid to defining the kind of sustainability under investigation. The key concepts of sustainability explored in this thesis are twofold. The first meaning is durability: the capacity to endure, to be long-lasting.[74] This meaning picks up on the slow persistence of manuscripts through the centuries. The second is the conservation of resources, particularly in the efficient use and reuse of both products and byproducts.[75] Of course, in practice the two senses of sustainability overlap in many ways, and as this thesis will show, the durability of material provides a basis for the use, resourceful reuse, and circulation of those hard-wearing materials.

Though concern for the environment has a much older history, what we understand today by *sustainability* has come into being relatively recently.[76] Our modern uses of this freighted term took shape over the course of about the last half century, as awareness of our environmental predicament grew. Following the World Wars, developed countries' population growth picked up pace; newly independent colonies and other less developed countries began to grow. Herbicides, pesticides, fossil fuels, and nuclear energy were used with little restriction to provide food and fuel, and to support increasing populations. Some of the disastrous consequences of pesticide use, which caused "universal contamination of the environment," were detailed by Rachel Carson in her ground-breaking book *Silent Spring*, often said to mark the first expression of environmentalist thinking.[77] These chemicals – including newly devised synthetic chemicals – and sources of energy took a toll on the environment. In addition to causing problems such as pollution, deforestation, bleaching of coral reefs, and acid rain, the exponential expansion of environmental contamination affected wildlife noticeably. Alongside other environmentalists, Carson

---

[73] ASLE-UKI, 'Call for papers', ASLE-UKI One-day Symposium at the University of Wales Trinity St David, 15 March 2013, online <http://asle.org.uk/wp-content/uploads/2014/10/ASLE-UKI-sustainability_symposium-cfp.pdf> (accessed 5 January 2017).

[74] *OED, durable, adj.,* senses 1, 2a and 2b.

[75] *OED, sustain, v.,* sense 1a: "To keep in existence, maintain", 1b: "To maintain (a physical object) in good condition or working order"; *sustainability, adj.,* sense 3a: "Capable of being maintained or continued at a certain rate or level."

[76] *OED, sustainable, adj.,* sense 3b, the first recorded special use of this word was *sustainable energy* in 1976; *sustainability*, sense 2b, attested in 1980.

[77] Rachel Carson, *Silent Spring* (London: Penguin, 1999, first publ. 1962 by Houghton Mifflin), p.23. Carson's work is often cited and described as groundbreaking by ecocritics and medieval ecocritics: a typical example is Barbara A. Hanawalt and Lisa J. Kiser, 'Introduction', *Engaging with Nature: Essays on the Natural World in Medieval and Early Modern Europe*, ed. by Barbara A. Hanawalt and Lisa J. Kiser (Notre Dame: University of Notre Dame Press, 2008), pp.1-8, at pp.7-8.

drew attention to the atrocious collateral damage caused by unchecked and unsustainable development.

The awareness brought about by activists and writers such as Carson informed international responses to the environmental crisis in the following decades. Serious consideration of sustainability as a global issue took shape in 1987. It was in this year that the United Nations World Commission on Environment and Development published a report entitled 'Our Common Future', also widely known as the 'Brundtland Report'.[78] In her introduction to the report, Gro Harlem Brundtland recommended that the future of global human development be as multilateral as possible, in order to defend the poorest from the worst consequences of environmental degradation, and to protect and enhance the environment. The commission sought to express its findings in language that would appropriately encapsulate this vast and urgent agenda and described their key recommendation as "sustainable development."[79] The sustainable development advocated by the commission was defined as "meeting the needs of current generations without compromising the ability of future generations to meet their own needs."[80] This definition hinged on human needs, not the needs of the environment, of animals or ecosystems, or indeed of the planet's ecosystem, and the anthropocentric inflection of this highly influential discourse gained traction.[81]

In many fields, following the 1987 Brundtland Report, *sustainability* and *sustainable development* became buzzwords. Michael Redclift has tracked the conceptual history of the phrase *sustainable development* from its definition in the Brundtland Report to the mid-2000s. He identifies a shift away from language of "needs" to "rights", following the first Earth Summit in 1992, and attributes this to neo-liberal agendas of the 1990s. This shift has become entrenched as a persistent underlying assumption in a series of "parallel but distinct discourses around sustainability."[82] So, aside from its

---

[78] United Nations, 'Our Common Future' (New York: UN, 1987) online <http://www.un-documents.net/our-common-future.pdf> (accessed 5 January 2017).

[79] UN, 'Our Common Future', p.5.

[80] UN, 'Our Common Future', p.39.

[81] For example, the dictionary definitions of *sustainable* chime with the report's anthropocentric definition, with one key meaning describing human activity in which "environmental degradation is minimized, esp. by avoiding the long-term depletion of natural resources" (*OED, sustainable, adj.,* sense 3b). See also: special uses, *sustainable development, n.,* senses a and b. These definitions are from the third edition, March 2012, so may have been influenced by the legacy of the discourse around sustainability.

[82] Michael Redclift, 'Sustainable Development (1987-2005), An Oxymoron Comes of Age', *Sustainable Development,* 13 (2005), 212-227.

general application, to mean "maintaining or continuing something", these senses of *sustainable* have come to carry connotations of economic and anthropocentric rights, rather than the earlier emphasis on ecological or environmental needs. The key definitions of sustainability used in this thesis, durability and the conservation of resources, are not expressed in terms of either needs or rights. Instead, a twofold, carefully-defined concept of sustainability has enabled this exploration of historical practices that brought about the pursuit of durability and resource conservation.

Fifteenth-century England pursued these two features of sustainability without the modern "buzzword", of course. In terms of expressing or understanding sustainability, by the late fourteenth century, Middle English had the verb *to sustain* in a variety of spellings, such as "sustenen" or "susteynen", which, among a range of senses, could mean "to keep (the world, a created thing, etc) in existence", or to perpetuate or maintain those things.[83] Around the same time, the adjective *durable* was similarly being used to describe something that was "able to withstand change, decay, or wear."[84] The idea of sustaining material things in particular was also linked to charity.[85] For example, a passage in Corinthians from the Wycliffite Bible, dated to the 1380s or 1390s, notes that "Charite […] susteyneth alle thingis."[86] Another Middle English sense of *sustenen* meant "to keep in good repair," and could be used in reference to the material fabric of buildings.[87] This sense carried connotations of charity too, and was also associated explicitly with the supply of lamps, candles, or tapers for churches. In one case it was noted that "serges" for many of the sepulchres were "sustened of charite by oder of the parishe."[88] Sustaining things, then, was often a charitable endeavour (this charitable sustaining of material things is evident in the donation of second-hand books explored in chapter 4). This suggests that, among other senses, the concept of sustainability could carry positive, even worthy overtones. What these examples show is that the broader concepts of durability and sustainability were not alien to medieval people.

---

[83] *MED, sustenen, v.,* sense 4c; *OED, sustain, v.,* sense 1a (first used *c.* 1300).

[84] *OED*, *durable, adj.,* sense 1; *MED*, *durable, adj.,* sense 1.

[85] For discussion of second-hand books and charity, see chapter 4.

[86] 1 Corinthians 13.7, the *MED* references BodL, MS Douce 369; Josiah Forshall and Frederic Madden, eds., *The Holy Bible, Containing the Old and New Testaments, with the Apocryphal Books, in the Earliest English Versions Made from the Latin Vulgate by John Wycliffe and His Followers* (Oxford: OUP, 1850), IV, p.362.

[87] *MED, sustenen, v.,* sense 4b, with particular application to buildings or structures.

[88] *MED* cites an inventory dated 1467, from All Saints church in Derby, in J. Charles Cox, *Notes on the Churches of Derbyshire: The Hundred of Morleston and Litchurch and General Supplement* (Chesterfield: W. Edmunds, 1879), IV, p.87.

Though we might not be able to talk directly to a medieval book producer about the sustainability of the manuscripts they made, and then to be understood in terms of the modern-day baggage that this concept carries, many medieval craftsmen certainly knew how to make things to last, and knew strategies for maintaining them. Whether or not the kind of book-centred durability and reuse explored in this thesis was ever precisely articulated, medieval people would have understood and recognized different degrees of material sustainability. In addition, throughout the fifteenth century greater quantities of older medieval books than we know today were still in existence, and more books were in existence than the ancestors of fifteenth-century people would have ever known, all testifying to their own durability by their presence. The network of medieval book makers and users would have been witness to the ongoing survival and long life of manuscripts.[89] Though I know no references that describe parchment, books, or the crafts of book production in these terms – as specifically – durable or sustainable, nevertheless, the goal of this thesis is to reveal the physical evidence in the books themselves which shows that medieval people were interested in making things well and making them to last.

Returning to contemporary discourse, ecocriticism is a key field in literary scholarship that has grappled with the concept of sustainability. Anxieties about the term, mentioned previously, are emblematic of sustainability's double-edged currency and pervasiveness within the literary discipline and without. Ecocriticism's proponents have considered sustainability alongside a panoply of other 'eco' interests. From its roots as a theoretical approach to nature writing, and inspired by environmental activism, it has grown into a flourishing, wide-ranging field. Some of the earliest writing in British ecocriticism includes works by Jonathan Bate,[90] and recent popular publications descend from this tradition of nature writing, such as works by Robert MacFarlane.[91] The field now ranges in focus from its initial interests in nature writing (known as "light green" theory) through to serious concern for the environmental crisis and its multiple, intersectional impacts ("dark green" theory, or "deep ecology", which often verges on the apocalyptic in tone).[92] Thus, ecocriticism is divided into two main camps. To grossly simplify their analytical positions, ecocritics either believe that

---

[89] See chapter 4 for more on the age and survival of manuscripts.

[90] Jonathan Bate, *Romantic Ecology: Wordsworth and the Environmental Tradition* (Oxford: Routledge, 1991); and Jonathan Bate, *The Song of the Earth* (London: Picador, 2000).

[91] Robert MacFarlane, *The Old Ways: A Journey on Foot* (London: Penguin Hamish Hamilton, 2012); and Robert MacFarlane, *Landmarks* (London: Penguin, 2015).

[92] Bate, *The Song of the Earth*, p.36; Garrard, *Ecocriticism,* pp.21-3, pp.23-6, and pp.93-116.

there is still hope, or that humans – and, more importantly, planetary ecosystems – are doomed. Though the field is far more complex and diverse than this characterisation suggests, these respective positions have guided the main trajectories of contemporary ecocritical thought. An array of hybrid and "even more pluriform" ecocriticism has developed, some of which has something to say about sustainability.[93] This thesis is not about nature writing or *nature*, nor is it apocalyptic deep ecology; rather this thesis is situated somewhere between light and dark green theory and pays due to attention to hitherto overlooked historical, sustainable practices in book production, handling, and circulation.

Thus far medieval literary ecocriticism has followed a similar trajectory to the wider field, tracing a path from analysis of medieval landscapes and green environments, to more recent enquiries into more diverse approaches. One of the earliest medieval ecocritical studies appeared in 1967, and argued that the origins of the twentieth century's ecological crisis lay in the potent combination of technological innovations and Christian dogma of the Middle Ages.[94] Other scholarship at this time was typically light green in method and concentrated on texts' representations of the natural world, whether realistic or stylized.[95] Like ecocriticism more generally, medieval literary ecocriticism began to diversify, and landmark texts began to articulate new approaches to medieval literature. Test cases for suggested approaches were offered in one overview of the field;[96] subsequently, more substantially 'green' readings of late medieval English literature were advocated and undertaken,[97] and shortly after this a whole collection of ecocritical approaches to medieval literature emerged.[98] Alongside these key publications there have been many others with a yet wider spectrum of approaches and preoccupations.[99] These modes of analysis

---

[93] Lawrence Buell, *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination* (Oxford: Blackwell Publishing, 2005), p.vii.

[94] A seminal, if frequently criticised article: Lynn White Jr., 'The Historical Roots of Our Ecologic Crisis', *Science,* 155:3767 (1967), 1203-1207.

[95] Derek Pearsall and Elizabeth Salter, *Landscapes and Seasons of the Medieval World* (London: Paul Elek, 1973).

[96] Douglass, 'Ecocriticism and Middle English Literature'.

[97] Gillian Rudd, *Greenery: Ecocritical Readings of Late Medieval English Literature* (Manchester: Manchester UP, 2007).

[98] Hanawalt and Kiser, *Engaging with Nature.*

[99] Such as John Aberth's study of the medieval environment, which draws on literary texts alongside other sources: *An Environmental History of the Middle Ages: The Crucible of Nature* (London: Routledge, 2013).

predominantly focus on representations of nature, and do not directly contribute to this thesis's exploration of manuscript waste and resources.

Since these mostly light green works, medieval ecocriticism has developed beyond this mode of analysis in order to address historical attitudes towards waste and resources. Moving away from those green and – relatively – pleasant readings, Susan Signe Morrison has brought a *fecopoetics* or waste studies perspective to medieval texts.[100] Those areas that treat my particularly material interests in sustainability are studies in recycling, junk, or composting.[101] Waste studies have been taken up most recently by Mary C. Flannery in an essay on the privy as a reading space in Chaucer's 'Merchant's Tale'.[102] Other commentators on medieval literature and its relationship with waste – broadly defined – are James Simpson and Eleanor Johnson, who have studied specific representations of waste. Simpson has explored the creative recycling of old literary texts in the *Confessio Amantis* and the "complex operations of idle reading."[103] And, though also writing with a specific frame of reference, to the poetics of waste and the presentation of land use in *Piers Plowman* and *Wynnere and Wastoure*, Johnson has argued that medieval people were "actively concerned [about] ecological economies of matter and energy."[104] Though Johnson makes this statement in support of her more specific arguments, in a general sense her claim also supports this thesis's argument for sustainable practices in manuscript culture.

As well as examining waste, other ecocritics have considered conceptions of matter in the Middle Ages. After all, there were wider medieval philosophical and theological concerns around the permanence and solidity of matter. Medieval thinking about matter grew out of classical philosophy, and understanding this requires us to peel back Enlightenment conceptions of materiality to rediscover

---

[100] Susan Signe Morrison, *Excrement in the Late Middle Ages: Sacred Filth and Chaucer's Fecopoetics* (Basingstoke: Palgrave Macmillan, 2008); Susan Signe Morrison, *The Literature of Waste: Material Ecopoetics and Ethical Matter* (Basingstoke: Palgrave Macmillan, 2015).

[101] Morrison offers an overview of waste and discard studies in the 'Introduction', *The Literature of Waste,* pp.1-16; also, see: *Excrement in the Late Middle Ages*; and see Pippa Marland and John Parham, 'Remaindering: the Material Ecology of Junk and Composting', *Green Letters: Studies in Ecocriticism* 18:1 (2014), 1-8.

[102] Mary C. Flannery, 'Privy Reading', in Flannery and Griffin, *Spaces for Reading*, pp.149-164.

[103] James Simpson, 'Bonjour Paresse: Literary Waste and Recycling in Book 4 of Gower's "Confessio Amantis"', *Proceedings of the British Academy,* 151 (2007), 257-84, at p.284.

[104] Eleanor Johnson, 'The Poetics of Waste: Medieval English Ecocriticism', *PMLA,* 127.3 (2012), 460-476, at p.473; reviewed, in the context of the development of ecocriticism, by Vin Nardizzi, 'Medieval Ecocriticism', *postmedieval: a journal of medieval cultural studies,* 4.1 (2013), 112-123, at p.118.

premodern concepts of human and nonhuman things.[105] The manifesto for vibrant materiality by Bennett (mentioned previously) also draws on the longer history of people's thinking about human and nonhuman matter. However, in their study of sacred objects, Shannon Gayk and Robyn Malo caution that object-oriented ontologies such as Bennett's fail to account for the "potential instrumentality and derivative power of objects within the sacred economy."[106] In addition to empowering objects, theology of the Middle Ages also encouraged widespread belief in the doctrine of resurrection, which described what could be expected at Doomsday. It was believed that resurrection would take place as a literal bodily reality, with flesh and bone restored to long-dead bodies for their journey to the afterlife.[107]

Though I am mindful of these studies and the differences between medieval and modern conceptions of matter, this thesis, by contrast, identifies medieval habits of manuscript making and use which foreshadow modern attempts at sustainability. These topics are not the main subject of this thesis: none of these studies has looked at the actual matter of medieval manuscript sustainability and recycling. Moreover, most medievalist ecocriticism is grounded in literary criticism and representations of waste and has not looked at the actual matter of medieval manuscripts; as such, my work responds to a gap in their scholarship. Previous studies in green reading, fecopoetics, literary representations of waste, and medieval conceptions of matter, leave space for the study of actual, material durability and conservation of resources in manuscripts. In contrast, this thesis moves on from the representation of waste to the material incarnations of literary texts as themselves – sometimes – becoming waste, or resourcefully avoiding waste through sustainable practices.

Lines of enquiry and methods

In this thesis, the chosen manuscripts are considered using a deliberately eclectic range of approaches. Across the thesis, then, the question of sustainability in fifteenth-century manuscript culture is answered from a range of angles. Throughout there is a commitment to inclusive sampling and an openness to a variety of methods. Open-

---

[105] See Frow, 'Matter and Materialism', pp.25-37; Kellie Robertson, 'Medieval Things: Materiality, Historicity, and the Premodern Object', *Literature Compass,* 5 (2008), 1060-1080.

[106] Shannon Gayk and Robyn Malo, 'The Sacred Object', *Journal of Medieval and Early Modern Studies,* 44:3 (2014), 458-467, at pp.460-461; for another approach to holy objects, see Kathryn M. Rudy, *Postcards on Parchment: The Social Lives of Medieval Books* (New Haven and London: Yale UP, 2015).

[107] Caroline Walker Bynum, *The Resurrection of the Body in Western Christianity, 200-1336* (New York: Columbia UP, 1995), pp.36-38.

minded research, in archives with plentiful fifteenth-century manuscripts, and particularly those with fifteenth-century bindings, has allowed me to augment each chapter with additional case studies as the thesis progressed. The limitations of catalogue records sometimes hampered traditional survey techniques (for example, the search for material traces of parchment production in chapter 1). It is for this reason that seemingly esoteric examples of manuscripts, which arose by chance, are included alongside more formally selected case studies and surveys.

Each chapter takes a different line of enquiry into a different aspect of medieval manuscript sustainability. Chapter 1 considers how parchment was made in the fifteenth century, tracking the journey of parchment from its origins as animal skins, through the hands of tradesmen to craftsmen, who transformed the material into parchment writing supports. To achieve this, the hides or skins underwent a series of processes. Evidence for these processes is drawn from medieval recipes for parchment making and from tangible evidence surviving in extant parchment. Each stage of production is addressed for the ways in which it enhanced or diminished parchment's durability and sustainability. The second part of the chapter focuses on what we could even more securely describe as sustainable uses of parchment material in manuscript contexts. It considers parchment damage, which was ignored, accommodated, or even celebrated, with a focus on the ways in which parchment was sustained through repair efforts.

In this chapter, fifteenth-century recipes for parchment making, derived from existing indexes of manuscripts, are transcribed and compared with one another.[108] Although some of these recipes have received attention previously, they have not been considered for the ways in which medieval parchment making may (or may not) have been sustainable. I also explore case studies of extant manuscripts, with relevant examples identified either by gleaning from catalogue descriptions, or from serendipitous encounter in the archives. This strategy, as mentioned above, enabled the discovery of these otherwise uncharted features of fifteenth century manuscripts. These further case studies demonstrate damage such as holes or tears, often overlooked in conventional cataloguing. Finally, there is a survey of eighteen

[108] Mark Clarke, *The Art of All Colours: Mediaeval Recipe Books for Painters and Illuminators* (London: Archetype Publications, 2001); Clarke, *Crafte*; Daniel V. Thompson, *The Materials and Techniques of Medieval Painting* (New York: Dover Books, 1956).

manuscripts, and close analysis of two particularly damaged parchment manuscripts.[109]

In chapter 2, the focus shifts from the production of parchment and its repair to the reuse of parchment in books. This chapter explores case studies of parchment recycled as reinforcing strips, quire guards, flyleaves, pastedowns, limp covers, and palimpsests: in short, all the scraps and fragments reused in the making and remaking of manuscripts. Some of these are scraps, like small off-cuts, whereas some pieces of parchment – in a range of sizes – were recycled, with some still bearing earlier writing. This chapter explores the hallmarks of reuse and investigates the techniques required to achieve the material recycling seen in manuscripts. In these instances of reuse, parchment is being "transformed […] into matter" and valued for its material properties.[110]

As in chapter 1, many of the case studies discussed in chapter 2 are the result of chance encounter. The manuscripts included here came to my attention either through word-of-mouth recommendations, or as the result of foraging in catalogues, handlists, text-books, and other scholarship. The key principle guiding the search for examples was the presence of fifteenth-century bindings.[111] Though not always watertight, and subject to the vagaries of date attribution to medieval books and book materials, the presence of a fifteenth-century binding helped to secure the date of other physically recycled components of the book block or binding. In the fifteenth century, the binding of books made recently existed side-by-side with the binding and repair of older manuscripts. The focus of this chapter, then, is upon manuscripts with fifteenth-century bindings, which enclose predominantly fifteenth-century book blocks, as well as featuring recycled parchment strips, leaves, or scraps.

Chapter 3 turns the attention away from the production, repair, and recycling of parchment, to the handling of books, chiefly to the reuse of their margins as a writing surface. These written or drawn reuses are not associated with the main text, and include marks such as doodles, alphabets, signatures, and verses. Margins are defined broadly, to incorporate the extraneous writing surfaces available in the book, such as spaces around the text block on each leaf, as well as flyleaves and pastedowns.

---

[109] Manuscripts selected from the BodL, e Musaeo collection; BodL, MS Bodley 744; BodL, MS Douce 369.

[110] Smyth and Partington, *Book Destruction*, p.8.

[111] Unfortunately, Jennifer Sheppard's *Census of Western Medieval Bookbinding Structures to 1500 in British Libraries* (Cambridge: British Census Project, 1997) was unavailable to me while I was researching this thesis.

People reused those spaces either for ephemeral purposes, which meant that they avoided wasting other materials, or as repositories for writing. Sometimes it seems that people anticipated that the marks they made in books would be read in the future: this expectation of future use depended upon the durability of the book.

A more formal, conventional selection strategy was adopted for chapter 3. In order to address the kinds of opportunistic marginal markings that I wanted to explore in this chapter, research was limited to two of the Bodleian Library's collections, the Douce and Laud collections. Middle English manuscripts dating to the fifteenth century, which featured some form of marginal inscription, whether written or drawn, were sought in relevant handlists and catalogues.[112] Browsing large numbers of manuscripts from these collections yielded case studies of marginal annotations and drawings that did not comment directly on the main text, but rather suggest treatment of the book as a useful writing support or as a repository.

The focus of the final chapter is second-handedness and the ways in which, when books underwent transitions in ownership, people depended on books' durability. To this end, this chapter tracks the ways in which manuscripts moved between religious institutions, colleges, and individuals, circulating from one owner to another, or to another custodian. Manuscripts could move between people as a result of giving, bequeathing, selling, or some specific directed forms of gifts such as shared common profit books. Again, in chapter 4, manuscript examples were sourced from a combination of catalogue foraging, book lists compiled by other scholars, in addition to two substantial formal surveys. First, I drew on C. Paul Christianson's handlist of known manuscript producers, who also sold works second-hand.[113] Then, I conducted a survey of *Summary Catalogue,* II.i, to limit the focus to early accessions to the budding Bodleian Library collections. The results of this enabled closer analysis of a range of inscriptions marking ownership or exchange. For my final survey, I turned to Ker's *Medieval Libraries of Great Britain*, to seek out other inscriptions marking the movement of books.[114]

Through these four perspectives, this thesis reconsiders the materiality of manuscript culture, and draws attention to occasions when what might otherwise have become waste was not treated as waste. Instead of being destroyed or ignored, manuscript materials – whether in fragments, or as larger pieces, or in codex form –

---

[112] *IMEP*, IV; *IMEP*, XVI; *Summary Catalogue*, IV; *Quarto Catalogue*, II.

[113] Christianson, *Directory*; *Summary Catalogue*, II.i.

[114] *MLGB*.

were repaired, recycled, reused, and re-circulated. These sustainable activities occurred at moments when the value of materials was in flux. At these moments, manuscripts or their materials were ripe with potential. So, at these moments materials teetered on the brink of a "dynamic ecology of use and reuse" which might lead to "transformation and destruction as well as to preservation."[115] This can be seen in the multiple possible uses, repairs, and reuses of book materials (chapters 1 and 2) as well as reuse of marginal spaces (chapter 3) or re-circulation of the whole manuscript as a second-hand book (chapter 4). The sources for study in these chapters are *actual* materials, recipes, traces of production, and markings in fifteenth-century manuscripts. However they were made, handled, or circulated, manuscripts were part of a medieval "rubbish ecology."[116] But far from being wasted, holey animal skins, scraps or leaves of parchment, margins (surrounding the text and at each end of the book), and whole books, were valued – in a range of ways – for their materiality. In the wider fifteenth-century manuscript milieu, books sustained people, and people sustained books.

[115] Though Sherman describes early modern printed images and texts, his assertions are highly applicable to medieval manuscripts, *Used Books*, p.6.

[116] Patricia Yaeger, 'Editor's Column: The Death of Nature and the Apotheosis of Trash; or, Rubbish Ecology', *PMLA,* 123.2 (2008), 321-339, p.329, and p.335; Morrison, *The Literature of Waste,* p.4, also cites Yaeger's "rubbish ecology", and her own work has pushed this focus back in time to include medieval studies.

Chapter 1: making parchment for books

This chapter is about the sustainability of medieval book production, with a focus on parchment-making. Here, sustainability is understood as both *durability*, and as ongoing *conservation*, that is, both the exhaustive use of resources and their later reuse or recycling. As discussed in the Introduction, these senses of sustainability overlap in many ways, with parchment's hard-wearing potential providing the foundations for both use and reuse.

Throughout, this chapter is informed by codicological studies of medieval modes of production, as well as examples of extant manuscripts and surviving copies of contemporary recipes.[1] Fifteenth-century manuscripts provide evidence for their production in their form, and extant recipes also provide instruction and information about book-producing crafts. This chapter explores these manuscript "monuments" and recipes, or "documents", of parchment-making as examples of sustainability.[2] There is a neat circularity to the fact that the surviving parchment recipes explored in this chapter were themselves written on to parchment. Considered in conjunction with one another, these sources of information in manuscripts and recipes reveal efforts made by fifteenth-century people to enhance the durability of parchment, as well as indications of the efficient use of resources which were crafted into products and into by-products which could themselves be used. There was a 'nose-to-tail' approach, which avoided waste and used the whole animal usefully. Taken together, these efforts are symptomatic of sustainability.

To explore these sustainable practices, the stages of parchment production are re-evaluated here, step-by-step, from farm to writing table. Though these stages are well-known to specialists, this chapter offers a new description of parchment-making. It explores the creation of parchment as an exercise in cultivation and conservation. This takes us from animal husbandry in the field, through various possible supply chains, into the hands of slaughtermen. Then, as dead animal matter, be it as raw

---

[1] The parchment recipes discussed here were studied first-hand, prior to the publication of Mark Clarke's excellent edition, *Crafte*. Prior to that edition, I identified relevant recipes in Mark Clarke, *The Art of All Colours: Mediaeval Recipe Books for Painters and Illuminators* (London: Archetype Publications, 2001).

[2] Daniel V. Thompson, *The Materials and Techniques of Medieval Painting* (New York: Dover Books, 1956), p.21.

hide or skin, to parchmeners.[3] Here we pause to dwell on the industry of the parchmener, and to appraise the processes, time, care, skills, tools, and additional organic and non-organic resources required to turn hide or skin into usable parchment. Finally, the "luxury commodity" of parchment is available for use and then, possibly, for reuse.[4] Alongside the main product of this process, parchment, there are by-products such as gelatine and glue made from bits of the carcass or trimmings of skin; and, furthermore, lower grade or damaged parchment could be used, or efforts could also be taken to sustain it by repair. Re-evaluating each stage of production indicates how medieval parchment production embraced and embodied sustainability.

But what about fifteenth-century paper books? As another manifestation of medieval manuscript sustainability, it would also be rewarding to study medieval paper. Fifteenth-century paper was, after all, made from "cellulose (flax, hemp, linen), which in late medieval Europe was usually obtained from cloth rags or ship sails (as well as recycled scrap paper)."[5] These rags were sorted, fermented, washed and beaten into a runny pulp before being shaken into shape, squeezed, set to dry, and sized.[6] In its own form, as a recycled, 'reconstituted' substance, paper is an example of resource conservation through reuse. If there were space here, the sustainability and durability of paper could also be considered, as a substance made from recycled rags. Though paper is usually more frangible and fragile than parchment, and not necessarily associated with durability in the same way, nevertheless many fifteenth-century paper manuscripts do survive.[7] Paper, particularly printed paper, came to be used in a range of ways, with wide post-Reformation production of books with "waste" pastedowns, flyleaves and binding linings.[8] There were special efforts taken in the fifteenth century to protect and enhance paper's potential for survival, such as the

---

[3] Following Christianson, *Directory*, pp.112-113, I prefer the spelling *parchmener*, although, as Peter W. M. Blayney notes in *The Stationers' Company before the Charter, 1403-1557* (London: The Worshipful Company of Stationers and Newspapermakers: 2003), p.17, there is no consensus on the spelling of this word, which is found as *parchmenter, parchemyner, parchminer,* and *parchmyner*.

[4] H. E. Bell, 'The Price of Books in Medieval England', *The Library*, 4th ser., 17 (1937), 312-332, at p. 332.

[5] Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca and London: Cornell UP, 2007), p.7.

[6] Christopher de Hamel, *Medieval Craftsmen: Scribes and Illuminators* (London: British Museum Press, 1992), pp.16-17.

[7] Nicholson Baker, *Double Fold: Libraries and the Assault on Paper* (New York: Random House, 2001), p.7.

[8] For example, Adam Smyth, 'Burning to Read: Ben Jonson's Library Fire of 1623', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014), pp.34-54, at p.35.

insertion of parchment reinforcing strips, quire guards and binding linings, among other strategies. Many of these strategies drew on the material qualities of parchment, using it as a sacrificial buffer (and these often recycled uses of parchment will be discussed shortly and at more length in chapter 2). So, paper was itself recycled, could be durable, and was subject to measures taken by book producers that were designed to *sustain* it.

Limitations of space, however, mean that the present chapter focuses on parchment and its production, which are central to this investigation of medieval manuscript sustainability. Moreover, the sustainability of parchment and its production (in this chapter) can be fruitfully contrasted with various book-based parchment reuses (in chapter 2). Paper is of course discussed where it contributes to predominantly parchment-centred sustainability, for example in chapter 2's exploration of the aforementioned recycled parchment reinforcing strips and quire guards in paper books. But the focus remains closely attentive to parchment, and to its production, repair, uses, and reuses, and while paper and paper books are acknowledged they are not the central concern.

Parchment was the substance most commonly used for writing supports in the Middle Ages, until the use of paper as an alternative resource began to flourish by the beginning of the fifteenth century.[9] Since the first records, humans have always made books with the materials afforded by their environment, whether that took the form of clay writing tablets, papyrus rolls, or parchment leaves.[10] The use of parchment for writing has a very long tradition, and is thought to take its name from the ancient city of Pergamon, from which the Latin word for parchment derives: *pergamenum*.[11] This writing support was "supposedly invented […] in the second century B.C.E." and, after supplies of papyrus were disrupted by the invasion of Egypt, was adopted

---

[9] Orietta da Rold, 'Materials', *PBE*, pp.12-33, at p.25.

[10] Many scholars draw a distinction between *vellum* (from Latin *vitulinum*, French *vélin*, meaning "of calf", and used to refer to calfskin) and *parchment* (commonly used to refer to other skins, usually sheepskin). The term *membrane* is also used. Here, the distinction will be made between calf or sheep where necessary, and the term *parchment* is used throughout to refer to treated hide or skin. For definitions on the 'theme' of parchment, see Muzerelle, *Vocabulaire codicologique*, online <http://codicologia.irht.cnrs.fr/theme/liste_theme/121> (accessed 5 January 2017).

[11] André Vauchez, ed., *Encyclopedia of the Middle Ages* (Oxford: OUP, 2005) online <http://www.oxfordreference.com/view/10.1093/acref/9780227679319.001.0001/acref-9780227679319-e-2106?rskey=Tki5hl&result=1> (accessed 5 January 2017).

thereafter as an alternative.[12] Whether parchment was actually invented at Pergamon (or Pergamum, now Bergama in modern Turkey) is unknown; however, that was certainly a site of early production.[13]

Then, as now, or in the medieval period, a simplified working definition of parchment would be: untanned hide or skin that has been soaked in solution and then dried under tension.[14] This process of soaking hide or skin then drying it under tension yields a substance that has the potential to be remarkably durable. But why was parchment chosen for fifteenth-century book production? What material properties does it have? Arguably, there was little other choice available for writing before the introduction of paper and in many cases parchment could well have been chosen simply for its ability to hold ink well, rather than for any special consideration for its longevity. However, parchment continued to be widely used for some time, certainly throughout the growth of the book-producing crafts and the use of paper in the fifteenth century, and in many cases, there was attention to promoting its potential for long-term durability. Parchment has a range of distinctive physical properties: "lightness and flexibility of the writing surface, […] high tearing strength, […] exceptional long-term stability," all of which contribute to its durability (discussed again in chapter 2 for the ways in which these properties enabled reuse of parchment).[15] People's attitudes to animals and the resources they provide sometimes rely on a "particular functional attribute for a raw material."[16] It is a combination of these distinctive properties – the "functional attributes" – of hide, calfskin or sheepskin, and of the ways in which they were enhanced and promoted by medieval people, that together ensured that parchment persisted as the favoured writing support for so long.

---

[12] Richard W. Clement, 'A Survey of Antique, Medieval, and Renaissance Book Production', *Art into Life: Collected Papers from the Kresge Art Museum Medieval Symposia*, ed. by Carol Garrett Fisher and Kathleen L. Scott (East Lansing: Michigan State UP, 1995), pp.9-47, at p.13; Clemens and Graham, *Introduction*, p.9; Michael L. Ryder, 'The Biology and History of Parchment', *Pergament, Geschichte, Struktur, Restaurierung und Herstellung*, ed. by Peter Rück (Sigmaringen: Thorbecke, 1991), pp.25-33, at p. 25.

[13] Michelle P. Brown, *Understanding Illuminated Manuscripts: A Guide to Technical Terms* (London: British Library, 1994) online <https://www.bl.uk/catalogues/illuminatedmanuscripts/glossary.asp> (accessed 5 January 2017).

[14] For a concise, summary description of the parchment-making process, see Rodney M. Thomson, 'Parchment and Paper, Ruling and Ink', *CHBB II*, pp.75-84, at p.77.

[15] Ronald Reed, *Ancient Skins, Parchments and Leathers* (London: Seminar Press, 1972), p.5.

[16] Terry O'Connor, 'Thinking About Beastly Bodies', *Breaking and Shaping Beastly Bodies: Animals as Material Culture in the Middle Ages*, ed. by Aleksander Pluskowski (Oxford: Oxbow Books, 2007), pp.1-10, at p.1.

But what was parchment made from? Hides from cattle, or skins from calves, hair sheep, pigs, or goats could all be used to make leather or parchment. For bookbinding, Alexandra Gillespie has noted that in addition to calfskin and sheepskin, seal, deer, and ox skin were made into leather.[17] Both hides and skins as leather and parchment were commonly used in book production: as leather for binding books, usually over wooden boards, and as parchment for the main writing support. The choices between hide or skin used to make parchment shows a geographical pattern of use. Recent research into a large sample of parchment DNA from twelfth- and thirteenth-century manuscripts has confirmed a "predominance of calfskin being used in France, a pronounced use of goatskin in Italy, and a more mixed pattern emerging from England."[18] These national trends not only reflect different preferences in meat consumption but also reinforce a sense of parchment as a locally-sourced by-product, tied to the variety of livestock available in a given city or region.

The lexical terms used in England reveal the different animals available for parchment making. Throughout the medieval period, where mention is made of parchment in documents and literary texts, it is referred to as *parchemyne* or *parchemin*, as well as fell, membrane, vellum, skin, or hide, which often suggest the animal origins of the material.[19] Whether the myth of its invention at Pergamon is true or not, the city gave it its Latin name *pergamenum*, which through French *parchemin* eventually became Middle English *parchemyne* or *parchement* (among a range of other spellings).[20] For example, the term "perchemyn felle" for a writing support is used in a copy of *Guy of Warwick* written in about 1475: "Of Guyes felawes shull we telle / As y fynde in this perchemyn felle."[21] *Felle*, though, descends from Old English and Old Germanic roots, finding a cognate in the Latin *pellis* meaning skin.[22] *Membrane* comes from the Latin *membrana* meaning an outer covering of an animal body.[23] Also from Latin, from

---

[17] Alexandra Gillespie, 'Bookbinding' *PBE*, pp.150-172, at p.150.

[18] Sarah Fiddyment, Bruce Holsinger et al., 'Animal Origin of 13th-Century Uterine Vellum Revealed Using Noninvasive Peptide Fingerprinting', *Proceedings of the National Academy of Sciences,* 112:49 (2015), 15066-15071, at p.15068 and p.15069.

[19] *MED, parchemin, n.,* senses a, b, and d particularly; for the occupation or surname, see senses d ("Parchemenmaker") and e ("Walterus Perchamunt").

[20] *OED*, *parchment, n.,* etymology, and senses 1 and 2.

[21] GCC, MS 107/176, ll. 4793-4, in J. Zupitza, ed., *The Romance of Guy of Warwick: Edited from the Auchinleck Manuscript in the Advocates' Library, Edinburgh, and from MS 107 in Caius College, Cambridge*, EETS e.s. 49 (Bungay: Clay and Sons, 1887), II, p.275; James, *GCC Catalogue*, I, pp.107-108.

[22] *OED, fell, n.,* etymology and sense 1a; associations between *pellis*-derived words are clear in the following list, from *Farming Glossary*, taken mostly from manorial records in Essex: *pelleta, pelletta*: skin, pelt; *pelliparus*: skinner; *pellis*: (animal) skin, pelt; *pellis lanuta*: sheepskin, p.32.

[23] *OED, membrane, n.,* etymology and sense 2.

vitulus or *vitellus* ("calf"), via French *velin*, comes *vellum*.[24] The word *skin* is borrowed from early Scandinavian, and the Old Icelandic manuscripts known as *Fagrskinna* and *Morkinskinna* ("fair-skin" and "rotten-skin") carry this particular sense of skin meaning parchment, and imply attention to quality.[25] Skin tended to be used to refer to integuments from smaller animals, whereas hide, from Old English *hyd*, indicated pelts from larger animals.[26] Thus, besides its mooted heritage as an invention from Pergamon, medieval people referred to parchment using a cluster of terms which evoked its animality.

However, though parchment was known to be an animal product, and was sometimes implicitly referred to as such, contemporaries only rarely commented explicitly on its animality. Long before the fifteenth century, a riddle from the Old English 'Exeter Book' offered an early account of the essential processes of parchment-making.[27] Unusually for a reference to book production, the riddle begins with the death of the animal ("Mec feonda sum feore besnyþede, / woruldstrenga binom", "A certain enemy robbed me of my life, took my world-strength") and describes the transformation of the animal's skin into parchment and incorporation into a decorated book.[28] And towards the end of the medieval period, in William Horman's Latin textbook of 1519, schoolboys would have learned the following:

> That stouffe that we wrytte upon : and is made of beestis skynnes: is somtyme called parchement / somtyme velem / somtyme abortyue / somtyme membraan. Parchement of the cyte : where it was first made. Velem / bycause it is made of caluys skynne. Abortyue / bycause the beest was scante parfecte. Membraan / bycause it was pulled of by hyldynge fro the beestis lymmes.[29]

---

[24] *OED, vellum, n.,* etymology and sense 1.

[25] *OED, skin, n.,* etymology and sense I.1.a, but especially sense 2.

[26] *OED, hide, n.,* etymology and sense 1a.

[27] Exeter Cathedral Library, MS 3501 (the 'Exeter Book') is dated 960-990; N. R. Ker, ed., *Catalogue of Manuscripts Containing Anglo-Saxon* (Oxford: Clarendon Press,1957), p.153. See discussions of Riddle 24, in: Bruce Holsinger, 'Of Pigs and Parchment: Medieval Studies and the Coming of the Animal', *PMLA,* 124 (2009), 616-623, at pp.621-2; and in Sarah Kay, 'Legible Skins: Animals and the Ethics of Medieval Reading', *postmedieval: a journal of medieval cultural studies,* 2 (2011), 13–32, at p.19.

[28] The most common solutions for this riddle are 'book', 'Bible', or 'gospel book', Riddle 24 in Richard Hamer, *A Choice of Anglo-Saxon Verse* (London: Faber and Faber Limited, 1977), pp.103-5, ll. 1-2.

[29] William Horman, *Vulgaria*, ed. by M. R. James (Oxford: The Roxburghe Club, 1926), p.123; cited by W. L. Ustick, "'Parchment' and 'Vellum'", *The Library*, 4th ser., 16 (1936), 439-440, at p.440; also cited by Christopher Clarkson, 'Rediscovering Parchment: The Nature of the Beast', *The Paper Conservator: Vellum and Parchment*, *The Journal of the Institute of Paper Conservation,* 16 (1992), 5-26, at p.5.

This snappy description defines each word, one by one, and culminates in a rather visceral image of the skin being pulled off a beast's limbs. The riddle and Horman's textbook suggest that medieval people could and did consider the animal origins of parchment, even after centuries of using the stuff.

Curiously, as Horman's textbook also suggests, fifteenth-century contemporaries also wrote about a peculiar kind of parchment, which they knew in Latin as *abortivum*, or Middle English *abortyve*: so-called *uterine vellum*.[30] These names were used to describe especially fine, thin, white parchment, which was allegedly always made from the skin of a stillborn calf or sheep. The idea of uterine vellum has become associated particularly with thirteenth-century French Bibles, which were made of superfine, extremely white parchment. A recipe mentions this type of parchment and gives instructions to use very little size when gilding an initial painted on it: "And ȝif þu wyll mak letter on abratif or abortyf, lai þi zyse als thyn þeron as þu may."[31] This gives an impression of abortive as a difficult support to work with; that writing on it required careful preparation. Though tricky to handle, abortive seems at first to be consistent with a sustainable, nose-to-tail approach – even stillborn animals' skins were made into parchment. But was such a product truly made from stillborn skins? And was it sustainable in any sense? Though this fine uterine vellum was known from classical times, and mentioned in the medieval period, it does not seem feasible that a high demand for it could have been supplied.[32] Christopher de Hamel notes that "it is very difficult to believe that thousands of cows miscarried for generations, or were deprived of their foetuses in such numbers to supply the book trade economically."[33] And if calves were being stillborn naturally in such quantities, "animal husbandry must have been in a very precarious condition."[34] Recent research into this question suggests that although "genuine uterine vellum cannot be discounted",[35] superfine parchment was more likely a "highly specialized craft" using

---

[30] *DMLBS, abortivus, n.,* sense 3 (first noted 1265, also examples from 1445 and 1446 noted); *MED, abortive, n.,* sense 3: "Parchment made from the skin of a stillborn animal."

[31] BodL, MS Ashmole 750, f. 178^{r}; *Quarto Catalogue*, X, pp.357-362; Clarke, *Crafte*, p.256.

[32] Ronald Reed, *The Nature and Making of Parchment* (Leeds: The Elmete Press, 1975), pp.76-7, mentions that Pliny referred to this material as *charta non nata* or *charta virginea*, and that uterine calf skins, or *pergamenae vitulinae,* were used because of the larger cutting area available (compared to uterine sheepskins).

[33] De Hamel, *Scribes and Illuminators*, p.16.

[34] Thompson, *Materials*, p.27.

[35] Very fine parchment made from calf foetuses is known as "slunk", and has a long tradition. This is still made today, for example by the Pergamena New York parchment-makers, 'Manuscript Uterine Calf Parchment', online <http://www.pergamena.net/parchment-products/manuscript-uterine-calf-parchment> (accessed 5 January 2017).

young animal skins and specific finishing techniques such as splitting skins, rather than always stillborn *uterine* vellum.[36] The real story of this near-mythical product, then, is less about a cruel misuse of animals' lives, and more about working young raw skins, with intensive effort and refined skills.

But even without that unlikely, unsustainable kind of skin, the production of any manuscript required a remarkable range of other organic materials, some of which were also by-products of animal activity. These included natural growths such as oak galls, also known as oak apples, the formation of which is triggered by the gall wasp, and which were used for making ink.[37] Many recipes for ink requiring galls are attested. One for ink of Lombardy, for example, suggests: "Forto make ynke Lombards do þusse. Take a novnce of gallis", and another in the same manuscript, for text ink, advises: "Text ynke þus. Take .iiij. once of galles *and* breke þa*m* small in a morter."[38] Another animal part needed for writing was bird feathers. Feathers were hardened and sharpened into flexible, strong quills for writing. Turkey, swan, crow, duck, and more rarely raven, pelican or peacock feathers could be used; however, quills were preferably made from goose feathers.[39] As the Goose in Lydgate's poem 'The Debate of the Horse, Goose, and Sheep' says: "Men plukke stalkes out of my weengis tweyn, / Some to portraye, so*m*me to noote & write."[40] To note and write on parchment required feathers for quills and ink galls: additional animal by-products. More resources required for parchment-making included chalk or similar calcium compounds for making lime solution to soak the hide or skin, as well as pumice (or a substitute, for which there were contemporary recipes), and a plentiful water supply.

---

[36] Fiddyment et al., 'Uterine Vellum', p.15070; see also Thompson, *Materials*, p.27; and Chiara Ruzzier, 'The Miniaturisation of Bible Manuscripts in the Thirteenth Century: A Comparative Study', *Form and Function in the Late Medieval Bible*, ed. by Eyal Poleg and Laura Light (Leiden: Brill, 2013), pp.105-125, at p.115.

[37] Gum, gall and metallic sulphate were typical ingredients for making ink, and for a modern-day reconstruction of iron gall ink recipes using these ingredients, see Sakura Tohma, 'Making & Testing Iron Gall Ink', online <https://www.westdean.org.uk/study/school-of-conservation/blog/books-and-library-materials/making-testing-iron-gall-ink> (accessed 5 January 2017).

[38] CUL, MS Dd.v.76, f. 7^{r}; *IMEP*, XIX, pp.26-30; Hardwick, *CUL Catalogue*, I, p.285; Clarke, *Crafte*, pp.216-217. For more examples of typical ink recipes, see also: BL, MS Cotton Julius D.viii, f. 89^{v}: "To make ynk Lumbard" and "To make tyxt ynk", and BL MS Sloane 4, f. 3^{v}: "To make ynk Lumbart".

[39] Michael Finlay, *Western Writing Implements in the Age of the Quill Pen* (Penrith: The Pen and Pencil Gallery, 1990), p.3; and Joyce Irene Whalley, *Writing Implements and Accessories from the Roman Stylus to the Typewriter* (London: David & Charles, 1975), p.16.

[40] John Lydgate, 'The Debate of the Horse, Goose, and Sheep', *The Minor Poems of John Lydgate*, ed. by Henry Noble MacCracken, EETS o.s. 192 (London: OUP, 1934), II, pp.539-566, at p.547, ll. 183-4.

Additional organic materials might be necessary for other aspects of book production, for example plant juices for making ink or for tanning leather. Metal and mineral resources were also required to make pigments.[41] Each of these additional resources contributed to the book, but in terms of their sustainability, some were a product in their own right, whereas others were efficient uses of by-products. Since meat and eggs were the main products from geese, goose feathers for quills were a by-product.[42] Furthermore, some of these resources enhanced the production of parchment, or some other feature of the book, and in so doing improved its long-term durability.

But are traces of raw materials, and their animal origins, visible in the finished book? Today, just as they would have been then, these medieval "beestis skynnes" are striking. Parchment has flesh and hair sides, and the difference in texture of each side is sometimes detectable by touch. The *flesh side*, once the inner side of the skin, is usually paler and smoother than the outer *hair side*, also known as the grain side. By this period, flesh and hair sides are usually arranged in manuscripts according to the Rule of Gregory, so that at any opening like faces like. As Richard W. Clement has suggested, this rule was followed for "aesthetic reasons", and he argues that if the quire was "arranged properly" the reading experience would not be disrupted by the contrasting colour and texture of each side.[43] Often manuscript leaves are speckled with follicle marks,[44] and occasionally some still have a few stray hairs intact on the hair side, such as a manuscript dating to the first quarter of the fifteenth century.[45] Sometimes, though very rarely, books were bound with what appears to be hairy parchment. In such cases, though the hair has not been fully removed, the skin has not been tanned like leather, and appears instead to have undergone the key features of the parchment-making process. Examples include: a thirteenth-century copy of works by Bede from Byland Abbey; a thirteenth-century manuscript at Worcester

---

[41] Clarke, *Art of All Colours*; Thompson, *Materials*, pp.74-188.

[42] Umberto Albarella, 'Size, Power, Wool and Veal: Zooarchaeological Evidence for Late Medieval Innovations', *Environment and Subsistence in Medieval Europe: Papers of the Medieval Europe Brugge 1997 Conference,* 9, ed. by Guy de Boe and Frans Verhaeghe (Zellik: Instituut voor het Archeologisch Patrimonium, 2007), pp.19-30, at p.27.

[43] Clement, 'A Survey', p.25; described by J. P. Gumbert, as a "deliberate choice" and not a consequence of folding, 'Skins, Sheets, and Quires', *New Directions in Later Medieval Manuscript Studies: Essays from the 1998 Harvard Conference,* ed. by Derek Pearsall (York: York Medieval Press, 2000), pp.81-90, at p.87.

[44] See for example: BodL, MS Laud misc.739, f. 161; Seymour, *Chaucer Catalogue*, II, pp.179-182; *Quarto Catalogue,* II, p.524 and p.584. Also, see: HEHL MS HM 114, f. 152; Dutschke, *HEHL Catalogue*, pp.150-152.

[45] Worcester Cathedral Library, MS Q. 93, f. 67; Thomson, *Worcester Catalogue*, pp.181-182. TCC, MS R.3.22 has hair on f. 168; *IMEP*, XI, p.28; James, *TCC Catalogue*, II, p.602; with thanks to Jessica Henderson for this reference.

Cathedral Library; a book of homilies in a sealskin binding from Iceland; and furry leaves which once wrapped a fourteenth-century treatise in reproof of worldly clergy (see figure 1, supplement, p.4).[46] The follicular features and hairy sheets remind us of parchment's animal origins, while in addition these wrappers made of partially-processed skins remind us of its basic function of sustaining books.[47]

In addition to follicle marks and stray hairs, parchment sometimes registers other features of the body it once enveloped, even when prepared appropriately and used in a book. The contours of the skin, especially at its edges, may trace the former body. Sarah Kay notes that "the curve of the animal's body persists in the natural curl of the pages."[48] Denis Muzerelle refers to this curl as the *sens de la peau* ("impression of the skin"), and this can be seen in numerous manuscripts.[49] The outer edges of the skin were a cheaper option for making smaller manuscripts, but these sections may be either "inadequately stretched" with "hard and horny [parts] like rawhide", or "weaker", softer areas.[50] These softer "marginal textures" correspond with more flexible parts of the skin at the animal's armpits and groin.[51] Relatively low-grade parchment was sometimes made from "raw, rough and almost 'wild' skins" and, in the shape of such parchment "we can recognize such animal parts as flanks, belly, legs."[52] In some manuscripts of substantial size each bifolium is a whole skin. For example, in the 'Ellesmere Chaucer', the spine of the animal runs from the book's

---

[46] Wormsley Library 12 (the *Byland Bede*), no.3, in Paul Getty and H. George Fletcher, *The Wormsley Library: A Personal Selection by Sir Paul Getty* (London: Maggs Bros. in co-operation with the Pierpoint Morgan Library & Museum New York, 1999), pp.8-10; Worcester Cathedral Library, MS F.12, Thomson, *Worcester Catalogue*, pp.13-14 notes the "overcover of rough brown cowhide" at p.13; an Icelandic manuscript now in Sweden, National Library of Sweden, MS Isl. Perg. 4 No. 15, online <http://www.kb.se/samlingarna/Handskrifter/Smakprov/Nordiska-handskrifter/Islandska-Homilieboken/> (accessed 5 January 2017), with thanks to Twitter user Sheryl McDonald Werronen (@SMcDWer) for this reference; BodL, MS e Mus. 198*, *Summary Catalogue*, II.ii, pp.738-739, with thanks to James Dylan Sargan for this reference.

[47] For more on wrappers, see chapter 2.

[48] Kay, 'Legible Skins', p.14.

[49] Muzerelle, *Vocabulaire codicologique, s.n.* sens de la peau.

[50] Jennifer Borland, 'Unruly Reading: The Consuming Role of Touch in the Experience of a Medieval Manuscript', *Scraped, Stroked, and Bound: Materially Engaged Readings of Medieval Manuscripts*, ed. by Jonathan Wilcox (Turnhout: Brepols, 2013), pp.97-114, at p.103.

[51] Gumbert, 'Skins, Sheets, and Quires', p.82.

[52] Jiří Vnouček, 'The Manufacture of Parchment for Writing Purposes and the Observation of the Signs of Manufacture Surviving in Old Manuscripts', *Care and Conservation,* 8 (2005), pp.74-92, at p.77.

head to tail on each bifolium,[53] and in the 'Vernon' manuscript, the leaves are marked with a "dorsal stripe", a ghostly, visceral impression of vertebrae running across each bifolium.[54] The animal origins, therefore, can register in the curl and texture of books' leaves.

The animal pre-history of the book

As these dorsal stripes, skin shapes and other surface blemishes all show, before parchment production, a considerable 'pre-history' of the book had already elapsed in the form of living animal organisms. These materials performed a rather different function as part of the animal, preserving and sustaining life long before they were used to preserve and sustain manuscripts. Animal skins have a remarkable range of functions. Skin is a complex organ, made up of highly specialized living tissue structures. These tissues operate together to "control form, shape and size" and, individually, perform regulated physiological functions such as responding to stimuli, excreting waste, secreting enzymes and hormones, providing cohesion and assisting movement. The outer epithelial tissue also makes "direct contact with the external environment," affording protection against "light, water, and fluids generally."[55] This organ has evolved to fulfil necessary physiological functions. In a sense, then, the *reuse* of skins could be said to be *any* use occurring after the death of the animal, thus changing the function of the skin.

But the necessary death of animals in the process of making parchment also raises ethical issues, as highlighted by Bruce Holsinger. He notes that to study parchment manuscripts "is to be hopelessly implicated in and to constantly witness the mass deaths of countless sheep, lambs, calves, and goats for the means of literary transmission."[56] Holsinger goes further and entertains a fantastical scenario in which all medieval parchment is discovered to be made from human skin: in this way he dramatically foregrounds the ethical ramifications of parchment culture through a

---

[53] HEHL, MS EL 26 C 9 (the 'Ellesmere Chaucer' manuscript); noted in M. B. Parkes, 'The Planning and Construction of the Ellesmere Manuscript', *The Ellesmere Chaucer: Essays in Interpretation*, ed. by Martin Stevens and Daniel Woodward (San Marino, CA: Huntington Library, 1997), pp.41-47, at p.43.

[54] BodL, MS Eng. poet. a. 1; A. I. Doyle, 'Codicology, Palaeography, and Provenance', *A Facsimile Edition of the Vernon Manuscript: Oxford, Bodleian Library MS Eng. Poet. A. 1*, ed. by Wendy Scase, Bodleian Digital Texts 3 (Oxford: Bodleian Library, Oxford University, 2012), pp.1-19, at p.4; Gumbert uses the term "dorsal stripe", in 'Skins, Sheets, and Quires', p.82.

[55] Reed, *Ancient Skins*, pp.13-14.

[56] Holsinger, 'Of Pigs and Parchment', p.619.

stark analogy.[57] I concede Holsinger's essential argument that medievalists today should be mindful that – to paraphrase it – parchment is murder. But while the 'murder' of animals is an alien, or at least, distant, experience for most people living in a modern, developed country, the slaughter of animals was readily visible in the meat markets in medieval towns, for example in the streets known as *Fleshambles*.[58] Concerns with animal cruelty today were evidently not shared by those who perpetrated the cruel treatment of animals then: customarily, animals were baited into a frenzy before slaughter, because of a medieval belief in the improved taste and tenderness of baited flesh.[59] Baiting meant that animals would have endured additional suffering and injury just before death.[60] It is clear that medievalists should be more aware of the ethics – the 'murder' and poor welfare – of medieval animals made into parchment, but also that a historical understanding of parchment might require us to reconstruct different attitudes to animal resources.

I contend that our 'constant witness' to medieval animal deaths can go beyond mere hopelessness; we could, perhaps, be hopeful that we might learn something important from the animal remains of a pre-industrial time. Though we may recoil in horror from the frenzied deaths that prefigured book production, we might also think through the medieval agricultural, economic, environmental, and social contexts of parchment. We might learn from the medieval use of animals, beyond expressing our modern humane perspective and being appalled by it. In fact, parchment was one among many sustainable reuses of animal bodies, and makers of parchment, among craftsmen working with other animal products and by-products, needed good supplies of raw materials to continue their trade. Parchment production should, therefore, be situated as a trade embedded amongst the various interlinked agricultural and cultural economies of monastic estates, rural hinterlands, and urban centres. In paying attention to parchment-makers and their methods, we might better "witness" a pre-industrial approach to material resources.

---

[57] Bruce Holsinger, 'Parchment Ethics: A Statement of More Than Modest Concern,' *New Medieval Literatures* 12 (2010), 131-6.

[58] Slaughter would likely have taken place somewhere blood and detritus could be sluiced away, or in the street of butchers' stalls known as the *Fleshambles,* such as the street still known as the *Shambles,* in York. This street name derives from *flesh-shameles*, meaning literally shelves or benches for meat. *MED*, *shamel, n.,* senses a, "a footstool", and b, "a bench"; *BT*, *sceamol, n.*, "a bench or stool"; *Farming Glossary*, *macella, n.,* "a slaughterhouse or shambles", p.27; *DMLBS*, *macellum, n.*, sense 1a.

[59] For more on the violence of humans towards animals, and its philosophical ramifications, see Karl Steel, *How to Be a Human: Animals and Violence in the Middle Ages* (Columbus: The Ohio State UP, 2011).

[60] Linda Kalof, *Looking at Animals in Human History* (London: Reaktion Books, 2007), p.65.

It is worth exploring why, in the fifteenth century as throughout the earlier Middle Ages, it was worthwhile to kill animals to make parchment. How were the necessary resources found? What else could hides and skins have been used for instead? What made parchment cost-effective, profitable, or socially desirable? How was parchment-making carried out? Most importantly here, was the use of skin *sustainable*? Was it made efficiently, with a 'nose-to-tail' approach to avoiding waste, or made to last, or both? Though today we may well find the scale and specifics of animal slaughter in the medieval period ethically problematic, the details of how and why people made parchment reveal more fully the animals and deaths that gave us medieval books. For example, Lydgate's poem 'The Debate of the Horse, Goose, and Sheep', mentioned previously for the comments made by the Goose about quills, makes much of wool, and additionally mentions that "Of Sheep al-so comyth pilet & eke fell, / Gadrid in this lond for a gret marchau*n*dise."[61] Hides and skins took their place in the same wider system of merchandise, and medieval parchment has since been described, matter-of-factly, as "a standard article of commerce, prepared by specialists."[62] Parchment was, after all, part of a wider system that depended – and capitalized – upon animal slaughter for products and by-products.

To source the necessary raw resources, fifteenth-century parchmeners depended on the wider agricultural economy. As Ralph Hanna emphasizes, "One must always insist on this agricultural underpinning […] since it is always silenced at the heart of texts and substantial efforts taken to hide its existence."[63] During the fifteenth century, domestic animals such as cattle, sheep, pigs, poultry, goats, and horses were put to multiple uses by people. Primarily, animals were reared to provide meat, dairy, and eggs – for food.[64] In the fifteenth century, rising living standards stimulated the urban consumption of meat and the demand for leather goods.[65] Then as now, the demand for animal-based foodstuffs gave rise to a supply system of animal by-products, including hides and skins, as well as wool, glue, leather goods, tallow,

---

[61] Lydgate, 'Horse, Goose, and Sheep', ll. 356-7, p.554; also discussed by John Aberth, *An Environmental History of the Middle Ages: The Crucible of Nature* (London: Routledge, 2013), p.168.

[62] Thompson, *Materials*, p.24.

[63] Ralph Hanna, *London Literature, 1300-1380* (Cambridge: CUP, 2005), p.158.

[64] Albarella, 'Size, Power', pp.19-30; and for discussion of the difficulties involved with integrating evidence, see: Umberto Albarella, '"The Mystery of Husbandry": Medieval Animals and the Problem of Integrating Historical and Archaeological Evidence', *Antiquity,* 73:282 (1999), 867-75.

[65] Maryanne Kowaleski, *Local Markets and Regional Trade in Medieval Exeter* (Cambridge: CUP, 2003), p.307.

lard, wax, and butter.[66] For sheep, when wool was in high demand, it could be the "main source of profit", with meat and skin as by-products.[67] The common requirement for skinning and butchery of the carcass meant that "the respective needs for meat and skins must have had impact on one another."[68] Once the main product, meat, had been separated from the skin, bones, and other parts of the body, these could be processed into other commodities.

As well as making parchment, hides and skins were made into a range of other commodities of variable durability, such as "clothing, footwear, bags, drinking vessels, and bone tools." But these "range from being relatively rare to virtually impossible to find today", whereas parchment survives in vast quantities.[69] However, though hides and skins were clearly widely used and rarely wasted, animals were not reared expressly to provide materials for these goods. Rather, as Umberto Albarella strongly suggests, hides and skins "could never be regarded as anything more than important by-products," leftovers from butchery for meat or from the wool trade.[70] (They continue to be generated merely as by-products of agribusiness even today.)[71] Taking the need for the animal primarily for meat alongside the growing demand for leather goods at the time into account, it is hard to imagine that much was wasted. Hides and skins had a salvageable use-value for making other things, and helped to avoid waste and to conserve materials. And among the other things that could sustainably be made from them, parchment stands out as a particularly durable commodity.

As a by-product rather than a main product, the supply of parchment took place alongside other crafts and trades. Recognising the key importance of such 'staple' commodities, the Staple had been instituted in 1291 by King Edward I in

---

[66] Kay, 'Legible Skins', p.18; E. M. Carus Wilson, 'The Overseas Trade of Bristol', *Studies in the English Trade in the 15th Century*, ed. by Eileen Power and M. M. Postan (London: Routledge, 1933, repr. 2006), pp.183-246, at p.198; and for more on meat, see: Krish Seetah, 'The Middle Ages on the Block: Animals, Guilds and Meat in the Medieval Period', in Pluskowski, *Breaking and Shaping*, pp.18-31.

[67] Christopher Dyer, *Lords and Peasants in a Changing Society: The Estates of the Bishopric of Worcester, 680-1540* (Cambridge: CUP, 1980), p.151, and discussion of sheep products and by-products at p.140.

[68] Timothy Stinson, 'Counting Sheep: Potential Applications of DNA Analysis to the Study of Medieval Parchment Production', *Codicology and Palaeography in the Digital Age II,* ed. by Franz Fischer, Christiane Fritze, Georg Vogeler (Institut für Dokumentologie und Editorik: Norstedt, 2011), pp.191-207, at p.201.

[69] Stinson, 'Counting Sheep', p.195.

[70] Albarella makes this comment of hides and skins, but also "wool fells, bones and horns", 'Size, Power', p.27.

[71] Compare Christian Stevens and Roland Verhé, 'Primary Production of Raw Materials', *Renewable Bioresources: Scope and Modification for Non-Food Applications* (Oxford: Wiley, 2004), pp.87-90, at p.87.

order to regulate the supply and demand of wool, leather, and sheepskins.[72] These resources directly supplied England's largest industry, the cloth trade, and its second largest industry, the leather-related trades.[73] Other industries that also relied on hides and skins included butchers, skinners, tanners, furriers, curriers, glovers, cordwainers, saddlers, and others.[74] In support of the close affiliations between parchment producers and butchery or similar leather-work related trades, Peter Blayney suggests that a parchmener "as a craftsman" had "real affinities with the Skinners and Leathersellers."[75] Parchmeners may well have been members of other closely-related guilds, and some were certainly amalgamated into the Leathersellers' Company,[76] which was thriving in the fifteenth century and was granted a charter by Henry VI in 1444.[77] Ronald Reed notes that the Whitetawyers guild, who received their charter in 1346, not only produced skin- and leather-based "gloves, laces, belts, [and] bookbinding materials" but also "superior (white) grades of parchment for writing purposes."[78] So parchmeners were closely linked to some of these guilds, and among a range of other related products, it was a viable, profitable choice to use hides and skins to make parchment.[79]

Hide or skin by-products were of course linked to meat production, as suggested, but almost "nothing is known about the management of herds to be

---

[72] Tom Hoffman, *Guilds and Related Organisations in Great Britain and Ireland: A Bibliography*, online <http://www.bbk.ac.uk/lib/elib/databases/tom-hoffman/tom-hoffman-bibliography-on-the-guilds> (accessed 5 January 2017), p.7.

[73] Maryanne Kowaleski, 'Town and Country in Late Medieval England: The Hide and Leather Trade', *Work in Towns 850-1850*, ed. by Penelope J. Corfield and Derek Keene (Leicester: Leicester UP, 1990), pp.57-73, at p.57.

[74] For example, Elspeth Veale writes that in *The Libelle of Englysche Polycye* (1436-8), the author comments on Ireland's trade in "martens, deer, otter, squirrel, hare, sheep, lamb, fox, kid, and rabbit skins" and on Scotland's "flourishing trade in fox, squirrel, marten, cat, beaver, and otter skins", in *The English Fur Trade in the Later Middle Ages*, London Record Society, 38 (London: London Record Society, 2003), p.60.

[75] Blayney, *The Stationers' Company*, p.17.

[76] Hoffman, *Guilds*, p.201, notes that the 1635 ordinances of the Leathersellers refers to the various constituent trades that made up the guild, which by that time included the Fellmongers, Leatherdressers, Glovers, Pursers, and Pouchmakers, Leather-dyers, and – most importantly for this study – the Parchment-makers.

[77] Jerome Farrell, *The Leathersellers' Company: A Short History* (London: Trident Printing, 2008), pp.5-6.

[78] Reed, *Nature and Making*, p.32.

[79] Christianson, *Directory*, lists ten London parchmeners, recorded as such between 1370-1467: Richard Collop (discussed further in chapter 4), John Corby, Roger Crane, William Fisher, John Grafton, Adam Leycestre, John atte Nashe, John Pountfreyt, Geoffrey Sprottesburgh, and Ralph Tonworth.

slaughtered in order to produce writing material."[80] Specifics relating to cattle and sheep rearing for parchment production are not widely recorded, but a few details are known about animal husbandry. By the fifteenth century structures known as sheepcotes were used for lambing, administration, sheltering sheep, storing fodder, and as a source of manure.[81] The archaeological and documentary evidence suggest a well-organized system of sheep farming. This is complemented by the "expansion of cattle and sheep farming" in the fifteenth century, documented in Exeter, "which produced a cheaper source of raw materials" for the leather trades.[82] After the Black Death reduced the population, numbers of animals in England increased,[83] due to a "reduced demand for cereal crops", and the "high price of labour", which encouraged a shift towards "more lucrative pastoral farming."[84] So, by the fifteenth century, there may have been some tension between keeping valuable, wool-producing sheep alive and the relative value of slaughtering young sheep for making parchment.

So how were the animals that yielded these related products and by-products reared, slaughtered, and distributed? How did skins get to parchmeners? Cattle or sheep could be reared 'in-house', or driven to market from near or far. In the fifteenth-century translation of a hunting manual *The Master of Game,* by Edward, Duke of York, the "alauntes", or dogs of the butcheries, were trained to bring animals from the country into town, and are also explicitly linked with bull baiting.[85] Some aspects of the movement of hides and skins from field to market were supervised by *fellmongers*.[86] They operated as middlemen between farmers, butchers, and tanneries.[87]

---

[80] Thomson, 'Parchment and Paper', p.76; Michael Gullick, 'From Parchmenter to Scribe: Some Observations on the Manufacture and Preparation of Medieval Parchment Based Upon a Review of the Literary Evidence', in Rück, *Pergament, Geschichte*, pp.145-157, at pp.147-148, explores rare evidence from the Beaulieu Abbey Accounts (1269-1270) which notes the grades of sheepskin and calfskin parchment produced there.

[81] Christopher Dyer, 'Sheepcotes: Evidence for Medieval Sheepfarming', *Medieval Archaeology,* 39 (1995), 136-64, at pp.150-55.

[82] Kowaleski, *Medieval Exeter*, p.307.

[83] Joyce Salisbury, *The Beast Within: Animals in the Middle Ages* (London: Routledge, 2011), p.18, and p.44.

[84] Kowaleski, 'Town and Country', p.64.

[85] Edward of York, *The Master of Game: The Oldest English Book on Hunting*, ed. by William A. Baillie-Grohman and F. N. Baillie-Grohman (New York: Duffield, 1909, repr. Philadelphia: University of Pennsylvania Press, 2005), pp.116-118; a copy of this text survives in BodL, MS Douce 335; *Summary Catalogue*, IV, p.598.

[86] *MED*, *felmongere, n.,* sense 3b "one who sells skins"; *OED*, *fellmonger, n.,* "A dealer in skins or hides of animals, *esp* sheep-skins."

[87] Dale Serjeantson, 'Animal Remains and the Tanning Trade', *Diet and Craft in Towns: The evidence of animal remains from the Roman to the Post-Medieval periods*, eds. D. Serjeantson and T. Waldron, British Archaeological Reports, British Series 199 (Oxford: British Archaeological Reports, 1989), pp.129-46, at p.129.

Records of broken contracts between tradesmen in medieval Winchester suggest that there were close partnerships and common trade arrangements dealing in skins between butchers and local tanners and parchment-makers.[88] So, in addition to the agricultural context of manuscript production, the trades that facilitated production could also organize the supply and movement of hides and skins.

Supply could be achieved on a highly localized scale; for example, the husbandry, slaughter and butchery undertaken by close-knit communities such as monastic estates. Jean-Pascal Pouzet has noted cases of 'in-house' production from the thirteenth to the fifteenth centuries at Benedictine institutions, including the Cathedral Priory of Norwich, the monastic Cathedral Chapter of Durham, and the Abbey of St Albans.[89] Likewise, the Cistercian Abbey of Beaulieu, which was founded in 1203-4, was still thriving in 1468, when a grant of Edward III gave the monks a weekly Thursday market and confirmed that, in the nearby forests of Bere and Porchester, they had the rights of pasturage.[90] The Cistercian order was notable for the effective way in which members of the order conducted animal husbandry; for instance, they introduced some "effective innovations" in breeding and farming arrangements.[91] The basic organising unit of mixed agriculture, including animal husbandry, in houses of this order was the grange.[92] The many Cistercian houses in Yorkshire, centred around the foundation of Rievaulx in 1132, and Fountains Abbey shortly after, were "renowned for their sheep farming."[93] Many houses certainly became wealthy from the sale, bartering and export of animals and their by-products, and importantly for this consideration of localized, systematized husbandry, these resources also "contributed to […] self-sufficiency" and presented prime opportunities for 'in-house' production.[94] These details, of a grant for pasturage and complaints

---

[88] Derek Keene and Alexander R. Rumble, 'Trades and Marketing', *Survey of Medieval Winchester* (Oxford: OUP, 1985), I, pp.249-365, at p.288.

[89] Jean-Pascal Pouzet, 'Book Production Outside Commercial Contexts', *PBE*, pp.212-238, at p.217.

[90] H. Arthur Doubleday and William Page, eds., *A History of the County of Hampshire* (London: Victoria County History, 1903), II, pp.140-146; Pouzet, 'Book Production', p.217.

[91] T. R. Eckenrode, 'English Cistercians and Their Sheep During the Middle Ages', *Cîteaux: Commentarii Cisterciensis,* 24 (1973), 250-66, at pp.256-6.

[92] For a simple outline of Cistercian farming strategies, see Cistercians Project, 'Farming', online <http://cistercians.shef.ac.uk/cistercian_life/environment/farming/index.php> (accessed 6 June 2016).

[93] Cistercians Project, 'Sheep Farming', online <http://cistercians.shef.ac.uk/cistercian_life/environment/farming/farming14.php> (accessed 6 June 2016).

[94] P. Ranft, *Medieval Theology of Work: Peter Damian and the Medieval Religious Renewal Movement* (New York: Palgrave Macmillan, 2016), p.138.

about sheep grazing, give a glimpse of how animal husbandry was integral to the running of monastic communities and might have allowed for *in situ* and sustainable production of parchment for books.

We should be wary of overemphasising the general importance or applicability of hyper-local monastic supply however: Pouzet emphasizes that only cathedral chapters or the largest houses of the regular orders had the "socio-economic conditions requisite for *in situ* provisioning of materials for book production."[95] By the fifteenth-century it seems there was some saturation in book ownership and production, with older houses already owning key texts. However, some chapters and houses still produced manuscripts, as did some newer foundations. Many of the institutions capable of 'in-house' production were already well-established and wealthy and had, in any case, a long reach and large geographic scale. *In situ* production should perhaps be understood as being less about the minimum distance from field to workshop, although in some cases it could be, and more about institutional wherewithal. In contrast with these sometimes relatively localized scales of production in monastic communities, on a larger, regional scale, parchmeners relied on longer supply chains. The acquisition of resources affected choice, as well as determining whether skins had to be processed in small quantities or large batches, both of which impacted on the sustainability of parchment production.

To move hides and skins from rural hinterlands into local markets such as urban centres required longer, more dynamic supply chains. This is put in perspective in a study of medieval Exeter, which, thanks to surviving records, is one of the best-documented fifteenth-century English cities for trade. Exeter's hinterland of hides and skins has been described as the "most extensive of all [trades]", and the "marketing chain" of these raw materials reached out as far as north Somerset and Cornwall; in the thirteenth and fourteenth centuries it even produced enough surplus to support a thriving export business. From field to market could be a long journey. In addition, E. M. Carus Wilson's study of fifteenth-century trade in another thriving port and trade hub, Bristol, highlights the supply of Irish and Welsh hides to the craftsmen of that city, both makers of parchment and of clothing items.[96] These supplies were moved by sea, or animals were walked to market "on the hoof" to urban centres along drovers'

[95] Pouzet, 'Outside Commercial Contexts', p.217

[96] Carus Wilson, 'Bristol', p.187.

routes.[97] Carus Wilson specifically mentions a Bristol parchment-maker who had trade connections with Cardiff, which exemplifies the complexity and length of some supply chains: if this was a secure supply, then parchment could be produced efficiently, but when supply was precarious or difficult this could result in more wasteful, less efficient production.

Though this 'field-to-fork' understanding of the products and by-products of medieval animal husbandry and the 'nose-to-tail' use of animals helps to situate parchment more clearly in its historical economic and agricultural context, did the craft of parchment-making have other, negative impacts? Drawbacks include the environmental and ecological impacts of animal husbandry, including methane emissions.[98] It is known from sampling of Greenlandic ice cores that production of this greenhouse gas rose between 800-1200. Recorded emissions appear to drop following the Black Death, before rising again in the 1500s.[99] But, given the methane emissions incurred through the rearing of animals, and the differences of scale and population, whether animal husbandry was more or less sustainable than modern-day farming methods is a question for another thesis. Leaving aside the overall impact of animal husbandry, as a resourceful sideline industry parchment production at least used up skins and hides. Though the varied products made of meat, bone, horn, and skin might not have been sustainable in a holistic sense, medieval animals were used in myriad ways in an undeniably efficient fashion.

Medieval parchment craftsmanship

Once separated from the living body, skins do not last in nature, and unless they are naturally air-dried or preserved in peat, they usually rot away. Making the skin into parchment is a way of sustaining this bodiless organ and thereby extending its shelf life. For medieval animal skins to become parchment, the energies and efforts of human bodies were required. Let us not forget that parchment-making required skin-on-skin contact between humans and animals. At first, both skins are alive, until the

---

[97] Umberto Albarella, 'Tawyers, Tanners, Horn Trade and The Mystery of The Missing Goat', *The Environmental Archaeology of Industry*, ed. by Peter Murphy and Patricia E. J. Wiltshire, *Symposia of the Association for Environmental Archaeology 20* (Oxford: Oxbow Books, 2003), pp.71-83, at p.80.

[98] Valerie Allen, *On Farting: Language and Laughter in the Middle Ages* (New York: Palgrave Macmillan, 2007), has extensively explored medieval representations of farting, though cattle methane production goes unmentioned.

[99] Alister Doyle, 'Romans, Han Dynasty Were Greenhouse Gas Emitters: Study', *Reuters*, 3 October 2012 <http://uk.reuters.com/article/2012/10/03/us-climate-romans-idUSBRE89212020121003> (accessed 5 January 2017); see also: C. J. Sapart, G. Monteil, M. Prokopiou, et al., 'Natural and Anthropogenic Variations in Methane Sources During the Past Two Millennia', *Nature,* 490 (2012), 85-88.

human kills the animal. Then the living skin, encasing a live human body, deftly crafts the dead skin, flayed from animal flesh, into a stripped back, distinct new form.

Evidently, animal bodies are transformed by parchment-making, but so too are human bodies.[100] Crafting parchment from a raw skin or hide was, and still is, difficult, involving a sequence of processes that require a range of specific tools and manual skills. Parchmeners handled chemicals, sharp knives, blunt knives, unwieldy vats, beams and frames, and needed to be skilled in several specialist techniques. Indeed, as Daniel V. Thompson notes, "technique means materials and tools in action."[101] How did they achieve these skilled techniques? Richard Sennett argues in *The Craftsman* that "all skills, even the most abstract, begin as bodily practices."[102] The bodily practices of parchment making were hard-won through what has been described by Jonathan Wilcox as "repetition to the point of mindlessness."[103] A group of modern-day medievalists, including Wilcox, gathered to experience parchment production for themselves, applying their own unskilled bodies to the task. The process of attaining muscle memory, through extensive, immersive repetition, resulted in skills "wired into the fingers and joints rather than thought through the brain."[104] Similarly, through hours of repeated practice, medieval craftsmen's bodies became changed by, and attuned to, parchment-making.

It is this finely-tuned craftsmanship that made possible the making of durable parchment. Parchment's physical and chemical properties are brought into being through human exploitation of the intrinsic structures of hide or skin. In addition to being by-products of other trades, parchment needed human transformation. That exploitation and transformation took the form of labour. Many of the same properties that make skin so vital to animals are carefully enhanced by craftsmen through the process of parchment production. Evolved to sustain and protect a living animal, then removed from the dead animal, the skin's peculiar possibilities for parchment-making are only accessed through human intervention. Those properties are cultivated

---

[100] For reflections on the contact between human and animal bodies in such processes see Susan Crane, 'Introduction: Animal Discourses and Animal Studies', *New Medieval Literatures,* 12 (2010), 117-119, at p.119; and Katie L. Walter, 'Introduction', *Reading Skin in Medieval Literature and Culture*, ed. by Katie L. Walter (Basingstoke: Palgrave Macmillan, 2013), pp.1-10, at p.2.

[101] Thompson, *Materials*, p.19.

[102] Richard Sennett, *The Craftsman* (London: Penguin Books, 2008), p.10.

[103] Jonathan Wilcox, 'Introduction: The Philology of Smell', in Wilcox, *Scraped, Stroked,* pp.1-14, at p.7.

[104] Wilcox, 'The Philology of Smell', p.7.

through the application of techniques which are designed to make the parchment last, and to enhance its shelf life as a sustainable material for books.

Fifteenth-century recipes for parchment-making

Parchment production involved a number of stages, which took the material all the way from being live tissue on the back of an animal into a supple yet robust material. Whatever the resulting quality, and however intentional that grade of quality might have been, a series of procedures were executed: soaking in a lime solution, dehairing, and stripping away the upper skin layers, and, finally, stretching the remaining fibre-network layer of the skin so that it dries under tension.[105] Due to the organic nature of the materials, each time the process was undertaken it produced a subtly different outcome. If these processes were undertaken with care and with reasonable resources, then the resulting product took the form of durable parchment.

Capturing something of these medieval techniques for refashioning animal skins depends on interpreting both the books which survive from the Middle Ages and contemporary descriptions of the processes. Such descriptions are found, in the fifteenth century, in Middle English recipes for making parchment. The content of these recipes will prove a valuable source in the review of the making of parchment (which follows), so it will help first to survey their form and their usefulness as evidence. These sequences of book making recipes are often clustered in a fashion typical of many medieval recipe collections, whether they consist of medical, culinary, or scientific recipes, or are concerned with practical crafts.[106] These recipes took their place in manuscript collections of varied recipes belonging to the "procedural genre."[107] Usually, but by no means always, when medieval recipes have been compiled they are grouped by topic. Collectively, the group of similar or related recipes acts as a finding aid. If one is looking for a parchment recipe, and flipping through various herbal cures, culinary recipes, and diagrams, lighting upon a recipe for leather or ink would suggest, particularly to the initiated, that a parchment recipe

---

[105] Ryder, 'Biology and History', p.26, describes the 'basic method'.

[106] Carrie Griffin explores the scholarly consensus on recipe collections, in 'Reconsidering the Recipe: Materiality, Narrative and Text in Later Medieval Instructional Manuscripts and Collections', *Manuscripts and Printed Books in Europe 1350-1550: Packaging, Presentation and Consumption*, ed. by Emma Cayley and Susan Powell (Liverpool: Liverpool UP, 2013), pp.135-149, at pp.136-139.

[107] Irma Taavitsainen, 'Middle English Recipes: Genre Characteristics, Text Type Features and Underlying Traditions of Writing', *Journal of Historical Pragmatics,* 2:1 (2001), 85-113, at pp.86.

might be written somewhere nearby.[108] Recipes may be written in Latin or English, or, occasionally, in a mix of the two languages. Discrete recipes are often marked by paraphs, rubrication, and titles. There may be multiple recipes for the same product, or smaller strings of related recipes, such as ink followed by a series of different coloured inks, as in TCC, MS R.14.45 just mentioned. It is not uncommon to find recipes for dyeing leather white or red (*cheuerell*) closely followed by recipes for parchment.

Having homed in on the parchment recipe, did fifteenth-century readers really use these written instructions to make parchment? It seems possible that any reader seeking out the details of book production with this level of specificity might have been professionally – or personally – interested in attempting to follow some of these recipes. The recipes are structured as lists of ingredients, actions, and tools, which follow a temporal sequence leading towards the desired result.[109] They are usually accurate, though may be vague in detail, and following the instructions carefully should lead to the right outcome. That said, as Mark Clarke points out, "many of the manuscripts […] were not for professional use" but for "general interest for amateurs, and even on occasion for practical use by some of those amateurs."[110] Maybe some readers did have a go, in an amateurish fashion, at making parchment. And if a reader was both literate and able to write, maybe he or she tried the more achievable recipes, such as coloured ink, size, or stanchgrain.

Yet in manuscripts containing sequences of book-making recipes, leather and parchment seem the least feasible from a do-it-yourself point of view. While Michael Johnston and Michael Van Dussen have written of recipes for book production as indicators of the "decentralization and 'amateurization' of book production,"[111] there was often some distance between the intended reader and working parchmeners.[112] These compilations and miscellanies may have been designed to satisfy readers'

---

[108] For example, in TCC, MS R.14.45, various recipes for making vermilion, ff. 49^{r}-50^{v}, recipes for verdigris, ff. 51^{r}-52^{r}, recipes for azure and gold colour, ff. 55^{r}-56^{v}, recipes for parchment and vellum on f. 57^{r}, followed by a recipe for cordwainers' cord ff. 57^{r-v}, and a recipe for white leather on f. 57^{v} and for red leather on f. 58^{r}; James, *TCC Catalogue*, II, pp.331-333.

[109] Taavitsainen, 'Recipes', p.98.

[110] Clarke, *Crafte*, p.xxv.

[111] Michael Johnston and Michael Van Dussen, 'Introduction: Manuscripts and Cultural History', *The Medieval Manuscript Book: Cultural Approaches*, ed. by Michael Johnston and Michael Van Dussen (Cambridge: CUP, 2015), pp.1-16, at p.10.

[112] Clarke notes that the use of both Latin and Middle English in recipe collections is not an indication of a professional audience (as it is in the context of medical recipes): whereas an amateur book maker might have some Latin, a professional craftsman might not, in *Crafte*, p.xxxi.

curiosity about how books were made, rather than for readers to have a go themselves. It has also been pointed out that "Recipes may be performative" and "may have functioned as fictions […] that may or may not have been realistically accessible."[113] As we will see, many of these instructions, particularly the leather or parchment-making recipes, required specialist resources, equipment, and skills. The distance between the reader and actual parchmeners is suggested by the instruction in one recipe to "take suche a flessyng knyf as þis p*ar*chemyneres vse" (see figure 2, supplement, p.5).[114] Here, the reader is not assumed to be a parchmener. All in all, it is unclear whether fifteenth-century people really followed these practical recipes.

Either way, they do give a remarkable record of parchment production. Some recipes are short, "telegraphic even", such as the ink recipes cited earlier in this chapter. For making skins into writing supports, one short recipe for vellum comes to seventy-five words.[115] To enable this relative brevity, the recipe-writer has taken advantage of the similarities between the preparation of parchment and vellum, and refers back to the immediately preceding recipe, on the same page, for parchment: "do þer with inne þe same maner as þov dedist wiþ þi schepis skynne."[116] This recipe for vellum, then, mostly consists of a caution to "schave hit [þe kalves skynne] on bothe sydys", an extra effort not required for parchment. Other recipes are longer, and typically detail the key stages of parchment production. One longer, more typical recipe "To make a p*er*chemyn skyn" takes up two-thirds of a folio and comes to nearly 300 words.[117] Some are even longer, such as a recipe which takes up a full side of a folio, entitled "They Makyng of fyne velom", which is 462-words long,[118] and incomplete, cut off by the end of the folio. Whether long or short, these extant recipes offer suggestive details of fifteenth-century parchment craftsmanship.

What are the sustainabilities indicated by these parchment recipes? Was there interest in making parchment well, or so that it would last? Is there any attention to avoiding waste in the description of the main processes, or to using up by-products of

---

[113] Griffin, 'Reconsidering the Recipe', p.142.

[114] TCC, MS R.14.45, f. 57^{r}; *IMEP*, XI, pp.46-59; Clarke, *Crafte*, p.134. The distance between professional parchment makers and the intended audience of this text is noted by Carrie Griffin, 'Instruction and Information from Manuscript to Print: Some English Literature 1400-1650', *Literature Compass,* 10 (2013), 667-676, at p.669.

[115] Clarke, *Crafte*, p.xxvii.

[116] TCC, MS R.14.45, f. 57^{r}.

[117] BL, MS Cotton Julius D.viii, f. 88^{r}; Clarke, *Crafte*, p.143.

[118] TCC, MS O.8.36, f. 22^{v}; *IMEP*, XI, pp.135-136; James, *TCC Catalogue*, III, pp.437-439; Clarke, *Crafte*, pp.289-290.

those processes? In terms of making parchment well, recipes seem to offer viable directions with appropriate instructions in the right order and a reasonable level of detail about the timings, tools, and skills required. Such precise writing suggests attention by the deviser of the recipe to doing a good job: strict, detailed instructions improve the maker's chances of avoiding waste, and, moreover, creating a durable product. Sometimes mention is made of particularly desirable qualities, such as the recipe (just mentioned) entitled "They Makyng of fyne velom." This title suggests specific interest and attention to making parchment well, to exacting "fyne" standards, set out thoroughly in what was once a lengthy recipe. The recipe for parchment in one manuscript is precise where quantities are specified: "ii unces", "half a pynt", and "too ȝelkes."[119] While the language here is accessible – not difficult or technical – it is specific.[120] By contrast, some recipes offer instruction which is curiously vague: such vague instructions risk wasting resources and making parchment that will not be durable. For instance, one recipe has an afterthought that follows the seemingly specific requirement for "too ȝelkes" ("two egg-yolks") with the confusing modification "or elles þre". This afterthought perhaps assumes the ability to judge by eye, or some prior or shared knowledge of how much yolk is required. Similarly, the vagueness of 'two or three' is repeated in the recipe's approach to whether the skin should be washed again "twyes or þryes". The repeated 'two or three' idea gives an impression of specificity, through enumeration, while at the same time remaining vague, through the 'either or' construction. The recipe is vague in other ways too, assuming the maker's ability to determine when the skin is "clene ynoghe", how long laying it down for "litel while" might last, and what degree of wringing-out might be meant by "sumwhat wryng hit" (later repeated and accompanied by the caution "but noȝt to harde"). Therefore, due its vagueness, trying to make parchment by taking instruction from this recipe might well result in an unsustainable, excessive waste of resources, and poor quality, shoddy parchment.

Parchmeners also had a choice of material with which to begin the process. This meant they could develop skins to differentiated grades of quality. Nicholas Hadgraft has interpreted the flock sizes of the flourishing British wool trade of the fifteenth century as providing parchmeners with a "large stock of skin from which to select raw material" which "enabled the craftsman more easily to offer grades of

---

[119] BL, MS Cotton Julius D.viii, f. 88r.

[120] Clarke discusses the language used for measurements, time, weight, and temperature, in *Crafte*, p.xxxviii

parchment related to the grade of manuscript."[121] Recipes sometimes pass comment on quality, describing the intended result of the prescribed techniques. For example, the intended product may be described as "fyne velom"[122] (as mentioned) or "p*ar*chemyne gode and ffyne".[123] Another recipe begins by calling for "perchemyn skyn of mothyn wiþouten scabbe."[124] Taken together, these assertions suggest that parchment-makers – or at least the writers of these recipes, whether they were makers or not – were concerned with the product's quality, or with giving the impression of quality. There was an expectation of parchment-making: that it would yield a "good", "fine", luxury product.

But surviving manuscripts exhibit variable parchment quality. Quality parchment depended on several factors. Good, fine parchment might be expected to be smooth, evenly trimmed, consistent in colour and texture, hole- and hair-free. Achieving this required a long chain of successful processes. First, the size of the animal mattered: a bigger skin would yield more sheets, or would make it possible to cut larger, neater bifolia. But more substantial skins grew on the backs of growing, ageing animals, and there was a trade-off between the size of the skin and the age of the animal. So, second, the age of the animal was important. Younger skins were preferred, as they suffered less exposure to natural damage, especially if the animal was fast growing. As Albarella has noted, by the end of the fifteenth century animals were bred to increase the size of younger animals, resulting in improved growth and therefore yield.[125] Third, freshness made a difference: "if the skins […] are not quite fresh, they give a spotty product."[126] Fourth, resulting quality depended on the type of skin selected, whether that was sheepskin, cow hide, or any other pelt. Finally, the parchment quality could be influenced by the care with which the skin was treated throughout each stage of production.[127]

Turning hides or skins into writing supports begins with *flaying* or *skinning*, the removal of the hide or skin from the body wall, and from the carcass of the animal.

---

[121] Nicholas Hadgraft, 'English Fifteenth Century Book Structures' (unpublished doctoral thesis, University College London, 1997).

[122] TCC, MS O.8.36, f. 22^{v}.

[123] TCC, MS R.14.45, f. 57^{r}.

[124] BL, MS Cotton Julius D.viii, f. 88^{r}; Clarke, *Crafte*, p.430, glosses *mothyn* as sheep.

[125] Albarella, 'Size, Power', p.22, p.25, pp.27-8; Stinson, 'Counting Sheep', p.200 also notes the practice and development of selective breeding in the Middle Ages, such as Cistercian sheep-breeding for wool production.

[126] Thompson, *Materials,* p.28.

[127] Barbara Shailor, *The Medieval Book: Illustrated from the Beinecke Rare Book & Manuscript Library* (Toronto: University of Toronto Press, 1991), p.9.

This was achieved through mechanical means, such as tearing, pulling, or, usually, slicing with a sharp knife.[128] Like many other stages of parchment production, as we will see, the viability and integrity of the whole piece of parchment is put at risk by this tearing action. One slip and the whole skin can be torn in such a way that the later stages of dehairing and fleshing on the beam or stretching on a herse become impossible. These stages required knives, and therefore also demanded special care. Butchers were well-placed to undertake this work, and are known to have sold skins, although other hide-workers would also flay skins. Wherever it took place, if the ultimate parchment product was to be a success of lasting strength and economic size, this early stage was as crucial as any other.

The economic viability of making parchment for a living depended on being able to store skins. After all, the product of flaying was a barely-treated raw hide or skin, which had to be worked soon after skinning, otherwise it would spoil. A pile of flayed skins, without further treatment, would quickly rot away before they could be worked into parchment. Due to the manual nature of later stages of parchment production, it was impossible to completely process a large batch of freshly-flayed skins all at once without risking rot. Whether parchmeners worked solo or in a workshop as members of a team, it seems that some did take on the risk of working with large quantities of skins. This is suggested by the fact that skins were often salted, which effectively preserved them until it became possible to continue the next stages of production.[129] Jiří Vnouček suggests that this was commonplace, noting that "Usually the skin is salted and dried first and stored for some time."[130] This option to store skins must have been essential for managing workflow. In addition, it offered the opportunity to buy in bulk and to manage seasonal gluts of skins.

Though it was often difficult to achieve, there was an imperative to select the youngest possible materials for making parchment. The skins of juvenile animals, slaughtered between April and July, were considered the best.[131] While a steady supply would have made it possible to use only relatively fresh, young skins, parchmeners also had to cope with gluts of raw hides and skins, which could be *ad hoc* but were also seasonal. As hides were a by-product of other animal product-driven industries, no matter how closely related these industries were, supply and demand

---

[128] Albarella, 'Tawyers, Tanners', p.74, notes that sharp cut marks on bones at the extremities of the skeleton indicate skinning rather than butchery.

[129] Muzerelle, *Vocabulaire codicologique*, salt curing.

[130] Vnouček, 'The Manufacture of Parchment', p.84.

[131] Salisbury, *The Beast Within*, p.18; Reed, *Ancient Skins*, p.40, and p.126.

were not always in balance. Sheep could be kept to produce multiple yields of wool, and cattle could be used for traction, so some animals were kept alive for many years.[132] However, the selective cull of a herd or flock was essential for overwintering, and was a traditional seasonal event at Martinmas. As a result, Martinmas, falling on 11 November each year, was known as a time for feasting because animals were selectively slaughtered. Culling at this time of year resulted in a glut of animal materials, in the form of meat for feasting and through the winter, and skins – sometimes the skins of older animals.[133] This may have presented parchmeners with the option of choosing only fresh, suitable skins, or it may have encouraged them to store as much as possible for future use, or may have encumbered them with old, poor quality skins. But it has been noted one could still "fit into this annual cycle" without "enormous financial sacrifice" by slaughtering young animals a few months before Martinmas."[134] Moreover, slightly earlier selective slaughter of younger animals would have provided both fresh meat and younger skins, better for making parchment well so that it would last. So, Martinmas culling managed the demands of supporting a flock through the winter, and also contributed a supply of workable skins for making the most durable parchment possible.

To make the most resilient parchment, freshly flayed and cured skins require an initial stage: soaking in freshwater, to clean off blood, dung, and any other dirt before undergoing liming. A fifteenth-century recipe mentions this, offering rather striking detail of blood being washed from calf skins: "first lay th[em] in fayre rennyng watyr a day or ij. And ich day t*ur*ne th one or ij tyll they blode be cleyne owte off them," the recipe goes on to pointedly note: "And iff they skynnys be hard or old slayn: they most ly the*r* lon<g> in they wat*er* tyl þ*ou* see them nesch."[135] So whether freshly flayed, cured, hard, or "old slayn" skins needed cleaning in water. Water was necessary also for drenching cured skins to rehydrate them and remove salts. To achieve this, skins were either immersed in tanks or baths of water, or, preferably, soaked under "fayre rennyng watyr." Whether immersed or left under running water, the result is a "high degree of hydration of the skin structures."[136] This cleaning and

---

[132] Christopher Dyer, *Making a Living in the Middle Ages: The People of Britain 850-1520* (London: Yale UP, 2009), p.25.

[133] Stinson, 'Counting Sheep', p.203.

[134] Stinson, 'Counting Sheep', p.203.

[135] TCC, MS O.8.36, f. 22^{v}; angled brackets here indicate letters cut off by a margin, which is only partially visible to due to tight binding.

[136] Reed, *Ancient Skins*, p.51.

hydration of skins led to polluting effects. As one fifteenth-century recipe for making parchment enjoins its reader-maker: "washe þy skyn in þat ylk water til hit wexe alle foul."[137] A survey of medieval Winchester identifies the most prevalent recorded offences committed by parchmeners: fouling of streams. For instance, in 1396 Robert Wantlesburgh complained that the parchment-maker Richard Gay and his wife had washed foul calf and sheepskins opposite his house at Newbridge, where he was "unable to remain because of the stench."[138] This stage prepares the skin and promotes the next stage's chemical soaking action. The profligate, even unsustainable, use of water to drench the skin improves the next stages of production, and thereby the durability of the final parchment product.

After the hide or skin is removed from the body of the animal, and sufficiently soaked with water, the next process is to remove the uppermost layers of the skin (see figure 3, supplement, p.6). The surface of the skin is known as the epidermis. Beneath this lies the dermis, and beneath that the hypodermis. The dermis itself has two main parts, the papillary layer and the reticular or fibre-network layer, also known as the corium, and this becomes the main component of parchment. The epidermis and the papillary layer "intimately ramify" with one another, which makes them difficult to separate.[139] It is not possible to achieve full separation of the epidermal structures from the lower layers of the skin or hide through mechanical means. For example, hair follicles are not removed fully at the root by shaving. So, unlike the first process in the making of parchment – the mechanical flaying by hand of the whole skin from the rest of the animal body – the internal layers of the skin can only be separated through chemical action.[140] This constitutes the second stage in the parchment-making process: 'unhairing' or 'dehairing' by soaking in a chemical solution. Chemically paring the skin back to one strong layer, the corium, is a crucial step in making the skin workable into long-lasting parchment.

To make it more effectively workable, as well as dehairing the skin, it was also important to chemically swell the hide. This could be accomplished by "changing the acidity or basicity of the skin from near neutral (pH 7) to either strongly acid (pH 1) or strongly basic (pH 13)." The substances available to parchmeners "rang[ed] from faeces, egg, bran, and other vegetable materials for the acid dehairing of a skin, to

---

[137] BL, MS Cotton Julius D.viii, f. 88[r].

[138] Keene and Rumble, *Winchester Survey*, p.288.

[139] Reed, *Ancient Skins*, p.20.

[140] Reed, *Ancient Skins*, p.20.

lime (calcium hydroxide) for the basic dehairing method."[141] The alkali liming method was the most common, and this chemical action served to loosen the epidermis from the corium, denature certain non-collagenous proteins, and remove keratin proteins (hair), grease, and fats. Within the corium itself, the alkali solution also causes the collagen to swell and the collagen fibre-bundles to split.[142] Typically, the alkali method used to soak hides or skins was a calcium hydroxide solution. This was made from water mixed with lime or ash, or both lime and ash together. The "suppleness" of medieval writing supports has been attributed to the "prolonged soaking in water and lime" recommended in parchment recipes.[143] In this way, medieval parchment-makers separated the skin layers to isolate the corium, and to begin to make it into a sustainable support.

Once thoroughly soaked, the swelled skin is worked further on a beam. This stage employs physical, mechanical methods to dehair the skin and to remove any remaining flesh. Both processes require beamwork: the skin is draped over a beam to provide a surface over which it can be scraped. The lengthy recipe mentioned previously offers details of exactly how this should be executed: "take on skyn an lay on they bord and þ*e* flesch side upwards a brod." The parchment-maker should reach forward over the skin, pushing away across the beam. The recipe goes on: "and rub wel on þ*e* flesch side ~~on~~ þ*at* w*ith* they knyff to make h*it* liȝht *and* sowpul and tend*er* and playn."[144] Double-handed knives are used: for unhairing, a blunt knife; for fleshing, a very sharp knife. The blunt knife has a gently curved blade and is used to remove hair from the outer side of the skin, a process known as *scudding*.[145] The lengthy recipe also informs the reader of the ideal knife for this task: "a knyff w*ith* ij hafts *and* the blade a fote *and* half long. and not scharp but a party blunt."[146] In the fleshing process, the sharp knife is used to cut away from the flesh side of the skin any remnants of hypodermal or muscle tissue.[147] In one fifteenth-century manuscript there are two recipes for parchment – one for calfskin, the other for vellum. The first, for "schepis skynne" (mentioned previously), tells the reader to "take suche a flessyng knyf as þis

---

[141] Jesse Meyer, 'Parchment Production: A Brief Account', in Wilcox, *Scraped, Stroked,* pp.93-96, at p.93.

[142] Stevens and Verhé, *Bioresources*, p.89.

[143] G. S. Ivy, 'The Bibliography of the Manuscript Book', *The English Library Before 1700*, ed. by Francis Wormald and C. E. Wright (London: The Athlone Press, 1958), pp.32-65, at p.36.

[144] TCC, MS O.8.36, f. 22^{v}.

[145] Clemens and Graham, *Introduction*, p.10.

[146] TCC, MS O.8.36, f. 22^{v}.

[147] Reed, *Ancient Skins*, p.53.

p*ar*chemyneres vse *and* chaufe awey The flesshe on þe flesshe side." In the same manuscript, on the same folio, a separate recipe "to make velyme," notes that, "on þe kalves þe nedis most schave hit on bothe sydys *and* a schepys skynne schal be schaven but on þe flesshe syde."[148] This arduous beamwork treats one or both sides of the skin in order to clean away debris and flesh and – though it potentially jeopardizes the skin by risking damage – is essential for the creation of sustainable parchment for writing.

Mechanical skin-stretching is a vitally necessary stage in the production of parchment, though it risked tearing the whole piece of skin. In its instructions for making parchment, one fifteenth-century recipe uses the word "streyne" to describe the stretching action: to achieve this, the skin was attached to a frame, called in this recipe a "harowe."[149] Some recipes suggest that alternatively hoops could be used, known as a *circulus*, though a square frame was also used, a *herse*.[150] The skin cannot be hooked or tacked on to the frame, as anything pushed through the skin will cause tears as soon as it is subjected to tension, rendering the skin unusable for writing. Efforts were made to avoid damage. To safeguard the skin, it was attached by means of small pebbles (*pippins*) or buttons, pushed into a pocket of skin near the edge of the sheet, pegged to the frame and pulled tight in a loop of cord. Though attaching the skin in this way rendered the gathered skin at the outer edges of the skin useless for writing, it made it possible to safely adjust the tension, while simultaneously avoiding tearing and wasting the parchment.[151]

The tension provided by stretching the skin across the herse causes the parchment to form the right structures at a deep level. The intense stretching is described evocatively in the following recipe instruction: "then set þ*e* skynnys on þ*e* tent als strayte as any tab*or*."[152] As Christopher Clarkson states, "The stretching [as the pelt] dries reorganizes the fibre network of the dermal layer to a laminal structure, in which tremendous forces are locked up."[153] The "natural fibre weave" of the skin is changed, and under tension settles into a horizontally layered structure.[154] The

---

[148] TCC, MS R.14.45, f. 57^{r}.

[149] TCC, MS R.14.45, f. 57^{r}; *MED, harwe, n.,* sense 2a.

[150] *DLMBS*, *circulus, n.,* perhaps sense 5a; *OED, herse, n.,* sense 3; de Hamel, *Scribes and Illuminators*, p.11; Thompson, *Materials*, p.25; Clemens and Graham, *Introduction*, p.11, and see also fig. 1-12.

[151] Serjeantson, 'Animal Remains', p.141 notes that sometimes horns and feet were kept on skins at this stage for ease of attachment; Albarella, 'Tawyers, Tanners', p.75.

[152] TCC, MS O.8.36, f. 22^{v}.

[153] Clarkson, 'Rediscovering Parchment', p.5.

[154] Chris Woods, 'Conservation Treatments for Parchment Documents', *Journal of the Society of Archivists*, 16:2 (1995), 221-238, at p.222.

ground fluid dries as gelatine, locking the fibres into place. Adjacent fibre surfaces strongly stick together, and as the skin dries and water is lost, the spaces between fibres remain. Instead of the shrinking effect that should accompany drying, stretching the skin maintains a large surface area. Therefore, this essential stretching process not only provides the maximum possible writing area but also develops its size, long-term durability and remarkable resilience.

Contemporary awareness of the skin stretching process in parchment production can be glimpsed in Middle English texts, which use the image of the stretched skin to describe Christ's crucifixion, drawing on the likeness of the skin on the frame to the way that the torturers "streyned" and "sprede" the body on the cross. In 'The Meditation on the Five Wounds of Christ', about 1410, Christ "suffrede hym to be streyned on the harde cros. moor*e* dispitously *and* greuously þan euer was schepys skyn streyned […] vp on þe parchemyn makeris harowe aȝens þe sonne to drye."[155] Second, in his 'Meditations on the Passion', Richard Rolle describes Christ's body "streyned as a perchemyn skynne vpon a racke."[156] Finally, in the 'Privity of the Passion', from the 'Thornton' manuscript of about 1440, Christ "was thus sprede o-brode one þe crosse more straite þan any parchemyne-skyne es sprede one þe harowe."[157] All three extracts offer a powerful image of Christ on the cross, in a strikingly fitting analogy with the stretching of parchment. In these images of stretched skin there is a strong association between "skin, parchment, pain and meaning" and to the "memorial significance of bodily surfaces."[158] The point of these comparisons is, of course, to highlight the magnitude of Christ's sacrifice on the cross. However, it is telling that all three comparisons of Christ with parchment highlight the stress, strain, and even pain of the stretching action. The first text describes Christ as stretched "moor*e* dispitously" on the cross than a "schepys skyn" on the harowe. Through sacrifice, Christ's triumph on the cross offered salvation. Though the comparison is employed to emphasize the relentless cruelty of Christ's sacrifice on the

---

[155] Oxford, University College, MS 97, pp.262-263; H. O. Coxe, ed., 'Catalogus MSS Collegii Universitatis', *Catalogus Codicum MSS. Qui in Collegiis Aulisque Oxoniensibus Hodie Adservantur* (Oxford: OUP, 1852), I, p.28; *IMEP,* VIII, p.109; Carl Horstmann, *Yorkshire Writers: Richard Rolle of Hampole and His Followers* (London: Sonnenschein, 1896), II, p.440.

[156] Uppsala, University Library, MS C.494; *IMEP*, X, p.28; Harald Lindkvist, 'Richard Rolle's "Meditatio de Passione Domini"', *Skrifter Utgifna af K. Humanistiska Vetenskaps-Samfundet i Uppsala,* 19:3 (1917), 34-59, at p.50, l. 24.

[157] Lincoln, Lincoln Cathedral Library, MS 91 (the 'Thornton' manuscript), ff. 179r-189r; Horstmann, *Yorkshire Writers: Richard Rolle of Hampole, an English Father of the Church, and His Followers* (London: Sonnenschein, 1895), I, pp.198-218, at p.206.

[158] Robert Mills, *Suspended Animation: Pain, Pleasure and Punishment in Medieval Culture* (London: Reaktion Books, 2006), p.27.

cross, there is a tacit acknowledgement that the stretching of sheepskin is also "dispitous." Though skin is similarly harmed – and potentially sacrificed entirely – by being violently stretched, this duress results in strengthened, longer-lasting parchment. The defeat and death of Christ, a suffering which led to an enduring triumph and eternal life, offers a curious analogy to the way in which parchment results similarly from processes which strengthen through violence.

While still attached to the frame, the hide or skin is refined further with mechanical scraping using a knife. The surface of the taut parchment "deflects […] each bite of the knife" which would result in a high risk of damage should a normal knife be used: its sharp point would puncture the skin. Punctured skin would present further risk of tearing and might reduce the writing space available. To mitigate this effect, the blade must be *lunate* (crescent or semi-circular) in shape.[159] The special knife used for smoothing parchment is thus known as a *lunellarium* or *lunellum* ("little moon") and allows the necessary level of control.[160] The knife is also 'burred': the blade is turned over by a "hair's breadth of steel" at its outer edge.[161] Though modern parchment-makers smooth skin by scraping it once dry, in the medieval period, the skin was scraped usually while it was still wet. G. S. Ivy describes the process as follows: "the blade press[ed] the skin into a small arc at each stroke […] squeezing out the moisture."[162] The aforementioned lengthy recipe also offers detailed information about this stage of parchment production: "take a schavyng iron w*ith* dult egge and ffraye hard on þ*e* skynne on both sydis hard and fore so long þ*at* þ*ou* mayst bring owt no more wat*er* off þ*e* skynne."[163] This recipe corroborates Ivy's account, as well as noting the "dult egge" of the burred shaving knife used to smooth the skin. This leaves the material thinner and the surface smoother, as one recipe notes: "schave hit efte sonys on þe flesch syde vntil hit be al smothe."[164] This specialist equipment was essential for reducing the risk of damage and for achieving a smooth piece of parchment with as little waste as possible.

Waste was limited wherever possible, but by this stage many trimmings and parings have been created, and these leftover bits of skin are *by-products* (of skins, which

---

[159] Vnouček, 'The Manufacture of Parchment', p.87; Jim Bloxam, 'The Beast, the Book and the Belt: An Introduction to the Study of Girdle or Belt Books from the Medieval Period', in Pluskowski, *Breaking and Shaping*, pp.80-97, at p.82.

[160] Clemens and Graham, *Introduction*, p.11.

[161] Thompson, *Materials*, p.26.

[162] Ivy, 'Manuscript Book', p.36.

[163] TCC, MS O.8.36, f. 22^{v}.

[164] TCC, MS R.14.45, f. 57^{r}.

themselves are by-products already). Any "rough and unwanted" areas have been trimmed, to leave the main sheet in a more desirable or workable size and shape, and these trimmings are known as *off-cuts* (discussed in this chapter, and their reuse in chapter 2). Other by-products are scrapings from the flesh side of the pelt, known as *fleshlings*,[165] and parings of "fluffy little peelings" when smoothing the sheet.[166] These scraps and scrapings could be salvaged and made into size or glue, and fifteenth-century recipes attest to this highly resourceful, 'nose-to-tail' approach to such by-products. Every last scrap was used. Trimmings of parchment – and parchment only – could be boiled up to make *size*, which is "practically pure gelatine," whereas *glue* involved boiling up the fleshlings, and "bits of cartilage, tendons […] as well as skin."[167] In addition to these waste-based glues, also popular at the time were glues made from cheese or "stokfisshe."[168] Glue and size could be used for the same purposes: as a binding medium in paint or ink, for gilding, and for repairing parchment. As a result, recipes sometimes confused size and glue, for example, though it is described as "horn glew", one recipe specifically tells the maker to "take pec*e*s of velym" only and soak them in "stondyng watyr", before straining them through a cloth into a basin. Then, "whan yt ys cold", the recipe instructs the reader to "cut yt owt in pecys and put yt on a thred and drye yt in the su*n*ne."[169] As it was for others involved in hide and skin processing, such as skinners, butchers, and tanners, the production of gelatine and glue was a convenient sideline for parchmeners. Moreover, it was a highly sustainable, effective and comprehensive way to use up these scrappy by-products (of by-products).

Following these efforts to smooth the parchment, a decisive moment in the production of parchment took place: the cutting-down from the frame of the stretched skin. Again, this mechanical action risked damaging the parchment or leaving it vulnerable to further injury. The skin could either be released from the frame by undoing the cord tied around the pippins, and then cut to size, or it could be sliced from the frame. Whichever option was taken it seems likely that a knife, shears, or scissors were the tools required to create a neat, even-sized, straight-edged prime cut

---

[165] Reed, *Ancient Skins*, pp.53-4.

[166] De Hamel, *Scribes and Illuminators*, p.12.

[167] Thompson, *Materials*, p.59.

[168] For example, two recipes for fish-based glue in BL, MS Sloane 2584, f. 6^{r}; Clarke, *Crafte*, p.319.

[169] CUL, MS Ee.i.13, f. 141^{v}; *IMEP*, XIX, pp.86-94; Hardwick, *CUL Catalogue*, II, pp.12-14; Clarke, *Crafte*, p.223. For another example of a glue made from parchment or hide, written in Latin, see: BodL, MS Canon. misc. 128, ff. 68^{r-v}; *Quarto Catalogue*, III, pp.513-514.

(see figure 4, supplement, p.7).[170] Leftover was "a thin and uneven outer rim" from which cheaper, smaller cuts, or off-cuts, could be made.[171] An illustration in a thirteenth-century account book from Beaulieu Abbey confirms that in the Middle Ages parchment could be cut with precision using scissors.[172] So slicing the skin down from the frame, as well as cutting skin for other book production purposes, evidently necessitated especially careful, controlled cutting. Cutting could be wasteful if executed poorly; if executed well, it supported the ongoing integrity of the prime piece of parchment, as well as generating scrap that could be used up resourcefully for making size, or glue, or off-cuts for making small books.

Another refinement to parchment was smoothing and de-greasing, which promoted ink adherence and improved the parchment's functionality as a writing support, but also risked the written skin's long-term durability. While the parchment was stretched out drying, more lime could be applied "to facilitate the removal of moisture and grease."[173] De-greasing powders or pastes, made from calcium compounds such as lime, chalk, or woodash, were applied. Another option was *stanchgrain*, made from varying quantities of lime, quicklime, flour, egg white, and milk. This paste was rubbed into parchment with a damp cloth and created a smooth, hard, even, white appearance. One recipe for "stanchegreyn" is entitled "ffor to rason p*ar*chem*e*n*t* w*ith* owt knyffe," which emphasizes this treatment's smoothing effect.[174] Another recipe describes "staunchegrey þat seruyth for scryveners for swagyng of letters," and suggests muddling chalk powder, wheat flour, milk and egg white into a paste, forming cakes from the paste and setting them to dry in the sun.[175] *Swagyng* refers to the way in which stanchgrain treatments "used calcium salts to prevent the ink from running, in the same manner they were used medicinally to staunch the flow

---

[170] Jane Cowgill, Margarethe de Neergaard, Nick Griffiths, et al., *Knives and Scabbards* (Woodbridge: Boydell, 2000), pp.106-114.

[171] Erik Kwakkel, 'Cultural Residue in Medieval Manuscripts', in Johnston and Van Dussen, *The Medieval Manuscript Book*, pp.60-76, at p.67.

[172] An illustration of scissors being used to cut parchment (or cloth, according to Margarethe de Neergaard, 'The Use of Knives, Shears, Scissors and Scabbards, in *Knives and Scabbards*, pp.51-61, at p.61) is available online: BL, MS Add. 48978, f. 43^{r}, <http://cistercians.shef.ac.uk/image_gallery/pages/C3605-03.php> (accessed 6 June 2016).

[173] Bloxam, 'The Beast', p.81.

[174] BL, MS Harley 218, f. 147v. Clarke, *Art of All Colours*, p.84; Daniel V. Thompson, 'Medieval Parchment Making', *The Library*, 4th ser., 16 (1935), 113-117, at p.117.

[175] TCC, MS R.14.45, p.79; *MED, swagyng*, *swaginge*, *ger.,* sense 3b.

of blood."[176] On the one hand, these treatments risked smoothing the parchment unevenly or drying the parchment too much, so that it might become brittle and less resilient. On the other hand, such elaborate treatments were necessary to refine parchment's long-term usefulness, which depended on the prudent work of its makers to ensure its functionality and durability.

Rubbing with pumice powder, known as "*pouncing*", could be performed to scour away any remaining unevenness, although this could also risk the parchment's durability by making it patchy and fragile. This process could be undertaken by a scribe closer to the time of writing.[177] One recipe suggests making what it describes as "stange greyne", by grinding eggshells and baked fish into a powder, and "yf þ*e* ynke sqwage caste þ*at* powdyr on […] and frete yt well w*ith* pomys."[178] The combined effect of stanchgrain and pumice would exfoliate the parchment surface, which could result in thin or weakened patches of parchment. An alternative exfoliant was glass-bread. According to Thompson, because "Natural pumice was an imported product in England", parchment-makers would bake "a sort of bread largely composed of powdered glass" and use this to scour parchment smooth.[179] There was one more option for treating the appearance of parchment, which required normal bread. If a book was "defovlyed or squaged" a "schevyr of old brown bred" could be rubbed "sore vp and downe" to clean it.[180] Though usually considered to be a method for aftercare, used to help remove dirt, this technique could feasibly be used as part of the parchment production process.[181] Though these final stages were meant to refine the product, some of these processes could also inflict damage and diminish the parchment's chance of survival. However, the risks of weakening parchment were small, easily mitigated by the judicious application of these techniques by a skilled, careful craftsman.

Of course, this is to assume that parchmeners would be intentionally careful and craftsmanlike, and that at each stage every effort was made to produce "gode and

---

[176] Karen Gould, 'Terms for Book Production in a Fifteenth-Century Latin-English Nominale (Harvard Law School Library MS. 43)', *The Papers of the Bibliographical Society of America,* 75:1 (1985), 75-99, at p.81.

[177] De Hamel, *Scribes and Illuminators*, p.12, suggests that this was "probably" the case, and that parchment was sold "not yet buffed up and rubbed with chalk in preparation for the actual writing".

[178] CUL, MS Ee.1.13, f. 140^{r}.

[179] Thompson, *Materials*, p.29.

[180] CUL, MS Ee.i.13, f. 141^{v}.

[181] Anke Timmerman, 'Of Dirty Books and Bread', online <http://recipes.hypotheses.org/2859> (accessed 5 January 2017).

ffyne" parchment. However, there is the possibility that some parchment was made to poor and shoddy standards. Poor craftsmanship would have been far less effective in conserving resources, and would have resulted in far more waste. Moreover, it would have certainly amplified the risks to the material at each stage, and thereby would have reduced the craftsman's chances of producing long-lasting parchment. Overall, the durability of parchment is partly dependent on the intrinsic properties of animal skins, but also on human agency. The craft and graft of skilled people were essential aspects of the process, and indeed of the larger project of book production. To create durable parchment which would survive for many hundreds of years required particular skills and a considerable measure of effort and care. As Krish Seetah notes, "the extra preparation that went into producing these commodities" increased their value, relative to meat.[182] It is this subjection of animal materials to the investment of skilled labour and effort that underpins parchment sustainability, both in terms of avoiding waste as well as developing and safeguarding long-term durability.

It would be easy to look at parchment manuscript-books and take from their brute materiality negative impressions of violence, destruction, and decay, as have some recent ecocritical and materialist comments on the matter of medieval books.[183] This is the inverse reading of these physical processes of production. If we explore the complexity of parchment making in more detail, rather than with a broad-brush interpretation of it as harmful, we can see that as well as violence, craftsmanship, effort, and care were used. Moreover, they were used to transform materials in ways that made them more sustainable – at once more enduring, and less wasteful. This is why these crafts, and the details of each process, are worth exploring so closely to re-evaluate what really occurred, and not simply to allegorize the basic fact of the use of animal resources. Close analysis reminds us that parchment-making was not just a random act of violence perpetrated on animals, but rather a careful attempt to cultivate and conserve resources usefully. Contrary to many ecocritical views of wasteful, modern Western consumerism, this kind of consumption was carefully managed. After all, skin was not intrinsically long-lasting: it was the processes of parchment production that made it so. Rather than berating or mourning the deaths of animals hundreds of years ago, the political lesson here is that people took care to cultivate and sustain available resources. All these processes of parchment production enhanced the workability, shelf life, and usefulness of skins.

---

[182] Seetah, 'Animals, Guilds, and Meat', p.22.

[183] Contrast with Holsinger, 'Of Pigs and Parchment', p.619.

The sustainable use and repair of skins

These objects of added value engendered by human effort were often respected: many books were considered worth sustaining by conservation and restoration after the initial production of the materials. The sustainable use of parchment in medieval manuscripts is seen especially in the use of flawed skins, and in the repair of damage. It is useful to review the kinds of parchment injuries in surviving manuscripts, to explore how and why this damage came to be, and to see how it was ignored, accommodated, and even celebrated by medieval people. Others have noted in passing that "defective" pieces of parchment were "quite commonly" used in books, even when they bore clearly visible damage, and that anyone consulting a medieval manuscript "almost inevitably encounters some parchment damage."[184] The apparent tolerance of tangible damage to skin and the efforts taken to repair and occasionally to decorate it point to an ethos of sustainable parchment use. Crucially, what the treatment of visible injuries exposes are the expectations and accommodations of makers and users of medieval books, and their practical abilities in sustaining book materials.

As well as accommodating visible damage, manuscripts were also made in ways that excluded the most damaged parts of parchment sheets. Ingenious cutting, folding, and discretion over the size of the sheet could help to mitigate the problem of holes – sometimes by leaving damaged parts of the sheet outside the book entirely. Damage could also be avoided by cutting, or folding the parchment just so, the sheet arranged so that damage lay outside the textblock.[185] Though this may seem a wasteful use of precious resources, as with any manuscript, the trimmings and off-cuts could be reused. Aside from the aesthetic considerations at play in such cases, in contexts where a choice of materials was available, selecting damage-free parchment would improve a book's overall durability. Choosing parchment without holes, tears or weak patches helped to prevent further splits or worsening damage. In resource-poor contexts, or other contexts where there was little choice available, the presence of holes or other visible damage in the parchment may either be a sign of that lack of choice, or of acceptance. However, in contexts where book-producers were well

---

[184] Clemens and Graham, *Introduction*, p.12; Christine Sciacca, 'Stitches, Sutures, and Seams: "Embroidered" Parchment Repairs in Medieval Manuscripts', *Medieval Clothing and Textiles*, ed. by Robin Netherton and Gale R. Owen-Crocker (Woodbridge: Boydell Press, 2010), pp.57-92, at p.57.

[185] For a discussion of possible folding arrangements when creating quires, see J. P. Gumbert, 'On Folding Skins, According to Gilissen', *Gazette du livre medieval* 43 (2003), 47-51.

supplied, the presence or absence of damaged parchment demonstrates that people could choose exactly which piece of parchment to use.

A brief manuscript survey demonstrates that damaged parchment was used commonly in manuscripts. An opportunistic, random sample of 18 books from the Bodleian Library's e Musaeo collection, taken from the handlist for *The Index of Middle English Prose*, was surveyed, in order to give a sense of the frequency and density of parchment damage.[186] The selected manuscripts feature a range of formats (for example: one roll-codex, one limp bound volume, one composite manuscript),[187] sizes (160 mm × 110 mm, to 410 mm × 285 mm),[188] total numbers of parchment folios (31 at the lowest and 474 at the highest, on average 144 folios),[189] and texts (including copies of medicinal works, Mandeville's *Travels*, the Wycliffite New Testament, and the Customs of the Stews at Southwark).[190] To give a sense of the levels of damage on display across the group, there were 104 holes present across 15 of the 18 manuscripts, with an average of 5.8 holes per manuscript. Again on average, 4.4 of these holes were located outside the ruled text area, with the remaining 1.4 holes located in the text space.[191] Averages like this risk misrepresenting the reality of the individual manuscripts, but these figures do align with my own impressionistic response to witnessing all 2595 leaves of parchment. To dig into the details a little further: 3 manuscripts had no visible damage at all. However, 10 of the 18 books had 5 or more instances of damage and, of these, 4 had over 10 discrete instances of parchment damage. The most damaged of these, with 474 parchment folios, had 1

---

[186] The eighteen manuscripts are all dated to the fifteenth century, and featured texts written in English. They were BodL, MSS e Mus. 1, 16, 23, 35, 39, 42, 53, 54, 76, 110, 111, 116, 124, 146, 187, 212, 229, and 232.

[187] Respectively: BodL, MS e Mus. 42, *Summary Catalogue*, II.ii, p.717; (BodL, MS Lyell 33 is an exact twin of this manuscript). BodL, MS e Mus. 111, *Summary Catalogue*, II.ii, p.705; BodL, MS e Mus. 116, *Summary Catalogue*, II.ii, pp.703-704.

[188] BodL, MS e Mus. 232, *Summary Catalogue*, II.ii, p.722; BodL, MS e Mus. 1, *Summary Catalogue*, II.ii, p.728.

[189] BodL, MS e Mus. 54, *Summary Catalogue*, II.ii, p.679; BodL, MS e Mus. 35, *Summary Catalogue*, II.ii, p.702. Average here taken across all 18 manuscripts.

[190] BodL, MS e Mus. 146, *Summary Catalogue*, II.ii, p.704-705; BodL, MS e Mus. 187, *Summary Catalogue*, II.ii, p.698; BodL, MS e Mus. 116; BodL, MS e Mus. 124, *Summary Catalogue*, II.ii, p.682; BodL, MS e Mus. 110, *Summary Catalogue*, II.ii, p. 679; BodL, MS e Mus. 229, *Summary Catalogue*, II.ii, p.741-742.

[191] Averages here do not include manuscripts without any holes, so are taken from the 15 manuscripts with holes.

hole in the text space and 22 holes in the margins.[192] So, from this sample, 15 of the 18 manuscripts contained visible damage, which clearly attests to the widespread presence and tolerance of such imperfections.

The origins of those injuries may be either natural or man-made. After all, animal skin or hide is an organic raw material but is also hand-crafted into parchment. Parchment is textured, with "cracks, cuts, blots, blurs and surface irregularities" such as soft or thin parts, plaques, horny patches, scrapes, and scars, that should be expected of skin, and sometimes it is even shot through with stretch marks.[193] When skin with any, some, or all of these features is made into parchment, these marks may be observable still, or detectable by touch. Natural or man-made imperfections are difficult to distinguish from one another and, although there are a few hallmark differences, often damage incurred naturally during the animal's life and injuries acquired during the parchment production process look similar. Decay or other changes since the Middle Ages can also make differences hard to see. Damage in the written area, which the scribe works round, is definitively medieval, rather than later; but of course, some holes are post-medieval, as will be noted shortly. These damage features can occur anywhere in manuscripts where parchment is used, whether as flyleaves, wrappers, or text-bearing leaves, and as the survey noted, they occur in the margins of those leaves, and sometimes even in the written area. The use of flawed parchment in medieval manuscripts, with visible and tangible natural or man-made damage, was widespread.

Why was this tolerable? The ideal outcome of the consecutive processes of parchment-making – the purpose that drives the entire undertaking – is the creation of parchment suitable for use as writing supports for all the activities of scribes and limners, such as ruling, drawing, gilding, and painting. Of course, parchment could have been made 'badly' to provide material for protective or ephemeral uses such as scrap parchment for writing drafts or letters, or for reuses, such as wrapping food or cleaning shoes (as chapter 2 notes), without consideration of writing requirements. Though a range of parchment quality was acceptable to medieval manuscript makers, it seems that the most desirable, deluxe parchment provided a reasonably smooth,

---

[192] BodL, MS e Mus. 16 (340 folios, 2 holes in the text space, 11 in the margins), *Summary Catalogue*, V, p.329; BodL, MS e Mus. 23 (162 folios, 5 holes in text, 5 in margins), *Summary Catalogue*, II.ii, p.656; BodL, MS e Mus. 35 (cited in main text), in which many illuminations have been cut out, there is liquid damage, and there are post-medieval repairs; and BodL, MS e Mus 116 (154 folios, 4 holes in text, 6 in margins).

[193] Vnouček, 'The Manufacture of Parchment' p.74.

substantial and continuous available surface area to hold ink as writing or paint as illustration. For example, one of the contemporary parchment-making recipes, mentioned previously, calls for unblemished skin "wiþouten scabbe"[194] which suggests an awareness that other people were willing to use scabby parchment, even if this person was not. In addition, the many recipes for stanchgrain also attest to an interest in creating a smooth surface. But it was not always possible to achieve ideal parchment, and skins could be peppered with scabby holes incurred during the animal's life, or riddled with patchy or glassy areas, man-made holes, or slits caused during production. So, with all this in mind, though undamaged parchment was desirable, why was damage itself a problem?

Holes or gaping tears are a problem for a number of reasons. Aside from the aesthetics and the intended grade of production, perhaps the most obvious problem caused by parchment injuries is the reduction in the space available for writing. By their very nature, holes or tears in parchment constitute non-surface, and take the form of a void, or negative space. Whether natural or man-made, holes or tears in the textblock area, that go right through parchment, affect the available space for writing on *both* hair and flesh sides. In a sense then, in this particular material, when used for writing, the adverse consequences of one mistake are doubled. A hole-free parchment leaf maximises the surface area available for writing. Damage can also result in plaques or eyes of scar tissue, and in addition to providing an inadequate surface for writing, these present the risk of unpredictable future loss if panes of ground fluid flake away. Finally, holes, tears, and the vestiges of tissue damage are all of concern for the way in which they compromise the strength and integrity of the parchment sheet: they can diminish the overall sustainability of the material.

Whatever form damage takes, and whatever problems it poses, how can we know that the damage is medieval? Anywhere that writing or illustration accommodates damage in some way, then the injuries either took place prior to or concurrent with those phases of manuscript production. More specifically, any instances of damage or repair in the form of holes or tears that have been 'pulled out' were already present before the stretching stage of the parchment-making process, or were inflicted during the process, and so must pre-date the scribal stage of

---

[194] BL, MS Cotton Julius D.viii, f. 88r. I am grateful to Dr Yvonne Bohm and Dr Martin Nicholas, who rear a flock of sheep ('Cold Aston Lamb' in the Cotswolds), for inviting me to visit the lambs and for sharing with me their knowledge of scabby sheepskins.

production.[195] Thus, although parchment damage is not datable by its own form, datable features of binding and handwriting can reveal when parchment damage occurred at an earlier stage of production. It is somewhat ironic that these apparently undatable parchment defects are often more securely identifiable as medieval phenomena than other examples of recycling, which (as we will see in chapter 2) can be difficult to date accurately and in many medieval manuscripts may well be the result of post-medieval interventions. Wherever possible in the following discussion, damage and repairs are identifiably medieval.

That said, identifiably medieval damage can be difficult to trace precisely. Even where manuscripts are well-catalogued overall, the damage itself is not often described or analysed in detail. Occasionally catalogues offer a general note of parchment quality, or perhaps mention of manuscripts with "soiled" or "mutilated and defaced" parchment.[196] However, both those quoted examples point out what are likely post-medieval incursions: contemporary medieval damage and repair are more rarely noted.[197] These aspects of medieval manuscript materiality are still largely the preserve of conservationists and parchment specialists.[198] While scientific research into parchment phenomena not otherwise visible to the naked eye – such as analysis of parchment DNA or analysis of damage under the microscope – is revealing remarkable results, there is still more to be said about observable physical features of

---

[195] De Hamel, *Scribes and Illuminators*, p.11; Sciacca, 'Stitches, Sutures', p.65; Robert Fuchs, 'Old Restorations and Repairs in Manuscripts', *Care and Conservation,* 6 (2002), 224-241, at pp.225-6.

[196] For example, *Summary Catalogue,* II.i, p.410, for the description of an incomplete *Canterbury Tales*, bound together with copies of some works by Lydgate, which is "in parts soiled" (BodL, MS Bodley 686). Also, a copy of Lydgate's *The Fall of Princes* (BodL, MS e Mus. 1, mentioned in the parchment quality survey) which has had "initials (mutilated and defaced)", according to Otto Pächt and J. J. G. Alexander, eds., *Illuminated Manuscripts in the Bodleian Library Oxford* (Oxford: Clarendon Press, 1973), III, p.1108.

[197] For catalogue descriptions that demonstrate awareness and sensitivity to parchment quality and types of damage, see Andrew G. Watson, ed., *A Descriptive Catalogue of the Medieval Manuscripts of All Souls College Oxford* (Oxford: OUP, 1997); and Peter Kidd, ed., *Catalogue of the Medieval and Renaissance Manuscripts* c.*1300*-c.*1500 from the Collection of T. R. Buchanan in the Bodleian Library, Oxford* (Oxford: Bodleian Library, 2000).

[198] For the technical assessment of parchment damage, see Jiří Vnouček, 'Typology of the Damage of Parchment in Manuscripts of the Codex Form', *Improved Damage Assessment of Parchment, IDAP Assessment, Data Collection and Sharing of Knowledge*, ed. by René Larsen (Luxembourg: The Royal Danish Academy of Fine Arts, School of Conservation, Office for Official Publications of the European Communities, 2007), pp.27-30.

parchment.[199] Moreover the accommodations and repairs made to those injuries by medieval people suggest their interest in the sustainability of parchment.

What natural damage can be seen on animal skin? As noted, while the form of many marks and holes makes identification difficult, some clearly originated during the animal's lifetime. They may be caused by environmental factors such as weather climate, which can lead to excessively hot, cold, wet, or dry weather, or too much or too little sun, all of which may affect the skin's growth and its susceptibility to parasites or disease.[200] Sometimes distinctive scars, for example those caused by certain insects, mark the skin. Warble flies, for instance, "sometimes ate holes or burrowed" into the skin of animals to lay their eggs, and where they punctured the skin left "characteristic holes and 'pits'."[201] If unhealed, these holes are known as "open warbles", or when healed, "blind warbles", and can sometimes be seen in the final parchment product. In addition, other flies puncture and leave lesions in the skin, which can become infected by bacteria. Mites may also lay their larvae in the skin of parchment-producing animals, causing irritation known as mange.[202] Larger animals might also attack, as noted in *The Master of Game*: a wolf "shal wel slee a kow" and "shal bere in his mouthe a gote a shep or a ȝonge hogge" and wild cats will take sheep.[203] The ravages of flies and mites, or even wolves or wild cats, during an animal's life can leave lasting traces on skin after death as holes or tissue damage in parchment.

Man's interventions may register on animals long before their skins have been transformed into books: during the animal's life, as a result of traditional animal husbandry techniques, accidents, or rough handling, humans may impact upon the skin. However, human control is made most distinctively manifest on skin by the death blow. In the late medieval period, this blow was usually delivered with a poll-axe or poleaxe to the head of the animal, in order to stun and incapacitate, and to kill

---

[199] For example, the CodeX Project, BioArCh, University of York, <https://www.york.ac.uk/archaeology/research/current-projects/codex/> (accessed 5 January 2017); Fiddyment et al., 'Uterine Vellum'; Stinson, 'Counting Sheep'; and M. D. Teasdale, N. L. van Doorn, et al., 'Paging Through History: Parchment as a Reservoir of Ancient DNA for Next Generation Sequencing' *Philosophical Transactions of the Royal Society B: Biological Sciences,* 370:1660 (2015), 20130379, online <http://dx.doi.org/10.1098/rstb.2013.0379>.

[200] Eckenrode, 'English Cistercians', pp.257-8, details various diseases that afflicted medieval sheep, including foot rot and murrain, however, the only disease he notes that would have damaged sheepskin was scab.

[201] Carol Freeman, 'Feathering the Text', *Rethinking Chaucerian Beasts*, ed. by Carolynn Van Dyke (Basingstoke: Palgrave Macmillan, 2012), pp.33-47, at p.39; and Vnouček, 'The Manufacture of Parchment', p.78.

[202] Reed, *Ancient Skins*, p.36, describes the attacks of warble flies, other flies, and mange.

[203] BodL, MS Douce 335, f. 23^{r} (wolves), f. 27^{r} (wild cats); Edward of York, *The Master of Game*, p.58 and p.70. Salisbury, *The Beast Within*, p.19, also mentions the vulnerability of sheep to wolves.

quickly.[204] Medieval cattle skulls have been discovered in Bruges, with circular fractures in the frontal bones, which confirm this method of stunning and slaughtering.[205] Before further processing, this blow must have made a significant and recognisable mark on the frontal bones still attached to the raw hide or skin. Many methods used to kill animals must have resulted in marks on the carcass and, sometimes, through the skin.

If the carcass, known in Latin as a *cadaver*, was not properly drained of blood, some stayed in the veins.[206] The *mort de sang* ("death-stain") is an evocative modern term used to describe these dark patches of blood retained in animal skin and still visible in parchment.[207] These marks are visible due to iron compounds in the blood.[208] De Hamel notes that, though hard to prove, such "tree-like vein marks" were likely more common in the pelts of hunted animals than in well-bled skins.[209] Today, parchment may be made with veins purposely retained, and modern book artists sometimes choose to use such vein-marked parchment.[210] Instances of this phenomenon occur on a number of leaves in a manuscript written in the second half of the fourteenth century, which was deposited in an Oxford chest in the early years of the fifteenth century (discussed in more detail in chapter 4). The vein-marks on these leaves are most easily seen when backlit.[211] Although it should be noted that any *mort de sang* is not a mark of the death blow, but rather of blood trapped in the skin, it is intriguing that a skin stain of this kind has become semantically linked with the death of the animal. It is a gruesome reminder of the slaughter of animals, and another mark of production that has left its traces on parchment.

---

[204] *Farming Glossary*, Latin *pollexa*, for "poleaxe", and English *polmarked*, meaning marked on the head, p.34.

[205] Anton Ervynck, Bieke Hillewaert, Ann Maes, and Mark Van Strydonck, 'Tanning and Horn-Working at Late- and Post-Medieval Bruges', in Murphy and Wiltshire, *The Environmental Archaeology of Industry*, pp.60-70, at p.63.

[206] *Farming Glossary*, *cadaver, n.,* carcase (or, carcass), p.7.

[207] Muzerelle, *Vocabulaire codicologique*, *mort de sang*; see also fig. 1-7, in Clemens and Graham, *Introduction*, p.10.

[208] Leila Avrin, *Scribes, Script and Books: The Book Arts from Antiquity to the Renaissance* (London: British Library, 1991; repr. Chicago: American Library Association, 2010), p.213.

[209] De Hamel, *Scribes and Illuminators*, p.15; for further discussion of vein-trails in parchment, see: Eric J. Johnson, 'Scarring, Tears, Veins and Hair: The Imperfections of Medieval Parchment,' The Ohio State University Libraries, online <https://library.osu.edu/blogs/rarebooks/2008/12/01/107/> (accessed 5 January 2017), with thanks to Twitter user M. Tullius Cicero (@spiritofcicero) for this reference.

[210] Heather Bain, 'Binding Marvell: Form and Content in Book Arts', *Andrew Marvell Newsletter,* 5:1 (2013), 9-16 at p.10.

[211] BodL, MS Bodley 251, a copy of commentaries on Biblical texts by Nicholas de Lyra; *Summary Catalogue*, II.i, p.314.

Further notable and identifiably man-made damage can be inflicted upon the skin in the parchment-making process. Every stage discussed in the previous section of this chapter – flaying, dehairing by soaking in solution, stretching, scraping with a knife (either when fleshing or dehairing), and smoothing – posed a serious risk of damage. These key processes not only risk marking the skin, but can also jeopardize the overall integrity of the sheet. Many injuries are compounded by the effects of later stages of production, and any imperfections – whether natural or man-made – such as punctures, thin patches, tears, scrapes, or cuts, can succumb completely when subjected to tension.

The first three stages of production can cause odd colouring, or patchy weakness, cuts or nicks in parchment. During both the initial flaying and later beamwork scraping, the skin is at risk of knife damage. The contemporary Latin word for flaying or skinning was *excoriare*, from *ex-* (out) and *corium* (hide).[212] *Excoriare* was also used to refer to the act of shelling peas, and this range of meanings perhaps gives an idea of the delicacy of the flaying operation.[213] On either side of the skin, manual scraping with a knife endangers the writing surface to be made available in the finished parchment sheet, and puts the integrity of the whole skin in jeopardy. A slip of the knife, especially the sharper knife used for the fleshing process, can injure the skin or worsen existing imperfections. During the beamwork, when fleshing or dehairing, the knife is dragged up across the skin stretched over the beam towards the craftsman. Damage caused by a parchment-maker at this stage can take the form of 'v-shaped' nicks, where the knife catches the skin.[214]

Between those flaying and beamwork stages, the soaking and liming stage can result in patchy skin damage. Too little time soaking and the solution penetrates the pelt unevenly, resulting in difficulty stretching the skin and "variable colour and opacity," but on the other hand, overdoing the length of time or strength of the lime soak weakens the fibre network.[215] Recipes offer varying levels of precision about the ideal length of time needed to soak parchment. One recipe asks the reader to "wesch

---

[212] *OED, excoriate, v.,* etymology.

[213] *DMLBS, excoriare, v.,* sense 1: "to excoriate, flay, strip of skin", and sense 3a: "to pod, shell"; and *Farming Glossary*, *excorio, v.,* "to skin, to flay, to shell (peas)", p.15.

[214] Possible examples are repaired v-shaped cuts, in BodL, MS Bodley 744, ff. 170 and 179; *Summary Catalogue*, II.i, p.533.

[215] Reed, *Nature and Making*, pp.80-81.

the skyn […] the space of a *miserere*" before hanging it out to dry.[216] Another fifteenth-century recipe specifies the duration a skin should be soaked: "Forto make parchemyne gode and ffyne Take þe a schepis skynne *and* caste hit inne lyme *and* water *and* late hit ligge ix days þer inne."[217] This recipe gives an idea of the time, care, and the patience involved in preparing parchment.

Tension exerted on the skin can exploit even small holes. Though stretching is crucial for forging the hard-wearing qualities of parchment (as noted earlier), the stretching process pulls on the whole skin structure, notwithstanding any existing imperfections, whether natural or man-made, and it is this indiscriminate tension that can lead to more serious damage and put the entire skin at risk. Pre-existing flaws can develop under the influence of tension into gaping holes, or splits across the whole hide or skin. For example, even the smallest pinprick punctures may be "pulled out into circular or oval holes" by stretching.[218] Not all skins respond the same way to the stretching process: some are more susceptible to high tension than others. Sheepskin is thinner and greasier and more vulnerable to critical tear damage whilst being stretched. As Vnouček notes, the upper layer of the sheepskin "tends to delaminate" and is "liable to rip" under tension.[219] The forces exerted on skins during the stretching process are unthinking and indiscriminate. Numerous examples of these 'pulled out' holes can be seen in manuscripts, just one of which is a fifteenth-century copy of *The Northern Homily Cycle*, a very large manuscript written by an Irish priest William Kame (or Thame).[220] The humble context of production and the desired size may help to explain why this scribe tolerated a variable quality of parchment. In this manuscript, 'pulled out' holes can be seen in the inner margin of one leaf, and the outer margin of another (see figure 5, supplement, p.8).[221] There is no visible attempt at further repair of these holes, so this man-made damage was tolerated perhaps

---

[216] BodL, MS Douce 54, f. 24^{v}, noted by Griffin, 'Instruction and Information', p.670; *Summary Catalogue*, IV, p.506; I consulted this manuscript but could not find this phrase; the idea of timing the washing of a skin to saying the *Miserere* is also mentioned (without a supporting reference) in Clarke, *Crafte*, p.xxxviii.

[217] TCC, MS R. 14. 45, f. 30.

[218] De Hamel, *Scribes and Illuminators*, p.11.

[219] Vnouček, 'The Manufacture of Parchment', p.83. The "propensity of sheepskin parchment to delaminate" is also noted in Fiddyment et al., 'Uterine Vellum', p.15069.

[220] HEHL, MS HM 129 measures 217 mm × 145 mm, is still in a fifteenth-century whittawed binding, and the scribe signed his name on f. 231^{r}; discussed by Daniel Wakelin, 'Editing and Correcting', *Probable Truth: Editing Medieval Texts from Britain in the Twenty-First Century*, ed. by Vincent Gillespie and Anne Hudson (Turnhout: Brepols, 2013), pp.241-59, at pp.248-54; Dutschke, *HEHL Catalogue*, pp.164-172.

[221] HEHL, MS HM 129, ff. 25 and 170.

because this was a book that was not valued for aesthetic purposes, but for practical use as verse preaching materials.

Sometimes holes in finished parchment appear to have scabbed over with a thin pane of translucent material, to have somehow self-repaired. These are known as plaques, and they are not natural scabs formed by the animal. Plaques form because of ground fluid leakage during the stretching process. These *plaques* are also known as *eyes*.[222] For instance, there are many intact plaques in a large, fourteenth-century manuscript copy of works by Robert Grosseteste, given by the executors of William Fylham to Exeter Cathedral (mentioned again in chapter 4).[223] As in this example, plaques may be slightly speckled with follicle marks, or they may be yellowish-to-nearly-clear, fill or partly fill the void, and may slightly overlap with (or flake off at) the edges of the hole. A detached plaque that is flaking away can be seen in a manuscript copy of works by Gregory the Great.[224] Where plaques have detached completely they leave a stretched-out oval hole in the parchment.

Sometimes it is difficult to detect whether what appears to be a plaque is in fact very fine repair work, for many manuscripts do bear leaves with stitched or glued repair-work. Stitched or otherwise repaired parchment leaves embody the 'stitch in time' approach to sustaining materials; sustainability in avoiding waste and conserving resources, as well as enhancing durability. One of the many advantages of skin for making and sustaining parchment for manuscript production is that it "allow[s] easy stitching."[225] Repairs suggest attempts to guard against further damage and to contribute to the overall usability and longevity of the material. However holes or tears came to be present in parchment, they were highly susceptible to ripping further. Efforts to stitch and glue parchment bolstered material resilience and limited these risks. In addition, these repairs improved the integrity of the whole sheet, and, therefore, the future sustainability of the whole manuscript. In addition to other fish-based glues, as previously mentioned glue for repairs can even be made from parchment waste such as trimmings and parings. It was, then, easy and possible by a range of means to repair parchment.

---

[222] Muzerelle, *Vocabulaire codicologique,* defines the "eye" or *tache vitreuse* as follows: "Petite surface de forme elliptique ou arrondie, à l'intérieur de laquelle le parchemin s'amincit et ne forme plus qu'une fine pellicule translucide", "A small round (or elliptical) surface around which the parchment thins and forms no more than a slight translucent film."

[223] BodL, MS Bodley 830, f. 174 (among many others in this manuscript); *Summary Catalogue*, II.i, p.509.

[224] BodL, MS Bodley 809, f. 69, flaking away on the recto; *Summary Catalogue*, II.i, p.482.

[225] Reed, *Ancient Skins*, p.5.

Stitched repairs could be performed at any stage in the production process. Effective stitching bound the edges of a tear or hole together and protected the parchment from further damage. Such "oversewing" of damage could be undertaken in order "to avoid the enlargement of the hole during stretching."[226] Parchment tear-repair was usually achieved using strong *pacthred*[227] "with a simple but firm stitch."[228] Such unremarkable repairs to tears or holes in parchment can be seen in many manuscripts.[229] The sewing has been executed simply and has successfully reinforced the parchment by binding together the edges of the damage. When this was undertaken before the skin was put under tension on a frame, the stitching could acquire a distinctive stretched effect. This is especially noticeable where the pin-prick holes through the parchment have been stretched into ovals on either side of a tear, versions – in miniature – of the 'pulled out' holes described above. A good example of this can be seen in a copy Peter of Lombard's *Sentences* (discussed later in this chapter because it contains many other leaves of damaged parchment; see figure 6, supplement, p.9).[230] Around the hole in the parchment the tiny holes stabbed through by the needle have been pulled out by stretching into ovals. Sometimes these visible efforts to repair and sustain parchment could inflict further small-scale damage. Tiny stitch holes in repairs could also be compromised entirely under tension, damaging the parchment further. Sewn repairs are designed to draw together the edges of a wound in the parchment, so by necessity the small holes formed by the needle when stitching must be close to the cusp of the damage. When stitch-holes are compromised under tension, they collapse and enlarge the original tear. This usually left an even larger, gaping hole. Where these have not collapsed, the parchment may still register the pin-prick stitch-holes as small but significant signs of the repair effort. Ironically, then, efforts to stitch up repairs in parchment could exacerbate damage.

---

[226] Fuchs, 'Old Restorations', p.225.

[227] *Farming Glossary*, *pacthred* or *paktherd*, pack-thread, p.31, and *MED, pakthred, n.,* sense 3a, "strong thread for sewing or tying up bundles", among a number of other uses.

[228] Vnouček, 'The Manufacture of Parchment', pp.85-6.

[229] Eton College, MS 39; *MMBL*, II, pp.672-675; M. R. James, *A Descriptive Catalogue of the Manuscripts in the Library of Eton Catalogue* (Cambridge: CUP, 1895), p.20. HEHL MS HM 19918; Dutschke, *HEHL Catalogue*, pp.606-608. London, Gray's Inn, MS 8; *MMBL*, II, p.57-8. Oxford, University College MS 91; Coxe, 'Catalogus Collegii Universitatis', I, p.27. Oxford, Hertford College, MS e. 4; known as 'MS 2' in H. O. Coxe, ed., 'Codices MSS Aulae B. Mariae Magalenae', *Catalogus Codicum MSS. Qui in Collegiis Aulisque Oxoniensibus Hodie Adservantur* (Oxford: OUP, 1852), II, pp.5-6.

[230] BodL, MS Bodley 744, f. 45.

Scraps could also be glued onto parchment to patch over damage. These forms of repair required appropriately-sized scraps of parchment and glue or other adhesives with which to hold them in place. It was, as has been briefly described, possible to make glue from parchment trimmings or parings. Patches are harder to date securely, as they may have been attached long after any medieval campaigns of production. Having said this, we can be confident that such repairs did take place during the medieval period, thanks to the survival of contemporary recipes for glue with the specified purpose of parchment repair, as well as repairs made with parchment bearing text or decoration.[231] Although the date of repair is unverifiable, a copy of Lydgate's *Troy Book*, written in the third quarter of the fifteenth century, features a large patch of written parchment, used to repair the lower outer corner of f. 159.[232] The parchment scrap is clearly recycled, since inverted writing is visible (though hard to read) on one side. This rich example of scrap parchment used to patch up damage demonstrates both resourceful recycling of parchment (thus, avoiding the creation of waste) as well as efforts towards making the whole book more durable.

More unusually, examples have come to light of manuscripts containing decorated damage. This decorative addition complements a practical repair procedure with creative flair. Though there was an earlier medieval tradition, as Robert Fuchs notes, for insular or Northumbrian scribes to "emphasise […] holes by surrounding them with red dots", some later medieval examples of decorated holes and tears have also been discovered.[233] For example, a fourteenth-century manuscript now held in Uppsala University Library and several manuscripts surviving from southwestern Germany and Switzerland feature eye-catching, colourful silk thread

---

[231] BodL, MS Ashmole 1494, f. 532; *Quarto Catalogue*, X, pp.1380-1386; Daniel V. Thompson, 'Trial Index to Some Unpublished Sources for the History of Medieval Craftsmanship', *Speculum*, 10 (1935), 410-431, at p.422.

[232] BodL, MS Digby 230, f. 159; *Quarto Catalogue*, IX.i, p.242, and p.99; Gisela Guddat-Figge, *Catalogue of Manuscripts Containing Middle English Romances* (München: W. Fink, 1976), pp.257-258.

[233] Fuchs, 'Old Restorations', pp.225-6.

work.[234] These repairs draw the eye to the damage and make a feature of it. From the neatly-pricked holes, which have not been pulled out, it looks as though the stitching has been executed after the stretching stage. This, in conjunction with the colourful design, suggests that any protective or repairing function is almost incidental to the decorative purpose. These fanciful, delicate embroideries draw attention to their own design, as complex needlework art, and to the holes into which they are stitched. However, they not only draw attention to the holes in parchment, but also depend on them. Without organic or man-made damage, this peculiar application of skilled craftsmanship would not exist. The opportunistic expression of such creativity goes beyond merely salvaging damaged material: instead parchment damage and stitching has become an artistic feature. Parchment, then, can sustain other forms of creativity beyond its intended purpose.

These forms of damage and of repair (so far surveyed) can be exemplified in a closer examination of two fifteenth-century parchment manuscripts, which both have a high quantity of holes and tears in their leaves. These two books indicate the range of possible damage and responses to damaged parchment. These manuscript-books offer glimpses of damaged parchment, as well as repair efforts. Each manuscript reveals the layout of holes on the page, and across the book, and the quantity of unrepaired and repaired holes on each page.

One of these two particularly hole-riddled manuscripts is the aforementioned copy of Peter of Lombard's *Sentences*, given by the executors of John Snetesham to Exeter Cathedral in the fifteenth century, then later passed on to the Bodleian Library (again, see figure 6, supplement, p.9). (The second-hand movement of this book from Snetesham to the Cathedral is discussed in chapter 4.)[235] This manuscript is large in size and made of parchment throughout.[236] The leaves are frequently injured, with many holes and tears not repaired, and many others stitched up. Of 255 parchment

---

[234] Sciacca, 'Stitches, Sutures', pp.57-92, Erik Kwakkel, 'Broidery on a Medieval Page', Tumblr posts: <http://erikkwakkel.tumblr.com/post/52258862048/broidery-on-a-medieval-page-holes-in-the-pages-of>; and Erik Kwakkel, 'Halloween (4): Stabbed, Cut and Stitched Back Together', Tumblr <http://erikkwakkel.tumblr.com/post/65552828979/halloween-4-stabbed-cut-and-stitched-back> (accessed 5 January 2017); Augusta Strand, 'The Examination and Conservation of a Medieval Manuscript with Embroidered Repairs', *Care and Conservation,* 8 (2005), 113-122; Augusta Strand, Uppsala Library, 'A Medieval Book Mended with Silk Thread', online <https://web.archive.org/web/20131017052042/http://www.ub.uu.se/en/Just-now/Projects/Completed-projects/A-medieval-book-mended-with-silk-thread/> (accessed 5 January 2017).

[235] BodL, MS Bodley 744; the footnotes that follow are from this manuscript; the following are examples of each form of damage, and are not exhaustive.

[236] 320 mm × 230 mm, with a depth of 60 mm when closed.

folios, 56 bear some form of tear or hole (22%). Of course, what this figure does not emphasize is the numerous (199) leaves of parchment, fully 78% of the manuscript, which are not visibly damaged. But on those 56 folios that are damaged, there are 60 instances of damage, with some folios significantly marred by multiple or larger injured areas.[237] This manuscript demonstrates that damage could be of varied kinds: unrepaired tears,[238] stitched tears with thread intact,[239] repaired tears without thread,[240] 'pulled out' holes that distend from partly-successful repairs,[241] cut-out tears,[242] 'v-shaped' repaired cuts,[243] thin patches,[244] intact plaques,[245] crinkly parchment that has puckered up due to moisture of some kind,[246] grainy follicle marks,[247] a corroded hole where the chain-staple was attached to the back board,[248] and unrepaired small holes.[249] This array of damage, whether it was caused during the animal's lifetime or during the parchment production process, was met with a variety of responses. Sometimes it was repaired, and sometimes those repairs exacerbated damage by being pulled out under tension. Sometimes damage was tolerated, or simply ignored. There is, then, a wide range of damage and responses to it even within just this one manuscript, in which parchment was sustained and treated sustainably.

Likewise, a similar frequency of damage and repair occurs in a large-scale manuscript made in about 1384, which is a copy of the Wycliffite Bible, in which there is a wide range of parchment quality (see figures 7a and 7b, supplement,

---

[237] For the purposes of this brief survey only visible damage, such as tears and holes, was counted: prick-marks for ruling and any other very small holes were not counted.

[238] Ff. 108, 194, 249.

[239] Ff. 161, 207, 247. F. 161 has been stitched along a short section of the lower rule-line, where the ruling implement perhaps scored through the parchment.

[240] Repairs now without thread at ff. 41, 68, 250.

[241] Pulled-out holes, with intact thread: f. 34, and f. 124; without thread: f. 35.

[242] Tears cut out at f. 32, and f. 191.

[243] Repaired 'v-shaped' cuts at f. 170, and f. 179.

[244] Particularly thin areas on f. 180.

[245] Intact plaques at ff. 121, 223, 230, 252.

[246] Particularly rippled with hygroscopic folding between ff. 208-9.

[247] Strikingly follicle-grained hair-side at f. 63^{r}.

[248] Chain staple holes on f. 225.

[249] Small, unrepaired holes at f. 65, and f. 67.

p.10).[250] Just over a quarter of the total folios (127 out of a total of 488 parchment leaves, or 26%) have imperfections of some kind. These do provide evidence of the damage incurred by these skins during animals' lives, and they register damage caused by people processing those skins into parchment, but this figure also includes lumps of wax and dirt,[251] crinkly patches which have warped due to the moisture of wet stains,[252] and other forms of later damage.[253] Indeed, this figure under-represents the actual number of imperfections present, since many of those 127 leaves have a cluster of instances of damage. For example: all on one folio there are two holes near the gutter, small weak spots, and a repaired slit,[254] and, elsewhere, four small holes are grouped together on one leaf.[255] Some of these distinctive marks are identifiable as damage to animals' bodies during life. These include: intact or mostly-intact plaques where the skin healed in life,[256] a smattering of weak spots which are sometimes slightly discoloured,[257] slight striations in the skin,[258] grainy follicle marks,[259] and – when the leaf is held up to the light – the tracery of subcutaneous blood vessels.[260] Other marks were more likely to have been caused by the parchment-making process, such as thin patches, perhaps from over-soaking,[261] weak abraded areas with a rough surface from scraping,[262] unrepaired small holes,[263] rough strips that appear to be a judder of the scraping knife.[264] Less clearly attributable forms of damage are stretched

---

[250] BodL, MS Douce 369; *Summary Catalogue,* IV, p.609; Elizabeth Solopova, *Manuscripts of the Wycliffite Bible in the Bodleian and Oxford College Libraries* (Liverpool: Liverpool UP, 2016), pp.113-127. The footnotes that follow are from this manuscript and consist of examples of each form of damage, although they are not exhaustive. The book block measures 370 mm × 240 mm, and (when closed) the depth is about 85 mm.

[251] Lumps of red wax at f. 80, and wax (or a similar substance) at ff. 89-90, 164.

[252] Hygroscopic crinkling around stains at ff. 77, 86, 101-2, 114, 158, 187, 218v, 219, 253, 263r, 313^{r}, and 449.

[253] For example, mould on f. 73.

[254] These forms of damage are all on f. 61.

[255] Small holes at f. 228.

[256] Plaques (some fully intact, some splitting) at ff. 139, 152, 166, 185, 226, 243, 250, 278, 355, 416, and 470.

[257] Folios with weak spots: ff. 78, 105, 187, 351, 419, and 433.

[258] Striations, or 'stretch-marks', at ff. 62, 117, 187*.

[259] Follicle-grained hair-side at f. 109^{v}, 225^{r}, 247^{r}, 442^{r}.

[260] Blood vessels at f. 231, and f. 483.

[261] Thin areas on f. 325, and thick, horny parchment at f. 322, which may be indicative of uneven soaking.

[262] Abraded surfaces at f. 122, and f. 123.

[263] In the text block at ff. 37, 88, 135, 338 (two holes, one in the main body of the text, the other in the middle of an initial), outside the text block at ff. 61, 74, 88, 404.

[264] Knife 'judder' at f. 345, and f. 414.

unrepaired 'open' holes.[265] This manuscript, then, certainly features a range of damage, and a range of responses to that damage. Bibles were revered, so it is striking that damage was tolerated in this book. Perhaps damaged parchment was difficult to avoid in a manuscript of such large scale.

Most of the imperfections detailed above are notable for the way in which they were left unrepaired. This is, itself, a response to damage. For example, though it may seem nondescript, there is an unrepaired tear on one folio.[266] This is significant in a manuscript which does include substantial levels of repair and interesting attention to damage. But what about repair efforts? Out of the total number of folios with 'imperfections', which came to 127, holes and tears treated through repair accounted for 22 folios, or 25 instances. Responses to damage include: tears which have pulled out or through some of the stitches,[267] stitched tears with thread intact,[268] repaired tears without thread (for a lower margin tear repair on f. 221^{v}, see figure 7b, supplement, p.10),[269] 'v-shaped' repaired cuts.[270] In this Bible there is an especially long tear that falls between two columns (see figure 7a, supplement, p.10).[271] This repair features herringbone-style stitching, and appears to have been a success, since it salvaged the leaf for writing. The repair was completed before the text was written, as can be seen in the way that the scribe executed the writing in the first column so that it gently curves to accommodate the line of the repair.

It is worth mentioning that both manuscripts are large scale, and the necessary size of parchment may have influenced the tolerance of imperfect writing supports. When larger leaves of parchment were difficult to come by, even when they had a choice of materials, sometimes medieval manuscript makers may have been prepared to accept less than perfect parchment to achieve other key production goals. Accepting such parchment meant that repair skills were necessary, such as the ability

---

[265] Holes, where plaques may have flaked away, or which may have been inflicted with a slip of the knife during production and stretched, now at the edges of folios, at ff. 98, 108, 177, and 234.

[266] Unrepaired tear: f. 192.

[267] A repaired hole which has pulled through some of the stitches entirely at f. 33; repair stitch-holes pulled out into oval shapes at f. 37, and f. 141 (though only slightly pulled).

[268] Stitch-holes not stretched (therefore suggesting repair once the parchment had been taken off the frame) at ff. 61, 94 (a long tear), 140, 184, and 221.

[269] In the text block at f. 124, a small, carefully repaired tear, which is barely pulled out and only slightly extended on one side in the inner margin; at f. 140; in the lower margin at f. 221; likewise at f. 316.

[270] Possibly a 'v-shaped' cut, though it is rather curved, at f. 226.

[271] Long repair on f. 94.

to make appropriate thread or thin skin strips, to handle a needle delicately and to stitch neatly in a range of styles.

Conclusions

Parchment, made from the skins and hides of animals, was a sustainable by-product that was crafted to last for a long time. The supply of such materials sustainably first depended on medieval animal husbandry and the trade of skins and hides. By exploring this "agricultural underpinning" of parchment production, I have countered the "hopeless witness" of animal death with a sense of the contemporary practices and processes that were sustainable.[272] That ethos of sustainable production has been explored here in the processes of parchment making. Fifteenth-century recipes for making parchment, which may or may not have been used by craftsmen or amateurs, expressed interest in making well, and avoiding waste. Furthermore, a survey of manuscripts demonstrated that fifteenth-century people tolerated and accommodated damage in parchment in their books. Sometimes people chose to repair parchment by gluing patches over the damage, stitching up the edges of holes or tears, and even stitching decoratively. Ironically, efforts to repair parchment could exacerbate damage. Nonetheless, recipes for making parchment and surviving parchment in manuscripts demonstrate that people could and did choose to make sustainable parchment in sustainable ways, that would last, by conserving it and avoiding waste.

[272] Holsinger, 'Of Pigs and Parchment', p.619.

Chapter 2: reusing parchment in books

As well as the economic and sustainable aspects of new materials (explored in chapter 1 previously), book production and book preservation were made more economically viable and more sustainable by means of recycling old materials. Recycling is ubiquitous in medieval manuscripts. After all, the initial materials of some books involved recycling: paper in the fifteenth century was usually made from recycled linen rags.[1] Although paper is not necessarily so visibly recycled as parchment, lying within paper sheets are reused fibres that had another form and a previous life. As discussed in chapter 1, the efforts taken to process rags into paper or skins into parchment resulted in added value for those materials. This begs the question: what was the value of the uses and reuses of those materials thereafter? This chapter continues the discussion of how and why value is added – or taken away – from book-centred materials by recycling. Some materials in medieval manuscripts are more tangibly recycled than others, such as flyleaves that bear writing, or visibly-scraped palimpsests. Though these are noticeable to us today, recycling did not have to be visible for those working with books to know that they were there. Materials from books were often salvaged, redeployed or even destroyed as part of efforts to sustain books: the subject of this chapter is the reuse of such book materials.

In addition to rag recycling for making paper, another commonplace feature of medieval book production was the use of wooden boards in bindings. As part of a new binding, book boards themselves could be reused, or "cannibalised" as Michael Gullick puts it, "from discarded bindings."[2] Sometimes bindings were taken apart and the boards they yielded were rebound on to the same book; sometimes they were removed from one book and used wholesale to bind another.[3] For example, a sixteenth-century rebinding of a Worcester Cathedral manuscript was furnished with

---

[1] Beverly M. Boyd, *Chaucer and the Medieval Book* (San Marino: Huntington Library 1973), p.7.

[2] Michael Gullick, 'The Bindings', *Worcester Catalogue*, pp.xvii-xlviii, at p.xli.

[3] For case studies of fifteenth-century 'upgrades' to extant bindings, see Nicholas Hadgraft, 'English Fifteenth Century Book Structures' (unpublished doctoral thesis, University College London, 1997), p.14 (on the Bury St Edmunds and Gonville and Caius College campaigns); for the campaign at St Gall, Switzerland, see J. A. Szirmai, *The Archaeology of Medieval Bookbinding* (Aldershot: Ashgate, 1992), pp.165-170.

reclaimed "ill-fitting chamfered oak boards" from another book.[4] In the flesh, though hidden under leather covers, these uneven wooden boards render this instance of recycling strikingly noticeable. A binder, who rebound a different manuscript in the fifteenth century, inscribed itemised costs on the back pastedown, including mention of "ii new bordes i d" (chapter 4 offers a more detailed study of book prices and costs).[5] Medieval book boards were valuable items, crafted from "wood, usually oak, frequently finished with a slight bevel."[6] These components were an important part of medieval book production, and they held their value as recyclable commodities. So, both boards and paper are material artefacts that can provide some kinds of evidence for recycling and sustainability in medieval books.

Likewise, pieces of parchment were reused in the fifteenth century in myriad, ingenious ways. Outdated, unfashionable or simply dilapidated manuscripts, no longer needed for their texts, were taken apart and recycled for their component parts. This is well known to have happened in the making and re-making of bindings. Nicholas Hadgraft suggests, "As books ceased to be useful," many were dismantled "and the materials re-used in bindings."[7] Parchment leaves, taken from broken books, were amenable to reuse as flyleaves, pastedowns, and spine padding in other books.[8] There have been some prior studies of this range of material, by Jan Brunius. His study of artefacts in Swedish archives, as well as Hadgraft's own work, are both limited to these binding-based reuses.[9] As Hadgraft goes on to say, materials were also reused in "no doubt other ways", but such other ways remain to be itemised.[10] In addition to their use in bindings, other recycled forms of parchment and paper in books include reinforcing strips, scraps added as inserts or extensions, and larger pieces used as quire-guards, wrappers or palimpsests. *Fragments* is the umbrella term

---

[4] Worcester Cathedral Library, MS F.37; Thomson, *Worcester Catalogue*, p.24. BodL, MS Bodley 333 has older sewing on six supports, since repaired and bound in a white sheepskin binding dated to about 1602; *Summary Catalogue*, II.i, p.276. Exeter Cathedral Library, MS 3520 features "late medieval" reuse of bevelled boards, which have been turned around; *MMBL*, II, pp.830-832.

[5] HEHL, MS HM 132: "In ledd*ur* hongre ii d; In whyte threde ii d; ii new bordes i d; ii skynys of p*ar*chement viij d; A skyn of redlath*er* ii d; In blac sylke *and* greyne j d ob; In glw ob; ij claspys ij d; s*umma* totalis xix d"; Dutschke, *HEHL Catalogue*, pp.175-177, at p.176; also cited by Szirmai, *Archaeology*, endnote 24, at p.279.

[6] Mirjam Foot, 'English Decorated Bookbindings', *BPPB*, pp.65-86, at p.66.

[7] Hadgraft, 'Book Structures', p.13.

[8] Discussed in the context of manuscript and print reuse by Julia Boffey, *Manuscript and Print in London* c.*1475-1530* (London: The British Library, 2012), pp.74-75.

[9] Jan Brunius, *From Manuscripts to Wrappers: Medieval Book Fragments in Swedish National Archives*, Skrifter utgivna av Riksarkivet 35 (Växjö: Davidsons Tryckeri, 2013), p.24.

[10] Hadgraft, 'Book Structures', p.13.

often used to describe such material, which is somewhat misleading as this broad category includes everything from the obviously fragmentary small slips of paper found in spine padding, or cut-out miniatures, to more substantial formats, such as whole leaves used as wrappers.[11] This chapter will explore some of the breadth and variety of material reuse in books, with a focus on parchment recycling.

As well as in books, parchment has been put to an array of other reuses. For example, in Norway there is a bishop's mitre constructed from four pieces of parchment, dated to c.1270.[12] This was designed to create a stiff parchment structure which would then be covered with cloth. Written on the parchment is a Norwegian translation of a French *lai* about two lovers.[13] Another intriguing example of manuscript recycling is a set of fragments sewn by nuns into the hems of dresses in Lüneberg. These ornate dresses were made to clothe religious statues, and the hems are lined with scraps from over thirty different manuscripts, including liturgy, hymns, and law texts.[14] Liturgical music manuscripts were also used to line hatboxes and organ cases.[15] These reuses shed light on to more book-centred reuses by demonstrating the characteristics of parchment that underpin why this material has been reused in these contexts. The mitre, dresses and linings are mostly items in circumstances in which washing or wetting could be avoided. In order to maintain the structural integrity of any parchment-based item (whether hat or book) it is essential to keep it dry, because parchment is sensitive to changes in humidity.[16] Surviving examples of esoteric parchment recycling certainly demonstrate this vulnerability but also suggest the wider employability of this material. These reuses all take advantage

---

[11] For an overview with a focus on cut-out miniatures, see Christopher de Hamel, *Cutting Up Manuscripts for Pleasure and Profit* (Charlottesville: Book Arts Press, 1996); examples of cut-out initials in a copy of *The Prick of Conscience*, BodL, MS Douce 156, pp.9-10, pp.45-46, pp.71-72, p.120-121; and many cut-out initials in a manuscript copy of the *Golden Legend*, BodL, MS Douce 372, some of the most dramatically cut leaves at f. 47 and f. 62.

[12] Reykjavík, Árni Magnússon Institute, AM 666 b 4to, <http://handrit.is/en/manuscript/view/AM04-0666-b> (accessed 5 January 2017); as cited by Erik Kwakkel, 'A Love Story Hidden in a Hat', Tumblr, <http://erikkwakkel.tumblr.com/post/55554381477/a-love-story-hidden-in-a-hat-you-are-looking-at-a> (accessed 5 January 2017).

[13] 'Tveggia elskanda strengleikr' (Norwegian).

[14] Henrike Lähnemann, 'Manuscript Fragments in Medieval Dresses', Workshop for the Manuscript and Text Seminar at Queen's College, Oxford (4 June 2014).

[15] Julia Craig-McFeely, 'Digital Image Archive of Medieval Music: The Evolution of a Digital Resource', *Digital Medievalist,* 3 (2007/8), §2, online <http://digitalmedievalist.org/journal/3/mcfeely/> (accessed 5 January 2017).

[16] Ronald Reed, *Ancient Skins, Parchments and Leathers* (London: Seminar Press, 1972), p.119: "Ideal storage conditions […] are temperatures between 0 and 20°C [and] relative humidity between 50 and 65%."

of parchment's strength and pliability, qualities that motivate many instances of recycling in books.

Furthermore, accounts of manuscript material being recycled in later centuries include parchment leaves "reserved of those lybrarye bokes, some to serve theyr iakes, some to scoure theyr candel styckes, and some to rubbe their bootes." Moreover, iconoclasts were reportedly sending leaves "to the grossers and sope sellers, and some they send ouer see to ye bokebynders […] at tymes whole shyppes full."[17] These kinds of reuse flourished – or at least records of reuse flourished – following the Reformation, due to the Dissolution of the monasteries and the dispersal of book collections.[18] As well as humidity, heat, naked flame, and liquids (including boot polish) are damaging to parchment. Therefore, domestic reuses tended to destroy manuscript material thoroughly. Margaret M. Smith notes wryly: "fate as a pie liner probably consigned most fragments to oblivion."[19] The purpose of these household reuses was ephemeral, with little consideration for longer-term durability. In contrast with the survival of carefully-kept mitres, little evidence of these reuses remains – from any century. Moreover, although similar kinds of recycling are likely to have taken place in the fifteenth century, I do not know of contemporary accounts of such treatment of parchment.[20]

What we do have evidence of, however, are reuses of parchment in books. Recycled components of books were incorporated in the making, unmaking and

---

[17] *The Laborious Journey and Serche of Johan Leylande, for Englandes Antiquitees, geuen of hym as a newe yeares gyfte to Kynge Henry the viii in the xxxvii yeare of his Reygne, with declaracyons enlarged: by John Bale* (1549) Sigs. A2v, A7v, cited by: Adam Smyth, 'Burning to Read: Ben Jonson's Library Fire of 1623', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014), pp.34-54, at p. 47; C. Y. Ferdinand, 'Library administration (*c*. 1475-1640)', *CHLBI I*, pp.565-591, at p. 581; de Hamel, *Cutting Up Manuscripts*, p.16.

[18] Szirmai, *Archaeology*, endnote 11, at p.278, notes the "truly wholesale destruction" of manuscripts, particularly outdated liturgical texts, set in during the sixteenth century, he also highlights the Peasants' War in Germany (1525); the Dissolution of the English monasteries (1537-9); the Council of Trent (1545-63); and the Huguenot wars in France (1561-89) which resulted in "cartloads of cheap 'binder's waste'."

[19] Margaret M. Smith, 'Preface', *Interpreting and Collecting Fragments of Medieval Books*, ed. by Linda L. Brownrigg and Margaret M. Smith (Los Altos Hills, California: Anderson-Lovelace, 2000), pp.xi-xv, at p.xii.

[20] For example, a search through the digitized corpora of documents from the Cely, Stonor, and Paston families did not provide accounts of parchment reuse: Henry Elliot Malden, ed., *Selections From the Correspondence and Memoranda of Cely Family Merchants of the Staple AD 1475-1488* (London: Longmans, Green and Co., 1900), online <http://www.r3.org/on-line-library-text-essays/the-cely-papers/>; Charles Lethbridge Kingsford, ed., *Stonor Letters and Papers 1290-1483* (London: Offices of the Society, 1919), online <http://name.umdl.umich.edu/ACA1723.0001.001>; Norman Davis, ed., *Paston Letters and Papers of the Fifteenth Century* (Oxford: Clarendon Press, 1971), online <http://name.umdl.umich.edu/Paston> (all accessed 5 January 2017).

remaking of books. Unfortunately, these book-centred reuses are also seldom described by fifteenth-century contemporaries; therefore, their rationale must be reconstructed from physical evidence. What form does this evidence take? The physical form of manuscripts can give us clues to how and why they were made and remade and can also provide foundations for informed speculation. The physical evidence reveals a range of medieval techniques for recycling parchment and the reasons for doing so. Normally parchment is thought of almost exclusively as a writing support. When made well, the surface of parchment is exceptionally good at holding ink, whether it sits on the surface as does carbon-based ink or bonds chemically by 'burning' into the parchment as does ink made from iron salt and oak galls.[21] But parchment is not only good for writing; in addition, parchment is an adaptable material, with a remarkable variety of potential uses and reuses in book production or adaptation. It is, after all, strong and pliable, a durable, indigestible substance, with "lightness and flexibility […] high tearing strength [and] exceptional long term stability."[22] The durability of books made from parchment that survive to the present day suggests this very resilience. These fundamental physical characteristics will be seen to enable recycling and improve sustainability.

Rather than addressing how or why manuscript material was reused, previous studies have tended to emphasise fragments, wherever they turn up, as a potential treasure trove of newly discovered texts. Eric H. Reiter has described fragments as "looking like discarded waste" which "often [contain] unique textual treasures."[23] Studies of flyleaves and palimpsests in particular often seem motivated by the desire to unearth lost texts; they consider whence the fragments came, and the texts or undertexts that they bear. In this treasure-hunting vein, David Rundle and Scott Mandelbrote quite justifiably describe manuscript fragments as "valuable, tantalising shards of evidence."[24] This chapter shifts the focus from these preoccupations with revealing the prior use of materials to the ways in which fifteenth-century manuscript makers recycled materials. It considers the various related reasons why manuscripts

---

[21] Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca and London: Cornell UP, 2007), p.19; Joyce Irene Whalley, *Writing Implements and Accessories from the Roman Stylus to the Typewriter* (London: David & Charles, 1975), pp.77-8.

[22] Reed, *Ancient Skins*, p.5.

[23] Eric H. Reiter, 'Recycling the Written Word: Manuscript Fragments and Late Medieval Readers', in Brownrigg and Smith, *Fragments*, pp.189-204, at p.189.

[24] David Rundle and Scott Mandelbrote, 'Corrigenda', in N. R. Ker, *Fragments of Medieval Manuscripts Used as Pastedowns in Oxford Bindings*, 3rd ser., 4 (Oxford: Oxford Bibliographical Society, 2004 for 2000), pp.†1-29, at pp.†1-2.

were reused by thinking through *waste* and *value* in this context, and, through case studies, explores how the materials of books were recycled.

Even before the fifteenth century, recycling had been a part of book production for centuries, and it continued to be so long after. The evidence preserved in fifteenth-century manuscripts demonstrates that there had long been access to scrap materials for initial (and any ongoing, or subsequent) campaigns of production. But how that material was made available and how it then came into the hands of book producers is less clear. Numerous sixteenth-century records survive of the reuse of scrap from books, such as the aforementioned accounts of John Bale and John Leland. These describe plentiful availability of book materials, recycled in extraordinary ways. There is later evidence, therefore, of the profitable reuse of parchment leaves in commercial settings, such as grocers' and soap sellers' shops, and even bookbinders abroad. The Dissolution provided a glut of scrap material from books. Trade and distribution of manuscript materials, which were "sold as bulk waste to members of the book trade."[25] This enabled reuse – and, particularly, the opportunity to capitalize on the value of these recyclable materials – on a more widespread basis than ever before.

Taking in to account the variable survival of books and the distortions inherent in the manuscript record, the trade in scrap before the sixteenth-century was likely to have been far smaller in scale than the later trade described by Bale and Leland. The Dissolution of the monasteries brought about more widespread availability of book-scrap than ever before. But as this chapter argues, evidence for the reuse of such scrap in the fifteenth century can be best glimpsed in the fabric of surviving books. This suggests, then, that in the centuries prior to this dramatic increase in available material, access to scrap was already in place in some form. As Ralph Hanna has noted "recycling had been a routine procedure of library custodianship in the Middle Ages as well."[26] Codicological features, such as inserted *schedules* or *schedulae*, are more prevalent in certain kinds of manuscripts, such as

[25] Ralph Hanna, *Introducing English Medieval Book History: Manuscripts, their Producers and their Readers* (Liverpool: Liverpool UP, 2013), p.142.

[26] Hanna, *Book History*, p.142.

university notebooks or copies of standard university texts.[27] Other phenomena include flyleaves and palimpsests, frequently recycled from liturgical manuscripts, and outdated Canon or Civil law texts. These features and texts may be indicative of particular environments, such as scholarly or clerical milieux. Therefore, universities or monasteries might be places where homegrown book-scrap was recycled.

In addition to individuals reusing the minor quantities of scrap generated by their own institutions, there was probably also scrap exchange in book-producing hubs. In the fifteenth century Oxford and London were notable centres of book production. Scribes and bookbinders in these centres would have been well-placed, like individuals in institutions such as universities or monasteries, to enjoy access to scrap material generated by their own industry.[28] Given their geographical proximity to one another, exchange or trade in scrap would have been achievable. After all, even book makers who used scrap opportunistically, or only when necessary, somehow managed to acquire such material. By its very nature, whether in provincial settings or busier metropolitan centres, this trade in scrap (and access to it more generally) was likely to have been inconsistent, often localised, and highly informal. It is therefore difficult to investigate. Nevertheless, patterns of trade and distribution in scrap – and, simply, access to it – did not spring up overnight in the wake of the Dissolution. The book trade (in the widest sense) during the fifteenth century, as in the sixteenth century, somehow enabled the supply of these recycled book materials.

Efforts to sustain books, often by recycling book materials, might appear arbitrary, but they were often intentional and were part of a wider culture and practice of sustaining books. In the fifteenth century, book production was shaped by social, economic, and technological pressures. Not only was scrap reused in various small-scale ways to reduce or negate certain costs in book production, it could also represent an opportunity for increasing profits. This could be achieved through larger-scale, perhaps more organised reuse of parchment, or even through trade in bookscrap. A pressing issue for any craftsman looking to make a profit from a product is the amount and kind of work that the craft entails. This was also an important

---

[27] *OED*, *schedule, n.*, sense 1; *MED, scedule*, *schedule, n.*; *DMLBS*, *scheda*, *schedula, n.*; mentioned by Richard Beadle as one of a range of 'ephemeral' materials used for writing drafts, 'English Autograph Writings of the Later Middle Ages', *Gli autografi medievali: problemi paleografici e filologici: atti del Convegno di studio della Fondazione Ezio Franceschini, Erice 25 settembre – 2 ottobre 1990*, ed. by Paolo Chiesa and Lucia Pinelli (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1994), pp.249-68, at p.260.

[28] Boffey, *Manuscript and Print*, pp.171-172, describes "sources of supply which provided large quantities of high-quality waste" to Robert Fabyan.

consideration for those who chose to repurpose material: the effort or ease of the task. The time, intensity, and skill-level of the labour involved varied widely between different processes of recycling. After all, as Gillespie puts it: "As long as people have wanted to get their hands on textual materials there have been slap-dash as well as skilled ways of getting that material into a serviceable form."[29] In any age, skilled work, and the time and materials it takes usually mean money, and so one of the reasons for reusing material at all was of course financial. But here the emphasis is upon the fact that fifteenth-century people actively chose to make efforts to reuse materials in books; consequently, this chapter will start with cases of manuscript reuse with minimum input of additional effort and will then proceed to examples in which considerable extra effort has been expended. It begins with off-cuts and other small strips, continues through several other reuses of fragments, and concludes with palimpsests, a reuse of parchment which entails a significant input of labour. Throughout, recycling is contextualized as part of wider efforts to make the production and treatment of books sustainable.

Off-cuts

From early in the process of production, parchment is open to and available for a range of potential uses, and because of this adaptability and potential it is also liable to be salvaged. While it is in the process of being made, once dried under tension, parchment must be either cut down directly from the herse frame, or released from the frame by removing the pebbles and cords. After it has been cut down or released, the parchment sheet is then trimmed to the desired shape. Whichever technique is preferred by the parchment-maker, cutting or trimming the hide necessarily entails the creation of spare slivers of parchment. The choice piece of parchment usually takes the form of the largest possible rectangular-shaped, centred "prime cut".[30] The leftovers, remainders from this optimised cut, the off-cuts mentioned in chapter 1, are typically identifiable by the following features: pronounced follicle patterns; horny patches; discolouration (dark or yellow patches); edges that fall too short; pebble holes; and elongated gaps caused by the fore and hind legs of the animal.[31] Using off-cuts in

[29] Alexandra Gillespie, 'Bookbinding', *PBE*, pp.150-172, at p.172.

[30] Erik Kwakkel, 'Commercial Organization and Economic Innovation', *PBE*, pp.171-191, at p.187.

[31] Erik Kwakkel, 'Discarded Parchment as Writing Support in English Manuscript Culture', *Manuscripts Before 1400*, *English Manuscript Studies 1100-1700* 17 (2013), 238-261, at p.252.

the production of books was a simple way to salvage available material, and to make books in a sustainable way.

Off-cuts, in common with other oddly-shaped fragmentary scraps of parchment, were put to a range of other uses: as unbound singletons, for ephemeral purposes such as letters or drafts, and by students for note-taking (see figure 4, supplement, p.7).[32] These scraps of parchment were known as *schedulae*, mentioned previously. But off-cuts were also used for constructing books. Although off-cuts are just as frugal as the similarly prudent use of parchment used right up to the edge of the skin, they should not be confused with those larger, sustainably-used cuts of parchment.[33] Off-cuts are a discrete category, with identifying features, including their small size.[34] Erik Kwakkel contends that they were used for "very small books only, with a page height of no more than 130-170 mm."[35] Fifteenth-century examples of books including off-cuts seem to be relatively rare and hard to find. In a survey of thirty-five small manuscripts (of 130-170 mm height) selected from the Ashmole, Digby and Douce collections in Oxford's Bodleian Library, seven could be confidently described as including off-cuts.[36] These manuscripts mostly incorporated between three to nine off-cuts, scattered throughout a much larger book block. Two date to the fifteenth century, one is of uncertain date, and the other four date to the thirteenth and fourteenth centuries. This survey therefore suggests that off-cut use may be rare in the fifteenth century.

As is typical of many of the reuses discussed in this chapter, off-cuts were used both in manuscript production and in 'short-term' or transient ways. These leftover scraps became a real option in the production of books, despite their visibly different quality. Off-cuts can be recognized by long curved edges or a "lacuna" at the lower

---

[32] Kwakkel, 'Discarded Parchment', p.241.

[33] BodL, MS Bodley 757 is manuscript which includes larger pieces of parchment used sustainably, this manuscript includes leaves with some holes and missing corners, and measures 260 mm × 180 mm. *Summary Catalogue*, II.i, pp.411-412.

[34] This is not to say that it is always clear where the boundary lies between off-cuts and larger cuts of parchment with similar features. For example, while off-cuts are defined as being between 130-70 mm in height, there is a small manuscript, BodL, MS Bodley 68, which contains off-cuts amongst variable-quality parchment. At just 175 mm × 120 mm, this manuscript is only slightly larger than a typical off-cut, but it is still a small manuscript in which use is made of 'imperfect' parchment. *Summary Catalogue*, II.i, pp.228-9.

[35] Kwakkel, 'Commercial Organization', p.187.

[36] Manuscripts with off-cuts: BodL, MS Ashmole 1280, BodL, MS Digby 2, BodL, MS Digby 14, BodL, MS Digby 15, BodL, MS Digby 20, BodL, MS Digby 24 and BodL, MS Douce 52; survey of *Quarto Catalogue*, X (Ashmole), IX (Digby), and *Summary Catalogue*, IV (Douce); survey for Erik Kwakkel's 'Holsterbooks and Off-cut Manuscripts', Bodleian Library Manuscript Masterclass, University of Oxford (24 February 2014); survey undertaken in collaboration with Jessica Henderson.

corner of the leaf, which is caused by the animal's flank and represents the limits of the usable part of the skin. This is often accompanied by 'stretch marks' and other skin imperfections. So, at a low grade of production, cheap cuts of parchment, including off-cuts as a distinct category, could be salvaged to make documents and small manuscripts. During the fifteenth century, off-cuts were therefore available for both ephemeral purposes and to book producers.

So, how were off-cuts used to make small manuscripts? As Kwakkel noted, a translation of the *Speculum ecclesie* into English exhibits the typical features of such off-cuts when used in books (see figure 1, supplement, p.11. The suitably small size of the whole manuscript (127 mm × 95 mm) falls comfortably within the parameters of the off-cut 130-170 mm page height range. In this book, the parchment is generally consistent in quality throughout, with off-cuts used for the three final leaves of the manuscript.[37] On these folios, there are curved lacunae around the edges of the parchment, and stretch marks, both indicative of the natural edge of the skin and key signs of off-cuts.[38] It is not clear whether the rest of the parchment used in this manuscript was also off-cut, as the only visible distinguishing features are seen on the last three folios. It is also not clear whether the manuscript is small because it is made from off-cuts, or if it includes off-cuts because it was designed to be small. The use of identifiable off-cuts at the very end of this translation of the *Speculum ecclesie* suggests that perhaps the scribe ran out of the main batch of parchment, and supplemented it with off-cuts. However, given its size, it remains a possibility that the whole manuscript was made from off-cut material and later trimmed to its current format.[39] Off-cuts could constitute the entire book block or, more commonly, they were scattered throughout or concentrated towards the end of the manuscript.

The rationale for using off-cuts might be easier to imagine in this case than in some others, for we know a little more about the making of this book. It happens to be one of a small group of "common profit" books, financed from the proceeds of

---

[37] BodL, MS Douce 25, dating to the early fifteenth century, the text is written in bastard anglicana influenced by secretary hand, off-cut folios at ff. 70-72. In addition, ff. 40-45 are missing the lower right corner of each leaf, which may be because they are off-cuts (especially ff. 40, 44, 45 which have 'natural' edges), or this may be because they have suffered later damage (especially ff. 41, 42, 43 which appear injured). *Summary Catalogue*, IV, p.497; *IMEP*, IV, pp.7-10.

[38] Kwakkel, 'Commercial Organization', pp.187-9, including fig. 8.2 at p.188.

[39] This possibility is difficult to substantiate: the margins on each side of the text block are a comfortable, 'normal' width. In comparison, the top margin seems smaller than it should be. In any case, the book has been rebound since the fifteenth century, which may have obscured original information about the size of the book.

wealthy merchants' estates and identified by similar inscriptions.[40] These books may have been typically made to relatively low grades of production.[41] As a more affordable copy of a text, this copy of the *Speculum ecclesie* was a cost-efficient charitable donation which was designed to promote access to religious literature. One of the final, off-cut leaves in it bears a statement instructing future readers that this small manuscript was "maad of the goodis of a certeyne persone for a comyn profite" and that it should be handed down from one owner to another for "as longe as the booke endurip".[42] In a sense, then, these books represent the recycling of the "goodis" of merchants into charitable gifts as well as the recycling of matter. The mention of the possible longevity of the book's existence calls attention to its material form. Just as this common profit book was intended and expected to work hard as an educational resource over many years, for it as long as it endured. So, using off-cuts derived the maximum possible benefit from the 'nose-to-tail' use of parchment.

Manuscripts made with these easily salvaged, cheaper off-cuts might lead us to anticipate that in every regard the book was produced to lower, less costly standards. However, as in the common profit book, other manuscripts containing visibly off-cut parchment also feature aspects of production that were well executed. Another early fifteenth-century manuscript of religious texts, including *The Prick of Conscience*, has been constructed from scattered off-cuts.[43] Although the off-cuts might suggest that this manuscript is materially a lower-grade production, there is careful attention to detail in the writing and rubrication of the text itself. The scribe and bookmaker may have been the same person, or these stages of production may have been conducted one after another. There are occasional flashes of rubrication on the letters at the beginning of each line and, in addition, rubrication of Latin lines embedded in the body of the text. There are also blue-ink letters beginning the line on occasion and bracketing of verses in the scribe's usual brown-black ink. Another book, a

---

[40] The four other known common-profit manuscripts are: CUL, MS Ff.vi.31; BL, MS Harley 993; BL, MS Harley 2336; London, Lambeth Palace Library, MS 472, as identified by Wendy Scase, 'Reginald Pecock, John Carpenter and John Colop's "common profit" Books: Aspects of Book Ownership and Circulation in Fifteenth-Century London', *Medium Aevum,* 61:2 (1992), 261-270, at p.261; common-profit books will also be discussed as a form of second-hand circulation and for the spiritual benefits that they afforded, in chapter 4.

[41] From observation of the four known books cited above, I suspect this to be the case. For example, CUL, MS Ff.vi.31 was also made from generally low grade material, including off-cuts with lacunae at ff. 3, 19, 31, 35.

[42] BodL, MS Douce 25, f. 72^{r}. This injunction to use the book for shared benefit can be found in similar inscriptions in the other common profit books, discussed in chapter 4.

[43] BodL, MS Digby 14, which measures 160 mm × 110 mm, within the parameters of the usual size of off-cuts; *Quarto Catalogue*, IX.i, p.10.

compilation of astrological texts, exhibits a similar juxtaposition of neat copying and attention to rubrication and initials with lower grade supports: the writing is executed on parchment of variable quality, including some off-cuts.[44] This contrast between easily salvaged, lower grade materials and apparent investment in more effortful copying is typical of many kinds of recycling. This contrast suggests that choices were made to economise in some aspects of production but not in others. Opting for parchment as a writing support was a priority, even if it sometimes had to be low grade to fit a budget, and perhaps opting for cheaper parchment off-cuts meant that more money, in the form of time, could be spent on the labour of writing the text.

Yet, despite the attention to other aspects of the book's design, there was an abiding willingness to use evidently cheaper parchment cuts. Off-cuts were often scattered throughout the book block; they could be more or less noticeable. The aforementioned copy of *The Prick of Conscience* features this kind of uneven distribution. When compared with the rest of the parchment, which is cut neatly with straight, regular edges, the off-cuts in this book are particularly conspicuous. On six leaves, scattered sporadically throughout the book, the fore-edges of the parchment are dramatically and noticeably curved.[45] The darker edges to the skin make the off-cuts even more eye-catching against the other parchment used. The collection of astrological texts also has off-cuts scattered throughout the book.[46] The last off-cut in this manuscript is a particularly fine example of the hue of the hide darkening towards the outer limit of the feasible parchment area: this discolouration is caused by the uneven stretching of the hide at the edges.[47] Also, all three of the off-cuts in the manuscript are much yellower and more horn-hued than the creamy-coloured leaves that intersperse and surround them, and all the off-cuts grow noticeably darker towards the edges of the hide.

Was this arrangement deliberate, and when books contained noticeably curved or dark-edged parchment, would people have noticed? The distribution of off-cuts in both BodL, MS Digby 14 and BodL, MS Digby 15 begs the question of whether visibly 'cheaper' material – such as off-cuts marked by their curved edges, darker shades and stretch marks – might have been purposely arranged in this way. Was this cheaper material perhaps, by design, hidden by being tucked away relatively

---

[44] BodL, MS Digby 15 measures 160 mm × 110 mm; *Quarto Catalogue*, IX.i, p.11.

[45] BodL, MS Digby 14, off-cuts at ff. 32, 87, 109 and 111-113.

[46] BodL, MS Digby 15, off-cuts at ff. 34, 62, and 134.

[47] BodL, MS Digby 15, f. 134. Kwakkel described the discolouration at the edges of the stretched hide in 'Holsterbooks and Off-cut Manuscripts'.

unobtrusively throughout the book? That might be the intention, yet, though they are scattered, when we leaf through either of these manuscripts the off-cuts are still conspicuously different from the other parchment. Though not everyone might notice, or mind, cheaper materials in books, this striking difference in quality would have been recognisable to anyone familiar with the processes of making parchment.

To try to understand these cases of off-cut use, it is helpful to reconsider the stage at which we imagine off-cuts being used. Maybe these materials were available close to the place of production, and could be entertained as a choice for cheaper production from the beginning of a project? For example, they would be useful for people who were likely to be eking out materials to make books as frugally as possible, such as university students and amateurs copying for their own use. So, rather than imposing an idea of off-cuts as being 'discarded', or thinking of them as part of a throwaway culture, we can instead characterise off-cuts as having latent potential for multiple other uses.[48] The people handling off-cuts were aware that these materials had a range of other functional uses: they could be boiled into glue by binders, or redeployed as writing supports for notes or drafts (as discussed in chapter 1).[49] These possible uses, and use-values, were weighed up by people who made books, and in some cases there was forethought and a planned process of production that actively incorporated off-cuts, and in others there was an openness to using such materials. These examples have shown that makers of books sometimes salvaged these by-products of the creation of parchment and, arguably, they did this because they were aware of their potential as recycled material for books as well. This also holds true for other scraps of parchment used to make books.

Reinforcing strips or sewing guards

It was relatively easy to repurpose other small fragments of parchment to help protect a book's structure. Layered scraps could be used as spine linings to provide padding, and thin strips were sometimes used to strengthen and help to sustain sewing structures.[50] The use of reinforcing strips in books suggests that late medieval scribes, binders, or readers believed that medieval paper was not as resilient as parchment

---

[48] Kwakkel, 'Discarded Parchment', mentioned in the title and at pp.238-9.

[49] For more on trimmings used to make glue, see Reed, *Ancient Skins*, p.54.

[50] For a report on the conservation of fragmentary spine linings and guards discovered in 2014 in Cambridge University Library, see Bridget Warrington, 'Conservation Report on the Pembroke Fragments', online, <https://www.english.cam.ac.uk/manuscriptslab/conservation-report-on-the-pembroke-fragments/> (accessed 5 January 2017), particularly figs. 7 and 8.

against the tearing effect of sewing structures.[51] Up to the 1480s, these sewing guards were typically used to protect each individual gathering in a paper book block, and by the end of the century this reduced to one or two at each end of the book block.[52] During the fifteenth century, many book producers chose to add tough parchment strips to counteract the risk of tearing and to promote the longevity of the new book. These parchment reinforcing strips could be sliced from good cuts of blank parchment, from parchment that bore writing, or even from off-cuts or other fragments or trimmings.[53] Any of these forms of parchment could be cut relatively easily into narrow reinforcing strips.[54] The straightforward reuse of these small pieces of parchment has much in common with off-cuts. Both kinds of fragments were formed quickly and simply, with little processing beyond cutting with a blade. Like off-cuts, reinforcing strips are by-products, generated by another customary process of making leaves: trimming the edges of sheets of parchment.

There were possibilities for generating multiple reinforcing strips at once, either by shredding one large piece of parchment into many ribbons, or by gathering up the trimmings left over from carving through the edges of a stack of parchment, perhaps on its way to becoming a stock of evenly-sized material, or a stock for a specific book block. What may be seen in some manuscripts are identifiable batches of strips, deployed throughout a manuscript, which were likely to have been made from the same book, or document, or possibly even cut from the same leaf. For example, in a late fifteenth-century miscellany including works by Chaucer and Lydgate there are reinforcing strips around and inside each of the paper quires (see figure 2, supplement, p.12).[55] This added material was mostly cut from the same source: on one side is a fourteenth-century text of liturgical directions and on the other, written upside down, are fifteenth-century documents of accounts – already a sheet used and then reused

---

[51] *Bindings Thesaurus* notes of *sewing guards* that "it was thought that paper alone would not be strong enough to prevent the sewing thread tearing through the gatherings of bound books with paper leaves."

[52] *Bindings Thesaurus* also notes that sewing guards are "rarely found in the sixteenth century."

[53] Ker refers to 'reinforcing strips' in *Pastedowns,* p.vii; also known as *sewing guards, sewing stays,* or *quire liners,* in *Bindings Thesaurus*.

[54] In the fifteenth century, cutting was achieved either with a penknife, or perhaps with shears or scissors. Jane Cowgill, Margarethe de Neergaard, Nick Griffiths, *Knives and Scabbards* (Woodbridge: Boydell, 2000), p.60.

[55] HEHL, MS HM 144; Dutschke, *HEHL Catalogue*, pp.197-203.

for another purpose.[56] The surviving reinforcing strips constitute a third reuse of this parchment. That strips of this kind were possibly made in batches, as this single-source example suggests, leads us to understand better the range of ways in which they may have circulated. Nicholas Pickwoad suggests that 'economies' govern the making of small, recycled scraps generally, a principle which can be readily applied to the batch-production of reinforcing strips.[57]

Reinforcing strips are added to books to strengthen the binding of the whole book block by supporting the sewing of the quires (the gatherings of parchment or paper). These strips appear, from the vantage point of the reader viewing the book, as narrow stubs poking out from between regular leaves. Two typical-looking books that include reinforcing strips are copies of Chaucer's *Troilus and Criseyde*.[58] The stubby strips either lie flat, because they have been pasted on to adjacent leaves,[59] or they stand up separately, as in both manuscripts of *Troilus*. Unfixed reinforcing strips, attached only by the sewing structures and not pasted down with adhesive, often look like the tiny remainders of truncated leaves. However, despite this resemblance to cancelled leaves, reinforcing strips are revealed by their arrangement. The strips are most commonly used in order to prevent the thread with which the binding is sewn from tearing through paper leaves, and therefore are normally located either around, or in the centre of, quire gatherings where the stress on the paper is greatest. The most committed application of this protective method involved using reinforcing strips both inside each centrefold and outside each quire. In addition to the aforementioned miscellany with reinforcing strips from documents, this can also be seen in a fifteenth-century collection of sermons, still in its original binding. The parchment strips remain intact, tucked into and enclosing each quire.[60] This thorough attention to detail thereby diminished the risk of tearing the paper leaves.

---

[56] Numerous details are legible on the strips in HEHL, MS HM 144, including the names of monks, dates, and the Augustinian priory Bisham Montague (Berkshire) to which it is thought this source material once belonged; Jean-Pascal Pouzet has also suggested a connection with this Augustinian priory, 'Southwark Gower: Augustinian Agencies in Gower's Manuscripts and Texts – Some Prolegomena', *John Gower: Trilingual Poet: Language, Translation and Tradition*, ed. by Elisabeth Dutton, John Hines and R. F. Yeager (Cambridge: Brewer, 2010), pp.11-25, at p.17.

[57] Nicholas Pickwoad notes this of spine linings and endleaf guards, in 'The Use of Fragments of Medieval Manuscripts in the Construction and Covering of Bindings on Printed Books', in Brownrigg and Smith, *Fragments*, pp.1-20, at p.6.

[58] BodL, MS Rawl. poet.163, strips at ff. 14-15, 25-26, 37-38, 56-57, 64-65, 72-73, 80-81, 88-89, 101-102, 109-110, this manuscript also includes a poem by Chaucer, entitled 'To Rosemounde'; Seymour, *Chaucer Catalogue*, I, pp.65-6; BodL, MS Selden supra.56, strips at ff. 6-7, 20-21, 34-5, 48-9, 62-3, 76-7, 90-91, 103-4; Seymour, *Chaucer Catalogue*, I, pp.63-4.

[59] Strips are adhered to the pages in BodL, MS Selden supra.56, ff. 90-91.

[60] For example, Worcester Cathedral Library, MS F.121; Thomson, *Worcester Catalogue*, p.83.

Although they can be made from unblemished, 'new' parchment, reinforcing strips were also made from recycled material. In the two copies of *Troilus and Criseyde*, reinforcing strips used at the centrefolds of quires have traces of script on the strips used in each of these manuscripts, though the writing is not always legible. It is likely that the source for the reinforcing strips used in one of them was a document of some kind. On some of the strips what might be names, numbers and dates, perhaps the name "John" on one strip, are more or less legible.[61] The length of the text running horizontally most of the way along the spine suggests that the writing was arranged in long lines rather than columns. This was the typical layout of documents in the fifteenth century.[62] So despite the almost entirely illegible words, the format of the parchment and the script indicate former documentary use. Thus, documents could be repurposed as reinforcing strips in order to make books sustainable. And ironically, though reinforcing strips are destroyed to some extent by being cut up, rather than being lost forever in this process; in their new form as small fragments they survive and preserve other texts.

Quire guards

Quire guards serve a similar purpose to reinforcing strips, in defending the material from being shredded by the sewing that holds the book block together. However, guards are usually larger in form. They are normally the same size as the rest of the leaves in a manuscript. Being more substantial, they offer additional protection to the quires by acting as bracketing leaves to each unit in the book. In this way, quire guards acted as a sort of internal flyleaf. As the fifteenth century wore on, more and more books were made of paper, and the difficulty with binding these books was paper's liability to tearing. The sewing holes are weak spots where forces applied to the book are magnified. Pulling leaves away from the spine exerts considerable stress on the sewing structures that hold the book together, which can result in tearing. The task that the guards perform relies on parchment's material properties: its particularly tight structure withstands stresses better than paper and therefore mitigated serious damage. Parchment's resilience, its ability to withstand rubbing and tearing, also made it highly appropriate for making quire guards. By consolidating the integrity of the quires, guards represented a cautious way to promote the durability of the book as a whole.

---

[61] BodL, MS Rawl. poet.163, strip at ff. 14-15.

[62] See comparable examples of documents in L. C. Hector, *The Handwriting of English Documents* (Dorking: Kohler and Coombes, 1980), pp.80-3, plates XII-XV.

Parchment quire guards are often readily noticeable in amongst paper leaves. A copy of the Wycliffite text *Rosarium theologie* features such parchment quire guards, placed at the centrefold and surrounding each paper quire.[63] The contrast of parchment and paper is visually striking and distinctive to the touch, and the distribution of quire guards was sometimes noticeable in the book block.[64] Endowed with the necessary material qualities, parchment reinforced each quire, and thus, the whole book. Likewise, a collection of texts by Bernard of Clairvaux, Hugh of St Victor, and St Jerome, among others, is made from paper, except for the inner and outer bifolia of each quire, which are guards made of parchment leaves.[65] This is a manuscript still in its original, late fifteenth-century binding, so we can be confident that this layout of material dates from that time. In both examples, parchment quire guards are found in conventional formats and constitute tangible efforts to sustain the manuscript.

Quire guards may be made from new parchment; however, one manuscript includes quire guards recycled by palimpsesting. It is uncertain how unusual this example might be. A series of extracts from Wycliffite Sunday epistle sermons has been rubbed down and used to support, protect and strengthen quires in a compilation of scientific texts, including astronomical and medical texts (see figure 3, supplement, p.13).[66] These texts were written in several hands, ranging from neatly executed small anglicana-influenced secretary, to larger, more sprawling secretary hands. The palimpsests have been bound in to the manuscript either to enclose the outside or to sit in the middle of a quire.[67] Five are complete leaves, which have been trimmed, and five are individual half leaves.[68] All the palimpsests have been rotated through ninety degrees (clockwise), so that the columns of the undertext now appear

---

[63] Worcester Cathedral Library, MS Q.15: quires I to XVII – although, XVII is made entirely of parchment, Thomson, *Worcester Catalogue*, p.129.

[64] BodL, MS Laud misc.735 is a substantial paper manuscript copy of texts by Hoccleve and Lydgate, which has noticeably mixed-quality parchment quire guards, and the manuscript measures 305 mm × 220 mm; *Quarto Catalogue,* II, pp.522-523; this manuscript is discussed in chapter 3 for signatures inscribed in the book, and a heavily annotated back flyleaf.

[65] Worcester Cathedral Library, MS F.114, Thomson, *Worcester Catalogue*, p.75.

[66] Oxford, Hertford College, MS e.4. The rest of the manuscript is written on paper and has been dated to *c.*1400 by H. O. Coxe, known as 'MS 2' in Coxe, H. O., ed., 'Codices MSS Aulae B. Mariae Magalenae', *Catalogus Codicum MSS. Qui in Collegiis Aulisque Oxoniensibus Hodie Adservantur* (Oxford: OUP, 1852), II, pp.5-6.

[67] Oxford, Hertford College, MS e.4, palimpsest quire supports are located at ff. 2, 19, 42, 43, 50-1, 58, 59, 108, 125, 138-9, 195, 196, and 209.

[68] Oxford, Hertford College, MS e.4, complete leaves around the outside of quires: ff. 43 and 58, 50 and 51, 108 and 125, 196 and 209. Complete leaves in the middle of a quire: ff. 138-9. Half leaves: ff. 19, 42, 59, and 195 (f. 2 is illegible).

to run across the folio. Of the fourteen palimpsests used as quire guards, some of the traces of the previous text are legible enough be securely identified as known Wycliffite sermons.[69] Although they have been scraped, the layout of the undertext indicates that the parchment leaves were also trimmed down to be compatible with their new setting.[70] Thoughts towards protecting the new text and its functionality for years to come can be inferred from the presence of the quire guards: in this example, both kinds of sustainability – durability and reusability – come together.

These quire guards and reinforcing strips all demonstrate how parchment could be deployed for its capacity to shield and pad out the whole book. Both unused and previously-used parchment could be added to a paper book to make it more resilient. Sometimes this resulted in the destruction of documents or other texts on the parchment sheets, in the service of protecting paper from sewing stresses or rubbing. Used – or reused – because of its physical properties, parchment was the perfect material for this task. Though sewing structures were by this time well-developed, it is perhaps ironic that the sewing and binding techniques designed to preserve the book block sometimes tore through leaves. Only by adding parchment, in the form of quire guards and reinforcing strips, could book producers improve the sustainability of the whole book. In addition to minimising the effects of tearing stresses at sewing holes, then, quire guards also helped to limit the damage caused by friction between different sections of the book, much like flyleaves and pastedowns.

Flyleaves and pastedowns

Medieval flyleaves and pastedowns (also known collectively as *endleaves*) survive in a large proportion of medieval manuscripts. Binders and other bookmakers secured material for guarding the beginnings and endings of their manuscripts from superfluous deeds, letters, superseded canon law, old liturgy or simply worn-out books.[71] Blank parchment was used only rarely for making endleaves, which were

---

[69] Ann Hudson, *English Wycliffite Sermons* (Oxford: Clarendon Press, 1983), I, pp.94-6; *IMEP*, VIII, p.37.

[70] Hudson, *English Wycliffite Sermons*, I, p.95, proposes that "The original leaf size must have been approximately 300 mm by 220 mm; the written frame approximately 223 mm by 152 mm."

[71] G. S. Ivy, 'The Bibliography of the Manuscript Book', *The English Library Before 1700*, ed. by Francis Wormald and C. E. Wright (London: The Athlone Press, 1958), pp.32-65, at p.52-53; Szirmai, *Archaeology*, endnote 11, at p.278, suggests that the "large scale" use by binders of outdated or illegible manuscripts began in the fifteenth century, and cites Greek and Irish texts cut up for pastedowns at St Gall in the rebinding campaign of 1436-1461.

more "often of low quality" parchment or "discarded manuscript leaves."[72] It is often difficult to determine the dates of such reuses precisely, and many may well have been added during later rebinding campaigns. Some pastedowns and flyleaves used as jotters by medieval hands, and that places them more securely as pre-Reformation instances of reuse; some others occur in original medieval bindings (the selection of examples has been guided by these limiting factors).

Many fifteenth-century manuscripts did have contemporary or older endleaves, however, there is a tendency to conflate the presence of flyleaves and pastedowns in medieval manuscripts with the work of post-Reformation binders. In his magisterial study *Fragments of Medieval Manuscripts Used as Pastedowns in Oxford Bindings*, N. R. Ker suggests that pastedowns found in medieval manuscripts are largely a sixteenth-century phenomenon. He points out that pastedowns were usually indicative of Oxford or Cambridge binderies, and "were used during a longer period at Oxford than elsewhere, regularly between c.1520 and c.1570 and commonly or occasionally during the half-century on either side of these limits."[73] While this is evidently the case in the manuscript record, was medieval manuscript material reused to make flyleaves and pastedowns earlier, during the fifteenth century too? After all, as Alexandra Gillespie has emphasised, "old books supplied handy material to binders long before the Reformation."[74] The following case studies focus, as far as possible, on verifiably fifteenth-century reuses of old books.

The primary purpose of a flyleaf is to protect the book block. Although one single flyleaf cannot properly cushion a book block, it may at least minimise the "rubbing [of boards] against the first and last leaves of the text," especially when those boards are heavy, as they need to be in large manuscripts.[75] Weighty wooden boards were often used in the bindings of large-scale manuscripts with many unruly parchment leaves, as significant closing pressure was required to keep the book shut. The flyleaves of a fifteenth-century manuscript of sermons on the Gospels materially demonstrate the successful minimisation of wear from rubbing.[76] This is a substantial, heavy manuscript, measuring 280 mm × 205 mm (with equally substantial boards).

---

[72] Szirmai, *Archaeology*, p.178, for diagrams of endleaf constructions in Gothic bindings, see fig. 9.2 on p.179.

[73] Ker, *Pastedowns*, p.vii.

[74] Gillespie, 'Bookbinding', *PBE*, p.161.

[75] Ivy, 'Manuscript Book', p.52.

[76] BodL, MS Barlow 24, f. 2: "Dominus Thomas Noly est huius libri verus possessor", "Lord Thomas Noly is this book's true owner"; *Summary Catalogue*, II.ii, p.1059.

The flyleaves were taken from a relatively contemporary manuscript: a fifteenth-century Book of Hours, with writing executed in a large module textura. These leaves have been bound in upside down. They are also – significantly – marked by pink stains, where colour has transferred from the turn-ins of the cover due to rubbing. This pigment transfer, which is relatively common, indicates the success of flyleaves such as this in bearing the brunt of the potentially destructive friction between the book block and the boards.

Similar marks, accumulated over years of rubbing can be seen in numerous manuscripts; one further example is a manuscript of historical and medical writings written in Canterbury in 1465 and probably bound there too.[77] The manuscript remains bound in a late medieval binding made of dark tanned leather, decorated with stamps. Its front and back flyleaves, taken from a fourteenth-century civil law manuscript, were formerly pastedowns: the flyleaves have left offset ink traces on the inside faces of front and back boards.[78] In addition to offset ink, the leaf is heavily marked by dark stains, residues of pigment which have transferred from the abutting dark leather turn-ins. Thus, the flyleaves in both of these manuscripts were subjected to rubbing, which is marked by traces of pigment from the turn-ins, and which demonstrate the successful, sacrificial, protective capability of flyleaves.

In addition to making flyleaves with materials from relatively contemporary books written in the fourteenth or fifteenth centuries, much older fragments of parchment could be reused as flyleaves in the fifteenth century. For instance, an older leaf, this time dating to the tenth century, was taken from a Gospel book, then unevenly folded and added to the front of a fourteenth-century manuscript of texts and tables of logic, then bound during the fifteenth century.[79] The leaf may have been added to the book block at any time, perhaps even soon after the book block was written, or, at any point until it was rebound in the fifteenth century.[80] The old leaf is noticeably darker, dirtier parchment than the rest of the manuscript, has been folded at an odd angle and sewn in lopsidedly. It is highly decorative in its own right, with

---

[77] BodL, MS Bodley 648, inscription in the top margin of f. 5r: "Iste liber constat .W. Boolde mon*a*cho Ecc*les*ie *Christi* Cantuarie. anno d*omi*ni M^{o}CCCC^{o}lxviij", "This book belongs to W. Boolde monk of Christ Church Canterbury. Anno domini 1468"; *Summary Catalogue*, II.i, pp.291-2; Geoffrey D. Hobson, *English Binding Before 1500*, The Sandars Lectures 1927 (Cambridge: CUP, 1929), p.15.

[78] BodL, MS Bodley 648, ff. i, 129.

[79] Worcester Cathedral Library, MS F.72, ff. 1-2, Thomson, *Worcester Catalogue*, p.46. The binding dates to the fifteenth century, although it is not thought to be this book's earliest binding.

[80] Indeed, how long it had been separated from its original context is unknown.

architectural designs, grotesque faces and colourful inks. Despite its casual treatment, and scrappy presentation, perhaps this leaf possessed some interest to whoever slipped it into the front of the book, as a decorative thing or an object of curiosity or a token of a bygone era. Nevertheless, it has existed and acted in concert with the sleeves of the overcover and the pastedowns to assist in protecting the manuscript from damage.

Sometimes flyleaves were recycled from parchment leaves that had been partly-prepared for writing. For example, in BodL, MS Bodley 731 the front bifolium (two leaves out of eight flyleaves at the front of the book) and the back bifolium and pastedown had all been ruled for writing.[81] The back flyleaves and pastedown were both ruled in in the same fashion. The manuscript measures 230 mm × 160 mm, and on the ruled leaves the columns measure between 87-89 mm in width, with the same pattern ruling of lines across each page. The front flyleaves were ruled – but not written on – and now bear later markings such as signatures. The back flyleaves and pastedown were partly used: there is writing on ff. 107^{v}-108^{r}, and f. 109^{r}. The ruling and vestiges of writing on these flyleaves do not correspond to the patterns or handwriting used in the main text. Similarly recycled parchment can be seen in a manuscript with ruled but unwritten parchment at both front and back, and another manuscript with flyleaves made from a Gradual, on which the notes had not yet been entered.[82] The parchment used for these unfinished campaigns of production have been reused for protective purposes in this manuscript.

This protective function is also the main purpose of pastedowns. However, as Graham Pollard categorically stated, "Pastedowns do not in fact strengthen a binding."[83] Instead, they are often used to shield expensive decoration on the front page of the book block, and may even be decorative in their own right.[84] Therefore, pastedowns serve a similar purpose to quire guards or flyleaves, but are adhered to inner sides of the binding boards. A typical example can be seen in a manuscript of legal texts and Royal Forest administration, which has a protective leaf pasted inside

---

[81] BodL, MS Bodley 731, ff. iii-iv (of flyleaves ff. iii-x), and ff. 107-108, and pastedown at f. 109. The fifteenth-century binding is in whittawed leather. As well as these partly-prepared, ruled flyleaves, the front pastedown is an upside-down fifteenth-century themata for sermons. On the front pastedown is a purchase note dated 1489 naming Robert Elyot as the owner, discussed further in chapter 4. *Summary Catalogue*, II.i, pp.496-497.

[82] BodL, MS Bodley 809, ff. i^{v}-v^{v}, ff. 103^{v}-107^{v} and the back pastedown, *Summary Catalogue*, II.i, p.482; BodL, MS Bodley 787, ff. 114-115, the variation from the Sarum use points to Tewksbury, *Summary Catalogue*, II.i, p.457.

[83] Graham Pollard, 'On the Repair of Medieval Bindings', *The Paper Conservator*, 1 (1976), 35-36, at p.35. This statement does not include limp covers, or pasteboard bindings, which of course may be strengthened significantly by a pastedown or other parchment or paper lining.

[84] Smith, *The Title Page, its Early Development, 1460-1510* (London: The British Library, 2000), p.21.

the front boards.[85] While the main texts were written in cursive hands in the second half of the fifteenth century, the crumpled pastedown was composed earlier in the same century in large module textura and is replete with red and blue ink decoration, and musical notation on four line staves.[86] Lumpy knots underlie the pastedown where the sewing supports have been fed through channels in the board. In addition, protecting the main text block from being rubbed into holes by knots such as these, which sit slightly proud of the board, is one of the key reasons for pastedowns, as for flyleaves.

Limp covers

Parchment can offer protection in other ways, for instance when wrapped around a book as a limp binding. In the most general sense, limp bindings, or more properly limp covers, are book coverings that do not have wooden boards, as suggested by one of the medieval terms for these structures – *libri sine asseribus* (literally, 'books without boards').[87] At the time, notes about the cost of bookbinding sometimes distinguished between the cost of binding (*ligacio*) or binding and covering (*coopertura*).[88] A contemporary English poem *Mum and the Sothsegger* refers, as Gillespie has noted, to boardless pamphlets as "forrels".[89] In the medieval period these boardless books were covered with soft leather, fabric, or parchment. Moreover, like flyleaves or pastedowns, parchment wrappers were sometimes made from "recycled older documents."[90] Indeed, like those other protective formats, wrappers also testify to parchment's capacity to be reused. This capacity for reuse is one of the two key elements of sustainability. The other pertinent aspect of sustainability is that, again

---

[85] BodL, MS Lyell 32 is in a "contemporary binding in wooden boards covered with white leather", and survives with the original sewing intact, a front pastedown and a former pastedown bound as a flyleaf at the back (f. 86), as noted by A. C. de la Mare, *Catalogue of the Collection of Medieval Manuscripts Bequeathed to the Bodleian Library, Oxford by James P. R. Lyell* (Oxford: Clarendon Press, 1971), pp.75-80, at p.75.

[86] The front pastedown of BodL, MS Lyell 32 was part of a noted Gradual, and contains parts of the 'Agnus dei' and 'Credo'; identified by de la Mare, *Lyell Catalogue*, p.80. Visible to me, on the upper side of the pastedown, are the following words of the 'Credo' visible from "omnium et invisibilium" down to "descendit de celis". On the reverse, where the pastedown is lifting from the board, visible to me are staves in red ink, the word "Agnus" (with blue ink initial **A**) and, further down, the phrase "tollis peccata mundi" from the 'Agnus dei'.

[87] I will use the terms 'limp bindings' and 'limp covers' interchangeably, since both terms are used by scholars, *Bindings Thesaurus*, *limp covers*, online, <http://w3id.org/lob/concept/1423>.

[88] H. E. Bell, 'The Price of Books in Medieval England', *The Library*, 4th ser., 17:3 (1937), 312-332 at 322.

[89] Alexandra Gillespie, 'Bookbinding', *A Companion to the Early Printed Book in Britain 1476-1558*, ed. by Vincent Gillespie and Susan Powell (Cambridge: Brewer, 2014), p.92.

[90] Monica Langwe, *Limp Bindings from the Vatican Library* (Sollerön, Sweden: Monica Langwe, 2013), p.27.

like flyleaves or pastedowns, parchment wrappers (whether or not they are recycled) can help to conserve other materials.

Unlike flyleaves or pastedowns, in the manuscript record, fifteenth-century limp bindings are relatively rare. There is "little doubt" according to Gullick and Hadgraft, that "there once existed a large number of books with limp covers of parchment, tanned or tawed skin, and even textile." They note a bequest of 1392 and a catalogue of 1400 in each of which perhaps a third of books are described as *in quaterno* or in limp covers.[91] But they go on to assert that "there are now very few [limp bindings] of British origin as nearly all of them have been rebound in modern times."[92] Perfectly serviceable limp bindings have long been at risk of rebinding, often due to a lack of interest from scholars and collectors, who may be more interested in luxurious bindings or who may have a penchant for standardized bindings.[93] They are also, like most book components, liable to partial or complete destruction through wear and tear.

There are few studies of limp bindings, so it is difficult to ascertain exactly how many might still survive in Britain. To give a sense of the possible numbers involved, Agnes Scholla's thesis surveys 89 medieval limp bindings from across Europe.[94] Given the apparent rarity of such survivals, it would not be fruitful, for this section, to make a comprehensive survey of a sample of books. The case studies that follow are therefore selected from the few known extant British limp bindings. Surviving British limp covers range from fully intact to more fragmentary examples. No matter their physical completeness or rarity, these case studies demonstrate that limp bindings had the potential to promote significantly the sustainability of the books they bound.

Limp binding describes just one type of binding among many medieval binding formats, which during the fifteenth century included leather covers over wooden boards which could be tanned leather or alum-tawed skin, and then might be

---

[91] Michael Gullick and Nicholas Hadgraft note: a catalogue of 1400 from a Premonstratensian house at Titchfield, in which 33% of the 224 volumes were in limp covers, and the bequest of nearly 100 books to Evesham by Prior Nicholas (d. 1392), of which "about one third had limp covers", in 'Bookbindings', *CHBB II*, pp.95-109, at p.107.

[92] Gullick and Hadgraft, 'Bookbindings', p.107.

[93] The post-medieval fortunes of medieval manuscripts often included later disbinding or rebinding. These actions are of course part of the longer history of the book, and are pertinent to its sustainability. Due to the defined scope of this thesis, these post-medieval fortunes are not included here.

[94] Agnes Scholla, 'Libri sine asseribus: zur Einbandtechnik, Form und Inhalt mitteleuropäischer Koperte des 8. bis 14. Jahrhunderts' (unpublished doctoral thesis, University of Leiden, 2002).

decorated with blind-tooling, stamps, rolls, or *cuir-ciselés*; treasure bindings; textile bindings; girdle-books; chemise or overcover bindings; and limp bindings.[95] Efforts to protect books could take other external forms, such as book bags (some kinds were known as *aumônières*), satchels, or chests and shelving arrangements.[96] Amongst all these protective options, limp bindings constitute a somewhat capacious category, as the name refers to a range of specific, different forms of boardless bindings, in "a wide variety of technical constructions."[97] The vagueness of terminology associated with this group of bindings may have its roots in this variety. Medieval libraries used a range of terms, such as *libri sine asseribus* (books without boards, as mentioned), *in quaterno* (as noted in the monastic library catalogue of c.1400, mentioned above),[98] or *sine postibus*,[99] or *in pergameno*,[100] all of which could be used to catalogue limp bindings, usually in unclear or interchangeable ways.[101]

It is often assumed that fifteenth-century parchment wrappers were always intended to be temporary – and therefore, in one sense, unsustainable. Perhaps in light of the perceived hierarchy of bookbinding structures at this time, the relative cheapness or low grade of wrappers compared with other kinds of binding, especially compared with solid wood boards and expensive decoration, added to this impression of impermanence.[102] It is also true that later, especially in the early modern period, limp bindings *were* typically used as a cheap trade or retail binding solution, to protect

---

[95] Gillespie follows Frederick A. Bearman's distinctions between the terms chemise, wrapper (fully detached coverings), and overcover (secondary covers without flaps), in 'Bookbinding', *PBE*, p.151; Frederick A. Bearman, 'The Origins and Significance of Two Late Medieval Textile Chemise Bookbindings in the Walters Art Gallery', *Journal of the Walters Art Gallery: Essays in Honor of Lilian M. C. Randall* 54 (1996), 163-187.

[96] Bearman, 'Textile Chemise Bookbindings', pp.168-169.

[97] Szirmai, *Archaeology*, p.98.

[98] N. R. Ker defines a *quaternus* as "usually a fairly light-weight book bound in a limp parchment cover" in 'Oxford College Libraries before 1500', *Books, Collectors and Libraries: Studies in the Medieval Heritage*, ed. by Andrew G. Watson (London: The Hambledon Press, 1985), pp.301-320, at p.306; and mentions it again in N. R. Ker, 'The Books of Philosophy Distributed at Merton College in 1372 and 1375', in Watson, *Books, Collectors*, pp.331-378, at p.358; *DMLBS*, *in quaterno/quaternus, n.*, sense 4b, in a "notebook, booklet, pamphlet".

[99] *DMLBS*, *sine postibus*, "without posts (that is, without sewing supports)".

[100] P. R. Robinson notes that "Many library catalogues refer to works which are said to be bound in limp parchment or *in pergameno*," in 'The "Booklet": A Self-Contained Unit in Composite Manuscripts', *Codicologica: Essais typologiques* 3 (1980), 46-69, at p.52.

[101] Szirmai, *Archaeology*, p.285.

[102] Nicholas Pickwoad, 'The Interpretation of Bookbinding Structure: An Examination of Sixteenth-Century Bindings in the Ramey Collection in the Pierpoint Morgan Library', *The Library*, 6th ser., 17:3 (1995), 290-249, at pp.213-17.

commercially-produced books in transit, storage or on the shop floor.[103] This is perhaps another source of the pervasive association of later, post-medieval limp bindings with transience – even fragility – which has been somehow applied to surviving medieval limp bindings. Whether it is their similarity to trade bindings, or their liability to be rebound in more substantial bindings, or simply their relative cheapness, all too often surviving medieval limp bindings are considered to be merely temporary measures.

But this is not the whole story: fifteenth-century limp bindings can be highly durable. After all, though rare, intact wrappers do still exist. Jan Storm van Leeuwen notes that fourth- to fourteenth-century wrappers "did not serve a very temporary purpose."[104] For example, a fifteenth-century confessor's manual and a late fourteenth-century collection of romances are still enclosed in fully-attached parchment wrappers.[105] As will also be discussed shortly, a range of wrapper-fragments have also endured. Inferior in quality though some of these surviving limp bindings may look, such as the waxy, stained wrapper with holes that enfolds a fifteenth-century scientific miscellany, many had the potential to last for a long time.[106] In his study of limp bindings, J. A. Szirmai argues against the assumption that all limp covers were somehow "temporary" and "inferior", calling this a "past misconception."[107] The notion of limp bindings as inevitably temporary things loses purchase further when we are reminded that even less evidently durable materials, like paper, were also used to cover fifteenth-century books. Some of these have survived too: the earliest known surviving paper wrapper dates to 1482.[108] In any case, it is a fallacy to think that those wrappers that *were* made for more temporary purposes, such as so-called 'trade bindings' in later ages, could not coexist with other kinds of wrappers, which were made to be durable and sustainable.

When they did not do so for temporary purposes, why did fifteenth-century people make limp bindings? Were these bindings particularly easy to make? Reed

---

[103] Pickwoad, 'Use of Fragments', p.3; Mirjam Foot, 'Bookbinding 1400-1557', *CHBB III*, pp.109-127, at p.111; and Joad Raymond, *Pamphlets and Pamphleteering in Early Modern Britain* (Cambridge: CUP, 2006), p.56.

[104] Jan Storm van Leeuwen, 'Review of Agnes Scholla's Thesis: *Libri sine asseribus*', *Quaerendo* 35:1 (2005), 150-152.

[105] SJC, MS S.35; BodL, MS Ashmole 33.

[106] BodL, MS Lyell 36, de la Mare, *Lyell Catalogue,* pp.92-101.

[107] Szirmai, *Archaeology*, p.286.

[108] Michèle Valerie Cloonan, *Early Bindings in Paper: A Brief History of European Hand-made Paper-Covered Books with a Multilingual Glossary* (London: Mansell Publishing Limited, 1991), p.4-5.

emphasizes the "remarkably simple construction" of limp bindings, which required "little or no adhesive and hence were produced easily in large numbers."[109] Yet, though many limp bindings were simple constructions, many surviving examples have also been recognised as "practical bindings of sound and even sophisticated construction."[110] This apparent discrepancy in interpretations of limp binding structures – were they simple or sophisticated? – has arisen for a few reasons. First, the vague application of the terms 'limp covers' and 'limp binding' has meant that some ingenious and decorative sewing structures, and some highly ornate covers, have been included in this category of binding. Second, Reed's analysis compares limp bindings with bindings that took longer to make, or involved adding adhesive, so of course he concludes that they are comparatively simple constructions. Finally, I would argue that what has been identified as the 'sophistication' of limp bindings lies in their very simplicity of construction. Most kinds of limp covers were, relative to other more substantial and expensive kinds of bindings described above, easier to make. In addition, their design could be elegant *and* economical – in the sense of being both simple in design and cheap to make.

As this debate over whether limp covers are somehow crude or elegantly simple in design might suggest, depending upon how elaborate a limp binding was intended to be, a series of different processes could be employed in its production. The only essential stages of construction were acquiring material, and using it to encase the body of the book. Arguably, a cover would not even have to be attached to a book block or a group of loose quires to constitute a limp binding of sorts. For the most basic structures, then, the cover may not have been sewn to the spine, or stab-stitched through the quire folds, at all, although if it was, the quickest, simplest method was tacketing (which will be discussed shortly). In this way, some limp bindings acted less like a binding, and more like a modern-day folder. Loose, folder-like covers are, though, even more susceptible to loss or destruction than other types of limp binding, making them rare survivals, and therefore more difficult to study.

Whatever further processes were undertaken beyond enclosing the body of the book, a piece of appropriate material had to be sourced. This material might be too big or too small, or might be formed by folding or trimming to size. Materials used for limp bindings included tawed skin or tanned leather, low grade or damaged new

---

[109] Reed, *Ancient Skins*, p.167.

[110] Gullick and Hadgraft, 'Bookbindings', p.108.

parchment sheets, or recycled manuscript leaves.[111] An example of a soft leather limp binding is bound into the front of BodL, MS Rawl. D.1220. These leaves were recycled from the binding of a manuscript dating from the late twelfth century.[112] The folios which immediately follow these leather 'flyleaves' of binding material are also made from recycled parts of the same older manuscript, and may have originally functioned as pastedowns.[113] Because they were cheaper, these lower grade pieces of parchment, which could include salvaged material and even off-cuts for especially small books, were a viable option for making particularly "frugal" wrappers.[114] For instance, enclosing a fifteenth-century scientific miscellany there is a wrapper which is similarly low in quality.[115] It is horny and thick, with follicle marks and one particularly large hole: these features made it a poor surface for writing. Yet, though lower grade, this piece of substantial, resilient parchment was remarkably well-suited to its protective purpose as a wrapper. Christopher Clarkson points to other streamlined, pragmatic aspects of limp binding design, which include their "light weight, mechanical yielding qualities, lack of distortion in varying atmospheres and the durability of their component materials."[116]

As well as protecting the books they encased, parchment wrappers could help to promote the fragmentary survival of other books, from which they were sometimes recycled. These wrappers were not only hard-wearing, like other parchment products, but also tangible examples of reuse. For example, the cover of a roughly made paper-and-parchment manuscript of astrological tracts and tables has been fashioned from a leaf of a fourteenth- or fifteenth-century religious treatise in French.[117] The handwriting of the French text is still visible on the surface of the parchment.

---

[111] Textiles could be considered 'limp bindings' of sorts, as mentioned earlier, but these survive very rarely, are usually studied as a separate phenomenon, and due to the limited scope of this thesis will not be addressed here. For more on textile bindings, see Bearman, 'Textile Chemise Bookbindings'.

[112] BodL, MS Rawl. D.1220, ff. xiv-xv; Macray notes that other leaves bound in as flyleaves by Rawlinson date to the sixteenth, seventeenth and eighteenth centuries, *Quarto Catalogue*, V.iv, p.356.

[113] BodL, MS Rawl. D.1220, ff. 1-2. Elsewhere in this manuscript, which contains a fifteenth-century astrological treatise on the twelve signs, are a number of illustrations. One of these full-page illustrations, on f. 32^{r}, depicts scribes and rubricators at work.

[114] Gillespie uses the phrase "frugal business" to describe cheaper strategies of bookbinding, such as restoring or repairing books, or using recycled materials, in 'Bookbinding', *PBE*, p.162.

[115] BodL, MS Lyell 36.

[116] Christopher Clarkson, *Limp Vellum Binding and Its Potential as a Conservation Type Structure for the Rebinding of Early Printed Books: A Break with Nineteenth and Twentieth Century Rebinding Attitudes and Practices* (Oxford: Christopher Clarkson, 1982 repr. 2005), p.1.

[117] BodL, MS Ashmole 366. Black notes that the "flapping cover" is a fourteenth- or fifteenth-century leaf, in *Quarto Catalogue*, X, pp.281-2.

Similarly, a fifteenth-century confessor's manual written in English and Latin has been bound in four leaves of canon law. This volume is heavily worn on the outer cover, which still has a horn button for fastening the wrapper closed and bears the inscription 'Confessio' in large letters. The canon law text is more legible on the well-protected inner lining.[118] A further example is another double-wrapper arrangement which encases a fourteenth-century collection of romances (see figure 4, supplement, p.14). The inner and outer wrappers were recycled from papal and clerical documents relating to the dioceses of Exeter and Sherborne (see figures 4b and 4c, supplement, p.15).[119] These wrappers are typical of the overt reuse of written-on or even, sometimes, decorated parchment as covering material. There has been no attempt to hide or scrape away the writing on the surface of the cover. This suggests that expedient, no-frills repurposing of material was the key aim of this kind of parchment recycling.

In the production of limp bindings, all further processes beyond the acquisition of material and enclosure of the book were optional. These other processes could include cutting, folding, layering, trimming, making turn-ins and flaps, making and attaching support strips and ties, tacketing, stab-stitching, other kinds of stitching, and dyeing, writing, or decorating. While limp bindings are – quite rightly – thought of as practical options, cheaper than books bound with boards, not all elements of limp binding fabrication are quite as parsimonious as they might at first seem. Surviving limp bindings indicate that the size of the available material mattered to their makers, so that these apparently meagre structures could consume a great deal of parchment in order to provide supplementary folds, layers, turn-ins, and flaps.

But before the maker turned to these other optional processes, there was a wide variety of possible methods of attaching the covers to the book block or quires. Tacketing or stab-stitching were quick and relatively simple ways of fastening the physical contents of the book to its limp binding, demanding minimal production

---

[118] SJC, MS S.35; James, *SJC Catalogue*, pp.293-4.

[119] BodL, MS Ashmole 33; Black notes that "The outer [wrapper] is a letter executor of a bull of pope Innocent VI for the presentation of Thomas de Silton to the vicarage of Columpton, in the diocese of Exeter, then vacant by the death of Peter Moleyns" and the "The inner cover is a very long and imperfect public instrument", in *Quarto Catalogue*, X, pp.14-15; and Gisela Guddat-Figge, *Catalogue of Manuscripts Containing Middle English Romances* (München: W. Fink, 1976), p.245, notes that the inner cover dates to 1377 and the outer to 1357.

time.[120] The strands used to secure bindings, whether they were tacketed or stitched, could be made of thread, cord, leather, or parchment.[121] In order to tacket, a strand of material was threaded through holes in the parts of the book to be secured together. Like tacketing, stab-stitching was also a cost- and time-saving technique.[122] This method was typically used to attach parchment wrappers as it was simpler than other ways of sewing, such as sewing methodically through the centre of the quire folds. Stab-stitching involved pushing holes for sewing through the quire, while folded, from front to back, so, literally stabbed through the full thickness of the quire. The parchment wrappers of a number of fifteenth-century manuscripts clearly show this typical technique. For example, a stab-stitched copy of some scientific tracts, including Chaucer's *Treatise on the Astrolabe*,[123] and the former wrapper of a collection of religious tracts, which has since been disbound and re-folded off-centre, making visible the lines of stab-holes from earlier stabbed sewing.[124]

Sometimes extra care is taken to stab-stitch a cover and its contents. The thirteen quires of the scientific miscellany (mentioned above) were secured with 'primary' (or 'quire') tackets, then secured with secondary tackets into a parchment cover. Multiple stab-holes remain, punctured through the parchment along the spine. The construction of this wrapper is of particular interest because not only were recycled quire 'twist' tackets used, but also the book block was attached to the cover with two or three thin strips of parchment, used doubled-up for strength.[125] While the thin strands of rolled parchment used to attach the cover to the book block would have been relatively inexpensive, and were salvageable by-products of trimming,

---

[120] Kwakkel, 'Commercial Organization', p.190. Here I follow the *Bindings Thesaurus* definition in referring to 'secondary tackets', which were "used to attach cases of parchment or cartonnage" to a book block; see also *Bindings Thesaurus* definitions of 'tackets' and 'primary tackets' for the differences between these features.

[121] Szirmai, *Archaeology*, at p.183, notes that white leather thongs, or cords, were commonly used for sewing Gothic manuscripts, and at p.182 mentions that in parchment manuscripts "quire tackets were regularly used in the fourteenth and fifteenth centuries."

[122] *Bindings Thesaurus, stitching*, "The [simple] process of holding bookblocks together by stabbing a material such as thread, textile tape, parchment or tanned or tawed skin thongs through the inner margin of an entire bookblock."

[123] SJC, MS E.2; James, *SJC Catalogue,* pp.138-9.

[124] BodL, MS Rawl. D.403: the limp binding is now bound into the back of the book that it once enclosed, at ff. 124-5; *Quarto Catalogue*, V.iii, pp.292-294; there are eight or nine holes in each slightly wobbly line of stabbed holes, mirrored on either side of the spine.

[125] BodL, MS Lyell 36, ff. 29-30: the recycled twist tackets that bear writing can be seen in the gutter between ff. 29-30 (quire II) and appear to be written in the same hand as the main text in this quire. These may have been leaves rejected during the process of copying, or leaves cut out later and reused for this purpose.

doubling-up the thickness consumed double the resources.[126] That a tangle of knotted strips is still intact, holding the wrapper in place, demonstrates the efficacy of this heavy-duty version of a standard sewing technique. When a single thin strand was sufficient for other wrapper designs, this structural feature indicates that additional care and effort was made to make the cover of this scientific miscellany secure. As this example has begun to show, the construction of limp bindings was not quite as simple, or as 'bargain-basement' as is so often assumed. On closer examination, these added efforts, which required materials and time, come into focus as insurances for sustaining limp bindings into the future.

Even more striking impressions of permanence are suggested by limp bindings with decoration. Decorative strategies hint at expectations of a useful future for the seemingly ephemeral structure. The decorations might be as low-key as the title 'Confessio' written on the outer wrapper of the confessor's manual mentioned previously, or the title inscribed on the wrapper of the paper manuscript of handwritten religious tracts just mentioned.[127] Although limp, the binding is marked up, presumably for identification, reference and use: it is labelled on the front cover with the words 'Mariale' and 'Liber mortis et vite'. Other features of limp bindings suggest further investment in longer-term use. These include decorative strategies such as dyeing, elaborate stitching, and tooling. An example of decorative stitching is found on a fifteenth-century copy of *Fasciculus morum* with English texts and receipts from Foston on the Wolds in Yorkshire.[128] Long vertical and chain stitches attach the text block to the spine, and are executed in an elegant pattern.[129] Another example, this time of remarkably lavish decoration, is the copy of the 'Statutes and Inventory of Rotherham College', which is covered with a blind-tooled, red-dyed tawed limp binding.[130] This kind of decoration was more common on bindings with boards, so it striking to find it adorning a limp binding.

Besides these rather remarkable examples of highly decorated bindings, even simple limp bindings sometimes needed surprisingly profligate amounts of material. A

---

[126] Although it is not known whether the attaching strips were made of recycled material (for they do not bear text or images or other evidence of former use), they were certainly designed to last.

[127] SJC, MS S.35 and BodL, MS Rawl. D.403 respectively.

[128] SJC, MS F.22; noted by James, *SJC Catalogue*, pp.190-1.

[129] Gillespie, 'Bookbinding', *PBE*, p.166.

[130] Hadgraft, 'Book Structures', p.33; M. R. James, ed., *A Descriptive Catalogue of the Manuscripts in the Library of Sidney Sussex College, Cambridge* (Cambridge: CUP, 1895), pp.2-9; Archbishop Thomas Rotherham founded Jesus College, Rotherham in 1483, *BRUC*, pp.489-491; and Nicholas Orme writes about the college in *Education and Society in Medieval and Renaissance England* (London: The Hambledon Press, 1989), pp.61-2.

binder making a wrapper from parchment was actually likely to be using more material than strictly necessary, and not just by doubling-up strands of parchment. Pickwoad has identified a particular tendency for binders to use overlarge leaves in their construction of manuscript limp covers.[131] This efficient method of limp binding wastes no time on unnecessary trimming. Other advantages to this technique include the fact that additional available material often provides double (or more) layers, strengthened turn-ins, and perhaps a wrap-around flap. This *apparent* profligacy is therefore defied by the relative efficiency of the whole process for the binder, in terms of both time and labour costs, and for its long-term effectiveness as a protective covering. Beyond the necessity of merely enclosing the book block, these optional features required extra material and effort.

Six manuscripts (discussed elsewhere in this section) feature turn-ins of some sort and therefore conform to this tendency to overuse material in limp binding construction.[132] Sometimes it looks as though turn-ins are a case of sheer overspill, and that it was the deliberate avoidance of expending additional effort in trimming that has resulted in a deep turn-in. Turn-ins were a simple step to take, and provided strength to vulnerable corners or sides. As the soiled state of side turn-ins in some manuscripts suggest, edges where turn-ins are commonly found are exactly where covers would be handled most. For example, a copy of a collection of religious texts has two side turn-ins, which, on a generally grubby cover, are especially darkened with dirt.[133] Although they entailed, in most cases, an extra inch or two of parchment, turn-ins offered significant advantages for limp binding producers looking to promote the survival of their book.

However, this reasoning cannot apply in the same way to turn-ins which show some other effortful attention, such as a cross-stitch to hold the fold in place, or trimmed edges. In these cases, was there perhaps an expectation that 'proper' bindings *should* have turn-ins? This may have derived from the necessity of turn-ins in manuscripts with boards, which result from securely adhering overhanging edges of leather covers on to the inside faces of boards. This idea of what constitutes a binding might explain why limp bindings feature turn-ins. To pick two examples of limp

---

[131] Pickwoad draws this conclusion from his work with post-medieval limp bindings, however, it is readily applicable to medieval limp bindings too, 'Use of Fragments', p.4.

[132] BodL, MS Ashmole 33; BodL, MS Ashmole 366; BodL, MS Lyell 36; BodL, MS Rawl. D.403; SJC, MS S.35; and SJC, MS S.54.

[133] BodL, MS Rawl. D.403 has no upper or lower turn-ins, though these may have been trimmed off at some point.

bindings with turn-ins: the cover of BodL, MS Ashmole 366 has small turn-ins at the top, and the back cover has a substantial flap,[134] and, in addition, the wrapper of BodL, MS Lyell 36 has turn-ins on all four sides.[135] At each corner, the folds of the turn-ins have been sewn together with a simple cross-stitch in dark thread, showing extra effort.[136] These examples offer clues as to why extra effort was expended on providing turn-ins: so that these bindings looked as they should.

Moreover, turn-ins usually consume a small amount of extra parchment, proportional to the whole wrapper. Layering uses more substantial quantities of parchment, perhaps doubled or tripled amounts. Many limp bindings are single ply yet nonetheless provide effective protection. For instance, the wrapper recycled from a French religious treatise is single thickness at the front, but double thickness due to an extra, turned-in flap at the back.[137] There is, then, something surplus to requirements in those limp-bound manuscripts which had an extra layer of parchment. No doubt the decision to insert extra sheets of parchment was dependent on the thickness, size, and quality of the parchment available, its affordability to the makers, and its perceived resilience to future wear. The cover of the copy of *Fasciculus morum* with decorative stitching (mentioned previously) is made from stiff, double-layered parchment, and the confessor's manual – as well as having turn-ins – is wrapped two-ply in canon law.[138] The extra thickness of the limp binding improved protection from dust, insect infestation, abrasion, spills, tears – all the usual mishaps that might befall a book – but also helped support the integrity of the whole structure.[139]

An intriguing example of relatively lavish, multiple-ply protection is found on the collection of romances previously mentioned, which includes *Roland and Ferragus*,

---

[134] BodL, MS Ashmole 366: 215 mm × 125 mm, turn-ins at the top of the front and back covers are 15 mm deep; the back cover is 125 mm wide with a folded-in back flap that measures 80 mm.

[135] BodL, MS Lyell 36: 200 mm × 135 mm, the large turn in at the lower edge is 115 mm at its deepest, but very uneven, there is a smaller turn in at the upper edge 50 mm approx., and overlapping these, turn-ins at the left and right edges of about 80 - 90 mm.

[136] It is unclear whether this is contemporary or a later repair.

[137] BodL, MS Ashmole 366.

[138] Respectively, SJC, MS F.22 and SJC, MS S.35.

[139] Bruce Barker-Benfield (Senior Assistant Librarian at the Department of Special Collections & Western Manuscripts at the Bodleian Library) and Nicole Gilroy (Head of Book Conservation at the Bodleian Libraries) both kindly answered my questions regarding the nature of limp bindings, especially in relation to humidity; as far as I am aware, there are no investigations into the particular efficacy of limp parchment covers as protection from humidity for the main book block, personal correspondence, October 2016.

Sir Otuel, and *Sir Firumbras*.[140] This manuscript was written in the fourteenth century and is still preserved together with its two wrappers, one folded inside the other. The two pieces of parchment formed a double-lined protective shell, around the rest of the book, which actually provides three layers of parchment, due to the extra folds made to fit the wrapper around the book block (see figure 4a, supplement, p.14). The inner cover is made of thinner parchment, which is perhaps the reason why it was folded in half, and then in half again, to fit the book block and to better protect the manuscript (see figure 4b, supplement, p.15).[141] The outer cover, on the other hand, is slightly thicker, stiffer parchment, and was kept single-ply and folded in three around the book block (see figure 4c, supplement, p.15).[142] As mentioned, these covers were fashioned from papal documents and the wrapper comes from the South West of England. However, the material that wraps the manuscript also features a holograph draft version of 800 lines or so of the text of *Sir Firumbras*, a text that is found again, in full, in the main body of the manuscript.[143] This is a remarkably rare survival of a draft that has survived together with the main copy of the text. Extraordinarily, the two versions therefore continue to coexist, the draft encasing a later version of itself like a second skin. This relatively low-quality, scrappy-looking binding involves extensive use of multiple layers of material, and care was taken to fold it into a protective enclosing wrapper.

A small, somewhat fragmentary late fifteenth-century manuscript of carols possesses both an array of turn-ins and a multiple-ply wrapper (see figure 5, supplement, p.16). In a remarkably tangible instance of the extravagant use of oversize parchment in a limp binding, this wrapper is also replete with such a long

---

[140] Also known as Sir Ferumbras or Sir Fyrumbras, as noted by Phillipa Hardman, 'Bodleian Library, MS Ashmole 33: Thoughts on Reading a Work in Progress', *Middle English Texts in Transmission: A Festschrift Dedicated to Toshiyuki Takamiya on his 70th Birthday*, ed. by Simon Horobin and Linne R. Mooney (Woodbridge, Suffolk: The Boydell Press, 2014), pp.88-103, at p.88. For further discussion, see S. H. A. Shepherd, 'The Ashmole Sir Ferumbras: Translation in Holograph', *The Medieval Translator: The Theory and Practice of Translation in the Middle Ages*, ed. by R. Ellis (Cambridge: Brewer, 1989), pp.103-121.

[141] BodL, MS Ashmole 33: the inner cover measures 450 mm × 415 mm. This cover has an additional overhanging flap of parchment. As Hardman notes, this manuscript presents a "very rare opportunity to see the 'foul paper' rather than the 'fair copy' state of a Middle English text", in 'Ashmole 33: Thoughts', p.88.

[142] BodL, MS Ashmole 33: the outer cover measures 255 mm × 430 mm.

[143] Nicholas Perkins and Alison Wiggins note that the material of the covers "suggests the composer was a clergyman of some sort with access to such materials," in *Romance of the Middle Ages* (Oxford: Bodleian Library, 2012), pp.64-66, at p.65; Beadle, 'English Autograph Writings', pp.255-6, at p.260.

flap that it can be folded right around the manuscript.[144] This profligacy is tempered by the parchment wrapper's low grade: it is peppered with a few holes and has rough edges. Yet, those raw edges belie the lack of trimming of this outsize leaf. The structure of this wrapper uses a large amount of parchment. Though the paper book block measures 146 mm × 105 mm, and the wrapper is a similar if variable height, the total width of the wrapper is 460 mm. The wrap-around section of the cover, when enclosing the songbook, extends from the back, overlays the front leaf of the wrapper, and ends in a thick turned-in hem that hooks around the spine and rests on the back. This extensive parchment wrapper is a remarkable example of sustainable efforts to support the durability of the book, achieved through the use of extra parchment.

So why did fifteenth-century people bind their books in limp parchment wrappers? Limp bindings, like any binding, help to protect books from dust, spills, mould, insect infestation, tearing, and abrasion. This can be seen in the marks of heavy wear on some extant wrappers, for example the soft parchment binding, on the paper manuscript of religious tracts, which is worn, dirty, and stained.[145] The cover is generally dark with wear and the build-up of grime over the years, however, it is also marbled with lighter worn areas, due to uneven rubbing of the outer surface. Wrappers were made of resilient parchment so that they could bear the brunt of these afflictions.

As well as these practical protective benefits, limp bindings were relatively cheap and elegantly simple in design. In their simplest forms, wrappers were not only relatively low in cost but also straightforward to produce. Even with 'optional extras' such as stitching, turn-ins, layers, flaps, or even decoration, limp parchment bindings were still cheaper, quicker and necessitated fewer skills to make them than books with

---

[144] James notes the "vellum wrapper folding completely round" SJC, MS S.54, *SJC Catalogue*, pp.294-6; Daniel Wakelin and Christopher Burlinson note the "tattered and rather stiff vellum case-type cover" and speculate that the cover may have been "made from an already-damaged piece of vellum, reused from some earlier binding or purpose", in 'Evidence for the Construction of Quires in a Fifteenth-Century English Manuscript', *The Library,* 7th ser., 9:4 (2008), 383-396, at pp.384-5.

[145] BodL, MS Rawl. D.403.

boards.[146] These features made them a feasible option in a range of milieux. Amateur book production, which was an important part of book production in the fifteenth century, may well have had a significant role in the creation of many such limp bindings. Even when made by more experienced binders or their apprentices, they would have been practical to produce. The most straightforward wrappers could be dashed off relatively quickly. Therefore, it was in part the simple nature of the processes and short amount of time required to make limp bindings that made them such an expedient way to effectively protect a book.

But limp bindings were not *just* used as cheap, practical alternatives to bindings with boards. In addition to being functional, they could be decorative in their own right, lavishly dyed, or tooled, or carefully marked up in carefully-executed handwriting. These features, among other less showy efforts to improve a book's chance of survival, imply hope for longevity. In her beautifully illustrated study of limp bindings at the Vatican Library, Monica Langwe notes that in the medieval period "the concept of conservation […] was more a process of extending the use of the book."[147] They indicate that books were prepared with both everyday use and with long-term protection in mind. They were an attractive, sustainable option: not only could they be made in a sustainable way, in the sense of being made from recycled or salvaged materials, where they lasted they also promoted the sustainability of a whole book. Even decoration could be useful in function: the aesthetic qualities of some of these limp covers might have promoted their survival.

Palimpsests

Salvaging material to make a wrapper or flyleaf (or slicing it up into small strips) is relatively straightforward, but making reclaimed resources reusable can involve substantially more effort. This is true of palimpsests. Palimpsests are pieces of parchment that bore writing which was effaced to make way, usually but not always, for a second campaign of writing. The name of this phenomenon derives from the

---

[146] Wood was widely valued in medieval culture, and boards for bindings must have represented substantial investments – as indicated by their full and partial reuse. However, where records survive it is often difficult to disentangle the value of the wooden boards from the total cost of binding. Bell mentions that "the typical binding is substantial, with heavy wooden boards" and refers to the bindings on Peterhouse, Cambridge MS 114 and MS 154, "which are known to have cost 2s. each" – although, of course, this cost includes more than just the wood, 'The Price of Books', p.322; Foot notes that "the boards of fifteenth-century bindings were usually made of wood (oak and beech were most common)", in 'Bookbinding 1400-1557', p.111.

[147] Langwe, *Vatican Library*, p.21.

Greek *palimpsestos*, meaning "scraped or rubbed away again."[148] If the parchment was resilient enough to withstand it, palimpsests could be composed of multiple campaigns of scraping or washing and writing.[149] The various scored marks and the faint ink residues left by the pen, inscribed into the surface of the parchment, are a strange reminder of the additional input of time and energy in order to scrape or wash away the previous text. Palimpsests therefore represent a strong and active choice to recycle material. After all, parchment that has already been written on could have been repurposed relatively easily, with little further work, for ephemeral domestic purposes, such as polishing or wrapping, or in other less labour-intensive ways in the production or maintenance of books as limp bindings, flyleaves, or wrappers (as this chapter has shown). In contrast with these relatively straightforward efforts, palimpsests represent more concerted resourcefulness.

Palimpsests are generally thought to be rare in books in the fifteenth century. Palimpsest scholarship has been focussed mainly on the literary outputs of the early Church, and with medieval Byzantine and Greek book production. Scholars often suggest that there is a great quantity of palimpsest material used in these contexts, but it may not have been as significant as has hitherto been suggested.[150] Manuscripts of this earlier period have been subject to sustained 'treasure-seeking' scholarship, with some well-known successes such as the discovery of the 'Archimedes palimpsest', which exists in only one copy as a palimpsest undertext.[151] There have also been some unfortunate failures, such as manuscripts rendered illegible due to the tendency of nineteenth-century scholars to apply to them damaging chemicals, such as hydrochloric acid and potassium cyanide, in order to reveal palimpsests. Nowadays, raked light, UV light, x-ray fluorescence, colour space analysis, or multi-spectral

---

[148] *OED, palimpsest, n., adj.,* etymology.

[149] Peter Beal, *A Dictionary of English Manuscript Terminology 1450-2000* (Oxford: OUP, 2008), p.279, notes that good quality parchment can be used up to three times.

[150] Georges Declercq "between [the years] 400 and 800 […] often considered to be the heyday of the practice, the amount of palimpsesting should not be overestimated," in 'Introduction: Codices Rescripti in the Early Medieval West', *Early Medieval Palimpsests,* ed. Georges Declercq, Bibliologia, 26 (Turnhout: Brepols, 2007), pp.7-22, at p.12.

[151] For more information, see Archimedes Project, 'Archimedes Palimpsest', online <http://www.archimedespalimpsest.org/> (accessed 5 January 2017); Reviel Netz, William Noel, Natalie Tchernetska, Nigel Wilson, eds., *The Archimedes Palimpsest: Catalogue and Commentary* (Cambridge: CUP for the Walters Art Museum, 2011).

imaging techniques may be utilised to reveal a glimpse of what lies beneath.[152] In the conclusion to a study that typifies the usual approach to early medieval *codices rescripti*, Rosamund McKitterick suggests that the "most striking feature of palimpsests […] is the paradox that they represent evidence preserved by destruction."[153] That act of so-called 'destruction' is the focus here. While these fragmentary glimpses of all-but-lost texts are remarkable, and their hidden texts worthy of scholarly attention, some of the other striking things about palimpsests are how and why they were reused. Why was their value, at one point in their history, not in their texts but in the materials and their reuse?

So, how did medieval palimpsest-makers convert a written piece of parchment into a reusable writing support? Erasing writing was not as easy in the fifteenth century as it is today. Without any ink corrector pens, Tipp-Ex fluid, or delete buttons to hand, scribes usually relied on their 'penknife' for removing mistakes.[154] Kathleen Scott characterises the penknife as indispensable to scribal practice, as it was used to "scrape away blemishes such as ink blots, to hold a page down during writing and to sharpen the pen" as well as to "remove errors in copying."[155] With this knife, the topmost, ink-marked layer of parchment could be scraped away. This could be a fiddly job, especially with fine, thin, well-made parchment. Whatever the quality of the parchment, scraping it risked strewing scars across the surface, creating thin or rough patches, and even – when the knife slipped – holes that went right through. An example of what appear to be 'knife-trials', regular inch-long slits cut into the parchment, can be seen on a leaf in a Missal of Hereford use.[156] In addition, parchment scraped until it was so fragile that it disintegrated can be seen on one leaf in a fifteenth-century copy of *The Prick of Conscience*, which features a number of other,

---

[152] Christina Duffy, 'The Discovery of a Watermark on the St Cuthbert's Gospel using Colour Space Analysis', *Electronic British Library Journal*, 2 (2014), 1-14, online <http://www.bl.uk/eblj/2014articles/article2.html> (accessed 5 January 2017); again, see <http://www.archimedespalimpsest.org/> for more on the ground-breaking techniques used in that project (both accessed 5 January 2017).

[153] Rosamund McKitterick, 'Palimpsests: concluding remarks', in Declercq, *Early Palimpsests*, pp.145-151, at p.145.

[154] For more on tools used by scribes, see Whalley, *Writing Implements*; Michael Gullick, ed., *Pen in Hand: Medieval Scribal Portraits, Colophons and Tools* (Walkern: Red Gull Press, 2006).

[155] Kathleen Scott, 'Representations of Scribal Activity in English Manuscripts, *c.* 1400-1490: A Mirror of the Craft?', in Gullick, *Pen in Hand*, pp.115-150, at p.132.

[156] Worcester Cathedral Library, MS F.161, although this manuscript does not contain palimpsested leaves, there is an unusual example of a series of 'knife-trial' cuts on ff. 230, 234; Thomson, *Worcester Catalogue*, p.110. Compare, for example, the geometric shapes sliced into the parchment in a copy of Gower's *Confessio Amantis*, mentioned in chapter 3, in BodL, MS Laud misc.609, f. 79 and f. 119; *Quarto Catalogue,* II, p. 432.

more successfully palimpsested leaves.[157] Penknives were one way, if effortful, to remove ink effectively from parchment.

Both the scraping and smoothing processes of parchment preparation are depicted in a fourteenth-century Italian illustration, which suggests that these processes could have been undertaken in a workshop.[158] Scraping was not the only way to remove ink, and text-bearing parchment could also be ground down by repeating the final stage of production: polishing with pumice. In addition to these techniques, which are most commonly associated with palimpsest-making, the removal of ink could be achieved by washing. This method is considered more likely to have been used for a second (or third) effacement of ink than scraping.[159] Rather than mechanically removing the upper surface, washing involved the application of powerful chemical concoctions, including ingredients such as unslaked lime, vitriol, or alum. The codicological recipe collections, discussed in chapter 1, included recipes for stanchgrain and mentioned glass bread as a pumice alternative. However, those collections also included one recipe for reusing parchment entitled: "To done away what is ywreten in velym or parchemen*t* w*ith* out any pomyce."[160] This recommends mixing "rewe" and "nettyl" into an unguent with "chese mylke of a kow or of shepe", and letting it dry to a powder. To remove the letters, the parchment should be wetted and the powder cast over it, "and w*ith* þi nail þ*ou* maist done awey þe l*ett*res." Although these chemical kinds of erasure took more time and effort, as well as tools, resources, and know-how, than salvaging scraps for immediate reuse, they demonstrate that no matter how much effort it took, in the fifteenth century there were known techniques that made it possible to reuse text-bearing parchment as palimpsests.

The conventional idea of a palimpsest is that of parchment recycled expressly in order to provide writing supports for a fresh writing campaign, in the fifteenth century as in earlier periods. For instance, palimpsests of this kind can be found along with other parchment leaves in a copy of Chaucer's *Treatise on the Astrolabe*, among other scientific tracts. At least six leaves are palimpsests: translucently visible greenish

---

[157] BodL, MS Rawl. C.35, f. 28; *Quarto Catalogue*, V.ii, p.11.

[158] Bologna, Biblioteca Universitaria, MS 1456, f. 4^{r}; Orietta da Rold, 'Materials', *PBE*, pp.12-33, fig. 1.1 at pp.17-18; Christopher de Hamel, *Medieval Craftsmen: Scribes and Illuminators* (London: British Museum Press, 1992), fig. 3 at p.9.

[159] Declercq notes that "it is generally agreed amongst scholars that in most cases the parchment was not subjected to a second scraping but rather […] washing", 'Introduction', pp.7-8.

[160] BL, MS Sloane 1313, f. 126^{v}; Clarke, *Crafte*, p.307.

blobs underlie the Chaucerian text.[161] At first glance, it is not easy to decipher the two layers of information that these folios present to the viewer. Gradually, with careful attention, the blotchy greeny-grey marks, probably musical notation, come slowly into focus. M. C. Seymour has proposed that the leaves were "possibly cut down from an abandoned or rejected antiphonal leaf or practice sheet of demi-vinets".[162] The musical notation has not only been almost entirely erased, but the bifolium has also been reoriented. The leaf was previously much larger, and was then turned sideways, folded, and reused as two leaves. Evidence for this can be seen in the way in which the staves now run vertically in their new orientation, lying crossways beneath the newer handwriting. So, while the musical notation has been largely destroyed, the parchment has also been preserved, recycled and transformed for reuse.

Numerous instances of palimpsest material can be found in a copy of *The Prick of Conscience* (previously mentioned).[163] The reused parchment is identifiable by some of the typical indicators, such as ruling schemes that do not correlate with the upper text, and traces of earlier writing which are now oriented crossways or upside down to the new text. Over fifty folios out of a total of one hundred and eighteen can be identified as palimpsests, though some are more visible than others.[164] The non-palimpsest leaves demonstrate the generally variable context of parchment quality in this book, with erratic thickness and some lacunae at the edges of folios.[165] There are a few different sources of palimpsest material, which can be distinguished by several underlying hands and inks, hazily visible beneath the new text. The sources include undertexts characterised by black ink, liturgical textura with musical notation (which will be discussed further), drypoint ruling on yellow parchment with some Latin text in brown ink, a darker brown ink in a different hand, and perhaps one more source, though it is indistinct, probably black ink in a different hand. This manuscript, then, provides plentiful evidence of how and why palimpsests could be used in fifteenth-century English books.

---

[161] SJC, MS E.2, ff. 5-6, 12-13, 14 and 17.

[162] Seymour, *Chaucer Catalogue*, I, p.118.

[163] Daniel Sawyer, personal correspondence, 22 November 2016; and Daniel Sawyer, 'Codicological Evidence of Reading in Late Medieval England, with Particular Reference to Practical Pastoral Verse' (unpublished doctoral thesis, University of Oxford, 2016), p.152.

[164] BodL, MS Rawl. C.35 palimpsest leaves: ff. 28^{r-v}, 42-43, 49^{r}, 51^{v}, 52^{r}, 55-56, 57^{r} and 60^{v}, 61-62, 64^{r} and 69^{v}, 66-67, 69^{r} (and probably its partner 63, but this is not verifiable), ff. 70, 71-78 (quire X), 79-86 (quire XI), ff. 87-94 (quire XII), ff. 95, 97-100 (quire XIV is missing, but may have been palimpsest in part or whole), ff. 103-110 (quire XV), and ff. 111-118 (quire XVI).

[165] BodL, MS Rawl. C.35, lacunae at f. 21, and f. 75.

In addition to this general picture of variable quality, and multiple sources of palimpsest material, a remarkable feature of this book is that one of the undertexts, the liturgical undertext in textura, which often features musical notation and red ruling, becomes conspicuously visible towards the end of the manuscript. A number of folios feature areas of text and sometimes notation that are unscraped, and therefore legible (see figure 6a, supplement, p.17).[166] The final folio was also left intact, was bound in upside down, and appears not to have been subjected to any erasure at all (see figure 6b, supplement, p.18).[167] This suggests the possibility of scraping having taken place after folding, during the copying process. Its cognate, in contrast, has been scraped down into holes.[168] This final folio is part of an otherwise normal bifolium that folds around the quire, yet unscraped and unused for writing, it effectively also acts as a protective flyleaf. Legible traces could be easily attributed to lacklustre scraping.[169] However, upon closer examination, there is a pattern: the most intact evidence of the undertext is repeatedly present in the upper and lower margins, towards the fore-edge, and in the gutter crease.

From some of the more legible scraps of writing, in conjunction with the rubricated ruling and the evidence on the final folio, this much-used source material can be identified as a service book.[170] This particular source constitutes the majority of the material used for palimpsests in the manuscript, providing at least forty leaves.[171] The heavy use of this source throughout the manuscript increases in visibility towards the end of the book. The layout of the visible undertext in the marginal space of the page, surrounding the more thoroughly scraped written text areas, suggests that the palimpsest-makers were aware of the spatial requirements of the upper text (again, see figure 6a, supplement, p.17).[172] That is, they knew the essential minimum area needed for the new text, and they knew where on the page that area would be needed. Therefore, they could tailor their efforts to prepare the parchment accordingly, expending energy on only the most crucial scraping. It seems unlikely that this

---

[166] BodL, MS Rawl. C.35, remnants of undertext are strikingly intact on ff. 104^{v}-106^{r} and ff. 112^{v}-113^{r}.

[167] BodL, MS Rawl. C.35, f. 118.

[168] BodL, MS Rawl. C.35, f. 111.

[169] BodL, MS Rawl. C.35, f. 118^{r} comprises readings selected from Isaiah 11: 3-5 in the Vulgate.

[170] BodL, MS Rawl. C.35, ruling especially visible at ff. 103-110.

[171] BodL, MS Rawl. C.35, that is, quires X, XI, XII, XV and XVI, which are wholly made of this material. There may be some further leaves used elsewhere in the manuscript, however these are not securely identifiable.

[172] BodL, MS Rawl. C.35, see ff. 104^{v}-105^{r} and 105^{v}-106^{r}.

convenient preparation of writing-space for the new text, bounded by such overt evidence of the old undertext, was achieved without design and efficiency in mind.

The overall distribution of palimpsest material in this manuscript is also of interest as it falls predominantly in the second half of the book, where the palimpsests become increasingly discernible, with less thoroughly scraped text. The most strikingly intact folios fall in the penultimate and final quires, and the final parchment leaf of the book block (again, see figure 6b, supplement, p.18). The end of the manuscript gives rise to a general impression of more noticeable, legible undertext, culminating in the intact undertext on the final leaf. Quires X-XVI are all composed entirely of palimpsested parchment.[173] Perhaps, as may be the case with some off-cuts, makers hoped to hide away the cheapest material towards the back of the book, where it might be overlooked, while still fulfilling their objectives and transmitting the new text. Or perhaps, assuming that the writing was executed in chronological order, it was expedient to resort to palimpsest material towards the end of the production of the book. A final possible reason for this distribution is that it was not only expedient but also necessary to use palimpsests as and when resources were constrained.

In contrast with these examples of inconsistent quality, there is another fifteenth-century English manuscript, a copy of the same text by coincidence, that is comprised of exceptionally carefully-executed palimpsests. On four leaves of this other copy of *The Prick of Conscience*, three lines of text have been particularly assiduously scraped away from the upper margin.[174] Indeed, it is quite possible that the whole manuscript was made with scraped material from the same source throughout, but that this is no longer visible, as the palimpsested folios are of the same quality as the rest of the parchment. Overall, the book is well-produced with neat trimming. The use of palimpsests in this production is almost surprising, given the apparent careful execution and general quality of the book. However, in the context of such a tidy, well-presented book, perhaps such notably diligent execution of scraping makes sense as part of the plan for the design and production of the manuscript. The few lines that are the only trace of the undertext present a conundrum. Perhaps this manuscript used material left over from an abandoned project? Whatever the prior text, the

---

[173] BodL, MS Rawl. C.35, except for quire XIII, which is mostly but not wholly palimpsest, and quire XIV, which is missing. Indeed, preceding quire X, quires VI to IX also include a substantial number of palimpsests.

[174] BodL, MS Ashmole 52, ff. 27-30, 35-38, at ff. 27^{v}-29^{r}; *Quarto Catalogue*, X, p.91; Sawyer, Codicological Evidence, pp.152-153.

emphasis in this instance of parchment recycling is more firmly on the look of the final production than the previous examples – however much effort this required.

Whether they were made carefully or inconsistently, why did people make palimpsests at all? Peter Beal confidently asserts that medieval palimpsests "resulted […] from the high cost of parchment, which made its reuse or recycling a matter of practical economy."[175] This is a partially accurate statement, and certainly practical economy is a vital motivation for many kinds of recycling, including palimpsesting. However, a more nuanced assertion would not only consider the 'practical economy' of limiting the use of costly materials, but would also set this within a broader picture of how manuscripts are produced. After all, 'cheapness' can only ever be relative. Indeed, sparingly-scraped palimpsests confirm, conversely, that usually this process entailed significant effort. Palimpsests may have been a 'cheaper' resource than new parchment, but with the craftsmanship, tools, material, know-how, labour, willingness and time required to work into parchment again, they could not be described objectively as 'cheap' material.[176] Rather, palimpsests should be seen as one of many 'cheaper' choices that became increasingly available in the production of books, in part through recycling.[177] This enabled some people to make books relatively cheaply for their own use, and some to make a financial profit. The interaction between money, time, labour-costs and the supply of parchment contributes to our understanding of why anyone would have taken the time to make a palimpsest.

That expenditure of effort – and so time and money – belies suggestions that palimpsesting was somehow a "last resort", as McKitterick calls it, or a rough and almost desperate, unintended procedure.[178] On the contrary it could look planned, and sometimes the decision to use palimpsests took place as part of the major campaign of production. A couple of the examples strongly suggest, by the quantity and distribution of palimpsests, that the use of this material was part of the design of the book. For instance, the Wycliffite *Rosarium theologie* (mentioned in the previous section) with its effaced parchment used as quire guards gives the impression of being a carefully planned and well-executed manuscript in which the palimpsest quire guards were made to accord with the overall look of the book. The few palimpsests used in the less heavily palimpsested copy of *The Prick of Conscience* also conform to the

---

[175] Beal, *Dictionary*, p.279.

[176] Hadgraft, "This picture of cheap labour and expensive materials seems to apply to most aspects of book production from the scribe to the illuminator to the bookbinder", 'Book Structures', p.41.

[177] Kwakkel, 'Discarded Parchment', pp.238-261.

[178] McKitterick, 'Palimpsests', p.147.

careful standards of the manuscript as a whole, and may have been part of an abandoned previous project. The other copy of *The Prick of Conscience*, with very numerous palimpsests, by contrast, could represent a situation in which the producer has had to 'resort' to palimpsests; the limited scraping on many leaves could indicate a time-poor scenario in which the producers were rushing to finish the book. However, this manuscript could equally suggest a campaign of production that depended financially upon the use of palimpsests for its completion. Therefore, there is some evidence, if ambiguous, that fifteenth-century scribes chose to use recycled materials as planned parts of their book production.

Conclusions

This chapter has explored a wide range of parchment recycling. While rare texts found on manuscript fragments, or the settings in which book recycling took place, are customary focuses of recycling scholarship, instead this chapter has concentrated on physical features of parchment reused in books. And, though there are accounts in later centuries of book-centred (and non-book) recycling, here I have sought out the evidence for fifteenth-century recycling. Those other contexts can help demonstrate what it is about parchment that has made it so usefully reusable in books. The appeal of reusing parchment is often dependent on its material qualities: resilience, pliability, high-tearing strength, resistance to rubbing, and long-term stability when kept dry. Book producers understood how to salvage parchment, and how much effort it might take to repurpose parchment for the various uses it could be put to in books. Many of the processes of reuse explored in this chapter required limited skill or labour. However, limp bindings and palimpsests probably took more time and effort than off-cuts or reinforcing strips. Therefore, these parchment reuses sit in an equation which balances necessity, resource availability, frugality, profit-margins, cheap labour, and the time taken for recycling. The ramifications of this balancing act are different for each and every manuscript.

Chapter 3: making marks on books

When the major campaign of book production has passed, people still add to books by repurposing marginal spaces as writing supports. For instance, the marks depicted in figure 1 (see supplement, p.19) are clustered together on the final flyleaf in a collection of religious works by "Jon þe blynde Awdelay" dating from the second quarter of the fifteenth century.[1] There are two upside-down doodles of faces, calligraphic flourish practice, the name 'John' scrawled twice, floating letters and squiggles, and various lines of writing in Latin and English, including a late fifteenth-century rhyme about a licentious friar named Andrew.[2] As this busily reused medieval flyleaf suggests, various kinds of written and drawn reuses took place on the manuscript page. These markings were not always and not only idle space-filling. Like other sustainable, durable media from the long history of human mark-making, marks on fifteenth-century books endure to this day, and they are remarkably common. Surviving markings on books are testament to manuscript durability, and to the reusability of those books as writing supports.

This chapter focuses on how the book is reused as an object for writing on. It is not, therefore, focused on the way the text is used in the most conventional sense: namely, reading. Indeed, in this thesis the conventional use of books is understood to be books as carriers of a main text, used primarily (and understood conventionally to be) for reading and responding to that text.[3] Accordingly, this chapter is also not about the conventional use of margins, that is, those markings that engage with and complement the main text, usually referred to by the term *marginalia*. Marks in margins have been described as "the human presence" in books, and as "a farrago of

---

[1] BodL, MS Douce 302, f. 35^{v}. 'John Audelay the blind' is named in the colophon ('Audelay's Epilogue') and is named repeatedly elsewhere in this manuscript; *DIMEV* 3698; Fein notes that it is on f. 34^{ra-b} in *John the Blind Audelay*, p.1.

[2] BodL, MS Douce 302, f. 35^{v}, my description; quote from *Summary Catalogue*, IV, p.585; Susanna Greer Fein writes that f. 35^{v} "looks like an original outside cover" in *John the Blind Audelay: Poems and Carols (Oxford, Bodleian Library, MS Douce 302)*, TEAMS (Kalamazoo: Medieval Institute Publications, 2009), p. 338; the manuscript measures 270 mm × 200 mm; further details of the main texts in *IMEP*, IV, pp.70-71 and *DIMEV* (61 entries).

[3] Throughout this chapter I employ the words *use* and *reuse* in the senses explored by William H. Sherman, who invokes the language of "use" rather than the language of "reading" (as previously mentioned in the introduction to this thesis), in *Used Books: Marking Readers in Renaissance England* (Philadelphia: University of Pennsylvania Press, 2008), p.xiii, and p.4.

abstrusities, […] human baggage weighing down the books on our stacks."[4] This chapter privileges those 'abstruse' reuses of marginal space.

Abstruse marginalia are part of a long history of mark-making and are found throughout the ages in books. From rock art, inscribed clay tablets, papyrus scrolls and stones, to contemporary graffiti art, humans have made marks on things around themselves. The habit of marking books continues to this day, and the fascination with marginalia has gained currency in recent years.[5] This chapter investigates a rich variety of non-verbal and verbal marks in fifteenth-century books. It is usually difficult to capture exactly how or why people made these marks. However, possible methods and motivations are explored here, as well as the literacies and layouts that inform the ways in which people marked books. Both non-verbal and verbal markings are present on the last flyleaf of Audelay's poetry collection, and as previously depicted and described, this thought-provoking case study clusters together a range of typical markings found in the marginal spaces of medieval manuscripts. As this example suggests this chapter explores book reuse in the form of doodles, squiggles, written letter-forms, names, and short phrases.

So far, this thesis has revealed shifts in the use values attributed to books and their materials. The use value of animal skins was transformed through human agency and craftsmanship into parchment available for use as a writing support. Skins were useful for many other things in fifteenth-century culture, such as making glue, leather, and other goods. People sometimes also chose to improve the durability of parchment in a range of ways, and to avoid waste. While medieval people protected and repaired their books, and put them to predictable uses, such as reading, there are also abundant reuses of books that are unexpected, even surprising. The use value of parchment as a writing support is not the only story. Its use value for writing was sometimes usurped by its use value as a protective or practical material for other bookmaking purposes, recycled as reinforcing strips, quire guards, flyleaves, pastedowns, and palimpsests.

Further change in use values took place when manuscripts were reused in the fifteenth century as supports for mark-making. There were of course other things that

---

[4] D. F. McKenzie, *Bibliography and the Sociology of Texts*, The Panizzi Lectures (Cambridge: CUP, 1999), p.29; Roger E. Stoddard, 'Looking at Marks in Books', *The Gazette of the Grolier Club*, n.s., 51 (2000), 27-47, at p.41.

[5] Mark O'Connell, 'The Marginal Obsession with Marginalia', *New Yorker*, 26 January 2012 <http://www.newyorker.com/books/page-turner/the-marginal-obsession-with-marginalia> (accessed 5 January 2017).

people made marks on, and there were other reuses of books, too, which could be destructive or transformative in different ways, but the focus here is on sustainability in the reuse of fifteenth-century books for further instances of writing, drawing, and other forms of mark-making, beyond the original scribe's use. Perhaps ironically, the value of books as *reusable* supports therefore draws on the same use values of parchment that made it so appropriate and desirable for book production in the first place: it is a good, durable surface for mark-making. And, although writing into books is not exactly the same as writing on loose pieces of scrap parchment, the evidence suggests similar mentality behind both kinds of reuse: the avoidance of waste. It is this enduring durability and reusability that made books a common location for this kind of mark-making-reuse.

These marks reflect the fact that the fifteenth century was a time of varied literacy. These literacies were spoken, visual, aural, and written, and varied across a growing and changing society.[6] For many in the medieval period, the ability to recognise or repeat the words of familiar prayers was the main aim of acquiring even a limited ability to read.[7] Reading in the late medieval period need not have had a textual basis for all, and Joyce Coleman has emphasised the importance of orality as a mode of literacy.[8] On the other hand, Malcolm Richardson has recently shown that middle-class professional experience of written material in the fifteenth century was widespread, and has demonstrated the far-reaching nature of pragmatic literacy.[9] Furthermore, in addition to this nuanced understanding of access to texts, the "ability to write" and the "ability to compose and comprehend" should be distinguished from one another.[10] Interactions with books ranged from visual or oral experiences of the text, through to a fully developed synthesis of reading and writing ability, as the case

---

[6] Brian Stock has explored the interdependence of oral and textual cultures in earlier centuries, in *The Implications of Literacy: Written Language and Models of Interpretation in the Eleventh and Twelfth Centuries* (New Jersey: Princeton UP, 1983), pp.1-11.

[7] In his study of orality and developing literacy during an earlier period, Michael Clanchy states that "More people could read than write", *From Memory to Written Record: 1066-1307* (Oxford: Wiley-Blackwell, 2013), pp.1-20, at p.13.

[8] Joyce Coleman, *Public Reading and the Reading Public in Late Medieval England and France* (Cambridge: CUP, 1996).

[9] Malcolm Richardson, *Middle-Class Writing in Late Medieval London* (London: Pickering and Chatto, 2011).

[10] Mary J. Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge: CUP, 2008), p.11.

studies of reuses in this chapter show.[11] Given this range of literacies, it is not surprising to find that there were people taking up pens to write or draw in books, and that they made use of marginal spaces of various shapes and sizes in different ways.

The mark-making activities that people undertook in previously-used books were diverse, and included scribbling, doodling, drawing, and writing. One kind of well-attested and studied marginalia take the form of annotations written into the margins around the main text space. However, here I am expressly not seeking out instances of engaged reading or intellectual commentary on the main text; instead my focus is upon reuses that recycle the manuscript as a writing support in other ways. While evidence of engaged reading does intersect with some of the following reuses of books, which is acknowledged where it occurs, I focus upon reuse which disregards the original use of the book to carry another text. For instance, this chapter considers case studies of scribbled lines, simple patterns, doodles of faces and flowers, as well as writing that takes the form of familiar combinations of letters, such as alphabets and signatures, and useful or popular combinations of words, such as recipes and short verses. So, the kinds of written marginalia explored here are not necessarily engaged with the main text of the book, and include "opportunistic" markings inspired by a range of motivations and with a variety of purposes.[12]

To give a sense of the flavour and variety of these opportunistic markings, this chapter surveys a wide-ranging body of manuscripts. The books selected for study mostly include vernacular texts, whether prose or poetry, and some contain texts in a mix of languages. They are all dated or datable to the fifteenth century. The manuscripts were made to varying production values: they come in different shapes, sizes, scripts, and were adorned with differing decorative strategies – or none at all. In what follows, the examples of mark-making in books are drawn from the Douce and Laudian collections in the Bodleian Library, Oxford, with additional examples from elsewhere for comparison or contrast. Most importantly for the purposes of this chapter, the Douce collection "constitute[s] a representative sample of books read by a wide cross-section of English society during the fifteenth century." Although Douce

---

[11] Heather J. Jackson rightly cautions: "Annotators are readers who write. Annotation combines – synthesizes, I should say – the functions of reading and writing", in *Marginalia: Readers Writing in Books* (Toronto: University of Toronto Press, 2001), p.90.

[12] Phillipa Hardman, in defining her own rather different focus, has expressed the reuse I am concerned with here as "opportunistic use of blank writing space for new purposes", in 'Domestic Learning and Teaching: Investigating Evidence for the Role of "Household Miscellanies" in Late-Medieval England', *Women and Writing c.1340-c.1650: The Domestication of Print Culture*, ed. by Anne Lawrence-Mathers and Phillipa Hardman (The University of York: York Medieval Press, 2010), pp.15-33, at p.18.

did not collect his books with the aim of achieving such representation, "by fortunate chance his random acquisitions provide […] a microcosm of nearly every type of Middle English prose from this period."[13] Of the relevant fifteenth-century manuscripts with some English, the most interesting examples or the best comparisons were picked for focussed close analysis.

Arguably, almost any selection strategy would have provided plentiful examples of opportunistic book reuse in the form of mark-making in marginal spaces. After all, as discussed in the Introduction to this thesis, in the fifteenth century there was a widespread culture of writing on things. Books were also open to reuse in this way, and the marginal spaces in these books were no exception. Casual writing supports were not necessarily easily or widely available, and many people existed in resource-poor environments, so it makes sense that some of the functional, practical jottings of day to day life were made on handy material: namely, books. Marks in books might be usefully compared with those made on scraps such as off-cuts, loose leaves, or those inscribed into notebooks. Scraps were often used for drafts, letters, or for other practical notes: scrap parchment was more mobile and more transient than parchment in notebooks or books. Normally, but not always, books provided non-mobile surfaces for writing, and could act as a repository for mark-making. As we will see in the examples from the Douce and Laudian collections, readers, owners and other mark-makers were willing to treat the margins of books as jotters, and not only for practical notes to aid memory, but also for testing their pens and other everyday purposes.

Thus, the first half of this chapter explores occasions when books were treated like scrap parchment or paper, or notebooks, or wax tablets, which were used for everyday purposes such as drafting or practising writing. Wax tablets were used as the primary tool for learning to write or for working out personal or literary texts and for teaching and composition throughout the Middle Ages.[14] The basic model of a wax tablet consisted of a wooden frame, which would have been filled with wax.[15] A stylus was then used to impress letters or markings onto the surface, and although occasionally marks were impressed onto the surface of parchment, this is of course a

---

[13] *IMEP,* IV, 'Introduction', pp.ix-xv, at p.xi.

[14] Richard H. Rouse and Mary A. Rouse, 'The Vocabulary of Wax Tablets', *Vocabulaire du livre et de l'écriture au Moyen Age: Actes de la table ronde, Paris 24-26 septembre 1987*, ed. by Olga Weijers (Turnhout: Brepols, 1989), pp.220-30, at p.220.

[15] Joyce Irene Whalley, *Writing Implements and Accessories from the Roman Stylus to the Typewriter* (London: David and Charles, 1975), p.12.

very different skill to writing with pen and ink. However, the transience associated with use of the wax tablet meant that it was thought of as a place for practice, for exploring ideas and for composition, with a "necessarily ephemeral" quality.[16] It was an important tool for students to develop their writing with impunity. Without available scrap parchment, paper or cheap notebooks (although these did exist for some) the marginal spaces of books were ripe for similar practice of this sort.

Studies of marginalia

Marginalia in books are the subject of a long-established field of study. However, the focus in this chapter is a turn from the usual studies of marginalia. Hitherto, studies have tended to prioritise marginal writing or images which are related to the text in some way: the goal is often to track reading, or other traces of intellectual interaction. For example, Michael Camille and others following him take as their focus the dialogic relationship between the book's main text and its marginal material.[17] Research is usually devoted to more polished or prepared writing – and, in Camille's case, imagery – found in the margins of medieval books. Further examples of marginalia studies include Kathryn Kerby-Fulton's wide-ranging, vital work on scribes as professional readers, Jane Griffiths' work on diverting glossing and authorship, and the work of Christopher Baswell, Maidie Hilmo, and Phillip Pulsiano, among many others.[18] Their investigations tend to focus on the relationship between marginalia and the main text. But as Deborah Thorpe has noted, "pen doodles – neither part of the text nor an elaborate scheme of decoration – can slip through the

---

[16] Roger Chartier, *Inscription and Erasure: Written Culture from the Eleventh to the Eighteenth Century*, trans. Arthur Goldhammer (Philadelphia: University of Pennsylvania Press, 2007), p.4.

[17] Michael Camille, *Image on the Edge: The Margins of Medieval Art* (London: Reaktion Books, 1992); the seminal importance of Camille's work is summed up by Sarah Larrat Keefer and Rolf H. Bremmer Jr., 'Introduction', *Signs on the Edge: Space, Text and Margin in Medieval Manuscripts*, ed. by Sarah Larrat Keefer and Rolf H. Bremmer Jr., Mediaevalia Groningana n.s., 10 (Leuven: Peeters, 2007), pp.3-6, at p.3.

[18] Kathryn Kerby-Fulton and Maidie Hilmo, eds., *The Medieval Professional Reader at Work: Evidence from Manuscripts of Chaucer, Langland, Kempe, and Gower* (Victoria: University of Victoria, English Literary Studies, 2001); Jane Griffiths, *Diverting Authorities: Experimental Glossing Practices in Manuscript and Print* (Oxford: OUP, 2014); Christopher Baswell, 'Talking Back to the Text: Marginal Voices in Medieval Secular Literature', *The Uses of Manuscripts in Literary Studies: Essays in Memory of Judson Boyce Allen*, ed. by Charlotte Cook Morse, Penelope Reed Doob, and Marjorie Curry Woods (Western Michigan University: Medieval Institute Publications, 1992), pp.121-160; Maidie Hilmo, 'The Power of Images in the Auchinleck, Vernon, *Pearl*, and Two *Piers Plowman* Manuscripts', *Opening Up Middle English Manuscripts: Literary and Visual Approaches*, ed. by Kathryn Kerby-Fulton, Maidie Hilmo and Linda Olson (Ithaca, London: Cornell UP, 2012), pp.153-205; Phillip Pulsiano, 'Jaunts, Jottings and Jetsam in Anglo-Saxon Manuscripts', *Florilegium,* 19 (2002), 189-216.

cracks of codicological scholarship."[19] It is these 'pen doodles' that are the focus of this chapter.

For later periods, there are instructive examples of scholarship that take a broader view. In the context of early modern printed books, and in books from 1700 to the present, two key studies have considered a wider range of marks in books. In his work on early modern used books, Bill Sherman characterises the transition of the book from text repository to writing support. As mentioned in the Introduction to this thesis, he describes books as being involved in a "dynamic ecology of use and reuse, leading to transformation and destruction as well as to preservation."[20] This, in a nutshell, expresses how mark-making-as-reuse is part of the life of manuscripts as sustainable entities, yet at the same time always changing, whether at a rapid or glacially slow pace. In her work on readers making marks in books, Heather J. Jackson suggests that the enduring physical features of books, historical development of annotation practice, and a range of common motivations give rise to marginalia in books. Books, in Jackson's study, are a "silent witness" to historical interactions with their texts because they are durable objects.[21] The possible durability emphasised by Jackson, and the possible outcomes described by Sherman, which may augment the potential of the manuscript by adding new uses and purposes, or potentially lead to mutation or mutilation, underpin my understanding of how manuscripts come to be reused as writing supports.

As Sherman and Jackson have shown, more traditional scholarship of intellectually-engaged marginalia can be expanded and extended productively and inclusively to consider all kinds of marks in books. And, as Jason Scott-Warren suggests, such markings are "not merely […] evidence of reading but also and more broadly part of what we might call the anthropology of the book."[22] This "anthropology of the book" builds on the foundations for a "sociology of texts" laid down by D. F. McKenzie. If we consider the book not only as a repository for literature and a space for intellectual response, but also as an object and artefact with a social history, there is a great deal that it can tell us about relationships between

---

[19] Deborah Ellen Thorpe, 'Young Hands, Old Books: Drawings by Children in a Fourteenth-Century Manuscript, LJS MS. 361', *Cogent Arts and Humanities,* 3: 1196864 (2016), 1-18, at p.12.

[20] Sherman, *Used Books*, p.6; William H. Sherman, 'The Reader's Eye: Between Annotation and Illustration', Keble Medieval and Renaissance Research Cluster, Keble College, Oxford, 8 February 2013.

[21] Jackson, *Marginalia,* p.100.

[22] Jason Scott-Warren, 'Reading Graffiti in the Early Modern Book', *Huntington Library Quarterly*, 73 (2010), 363-381, at p.380.

people (as in chapter 4 below) and attitudes towards materials such as other books. As part of people's concern for the durability and recycling of fifteenth-century manuscripts, they reshaped the materials of those objects by reimagining the sustainable uses that they might serve.

The examples of book reuse explored here are marks made in fifteenth-century manuscripts' marginal spaces. There are "hundreds of thousands of fragmentary written elements that occupy the margins, flyleaves, and textual and interlinear spaces of the medieval page".[23] Sometimes these markings are found in the margins that surround the text block on each page (the conventional location for marginalia engaged with the text) and sometimes these are found on blank, or partly blank leaves, such as flyleaves or pastedowns. Moreover, there are sometimes other odd spaces in the manuscript, for example on interleaved folios or where the main text finishes short of the lower margin: these spaces are also reusable as supports for mark-making.

Typically, medieval flyleaves and margins do not provide spaces of the same size or shape: margins are normally narrower and are restricted on one side by the main text area and on the other by the edge of the page. In many medieval manuscripts, the text area and margins tend to conform to a remarkably similar proportional relationship, where the relative width is between 0.67-0.72, and this tends to be loosely in accord with the Golden Section or Rule.[24] Whatever their precise proportions, margins are never central, like the main text, but peripheral.[25] While they do visually define the central text, at the same time, margins offer opportunities for "expansion, contest, subversion."[26] Even marks which do not comment on or interact intellectually with the main text may nevertheless disturb the *mise-en-page* from their marginal position, by drawing attention away from the centre, either with an isolated doodle or piece of writing, or by a cluttered, busily-reused

---

[23] John Dagenais, 'Decolonizing the Medieval Page', *The Future of the Page,* ed. by Peter Stoicheff and Andrew Taylor (London: University of Toronto Press, 2004), pp.37-70, at p.39.

[24] Carlo Bozzolo and Ezio Ornato, *Pour une Histoire du Livre Manuscript au Moyen Âge: Trois Essais de Codicologie Quantitative* (Paris: Éditions du Centre National de la Recherche Scientifique, 1983), pp.307-310; J. P. Gumbert, 'The Sizes of Manuscripts: Some Statistics and Notes', *Hellinga Festschrift / Feestbundel / Mélanges: Forty-Three Studies in Bibliography Presented to Prof. Dr. Wytze Hellinga on the Occasion of his Retirement from the Chair of Neophilology in the University of Amsterdam at the End of the Year 1978* (Amsterdam: Nico Israel, 1981), pp.277-288, at p.279; Jan Tschichold notes that manuscript pages tend to be proportioned 2:3 (width: height), with the "text area proportioned in the Golden Section", in *The Form of the Book* (London: Lund Humphries, 1991), p.45.

[25] For more on centre and periphery, see Rudolf Arnheim, *The Power of the Centre: a Study of Composition in the Visual Arts* (Berkeley; London: University of California Press, 1988).

[26] Baswell, 'Talking Back', p.122.

margin. In some of the examples that follow, marks in the margins can represent a total diversion from the main text. Moreover, the edges of pages are some of the most exposed parts of the structure of the book. They do not simply designate the outer perimeter of the page. Together, these edges form the bridge between the manuscript and the outer world, or "the paginal world's encounter with the world of the reader."[27] The hands of producers, viewers, and readers turn the pages by gripping these borders. Their relatively exposed nature made them accessible for handwriting and other mark-making.

In contrast with margins bordering the edge of the page, pastedowns and flyleaves constitute very different spaces. Pastedowns and flyleaves (defined and discussed in chapter 2) offer space for reuse of the book as a spare writing support. Books' physical forms may limit the space available: for example, pastedowns still adhered to boards or limp bindings present only one face of a leaf to write on, whereas flyleaves and lifted pastedowns provide two. In addition, there may be multiple flyleaves one after another in sequence, which present a run of available writing supports. What is more, once someone has opened a book, the front pastedown or flyleaf or flyleaves are encountered first. If these leaves are relatively blank, then they are also the first available spaces inside the book on which marks can be made. Likewise, at the back of the book there may be pastedowns or flyleaves just as accessible for mark-making; after all, books can be opened from the back as easily as the front, depending where the user of the book began. However fifteenth century people approached these parts of books, pastedowns and flyleaves typically provide more substantial spaces than page margins for mark-making.

An inclusive approach is taken here, and the 'marginal spaces' studied in this chapter encompass all of these available areas in manuscripts, whatever their size or shape. Carl James Grindley corroborates this approach, in his work he defines margins more broadly and conceptually to include flyleaves, which he describes as "the *ur*-margins of books", as well as "blank leaves".[28] Marginal spaces are understood here in his extended sense to refer not only to marks made in margins, but also those inscribed on pastedowns, flyleaves, in erstwhile blank spaces and in any other supplementary or marginal spaces.

---

[27] Dagenais, 'Decolonizing the Medieval Page', p.62.

[28] Carl James Grindley, 'Reading *Piers Plowman* C-Text Annotations: Notes toward the Classification of Printed and Written Marginalia in Texts from the British Isles 1300-1641', in Kerby-Fulton and Hilmo, *Professional Reader*, pp.73-141, at p.77.

Physical forms of marginal spaces

The reuse of books was influenced by social, economic, religious, and educational contexts and considerations. As the preceding discussion of margins and flyleaves has already suggested, the physical forms of marginal spaces are highly variable in size and shape. Though there were expectations about how margins bounding the text on each page should look, they could be influenced by economic pressures, by trimming, and by other processes of production. Indeed, the status of a book could be signalled through the size of margins, which were a potentially costly design choice. Luxurious books were a performative symbol of prestige: opulence or significant size tends to signal that a book was intended for use in a public, social arena.[29] However, the large marginal spaces in many big books do not necessarily lead to more marginal reuse than is found in books with smaller margins. A utilitarian argument, that reusers were driven by the straightforward availability of material to use as a writing support, does not hold. Instead, there is a general pattern in the manuscripts surveyed that those with bigger margins feature less repurposing of this kind.

While there were certain expectations of how a manuscript might look, books were made in a wide range of formats, and this affected the shape and size of margins. Book formats ranged from tiny books to coucher books, from light, limp bindings, portable girdle or holster books, to heavily-bound, and sometimes chained books.[30] With these available options, the choices of patrons and book producers could profoundly affect the shape and size of marginal spaces. Those purchasing or commissioning a book in the fifteenth century would likely have had a reasonable choice of the quality, cost, and size that they sought.[31] As suggested by chapter 1's exploration of parchment production, and chapter 2's discussion of off-cuts and other cheaper, salvaged pieces of parchment reused in books, many medieval book producers were prepared to make books with damaged, repaired, or otherwise imperfect pieces of parchment. They could offer these choices to their patrons. While oddly shaped edges or variable surfaces in parchment manuscripts indicate that a

---

[29] Perry, Ryan, 'The Material Text: Reading, Identity, and the Late Medieval Book', London Medieval Society Colloquium: 'Who Read What in the Middle Ages?', Queen Mary University London (17 November 2012).

[30] Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca and London: Cornell UP, 2007), pp.50-61.

[31] Alexandra Gillespie and Daniel Wakelin, 'Introduction', *PBE*, pp.1-11, at p.3; Erik Kwakkel, 'Cultural Residue in Medieval Manuscripts', *The Medieval Manuscript Book: Cultural Approaches*, ed. by Michael Johnston and Michael Van Dussen (Cambridge: CUP, 2015), pp.60-76, at pp.65-70.

range of options were available to budget-conscious patrons, they also affected the shape and size of marginal spaces available for reuse as writing supports.

The size and design of a book could affect its use, for example, a very small book, with proportionally tiny margins, made writing in the margins difficult. An example of such a small book is a mid-fifteenth century manuscript, filled with a various prayers, hymns and devotional texts, which measures only 70 mm × 50 mm. (This manuscript is so small that it fits into the palm of my hand.)[32] It is beautifully produced, with a full-leaf miniature at the beginning, some pen-and-ink drawings, and some coloured initials.[33] However, compounding its already diminutive size, many of the leaves have been trimmed in a haphazard fashion. A consequence of the size and trimming of the book is that to hold the book open, parts of the text block – and certainly the margins – are obscured by one's fingers or thumbs. This of course would have made marking the margin, whether scribbling, drawing or writing, virtually impossible. In this case, the size and trimming of the margins have resulted in minimal space for reuse, and this might explain why there are no marks in its margins.

In comparison, some manuscripts had spacious flyleaves, and margins that were substantial in size and consistent in shape. An example of a large manuscript that has particularly generous margins is a copy of the Wycliffite bible, which dates from the first quarter of the fifteenth century (its parchment damage was mentioned in chapter 1). This book's dimensions are 370 mm × 240 mm and the text block measures 250 mm × 155 mm.[34] This manuscript was mentioned in chapter 1 because its parchment has many holes and repairs. Handling this bible is physically demanding, but in stark contrast with the difficult handling of the small devotional manuscript, this is due to the bible's large format and weight. Again, unlike the miniaturised margins in the devotional book, the margins in the bible provide (theoretically) generous space for reuse as a writing support. Once a large manuscript had been manoeuvred into place, writing in spacious margins would have been a relatively comfortable experience.

Margins may be consistent throughout a manuscript, as in the well-planned small devotional book, or the equally neatly-executed Wycliffite bible just mentioned,

---

[32] BodL, MS Douce 1; *IMEP,* IV, pp.1-2; *Summary Catalogue,* IV, p.489.

[33] BodL, MS Douce 1, full-leaf miniature at f. 1^{v}.

[34] BodL, MS Douce 369. I use 'theoretical' advisedly, because there is a relatively low presence of marginalia inscribed in this manuscript, *IMEP,* IV, pp.88-90; *Summary Catalogue,* IV, p.609; Elizabeth Solopova, *Manuscripts of the Wycliffite Bible in the Bodleian and Oxford College Libraries* (Liverpool: Liverpool UP, 2016), pp.113-127.

or in less well-composed, or composite manuscripts, the layout of margins may vary. An example of total loss of the original margins can be seen in a holster book written in the fifteenth century, in which a copy of the English romance of *Richard Cœur de Lion* is recorded.[35] The margins in the manuscript are narrow for two reasons: because it was designed and made as a holster book, with narrow margins, and because of later trimming of those margins. Holster books were designed to enable portable usage of the manuscript, and may have a relative width as low as 0.3.[36] As well as being folded, it was then further narrowed by being cropped or more likely torn close to the text block on the fore-edge on every single folio, although it is hard to imagine precisely why.[37] Sometimes the margins of smarter books than this one were washed or removed by later collectors, to excise marginalia and return the book to a pristine state. However, it seems unlikely that this is the explanation in this case. The option to make marks in many of the margins has been removed and replaced, at some stage, with heavy repair work, upon which no later markings have been entered. As in this example, space available for reuse in margins can be drastically reduced.

Composite manuscripts' page layouts can change from booklet to booklet: sometimes booklets have dramatically different amounts of planned marginal space. Haphazard later trimming may take place without regard to the existing layouts in the book, and though this may standardise the overall book block, it can denude the margins, leave large or irregularly sized margins, and can even cut through the text block. For example, there are variable margins in a composite paper manuscript from the second half of the fifteenth century, which contains a copy of John Mirk's *Festial*, as well as other texts such as a sermon and a treatise on the seven deadly sins.[38] This manuscript is neatly trimmed into a regular, rectangular book block measuring 195 mm × 130 mm. However, it comprises several booklets; in some later, prose-filled sections, the close trimming leaves little to no margin. For example, between ff. 189-215 and ff. 216-228 the trimming has impinged on the margins of the text to varying extents, from leaving virtually no margin at all, to a margin measuring at most 10

---

[35] BodL, MS Douce 228; *DIMEV* 3231; *Summary Catalogue*, IV, p.562; dimensions: 290 mm × 100 mm; Gisela Guddat-Figge, *Catalogue of Manuscripts Containing Middle English Romances* (München: W. Fink, 1976), pp.263-4.

[36] Kwakkel, 'Cultural Residue', at p.71.

[37] BodL, MS Douce 228. The damage is referred to – somewhat euphemistically – as "some edges injured": narrow strips of paper have been supplied to create a false fore-edge, held in place on each folio with thinner repair tissue which extends translucently over the main text block (*Summary Catalogue,* IV, p.562).

[38] BodL, MS Douce 60; *IMEP,* IV, pp.25-30; *Summary Catalogue,* IV, p.508.

mm.[39] Earlier in the manuscript the margins are generally more consistent and more substantial: in this section the margins measure about 20 mm.[40] In striking comparison to these prose margins examples are those booklets filled with bracketed poetry, replete with wide margins, such as ff. 147^{r}-160^{v}. Therefore, the availability of marginal writing spaces in this composite manuscript is inconsistent, as is the reuse of that space in this case.[41]

Catchwords are another influence on the shape of the margins. They were used to guide the production of the manuscript, and many catchwords can still be seen in manuscripts.[42] A substantial paper manuscript, which comprises copies of the prose *Brut*, *Piers Plowman* and a moral treatise entitled *The Abbey of the Holy Ghost*, features decorative catchwords in the margins.[43] They are heavily decorated with faces, a castle, and scrollwork, among other decoration: all fall squarely in the middle of the large lower margins, towards the gutter.[44] These catchwords are not reuse in their own right, because they were a part of the scribal campaign of production. Their decoration suggests that scribes were willing to lavish time on them, in the knowledge that they would remain intact. This ostentatious example in turn reminds us that in many other manuscripts – where catchwords are not visible – margins are likely to have been trimmed off. Either because they have been trimmed off, or because they are still present and take up room, in any book catchwords affect the marginal space available for future reusers.

---

[39] BodL, MS Douce 60: ff. 189^{r}-192^{v} is a Sermon for All Saints' Day (not from the *Festial*); ff. 193^{r}-213^{r} is Richard Lavynham's *Litil Tretys on the Seven Deadly Sins*; ff. 213^{r}-227^{v} is a long form of confession, mostly in English, followed by English and Latin pastoral notes, ff. 227^{v}-228^{r}; Susan Powell, *John Mirk's Festial,* EETS o.s. 335 (Oxford: OUP, 2009-2011), II, pp.544-545.

[40] BodL, MS Douce 60, ff. 1-146: in this section is written Mirk's *Festial*.

[41] Marginalia in these trimmed spaces in BodL, MS Douce 60 have also been affected in a number of places, although the manuscript as a whole is not heavily annotated.

[42] Clemens and Graham, *Introduction*, pp.49-50.

[43] BodL, MS Douce 323; *Piers Plowman* 'A' text, *DIMEV* 2458; this manuscript is dated to the second half of the fifteenth century in *IMEP,* IV, pp.85-86; *Summary Catalogue,* IV, p.595; dimensions 285 mm × 210 mm.

[44] BodL, MS Douce 323, f. 12^{v}, f. 24^{v}, f. 36^{v}, f. 48^{v}, f. 60^{v}, f. 72^{v}, f. 84^{v}, f. 96^{v} (the first text, the prose *Brut* Chronicle, begins f. 1^{r} and ends at f. 101^{v}, thereafter catchwords are less elaborate through *Piers Plowman*, which runs ff. 102^{r}-140^{r}, catchwords at f. 110^{v}, possibly torn out at f. 112^{v}, f. 122^{v}, f. 138^{v}); it is worth noting that where each text ends, the written area is followed by drawings, and the remainder of the leaf is left empty: so, following the end of the prose *Brut* Chronicle on f. 101^{v} are the words "deo gracias" and "the arms sable a saltire engrailed ermine between four roses" with the name "Iohannes tubantisville' in a scroll, drawn in a similar design to some of the catchwords, *Summary Catalogue,* IV, p.595; then, following *Piers Plowman* on f. 140^{r} is the phrase: "explicit liber petri plouman" in very large red and black lettering with a decorative bird-shaped initial e; likewise at the end of *The Abbey of the Holy Ghost* is a red and black ink illustration of an abbey.

Organising tendencies

Marks themselves may accrete over the years, made by the hands of many different people, often interacting or jarring with one another.[45] Successive reusers may add to the space available, even on a crowded flyleaf or margin. The leaf mentioned in a collection of Audelay's poetry, cited at the start of this chapter, is a prime example of amassed written and drawn marks (again, see figure 1, supplement, p.19).[46] Within the jumble, individual marks are placed near other marks – there is little apparent 'deference' to other markings – but there are also large gaps. This casual, higgledy-piggledy approach to the layout of the page also includes two small patches of erasure, one of which has rendered the first line of a verse illegible. We can well imagine a reuser creating more space for their own marginalia by erasing marks in marginal spaces; however, in this case the erased spaces remain blank, making the reasons for this act mysterious.

Similar leaves, which are particularly busily strewn with markings, are found in at least four other examples from the Douce and Laudian collections. First, the front flyleaf in a copy of *Mandeville's Travels*, which was formerly a pastedown, now lifted, and features a jumble of activity, including the floating letter **a** repeated, a further row of repeated letter **d** shapes, lines aligned to form staves, squiggles, longer pen strokes; there is also a repeated Latin phrase "Ego sum bonus puer que*m* deus amat", and a practice alphabet (see figure 2, supplement, p.20).[47] Second, a copy of works by Hoccleve and Lydgate, in which one of the final flyleaves features phrases, notes, signatures, and an initial shaped like a fish, which are dispersed across the folio in a generally upright orientation.[48] Third, the final parchment flyleaf in a copy of *The Prick of Conscience* includes a range of writing in Latin in different hands, calligraphic pen strokes, an elaborate initial **h**, floating letters, zigzag lines, a face, loose knot patterns, the name 'Thomas', the name 'John', all generally in conventional orientation: the layout is otherwise random, with spaces between markings highly

---

[45] Ben Watson, 'Oodles of Doodles? Doodling Behaviour and its Implications for Understanding Palaeoarts', *Rock Art Research*, 25 (2008), 35-60, at p.42.

[46] BodL, MS Douce 302, f. 35^{v}.

[47] BodL, MS Douce 109, f. iv^{v}, Latin phrase and alphabet are both discussed later in this chapter; *IMEP,* IV, p.109; *Summary Catalogue,* IV, p.524; M. C. Seymour, 'The English Manuscripts of Mandeville's Travels', *Edinburgh Bibliographical Society Transactions*, 4:5 (1966), 169-210, at p.191; M. C. Seymour, ed., *The Defective Version of Mandeville's Travels*, EETS o.s. 319 (Oxford: OUP, 2002), pp.xxi-xxiii.

[48] BodL, MS Laud misc.735, f. 135^{r}; *IMEP,* XVI, pp.94-95, dates the manuscript to the second half of the fifteenth century; *Quarto Catalogue,* II, pp.522-523; *LMES*; the manuscript measures 305 mm × 220 mm.

variable.[49] Finally, in a copy of the Wycliffite translation of the four gospels, the front and back paper pastedowns are littered with scrawled, secretary-hand annotations.[50]

Aside from clustered markings on flyleaves, there were other more dispersed reuses of marginal spaces. Some flyleaves or margins have only one or two odd, isolated markings. Books sometimes contain markings scattered throughout the book, as will be seen later in this chapter in examples of signatures in margins. In addition, sometimes people had to reorient the manuscript in order to write in the narrow margins bounding the main text. Evidence for this can be seen in writing that was inscribed sideways, for example running either up or down the vertical margin. One instance of this can be seen in a copy of *The Prick of Conscience*, on a folio in the first part of the poem, where a rubricated line mid-way down the page has been copied out in the left-hand margin. The writer has turned the book through ninety degrees anti-clockwise, so that the writing now runs down the page towards the lower edge. The marginal note reads: "Homo cum in honore esset non intellexit comparatus est iumentis insipientib*u*s […]" breaking off at the leaf edge. The full rubricated line translates as: "And man when he was in honour did not understand; he is compared to senseless beasts, and is become like to them."[51] This particularly uninspired, 'senseless' pen trial, which merely imitates the main text and does not add anything to it, treats the book like a scrap writing surface, whether for a merely idle purpose, or as a pen trial. Ironically, this example shows disregard for the original use of the book to carry the text by merely turning the book sideways and copying from the text to test the pen.

Books reused for ephemeral mark-making

Scribbles, doodles, sketches, and other drawings that are not part of a formal decorative scheme constitute significant non-verbal reuses of marginal spaces. They may occur when books are treated like wax tablets, scrap parchment or paper, valued

[49] BodL, MS Douce 126, f. 93^{v}. Robert E. Lewis and Angus McIntosh, eds., *A Descriptive Guide to the Manuscripts of the 'Prick of Conscience'* Medium Aevum Monographs, n.s., 12 (Oxford: Society for the Study of Medieval Language and Literature, 1982), pp.99-100, mentions a "note with the date 18 August 1499 in it" on this folio; *DIMEV* (6 entries); *Summary Catalogue,* IV, p.529; dimensions: 230 mm × 170 mm.

[50] BodL, MS Laud misc.36; *IMEP,* XVI, p.15, dates this manuscript to *c.*1430; *Quarto Catalogue,* II, p.71.

[51] BodL, MS Douce 156, p. 16. The full rubricated line reads: "Homo, cum in honore esset, non intellexit, comparatus est iumentis insipientib*u*s, *et* similis factus est illis", lines 602-603, Psalm 48:21, in Ralph Hanna and Sarah Wood, *Richard Morris's Prick of Conscience: A Corrected and Amplified Reading Text*, EETS o.s. 342 (Oxford: OUP, 2013), p.19; *DIMEV* 1953. Lewis and McIntosh, *Descriptive Guide*, pp.101-102, date this manuscript to the last quarter of the fourteenth century; *Summary Catalogue,* IV, pp.540; dimensions: 250 mm × 150 mm.

as surfaces for apparently ephemeral mark-making. Although marks can be scratched or impressed into the surface of parchment, a little like using a stylus to press into a wax tablet, marks made in manuscripts are mostly laid down with pen and ink. In the scholarship about marginalia, many marginal non-verbal marks made in ink are lumped together and referred to collectively as *probationes pennae*. A 'pen test' refers to the writer's act of checking that the pen was functioning smoothly, especially if the pen had been freshly cut, before starting to write in earnest.[52] So the long, random, wiggly lines that snake around the margins of at least three leaves in a manuscript of *The Canterbury Tales* might well be pen trials,[53] made to encourage ink to flow through a newly cut nib.

Alternatively, they may be doodles without even the purpose of preparing for writing. In the broadest sense, since we cannot ever really know how consciously any of these marks were made, almost any marginal mark could well be considered a pen trial or an idly-doodled mark.[54] After all, doodles are generally characterised as absent-minded, spontaneous "scrawls" commonly featuring both figurative and apparently abstract patterns.[55] Typical doodle forms recur in human mark-making through the ages, and in his work on palaeoarts Ben Watson has identified many of these common patterns. Many of the forms found in marginal spaces in fifteenth-century manuscripts align with the recurrent patterns identified by Watson, and these include spiral patterns, squiggles, jagged lines, parallel lines, and cross-hatching.[56] There is an example of abstract strapwork in the manuscript of Audelay's works (again, see figure 1, supplement, p.19).[57] A number of pale ink doodles of geometric shapes is sporadically present in the margins of a copy of John Gower's *Confessio Amantis* on parchment, dating from the first quarter of the fifteenth century, as are

---

[52] Clemens and Graham, *Introduction*, pp.35-48, at p.45.

[53] BodL, MS Laud misc.739, scribbles on f. 74^{r}, f. 86^{r}, and f. 134^{r}, drawn in an ink which is difficult to date: this caveat applies to many of the ink marks (as opposed to datable handwriting) cited in this section; Seymour, *Chaucer Catalogue*, II, pp.179-182; *Quarto Catalogue,* II, p.524 and p.584.

[54] McKenzie, *Bibliography and Sociology,* p.18, terms this neatly thus: "To venture into distinctions between conscious and unconscious intentions would be to enter upon troubled waters indeed."

[55] *OED*, *doodle, n.,* sense 3: "An aimless scrawl made by a person while his mind is more or less otherwise occupied"; O'Connell describes marginalia as "spontaneous" in 'The Marginal Obsession with Marginalia'.

[56] Watson cites the following common abstract patterns (drawn from his longer list of recurrent doodle forms, including anthropomorphic and organic forms), "cross-hatching/ lattices, multiple straight (parallel) lines, zigzag lines, […] meandering lines, multiple 'waves' […] spirals" in 'Oodles of Doodles', p.37.

[57] BodL, MS Douce 302: the strapwork on f. 35^{v} is significantly calligraphic and controlled; it is reminiscent of the flourishes commonly found under post-medieval signatures, and may be a trial run for exactly this purpose.

similar shapes sliced with a knife through the parchment.[58] This abstraction may be an avoidance of meaning, by people who are reusing the book to test their pens or to stave off boredom.

The 'relief of boredom' or 'amusement' seem to motivate the creation of some doodles.[59] It is quite possible to imagine that whimsy was a motivating reason to draw the bearded, bandy-legged man, doodled with his hands on his hips, in the copy of *The Canterbury Tales* with scribbles on it. Indeed, this doodle may well have been illustrated by a bored child.[60] The playfulness and whimsicality of doodles has been traced in early modern books by Stephen H. Goddard: such motivations were just as likely in earlier centuries.[61] Kwakkel has described some medieval Russian doodles on birch-bark as the products of bored children.[62] It is an oft-stated but also oft-ignored fact that scribes were on occasion bored by their work, and that users of books were sometimes bored too.[63] While these examples display doodling at its most abstract, manuscripts also incorporate a range of various kinds of doodling behaviours, including shapes reminiscent of anthropomorphic and organic forms.[64] Two examples of organic forms are also found in the same copy of *The Canterbury Tales*; there are leaf patterns on a folio mid-way through 'The Cook's Tale' and flowers on a folio in 'The

---

[58] BodL, MS Laud misc.609, shapes in the margins on f. 93^{r} and f. 144^{r}, and shapes cut through the parchment on f. 79 and f. 119; *DIMEV* 4226; *IMEP,* XVI, p.76; *Quarto Catalogue,* II, p. 432; *LMES*; dimensions: 410 mm × 270 mm.

[59] Peter Beal notes that "whether actually engaged in testing a pen or else relieving the boredom of a tedious copying task by adding […] unrelated text, doodles, or drawings for their own amusement," in *A Dictionary of English Manuscript Terminology 1450-2000* (Oxford: OUP, 2008), p.294; Thorpe notes the "playful aspect" of doodles by adults in 'Young Hands', p.12.

[60] BodL, MS Laud misc.739, f. 54^{v}.

[61] Stephen H. Goddard, 'Probationes Pennae: Some Sixteenth-Century Doodles on the Theme of Folly Attributed to the Antwerp Humanist Pieter Gillis and His Colleagues', *Renaissance Quarterly*, 41 (1988), pp.242-267, at p.244. He also notes that "the English term 'to doodle' derives from the Slavonic and Germanic term 'to play' – usually to play the bagpipes (German *dudelsack*, Dutch *doedelzak*)."

[62] Erik Kwakkel, 'Medieval Kids' Doodles on Birch Bark', Tumblr <http://erikkwakkel.tumblr.com/post/67681966023/medieval-kids-doodles-on-birch-bark-heres> (accessed 5 January 2017).

[63] This is brought to the fore by Stephen Justice in 'Inquisition, Speech, and Writing: A Case from Late Medieval Norwich', *Criticism and Dissent in the Late Middle Ages*, ed. by Rita Copeland (Cambridge: CUP, 1996), pp.289-322, at p.318; Pulsiano also notes that marginal doodles take us into "the world of modest play, of readers and scribes seeking distraction" in 'Jaunts, Jottings', p.190.

[64] BodL, MS Laud misc.739 features more substantial abstract doodles, shaped like loose trellis work with dots in the gaps, at f. 15^{r} and f. 164^{r}; similar doodles are in BodL, MS Douce 126, f. 93^{v}, on the final flyleaf.

Franklin's Tale'.[65] Perhaps these doodles were playful jottings in the margins by reusers idly drawing on a book?

Intriguingly, of the anthropomorphic doodles encountered, faces were most common (exempting the hands-on-hips posed doodle of a man already cited). The heads drawn in the margins of medieval manuscripts have been noted for the way in which they were "used for the same indicative function" as manicules.[66] So while faces were a form of reuse merely for bored doodling, they echo familiar aspects of book production by scribes and readers. For example, a scribe drew a face in red ink in the left margin of a paper manuscript written in the third quarter of the fifteenth century, which contains various prayers to Christ and the Virgin, medical recipes, poems, and the romance *Titus and Vespasian,* also known as *The Destruction of Jerusalem*.[67] The adornment of tall ascenders with small faces is a further example of anthropomorphic decoration which does not seem to be used for an indicative function. Such adornment was added by scribes themselves, and these marks represent a momentary diversion from the main text, a glimpse of a scribe "sidestep[ping] seriousness."[68] Instances of these little faces drawn by scribes in my survey were located where the ascenders reach up into the upper margins in two copies of *The Prick of Conscience* (MS Douce 141 and MS Douce 156), and all wistfully look away from the text into the side margins.[69]

By contrast, some drawings of heads and faces by other later reusers are *not* used for these purposes but are, like many other marginal drawings, 'absent-minded' or observational. Though they are not used for indicative functions, and are not in ascenders, these faces fit into the broader expectations of the kinds of forms that are marked into books. Perhaps more formal uses of head-manicules or ascender-faces by

---

[65] BodL, MS Laud misc.739, leaves on f. 73^{v}, flowers on f. 186^{v}.

[66] It is unclear whether Grindley means to refer only to the *Piers Plowman* C-Text at this point, or whether he is making a general classification point; he also notes that heads used for the same function as manicules "so far remain[s] unnamed" in 'Classification of Marginalia', p.91.

[67] BodL, MS Douce 78, f. 63^{v}, in the same red ink that the scribe used to rubricate the main text; *Titus and Vespasian* runs ff. 19^{r}-75^{v}; *DIMEV* 3107; *IMEP,* IV, pp.30-31; *Summary Catalogue,* IV, p.513; dimensions: 200 mm × 100 mm.

[68] Erik Kwakkel, 'Party Time', Tumblr <http://erikkwakkel.tumblr.com/post/107251005026/party-time-the-first-and-last-text-line-on-the> (accessed 5 January 2017).

[69] BodL, MS Douce 141 features some abstract, curly marks in ascenders, and a couple of small faces, one face in profile peers out from under an elaborate ascender-turban, which unfurls above an **h** on f. 13^{r}, and on f. 123^{r} another profile – this time bearded – looks out from the backwards-looped ascender of a **d**; *DIMEV* 5398; *IMEP,* IV, pp.44-45; Lewis and McIntosh, *Descriptive Guide*, pp.100-101, dates this manuscript to the first half of the fifteenth century; *Summary Catalogue,* IV, pp.535-536; dimensions: 245 mm × 160 mm; BodL, MS Douce 156.

scribes may prime others to make similar marks in the margins of books, even without the same formal purpose. There is a small, simple line drawing of a head and shoulders, with popping, round eyes, which appears on the final flyleaf in a different copy of *The Prick of Conscience*.[70] This face cannot be intended to indicate anything in the main text, located as it is on a flyleaf.[71] Indeed, two of the flyleaves at the back of the book may have been added to the main book block.[72] Another example of faces that are not indicative include two profiles of faces drawn in black ink, on f. 38^{r} and f. 182^{r} in the copy of *The Canterbury Tales* with various other doodles (already mentioned).[73] These profiles were drawn with grotesque rolls of fat, perhaps for comic effect. Where scribes used heads for indicative functions, they – as well as readers – might doodle purposelessly too.

Simple doodles may well be idle or comic, but some drawings in marginal spaces are finely-executed. In the much doodled-upon copy of *The Canterbury Tales*, there is a pencil sketch of a bearded man in an ornate hat.[74] There is also a deft ink sketch of a face in a composite manuscript from the late fourteenth century: it depicts a mournful-looking man's face.[75] This is drawn in the lower third of the final leaf, next to a coloured drawing of a book draped with a cloth. The layout of the page is such that the two drawings do not seem connected to one another – there is no suggestion that the man is meant to be reading the book. The two illustrations, although they are adjacent to one another, are so different in nature that they give the impression of being here coincidentally. The survey of Middle English prose manuscripts in the Douce and Laud collections yielded only these two examples of sketching, as distinct from more basic or abstract doodling. The various drawings and sketches of faces explored here have little in common in the ways in which they have been rendered. Nevertheless, they suggest that when people randomly doodle, whether as pen trials or

---

[70] BodL, MS Douce 126, f. 93^{v}. The drawing is in the top right corner of this heavily-marked leaf, surrounded by written and drawn markings.

[71] BodL, MS Douce 126, f. 93 sits after two flyleaves: f. 91 on which there are Latin verses, and f. 92 on which there is a hymn to the Virgin, and before a modern paper flyleaf at f. 94.

[72] BodL, MS Douce 126, f. 91 is the last leaf of the final quire of the main body text, whereas ff. 92 and 93 appear to have been added to the book block.

[73] BodL, MS Laud misc.739, f. 38^{r} and f. 182^{r}.

[74] BodL, MS Laud misc.739: on f. 199^{v} the sketch is only faintly visible. Watson, 'Oodles of Doodles', p.39, defines sketches as "unfinished drawings [that] are usually depictive" and I use the word here deliberately, in contrast with other non-verbal mark-making.

[75] BodL, MS Douce 257, f. 99^{r}; *IMEP*, IV, pp.51-52; *Summary Catalogue*, IV, pp.569-570; dimensions: 180 mm × 135 mm.

amusing diversions from boredom, they sometimes follow what is already normal in books, or other typical patterns of mark-making such as realistic sketching.

Doodling behaviour might, then, be providing diversion for bored scribes or reusers as its core rationale. But doodles have been shown to function as an aid to memory.[76] In practice then, they might just be aids to reading the main text. Not only can we picture scribes doodling while at their work, but also reusers interacting with the book by reading and concurrently doodling, or just doodling. In her modern study of doodling, Jackie Andrade suggests that "doodling while working can be beneficial," and that doodling may perhaps "aid cognitive performance [in a dual task scenario] by reducing daydreaming."[77] So, even apparently wildly unrelated, informal doodles in margins may, therefore, albeit in a minor and inadvertent way, aid other work, or aid recall of the main text, by staving off daydreaming. Paradoxically, then, the most abstract of doodles, normally deemed completely irrelevant to memory-work, might be traces of a user in fact highly engaged with the main text. Moreover, it also tells us about the difficulty of disentangling use of the text and the reuse of the book, in the context of doodling behaviour.

Alphabets

As well as pen tests and doodles, marginal spaces in manuscripts provided surfaces for people to develop their penmanship through writing out lettering and basic verbal markings. This practical use goes beyond the expected or intended use of the book for reading. By reusing the book for such penmanship, people made the most of the material available in the book. In so doing, they avoided wasting marginal spaces (by leaving them blank) and avoided using up other scrap materials outside the book. Reusers practised everything from rudimentary to polished writing skills in the margins of manuscripts. For example, in the copy of the *Confessio Amantis* with abstract markings in its margins, the lower margin of the final leaf of the book block is strewn with single letters, including the letters **a**, **o**, **p**, **s**, and odd shapes. These isolated letters and shapes were inscribed onto the page at a range of angles, well-spaced from

---

[76] Here, I am applying the results of modern studies into doodling psychology to late medieval minds that I cannot know or test; Jackie Andrade, 'What Does Doodling Do?' *Applied Cognitive Psychology*, 24 (2010), 100-106. The benefits of doodling have become popularised recently, see Steven Heller, 'The Cognitive Benefits of Doodling', *Atlantic*, 9 July 2015 <http://www.theatlantic.com/entertainment/archive/2015/07/doodling-for-cognitive-benefits/398027/> (accessed 5 January 2017); for more on medieval memory work and the conscious, formal making and use of visual imagery, see Carruthers, *The Book of Memory*.

[77] Andrade stresses that this final hypothesis requires further investigation, in 'Doodling', p.106.

one another, and do not seem to conform to any sequence or pattern.[78] Other writing skills were exercised through simple patterns of familiar letters, such as signatures or short phrases, and sometimes people practised writing out alphabets.[79]

A partial alphabet has been written – in a useful reuse of marginal space – on a blank half-page in a manuscript including prayers, medical recipes, and the romance *Titus and Vespasian*. In the lower margin on f. 71^{v} the letters **a** to **o** are set out as follows: "a a a b b c c d dd e e f ff g g h h j / i k k l ll m n o oo", written in the space after the main text on the page finishes.[80] A couple of extra **o** graphs, and what might be **g**, or just a squiggle, float above the "g g h" section of the alphabet. It is odd that the scribe stopped writing the main text (*Titus and Vespasian*) halfway down this page before resuming on the next page.[81] In this partial alphabet, the writer has recorded both anglicana and secretary forms of the letter **a**, and seems interested in the shapes resulting from the doubling of letters, which could be an alternative to marking majuscules or upper-case letters, as well as representing two individual letters.[82] The double **dd** and **ll** are held together by looped cursive strokes and a long crossbar. The letters display varied levels of calligraphic effort, some of them spiky with broken strokes, particularly **b** and **h** with ascender flourishes that flick out to the right and back in sharply, and the second **e**, with a pronounced horn. These efforts suggest attention to the prestige of the hand; however, the overall impression is of an unfinished alphabet, dashed off in haste. The stylish script that is being practised does not seem to be related to the campaign of production that generated the main texts of the book in which it is found. So, despite its relative lack of polish, this alphabet appears purposeful, and is perhaps a rehearsal of letter forms to be used in later acts of writing. The evident effort in these attempts at a smarter style of writing suggest that, rough though this alphabet might appear, once these shapes are mastered they will be used in future books. This is a *useful* reuse of spare spaces in the book.

---

[78] BodL, MS Laud misc.609, f. 170^{v}.

[79] For more on alphabets and early learning in class and at home, see Nicholas Orme, *Medieval Schools: From Roman Britain to Renaissance England* (New Haven, London: Yale UP, 2006), pp.56-57.

[80] BodL, MS Douce 78, f. 71^{v}, there is plenty of space available for a full alphabet, should the writer have wanted to continue; this folio is only four folios shy of the end of the unfinished romance, and sits as part of a rather erratically trimmed text block: the limited shapes and sizes of other nearby margins may have made this available half-page of space particularly appealing for a pen trial or practice.

[81] BodL, MS Douce 78, f. 71^{v}. *DIMEV* 3107 notes that *Titus and Vespasian* "Ends imperfectly because of loss of folios. Last folio is damaged. A leaf is lost after f. 70. On f. 71^{v} the text breaks (half of the folio is left blank) and resumes on f. 72 with 'And when all þis wes ydoo'."

[82] Albert Derolez, *The Palaeography of Gothic Manuscript Books from the Twelfth to the Early Sixteenth Century* (Cambridge: CUP, 2003), p.146.

Another near-complete alphabet appears in a mid-fifteenth-century copy of *Mandeville's Travels*, previously mentioned for a busily-reused parchment flyleaf, among educational drills, pen trials, and the initial marks towards recording musical notation: a partial alphabet is found amongst many markings on this same flyleaf (see figure 2, supplement, p.20).[83] The alphabet runs over two lines from **b** to **d**, with **d** repeated thirteen times, and then from **e** to **q**. It is incomplete because the top left corner of the folio has been cut off at an angle. Notably, the alphabet has been written upon parchment, whereas the rest of the manuscript is paper, dated to the middle of the fifteenth century. While the parchment flyleaf in question has since had a copy of a short letter added to the recto dated to 1746, and a couple of lines beneath this written by the eighteenth-century antiquarian and owner of the book Francis Douce, the parchment itself had either been with this manuscript or another manuscript for some time, because it is marked by discolouration around the edges on the verso, which suggests a significant interval spent as a pastedown. In amongst the mix of markings on the verso, this near-complete alphabet demonstrates purposeful reuse of a marginal space in a book, for the rehearsal of letter forms.

Unlike these two examples of alphabets added into the margins by later reusers, we might, tendentiously, suggest an example in which the main text reuses space around a marginal inscription of an alphabet. In a composite paper manuscript of English texts, and Latin texts for beginners, there is a "specimen alphabet" noted into an upper margin (see figure 3, supplement, p.21).[84] The margin is slightly larger than the smaller upper margins on the surrounding folios, and indeed on the verso of the very same folio: this small detail, in conjunction with the difference in script in the main hand and the alphabet, suggests that the alphabet may have been written *before* the main texts on this recto. There is an exhaustive range of letters, with many repeated letters, in an upright, prickly secretary script, with a few anglicana forms: there are instances of round **a**; 2-shaped **r**; long **r**; short **r**; kidney-shaped **s**; round **z**. This alphabet includes variant forms of different letters and ligatures from both styles of handwriting, and is rendered in a controlled, upright style with close attention to broken strokes. It is followed by a few random words to test different letter shapes. This carefully-executed alphabet suggests a well-trained writer trying out forms of

---

[83] BodL, MS Douce 109, f. iv^{v}.

[84] BodL, MS Douce 103, f. 15^{r}, this manuscript is datable to the middle of the fifteenth century, *IMEP,* IV, pp.36-37; *Summary Catalogue,* IV, pp.522-523; David Thomson, *A Descriptive Catalogue of Middle English Grammatical Texts* (London: Garland Publishing, 1979), p.277, describes it as a "specimen alphabet" and dates the manuscript to the middle to end of the fifteenth century.

stylish penmanship, rather than the work of a novice practising newly-learned letters. This manuscript – which includes educational texts – is an unsurprising location to find such accomplished and conscientious handwriting practice.

Unpacking further this fragment of writing, we can imagine that it may well have been set down by a professional scribe, and someone who perhaps had this quire of paper to hand whilst working on another. Multiple scribal hands contributed to this manuscript,[85] and the writer of the alphabet may have been a different scribe from the one who completed the main text at this point, or, they could be one and the same.[86] Thus, this manuscript presents a slightly different scenario from the other two alphabets already discussed. Whoever the scribes of the main text were, and whatever the relationship between the scribe working on this quire had to this alphabet, that scribe has opted to work around the fragment of writing. This presents a tolerance of existing marginal markings (and, like the examples in chapter 2, an economical reuse of material) rather than appropriation of the margin by a later reuser. In this unusual example, it is therefore the writing of the main text that has become the reuse of scrap, an addition of 'proper' text around an alphabet, rather than the other way around.

Returning to more common reuses of marginal spaces for writing, as well as inscribing the margins with familiar sequences of letters like alphabets, people also wrote short, familiar sequences of words. These might include brief extracts from the Bible, from prayers, verses, songs, or phrases from early-learning exercises.[87] An example of an excerpt from an early-learning exercise is seen on one of the busy flyleaves mentioned previously (figure 2: BodL, MS Douce 109, f. iv^{v}). On this lifted former pastedown, in the front of a copy of *Mandeville's Travels*, there is a haphazard jumble of accumulated markings, and in this mix of doodles and writing a phrase has been repeatedly inscribed.[88] The Latin phrase reads "Ego sum bonus puer que*m* deus

[85] BodL, MS Douce 103, Thomson identifies six different hands, using anglicana, secretary, or mixed styles of handwriting, to varying quality of execution, in *Grammatical Texts* p.277.

[86] BodL, MS Douce 103, f. 15^{r}, the text here is the words of the Psalms, Canticles and Athanasian Creed "rearranged for easy understanding", ff. 9^{v}-33^{v}, Thomson, *Grammatical Texts*, pp.277-282, at p.278.

[87] Clemens and Graham, *Introduction*, p.45, describe a "sequence of letters of the alphabet, a well-known verse from the psalms or some other source, or a prayerful invocation of divine aid" as typical forms of *probationes pennae* or pen trials.

[88] BodL, MS Douce 109, f. iv^{v}.

amat", which can be translated "I am a good boy whom God loves."[89] This has been written out in full three times, dotted around the page and enmeshed in other markings. The phrase is a common school exercise.[90] Like other brief jottings, or non-verbal markings, this may well be a pen test by those who knew how to write in Latin, or were learning to do so. But it might also be an echo of the proper use of the main text for learning. As we have seen, doodles of faces may echo other faces, drawn into books by scribes, so, in a similar fashion, perhaps this repeated marginal inscription conforms to a schoolboy's expectations of what can be written in books.

Signatures

As well as marking the page with alphabets, testing pens and practising penmanship could also be accomplished by other simple, familiar sequences of letters. One common piece of writing for testing pens or improving handwriting was the signature. Signatures were familiar and one of the first things people learned to write. As Scott-Warren notes of signature practice, found in abundance throughout medieval manuscripts in medieval and early modern hands, "These are the endless dry-runs of people learning to write their names; they are thus of a piece with the practice alphabets that frequently crop up on flyleaves and around the edges of texts."[91] To add to the examples of alphabets, an example of two of these 'dry-run' signatures can be seen in a manuscript already cited, containing works by Hoccleve and Lydgate, with a busily marked back flyleaf. The self-conscious assertion of accomplishment "Thomas Ceryks hand" and the clumsily insistent "Thomas creyke [*sic*] ys my nyme" are both written in the same awkward fifteenth-century handwriting, modelled on secretary script.[92] Both examples display a tentative grasp on the very convention of signing one's own name. Signatures and alphabets suggest the gradual process of acquiring literacy through practice and exercises written in books' marginal spaces.

Sometimes entire pastedowns or flyleaves were inscribed by multiple hands, to the extent that they are busy with doodles, inscribed names and notes, as mentioned

---

[89] Daniel Wakelin discusses this phrase in '"Thys ys my boke": Imagining the Owner in the Book', *Spaces for Reading in Later Medieval England*, ed. by Mary C. Flannery and Carrie Griffin (Basingstoke: Palgrave Macmillan, 2016), pp.13-33, at pp.22-23.

[90] BodL, MS Douce 109, f. iv^{v}. For more on Latin/English *vulgaria*, see Orme, *Medieval Schools*, p.112.

[91] Scott-Warren, 'Reading Graffiti', p.368.

[92] BodL, MS Laud misc.735. These signatures are both in the wide right margins of f. 1^{r} and f. 71^{r} respectively; while varied spelling (even in a signature) is not necessarily unusual, the spelling of "nyme" is odd, without the vowel 'a' – this adds to the impression of the writer as a new learner of written English.

in a group of previous examples from the survey.[93] The front or back leaves in a book are the places traditionally occupied by fuller statements of ownership.[94] Despite the typical use of these prominent places at the front or back of the book for formal declarations of ownership, scrappier signatures can build up here too. On these occasions, it is as though, after a watershed moment, all and sundry felt it appropriate to add their names to the pile. Perhaps new reusers responded to the presence of other markings by joining in, often huddling their names in a tangle, embellished with flourishes. Perhaps the blank space usually available on flyleaves or pastedowns attracts these markings. What begins as possibly random or whimsical reuse becomes a new convention, patterning further reuses, inviting other reusers to make their mark.

As well as these clusters of signatures on flyleaves or pastedowns, signatures scattered throughout books are compelling evidence that users of the book wanted to assert their presence and contact with the book in some way. After all, "the first impulse of any [book] owner appears to be the impulse to stake a claim" and this could be achieved more or less formally.[95] But, except for the reuse for practising one's signature already discussed, and except for formal statements of ownership, signatures scattered through the book block would seem to simply mark out a name upon a book somewhat pointlessly.[96]

The array of signatures in medieval books represents a way of leaving a personalised mark of the self in a book. An example is found in the fifteenth-century copy of the *Confessio Amantis* previously mentioned, which bears the signatures of "Symon Chimyton" twice on the same folio, found approximately halfway through the manuscript, and the names "Elizabeth Makwellam" and "Thomas Elrinten," both written on the last folio of the text.[97] Perhaps these were just pen tests or people polishing their autographs. Whatever the motivations behind these signatures, they

---

[93] I am referring to a general pattern of flyleaf reuse, but particularly to BodL, MS Douce 109; BodL, MS Douce 126; BodL, MS Laud misc.735; BodL, MS Laud misc.36, cited previously in this chapter.

[94] Jackson, *Marginalia,* p.19; Wakelin, 'Imagining the Owner', p.13, p.18.

[95] Jackson, *Marginalia*, p.19, writes here with reference to books of the eighteenth century and later, however, her comments on signatures in books are also applicable to those found in late medieval manuscripts.

[96] Scott-Warren, 'Reading Graffiti', p.380.

[97] BodL, MS Laud misc.609: f. 89^{r}, f. 170va and f. 170^{vb}; Ogilvie-Thomson, in *IMEP,* XVI, p.76, suggests "Makwellam" and "Elrinten"; *LMES* suggests "Mabwesham (???)" and "elrinton (???)" [question marks theirs]; although both signatures are difficult to decipher, I am inclined to agree with Ogilvie-Thomson.

operate differently to those that make overt statements of ownership. Perhaps the people who made these highly personal marks were participating in a similar impulse to assert themselves: the spirit of this demarcation of the self is akin to contemporary graffiti-tagging.[98] Wax seals are a more unusual indication of the mark-maker's physical contact with a book – another manuscript features an intact wax seal on f. 51v.[99] An extreme example of someone keen to tag their book is seen in a copy of the prose *Brut* written in the 1460s, in which Dorothy Helbarton's name was inscribed more than sixty times, in what has been described as an act of "belligerent literacy."[100] Much like contemporary graffiti, the motivation behind these scattered signatures might be to leave a mark somewhere out of the way, yet still visible to those privileged enough to access the book.

So *why* did these writers take the time to jot down their signatures? Sometimes they were testing their pen, sometimes they were rehearsing their signature, sometimes they were adding to a jumble of other signatures, and sometimes they were tagging the book. In each of these possible circumstances, the durable books presented an appropriately reusable writing support. These reuses in fact depend upon the sustained, enduring physical presence of the book – with flyleaves, pastedowns, margins and other marginal spaces intact.

Books reused as repositories for writing

Verses are a typical example of brief combinations of words which, compared with alphabets or signatures, require more developed writing skills. Snippets of more developed writing were added to marginal spaces, and the writers who added these texts often treated the book as a repository, as a store for information. These forms of marginalia may have been noted down because they were practical instructions, such as recipes, which might be required for future reference, or because the act of writing things down itself assists memorisation. After all, "writing depends on and helps

---

[98] Cedar Lewisohn defines contemporary graffiti writing as "essentially a text-based art form, with tagging (the act of writing one's personalized signature) at its core" in *Abstract Graffiti* (London: Merrell, 2011), p.7.

[99] BodL, MS Rawl. C.299; *Quarto Catalogue,* V.ii, p.132. With thanks to Shokoofeh Rajabzadeh for referring me to this manuscript.

[100] Anthony Bale dates the hand to *c.* 1500-1550, in 'Belligerent Literacy, Bookplates and Graffiti: Dorothy Helbarton's Book', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014), pp.89-111, at p.92; for more on signatures as marks of ownership see chapter 4.

memory."[101] Unlike the recipes in longer collections (discussed in chapter 1) which were mostly arranged in the main body of text, these recipes are found in the marginal spaces of the book. So, recipes may be found singly or clustered together in marginal spaces and sometimes take surprisingly substantial forms.[102] These genres of marginalia all treat the book as a repository for writing. By writing these recipes, for making ink or for medical purposes, and (as noted later) fun or showy inscriptions of literary verses, into books, their writers drew on similar use values to those that motivated book producers.

Recipes may be inscribed singly into the margins and endleaves of books for record and for reference. For example, on the final pastedown of a fourteenth-century copy of commentaries on religious texts is an isolated recipe for ink.[103] The recipe is written in a fifteenth-century hand and does not seem to have anything to do with the texts in the rest of the manuscript. The sprawling secretary handwriting, written near the top of the page, reads: "To make Inke . take of Gu*m*me j d weyght / of coperose ij d weyght of gall*e* iiij pen*n*y weyght"[104] and, as is more common in poetry, the two lines of writing are bounded by a bracket to the right. These ingredients – gum, gall, and metallic sulphate – were conventionally used to make ink for writing (as noted in chapter 1). Perhaps this suggests that the manuscript was in a context of ongoing literate activity that might require ink. Although we cannot know whether this recipe was ever actually used, this quick note seems more likely to be a practical *aide-mémoire* than something dashed off as a pen test. This recipe makes it clear that people reused marginal spaces to record useful material that they wanted to remember, and that they perhaps anticipated returning to this recipe as a basis for further textual

---

[101] Carruthers, *The Book of Memory*, p.34; see also her discussion of Quintilian's literal and metaphorical suggestions that writing should be performed carefully and frequently "as an aid for storing memory", at p. 252.

[102] Carrie Griffin notes that recipes often "survived and [were] consumed […] independently of the collection", in 'Reconsidering the Recipe: Materiality, Narrative and Text in Later Medieval Instructional Manuscripts and Collections', *Manuscripts and Printed Books in Europe 1350-1550: Packaging, Presentation and Consumption*, ed. by Emma Cayley and Susan Powell (Liverpool: Liverpool UP, 2013), pp.135-149, at pp.144-145.

[103] BodL, MS Laud misc.444. The manuscript is from the late fourteenth century, *IMEP,* XVI, p.45; the manuscript measures 315 mm × 210 mm.

[104] BodL, MS Laud misc.444, f. 157^{r}. The recipe is written in a fifteenth-century hand (*Quarto Catalogue,* II, pp.319-20, p.562); this side of the flyleaf also contains a note of ownership and there is one other note at the top of f. 156^{v}; this otherwise blank leaf is roughly scraped on both sides, and sits after two flyleaves which are ruled but unwritten, and before a blank, now-lifted pastedown; *MED*, *coperose, n.*, a "metallic sulphate, as of iron (green), of copper (blue), or of zinc (white); vitriol [used in tanning, dyeing, and medicinally]"; Clarke, *Crafte*, p.286.

production. This example reveals a titbit of knowledge being sustained, and someone treating the book as a sustainable place to store that knowledge.

Slightly longer sequences of words designed for practical purposes were also jotted into marginal spaces. Another kind of recipe, this time a charm to staunch blood, was inscribed into a late fourteenth-century manuscript of medical texts (see figure 4, supplement, p.22).[105] In this case, the added note is of the same genre as the main texts, but it is written in an unusual format. The charm is written neatly across the double-page spread of an open bifolium, and on the back of this bifolium is the start of a table of contents to the main texts of the manuscript. The charm is widely attested elsewhere, and here it reads:

> Lord god as þou were borne in Bedleem an folued in <?>
> Jurdan thou comandeste the flom ^flode^ to stonde and hit
> witstode so do this blod that this body .N. here blest þorow the
> v*er*tue of the blod that thou bledeste whan thou sholdest deye
> as thou ert fadir and sone and holigost.[106]

This pious charm for staunching blood is sandwiched between an orderly array of other annotations, all of which are in a similarly neat script with both secretary and anglicana forms. One of these other notes is a recipe for spiced and sugared wine: "1 vnce sugre half vnce frankensence ij quart wyn and seth hem to a pynte and braie the forsayd sugre and ensence to gedre."[107] Though these recipes for apparently useful purposes might seem handy, jotted onto a flyleaf together, it would be difficult to pick out the relevant one in an emergency, when someone was suffering heavy blood loss. Perhaps instead these recipes were written down not just to avoid using the memory later by reading but also for activating and exercising the memory by writing. This example presents a strongly suggestive case for the acts of writing out and re-reading recipes as facilitating memorisation. In this way, as well as acting as repositories for written records of recipes, available marginal spaces in books also sustain memory culture outside the book.

---

[105] BodL, MS Douce 84, f. ii^{v}-iii^{r}.

[106] BodL, MS Douce 84, ff. ii^{v}-iii^{r}. *IMEP*, IV, pp.31-35, dates this composite manuscript to the end of the fourteenth century and the middle of the fifteenth century; *Summary Catalogue*, IV, p.515; another version of this charm is in BL MS Sloane 88, noted by R. E. Lewis, N. F. Blake and A. S. G. Edwards, eds., in *Index of Printed Middle English Prose* (New York and London: Garland Publishing Inc., 1985), p.149; the widespread popularity of the 'Flum Jordan' charm in the late medieval period is mentioned by Don C. Skemer, in *Binding Words: Textual Amulets in the Middle Ages* (Philadelphia: Pennsylvania State Press, 2006), p.208.

[107] BodL, MS Douce 84, ff. ii^{v}-iii^{r}.

Verses

As well as practical reuses of marginal spaces for writing, such as the jotted recipes or charms above, there were amusing and diverting verses inscribed in marginal spaces. These perform multiple kinds of sustainability. Like the other examples of marks made in books explored throughout this chapter, verses also convert the book's use value from being an object for reading to being a space for writing. It has been noted that "many late Middle English lyrics are found on fly-leaves or squashed into odd spaces in copies of unrelated works."[108] And, in common with more practical verbal inscriptions, verses written into the marginal spaces of manuscripts suggest treatment of the book as a repository. In this way, the writing supports used to make books are recycled and made available for further additions of writing. And, rather than using up other resources elsewhere, these verses are sustainably written in scrap-like salvaged spaces in books. Sometimes verses are neatly recorded, perhaps with the anticipation that others might read these diverting marginal inscriptions, and sometimes verses seem to be written without regard for legibility or future use.

So, a verse might be jotted in the margins to jog the memory of the writer, but perhaps not necessarily for anyone else. An example of this is found in the composite manuscript of medical texts: as well as a uroscopic treatise and various medical recipes, this manuscript also contains Latin texts, including Psalm 134, and at this point in the manuscript, there is a substantial verse written in the lower margin.[109] In the lower margins are verses which refer to the kings of England, which begin "kyng harry þe verst" and run on for four lines. On these leaves a single scribe writes the main text in a secretary hand. The verses in the lower margin are in a particularly scruffy, scrawled secretary script, and seem to be unrelated to the main texts at this point. The main text on this folio features guidance on how to pray, written in English, which directly precedes the Latin text of Psalm 134. Therefore, this verse written in the margin is clearly distinct from the adjacent texts, as well as being distinct from the main thrust of the collected works in this composite manuscript. The hand is notably different, and the verses are haphazardly inserted in the lower margin. The script is significantly less disciplined than the main hands found throughout the rest of the manuscript, and this example suggests that marginal spaces were sometimes reused as a writing pad.

---

[108] Julia Boffey, 'Manuscript and Print: Books, Readers and Writers', *A Companion to Medieval Poetry*, ed. by Corinne Saunders (Oxford: Wiley Blackwell, 2010), pp.538-554, at p.540.

[109] BodL, MS Douce 84, ff. 33^{v}-34^{r}; *IMEP,* IV, pp.31-35, at p.34.

A diverting extra text is added onto the damaged final leaf of a composite manuscript, which comprises recipes, an ecclesiastical calendar, texts on arithmetic, and grammar, amongst others, and dates from the late fourteenth century: written at the end of this mixed array of texts is a short verse about the tribulations of marriage.[110] Images of a man's face and a cloth-draped book were mentioned earlier in this chapter, and these are on the other side of the same leaf.[111] The verse is on the lower third of the page beneath another, more substantial piece of writing, which is a charm in French for curing wounds.[112] The charm and the verse about marriage are distinctly different specimens of script and ink, with the charm above in a faded browny-black ink, and the verse below in black ink with a split nib. The parchment is visibly scuffed where the top line of this verse has been scratched away, with only the faintest vestiges of ink remaining.[113] Nevertheless, beneath this partially erased line the following lines remain:

A<n old wife and an empty cu>p
þer ys no merth yn noþir
A man þ*a*t haþ y teyd <hy>m vp
May nawte chese an<oþ>ir
A yong wyf and an arvyst gos
Moche gagil wiþ boþe
A man þ*a*t haþ ham yn his clos
reste schal he wroþe.[114]

In addition to the partly damaged and partly scraped quality of parchment on which this verse has been inscribed, the script in which this verse is written is scrappier than the one used for the text above it on the same page. In contrast with the flyleaf with a charm for staunching blood, and a recipe for spiced wine, on which all the inscriptions are written out so that they run on in prose form, this verse is lineated by sound pattern. In this, it is typical of the verses and prayers used as 'space fillers' in marginal spaces. While it could not be said to be a neat copy, the verse is set out with the poetic form observed carefully. There is even some diligent, accurate bracketing of

---

[110] BodL, MS Douce 257, f. 99v. The manuscript also includes 'tricks' for cooking chicken and conducting an exorcism (*Summary Catalogue*, IV, pp.569-570); *DIMEV* 496; Rossell Hope Robbins entitles the verse 'The Tribulations of Marriage' and suggests that this was a popular song, in Secular Lyrics of the XIVth and XVth Centuries (Oxford: Clarendon Press, 1952 and 1961), p.38.

[111] BodL, MS Douce 257, f. 99r.

[112] BodL, MS Douce 257, f. 99r. This sixteen-line charm is in French, and explains how to cure wounds by putting a charm on a piece of lead and reciting various Latin prayers.

[113] BodL, MS Douce 257, f. 99r. It is unclear when this line might have been removed – the top line may have been rubbed off when some marks above the verse, perhaps including signatures, were scraped off.

[114] BodL, MS Douce 257, f. 99v. *DIMEV* 496 supplies both the first line "An old wife and an empty cup", which is erased in the manuscript, and the words "hym" and "anoþir", where there is a hole in the parchment.

the rhyme scheme (which rhymes in an abab pattern). It shares the same kind of frivolous whimsicality and humour seen in some of the doodled non-verbal markings discussed previously. Perhaps this verse was intended to be shared with future readers, for their amusement. In the context of the whole manuscript, a motley miscellany of diverse texts, perhaps marginalia of this kind are – to some extent – invited. Nevertheless, while this verse may have been added very much in the spirit of this composite manuscript, it was an afterthought, and was not part of the main production of the book. The writer of this verse was engaging with similar use values to the book producer, but supplements the initial campaign of production by sustainably salvaging marginal space for an opportunistic, hastily jotted verse.

Flyleaves seem to have been a refuge for reusers who wanted to jot down diverting, humorous verse. In a copy the "defective version" of *Mandeville's Travels*, there is a verse written on the first of three parchment flyleaves at the back of the book.[115] The book is small enough to be held comfortably in the hands, and measures 130 mm × 90 mm.[116] The verse reads:

> Love ys had whyll monney
> doth lest when monney ys gone
> love ys paste ~~~
>
> Thogh so*m*me women be blamyd all
> hath nott offendyd please theym that
> be good the beste may be amendyd
>
> Better yet ys smale howsold for to
> hold then to ly yn presons fetteres
> of gold
> [amen].[117]

This verse articulates enduring, if cynical, sentiments about love and money. It is set out on the flyleaf, with gaps between each of the three short stanzas. Intriguingly, though the verse is set out into stanzas, the lines are written out as prose, running over lines without starting a new line at the rhyming word. The main hand in this manuscript is a consistent, neat anglicana with some secretary forms, which contrasts noticeably with this verse, written in a sprawling secretary script. When the layout is considered in conjunction with the extremely scrawly hand, this written verse suggests

---

[115] BodL, MS Douce 33, ff. 152-154, with verse at f. 152^{r}. *IMEP*, IV, p.10, comments on the imperfect nature of this version of the main text, and dates it to the first quarter of the fifteenth century; *Summary Catalogue*, IV, p.499; Seymour, *Manuscripts of Mandeville's Travels*, p.182; Seymour, *Defective Version*, pp.xvii-xix.

[116] BodL, MS Douce 33. Seymour notes that the book is one of two surviving copies of *Mandeville's Travels* that are "of small octavo size, held easily in one hand" and suggests dimensions of 125 mm × 90 mm, in *Manuscripts of Mandeville's Travels*, p.173, p.182.

[117] BodL, MS Douce 33, f. 152^{r}.

that the aim of the writer was to note down the verse, perhaps to exercise the memory, rather than to reflect the sound of the verse in the layout or to make it accessible or legible to future readers.

Elsewhere there is another version of this verse, so it seems not to have been an original composition. In the other version, the verse is noted onto the back of a flyleaf in a printed copy of the Sarum breviary, this time set out as poetry.[118] The verse itself is one of a number of short texts that have been neatly, legibly written in secretary script onto a flyleaf that directly follows the printed main text.[119] It reads:

> Love . ys hade . whyll sylver dothe laste
> Whene . sylver ys gone . Loue ys paste
> Who . no . thing . kepeth ys. ande more . nede.

There are no further stanzas in this copy. Taken together, these examples suggest that in its time this verse was popular enough to have existed in at least two loosely-related forms, some of which were likely circulating orally as a song. It may be significant that this version, in the back of a printed book, reflects the rhyme scheme in its lineation in a way that the other version does not. Perhaps this was noted down from an aural exemplar, or from a visual exemplar that already followed this poetic convention. Maybe both instances of this verse were meant as a personal *aide-mémoire*, as with the recipe for ink or the pious charm for staunching blood, rather than as a 'neat copy' that others might later read. In either case, flyleaves were reused opportunistically as a repository for a similar verse, set out in different forms of writing.

But verses were not only scrawled into marginal spaces; they could also be neatly executed. In a copy of the *Confessio Amantis*, mentioned previously for abstract markings and a few signatures, there is a verse added onto the final leaf of the poem, which switches between "driery" thoughts to May-time merriness (see figure 5, supplement, p.23). It is a unique version of a *Bele Aeliz* poem in Middle English.[120] The verse reads:

> In Aprell and in May when hartys ⌐be all mery¬
> Besse buntyng the myllaris may ⌐with lyppes so red as chery¬
> She cast in hyr remembrance
> to passe hyr tyme in dalyaunce

---

[118] BodL, Douce BB 200, dated to 1519, identified by William A. Ringler Jr., *Bibliography and Index of English Verse in Manuscript 1501-1558*, prepared and completed by Michael Rudick and Susan J. Ringler (London: Mansell Publishing Limited, 1992), p.151.

[119] BodL, Douce BB 200. Stains on the paper flyleaf on which it is written indicate that the page may have previously been adhered to, or perhaps just in contact with, a backboard, but not necessarily the current binding; the binding also includes two later paper flyleaves at the front and at the back of the book.

[120] P. J. Frankis, 'Two Minor French Lyric Forms in English', *Neuphilologische Mitteilungen,* 60 (1959), 66-71, at p.70.

And to leue hyr thowth driery
Rygth womanly arayd in a petycote of whytt
She was nothyng dysmayd
Hyr cowntenance was ffull lygth.[121]

Here, this smartly-executed verse is written in a sharply-executed textura script on the final leaf. Textura script was used outside books for church inscriptions in stone and brass, as well as Bibles: these inscriptions in books were intended and expected to last. The main text ends just above the verse, and the handwriting of the main text is gentler in execution than the spiky script used for most of the verse: the two hands are also in different inks. The rest of column a is mostly empty, as is column b. A later, sprawling secretary script has been added to the first two lines of the poem, to complete each line. This literary verse, which plays on the May-time trope, switches from serious "remembrance" to a white, womanly outfit and light-hearted "cowntenance", and demonstrates that margins were reused for literary verses. This example was written so well that it seems as though the writer expected it to be enjoyed by future readers.

Conclusions

The markings explored here show that fifteenth-century books were subject to use values that prized their surfaces as writing supports for making marks. A riot of mark-making took place in manuscripts' marginal spaces, and these included non-verbal scribbles, doodles and drawings, as well as verbal markings such as alphabets, signatures, recipes, charms, and verses. Reuse of the manuscript for verbal and non-verbal markings alike was in part due to utility, and the recycling of books' marginal spaces can be located in a wider context of writing on things. So, some of these markings were pen tests, some treated manuscript leaves like wax tablets or scrap parchment, some were early-learning exercises, and some were diverting distractions. There were pragmatic motivations, such as reuses that treated the book as a repository for recipes or other notes, as well as evidence of more whimsical, even apparently 'meaningless' reuses of books. Diversion and amusement therefore constitute another dimension of book reuse. While scribbles or doodles are usually clearly separate endeavours from the main texts, literate writing in marginal spaces,

[121] BodL, MS Laud misc.609, f. 170va; *DIMEV* 2475; Coxe, in *Quarto Catalogue*, II, p. 432, omits the added secretary hand on lines 1 and 2 and transcribes some lines differently: line 2 "Hesse huntyng", line 6 "peticote", line 7 "dymayd" and line 8 "countenance"; "with lyppes so red as chery" supplied by R. T. Davies, who entitles the poem 'Besse Bunting', and transcribes a few details slightly differently from Coxe, in *Medieval English Lyrics* (London: Faber and Faber, 1963), p.212.

such as recipes, charms, and verses, can appear to continue the purpose of the book as a carrier of texts.

But the use values have subtly shifted: these markings were made in such a way that they reuse the surfaces available in the manuscript as a writing support for two kinds of writing. As this chapter has shown, one kind of writing or doodling was ephemeral: this did treat books like scrap parchment and paper or wax tablets. This kind of marginal marking was sustainable in the ways in which it salvaged space in books and avoided wasting other writing supports. Modern psychological studies suggest that those scribbles and doodles – which may appear wholly unrelated to the main text – may have, surprisingly, played an active part in helping readers to concentrate on the main text by staving off daydreaming. The second kind of writing treated marginal spaces in books as space for recording information, and for future reference. Ironically, writing out recipes, charms, and verses may have also had an impact outside the book, to cultivate memorisation. Whether the book was being treated as an ephemeral surface or as a repository, the material presence of the marginal spaces of the book were essential as supports for mark-making. Ultimately, each kind of marginalia explored in this chapter depended upon the physical durability of the manuscript.

As already suggested by the proprietary potential of signatures in manuscripts, which in this chapter were used to practise penmanship or tag the book, markings in books could represent significant relationships between people, and between people and their books. Chapter 4 explores many kinds of markings that explicitly state such relationships, and in turn these relationships suggest that books were sustained through ongoing circulation and reuse by multiple and successive owners and users in second-hand reuse.

Chapter 4: second-hand books

This chapter explores the second-hand movement of medieval manuscripts between people in the fifteenth century, with particular attention to what those people wrote about that circulation on to the leaves of their books. In the fifteenth century, manuscripts became second-hand by a range of mechanisms: they might be sold, re-sold, bought, given, received, bequeathed, inherited, shared, even used as collateral for a loan. As Anthony Bale puts it, a book was an "artefact for reading" that could be converted into an "artefact for owning,"[1] and their ownership could change. Manuscripts were

> typically produced to outlive their first users, not least because the decision to produce a manuscript included a hope that it would retain value and remain useful or relevant through more than one generation of readers – an ambition made thinkable by the durability of medieval books.[2]

Where previous chapters have identified the use-value of processed skins as parchment for writing; of parchment for reuse in making books; and the subsequent reuse of marginal spaces in books for writing, this chapter explores the ways in which fifteenth-century books were valued as durable commodities with use-values that resulted in books moving between people. Inscriptions recording ownership transfer offer snapshots of moments when people explicitly endorsed certain valuations of books.

Marginal annotations express aspects of second-hand book ownership or various forms of giving, or various forms of receipt. These notes offer an insight into contemporary ideas about manuscripts, expectations of them, and conventional modes of recording information about second-handedness. Of course, almost any fifteenth-century manuscript-book might qualify in some way as being second-hand: to make the topic manageable, this chapter is informed by three surveys of different manuscript collections, which yielded examples of inscriptions that specifically note the second-hand movement of books. From these surveys arose impressions of typical second-hand transfers, as well as examples of specific instances of what was written into the books themselves. The notes are both historical record and historical practice

---

[1] Anthony Bale, 'Belligerent Literacy, Bookplates and Graffiti: Dorothy Helbarton's Book', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014), pp.89-111, at p.91.

[2] Michael Johnston and Michael Van Dussen, 'Introduction: Manuscripts and Cultural History', *The Medieval Manuscript Book: Cultural Approaches,* ed. by Michael Johnston and Michael Van Dussen (Cambridge: CUP, 2015), pp.1-16, at p.7.

and testify to contemporary expectations about the sustainability of second-hand books.

Here, *second-hand* refers to any later possession of books, after the first phase of ownership. The modern understanding of second-hand goods today is not only things that were once owned by others, but also the resale of those things for profit, sometimes for the benefit of charitable causes. Nicky Gregson and Louise Crewe complicate the dualistic distinction between "the market" and "the gift" in their study of modern-day second-hand consumption.[3] While second-hand books were traded in the fifteenth century, and charity often motivated the giving and sharing of books, the basic meaning of second-hand in this chapter is simply sequential ownership by two or more people.[4] Also, communal or collective forms of ownership are explored for the ways in which they might also qualify as second-handedness. So, second-handedness might look like individual ownership of a book, maybe a cleric or a student, or like corporate ownership, maybe a university college in Oxford or Cambridge, or a cathedral. Shared use of books amongst a group may overlap with individual or corporate forms of ownership. A formalised version of this can be seen in a handful of books that were given for the "common profit" of a specified group, or the yearly *electiones* system and chained libraries of medieval colleges. Transfers in the ownership of books, then, could make books second-hand in various ways, and, in turn, this could sustain books in various ways.

Second-hand book circulation depended on both the material durability and the possibility of multiple exchanges of the book. Throughout, this thesis finds the sustainability of medieval manuscripts to depend both on the durable, resilient qualities of parchment and manuscripts, as well as organized systems for resource conservation or recycling. Both are in play here. First, second-hand book circulation depended on the physical resilience of books. Every purchase, gift, or pledge of a manuscript expressed the expectations of the people involved that the books themselves would last. Pledges to loan chests are perhaps the most explicit embodiment of these expectations of books' durability (as this chapter will show). Second, medieval books changed hands, sometimes multiple times, and sometimes passed through multiple transfers of ownership. This too suggests dependence on the ongoing durable nature of books – a kind of recycling by virtue of re-circulation. Furthermore, sharing books (whether in a casual sense or in the sense of sequential or

---

[3] Nicky Gregson and Louise Crewe, *Second-hand Cultures* (Oxford, New York: Berg, 2003).

[4] *OED*, *hand*, *n.*, sense VI 25a(b); *OED*, *second-hand*, *adj.*, sense 2a.

communal ownership) suggests efforts to pool resources, and specific instructions about the storage or use of books indicates attention to their ongoing conservation. Inscriptions could themselves, then, enable sustainable and sustained access to books.

The financial corollary of the expectation that books would last was that, in fifteenth-century society at large, books were treated as a form of capital. As R. A. B. Mynors states, books were "like plate, one of the recognized ways of holding capital," and M. B. Parkes describes books as "not merely […] instruments for study" but also a "portable form of capital."[5] The sale, purchase or pledge of books usually involved financial valuation of the price that the book could command. What was it that fifteenth-century people valued in books? Value could be attributed to the materials required for book production, the skilled artisanal labour and effort involved in book production, to the finished artefact, to the text a book carried, or to its educational, religious or social cachet. However they were derived, such valuations could be noted down in books or in other documents such as wills, inventories, booklists, donors' lists, registers, accounts, and in library catalogues.[6] Though some reference is made to sources of evidence external to books, the focus in this chapter is primarily notes about ownership transfer that were written into books, and the ways in which those notes suggest expectations that books would last.

But the values attributed to books were not just economic, they were also social and spiritual. Charity often motivated the second-hand movement of books (as noted). In his comments about books as portable capital, Mynors goes on to point out that books held capital "in portable and *negotiable* form."[7] At any given time, a book may be subject to a range of actual, perceived, and as-yet unknown or untapped values. The potential value of a book can be enhanced by the popularity of the text it bears, or by the grade of materials used in its production, by the later addition of costly materials, such as a binding, or even for particular kinds of second-hand

---

[5] R. A. B. Mynors, ed., *Catalogue of the Manuscripts of Balliol College, Oxford* (Oxford: Clarendon Press, 1963), p.xi; M. B. Parkes, 'The Provision of Books', *The History of the University of Oxford: Late Medieval Oxford*, ed. by J. I. Catto and T. A. R. Evans (Oxford: Clarendon Press, 1992), II, pp.407–83, at p.409.

[6] For example, see Susan H. Cavanaugh, 'A Study of Books Privately Owned in England 1300-1450' (unpublished doctoral thesis, University of Pennsylvania, 1980); for books mentioned in nuns' wills, Janet Burton, 'Documenting the lives of Medieval Nuns', *Recording Medieval Lives: Proceedings of the 2005 Harlaxton Symposium*, ed. by Julia Boffey and Virginia Davis (Donington: Shaun Tyas, 2009), pp.14-24, at p.20; for the inventories of books owned by Sir Simon Burley and William de Walcote, V. J. Scattergood, 'Two Medieval Book Lists', *The Library*, 5th ser., 23:3 (1968), 236-239; and for a list of medieval British library catalogues, see *MLGB* (beta-version), Bodleian Libraries, University of Oxford, online <http://mlgb3.bodleian.ox.ac.uk/authortitle/medieval_catalogues/> (accessed 5 January 2017).

[7] Mynors, *Balliol Catalogue*, p.xi.

movement. A valued provenance depends on second-hand ownership by notable people, especially where this is visibly recorded in marginalia or in notes indicating ownership – in modern second-hand consumption of goods, this kind of provenance is known as a "commodity biography."[8] Of course, the potential value of a book can also be reduced by the passing of time, by the changing cultural capital of a text, by the vagaries of fashion, or wear and tear, amongst other things. In all these ways, the attributed valuations of a book can rise and fall. Nevertheless, many transfers of ownership represent faith in the resilience and sustainability of books' material forms and values.

This investment can be seen in some books (in the surveys for chapter 3) with ownership inscriptions. While some rehearsals of signatures were possible pen trials, or tags signifying contact with books, others were possible ownership inscriptions. Although these examples did not suggest *transfer* of ownership, they do "stake a claim" to the manuscript.[9] A composite manuscript with the verse on the tribulations of marriage also carries an inscription noting that it was "Co<*n*>stat m*agistro* Brymston."[10] This was jotted on the verso of the same flyleaf, at the foot of the page beneath the verse. In another manuscript with the isolated ink recipe jotted on a back pastedown, is the following note on a front flyleaf: "mag*ist*ri Joh*ann*is <Kynton monachi ecclesie *christ*i cant*uaria*>."[11] These inscriptions state static ownership, but do not specify any transfer of ownership.[12] But in one large parchment manuscript of the *Golden Legend* there is a note which identifies exactly how ownership of the book was passed on from father to daughter upon his death in 1460, and the details are marked at length in the manuscript itself:

> <B>e hit remembryd that John Burton citizen and mercer of london past oute of this lyfe the xx. day of Nouemb*er* the yere of oure lorde. Mill*esimo*. CCCC. lx and the yere of kynge Herry the sixte after the co*n*quest xxxix. And the said John Burton bequethe to dame Kateryne Burton his dou3ter a boke callyd Legenda s*anct*o*rum* . the seyde Kateryne to haue hit and to occupye to hir owne vse and at hir owne liberte durynge hur lyfe and after hur decesse. to remayne to the prioresse and the

[8] Gregson and Crewe, *Second-hand*, p.8.

[9] Heather J. Jackson, *Marginalia: Readers Writing in Books* (Toronto: University of Toronto Press, 2001), p.19.

[10] BodL, MS Douce 257, f. 99^{v}: "Owned by Master Brymston"; *Summary Catalogue*, IV, pp.569-570; dimensions: 180 mm × 130 mm.

[11] BodL, MS Laud misc.444, f. iii^{r}: "Master John Kynton, monk of Christ Church, Canterbury"; *Quarto Catalogue*, III, pp.319-320; dimensions: 310 mm × 210 mm. John Kynton (or Kyngton) became a monk in 1410 and died in 1416: *BRUO*, p.1075.

[12] Of course, where books contain multiple notes of static ownership, inscribed by different people, this may indicate second-handedness; this is discussed later in this chapter.

> couent of Halywelle for eu*er*more. they to pray for the saide John Burton and Joh*an*ne his wife and alle crystene sayles. And who that lettithe the execucion <of thi>s bequest be the lawe standeth[13]

There is care taken to spell out relationships here: the book's name, and the name, occupation and home of the owner, the name of his daughter, the recipient, and the thoughtful nature of the future bequest to Holywell Convent are all touching details.[14] Another similar example of poignant evidence of this kind can be found in a manuscript copy of religious verse and prose: "þe ȝifte of Wyll*ia*m Baron Esquyer" is bequeathed for the "vse" of his niece, sister "dame pernelle Wrattisley", and for the book "to remayne for evye*r* to þe place and nonrye of detforde."[15] This particular note of bequest is found on the front flyleaf of the manuscript.

Complexities arise from annotations like this. While both inscriptions reveal family bonds, redolent of books as carriers of relationships, there is a firm legalistic tone to the conditions attached to the bequest in the manuscript of the *Golden Legend*. John and Johanne have effectively taken out a holy insurance, by making prayer "for eu*er*more" a condition of the bequest to their daughter. Like the popular contemporary act of endowing a chantry, but on a much smaller scale, the book becomes a marker of the giver's devotion. As Jamieson Weetman also suggests, seen in their "social context", books were like chantries, and presented "tangible benefits for founders and for the community at large in both a material and a spiritual sense."[16] In this way, even a heartfelt gift may become a significant social and religious statement, transcending the private realm the book is usually deemed to be. A mark of ownership or bequest reaches beyond the confines of the book, and can even be seen as a strategy by which to accrue a kind of status or holy security. For these statements are more public than they initially appear and work within a public economy of self-

---

[13] BodL, MS Douce 372, f. 163^{vb}: initial "B" cut out (other cut-out initials in this manuscript mentioned in chapter 2), and the letters "of thi" washed away; *IMEP*, IV, pp.91-93, makes a number of mistakes and omissions in the transcription, corrected here; *Summary Catalogue*, IV, p.610; dimensions: 290 mm × 410 mm.

[14] David N. Bell, *What Nuns Read: Books and Libraries in Medieval English Nunneries* (Kalamazoo: Cistercian Publications, 1995), pp.148-149. *MLGB*, p.277, suggests that the "couent of halywelle" refers to the Priory of St. John the Baptist in Holywell, Shoreditch. Kathleen L. Scott, 'Past Ownership: Evidence of Book Ownership by Merchants in the Later Middle Ages', *Makers and Users of Medieval Books: Essays in Honour of A. S. G. Edwards*, ed. by Carol M. Meale and Derek Pearsall (Cambridge: Brewer, 2014), pp.150-177, at p.167, notes that John Burton was a citizen and mercer.

[15] BodL, MS Douce 322, f. ii^{r}; *IMEP*, IV, pp.74-85; *Summary Catalogue*, IV, pp.593-595; Bell, *What Nuns Read*, pp.132-133; *MLGB*, p.57; dimensions: 275 mm × 185 mm.

[16] Jamieson Weetman, 'Testamentary Piety and Charity in London, 1279-1370' (unpublished doctoral thesis, University of Oxford, 2013), p.120.

assertion, social hierarchy and devotion, which was enacted through the circulation of second-hand books.

In these and other inscriptions (discussed in chapter 3), sometimes people followed conventions when they wrote notes into their books about how its ownership had been transferred. Almost all the inscriptions surveyed for this chapter were written in marginal spaces at the front or back of books. Anywhere in the front of a book was regarded as the "traditional" place for a bookplate or other assertion of ownership, and it was the first space a reader encountered upon opening the book.[17] Also, inscriptions which observe the second-hand movement of books often took conventional phrasing. Sometimes inscriptions were heavily abbreviated to simply a quick note of the price or cost of a book, or the name of a new owner. But people also wrote more fulsome inscriptions about whether the book was sold, purchased, gifted, pledged, bequeathed, or donated for common profit. These longer inscriptions may name the old or new owners and may also locate the book in a place or community. This chapter entertains a range of notes written into books for what they can tell us about whether ownership of books transferred, and on occasions that it did so, how did it happen, and why? To do so, this chapter offers a series of three surveys: the first focusses on second-hand booksellers, the second gives general impressions about the kinds of inscriptions that typically mark the movement of books, and the third investigates the age of books at the point of transfer to new ownership, as well as analysing the numbers of exchanges that might be recorded in books. But this chapter begins with a brief overview of the mainstream fifteenth-century trade in new books. An extensive second-hand circulation of old books existed within and alongside the ongoing commercial production of new books.

Overview of the book trade

Unfortunately, thanks to a "paucity of explicit narrative or documentary evidence about book production and acquisition," exploring the trade in books at any time during the Middle Ages is difficult.[18] Nonetheless, although there is only "fugitive" surviving evidence, scholars have developed impressions of the nature of the trade,

---

[17] Jackson, *Marginalia*, p.19; Daniel Wakelin, '"Thys ys my boke": Imagining the Owner in the Book', *Spaces for Reading in Later Medieval England*, ed. by Mary C. Flannery and Carrie Griffin (Basingstoke: Palgrave Macmillan, 2016), pp.13-33, at p.13 and p.18.

[18] A. I. Doyle, 'The English Provincial Book Trade before Printing', *Six Centuries of the Provincial Book Trade in Britain*, ed. by Peter Isaac (University of Michigan: Oak Knoll Press, 1990), pp.13-29, at p.13.

especially in the later medieval period.[19] What is clear from this overview is that over the course of the long fifteenth century it changed dramatically, at once growing, diversifying, and becoming more organised. C. Paul Christianson has described the century that elapsed between the 1390s and the 1490s as "the period of greatest commercial activity in making and selling manuscript books."[20] Books were made in growing numbers as the century wore on, with "something like a tenfold increase in vernacular book production between 1350 and 1475."[21] The growth in production served diversifying markets, and probably accompanied increases in rates of literacy. The availability of books was yet further enhanced by imports and by paper and print technology.

While it is possible to characterise the book trade as undergoing these overall shifts, it may not be accurate enough to refer to a single book trade at all. As A. I. Doyle notes, the term three different activities: first, the "practice of various handicrafts" towards making books, second, the "provision of texts" and the "coordination of the crafts to produce copies" and, third, the "selling of books, old or new, and of the requisite materials."[22] Doyle's definition helps us see how recycled materials and second-hand books might both fit into different parts of this wider market. Second-hand book sales were only one component part of this activity.

The trades involved in making, distributing, and selling books were carried out on local, regional, national, and international scales. During the fifteenth century, Oxford and London were both hubs for the production and trade in books. Evidence from archival documents situates medieval book artisans in Catte Street, Oxford, and around St. Paul's churchyard in London.[23] Among others, regional sites of book production included Leicester and various precincts of York.[24] Throughout the

---

[19] C. Paul Christianson, 'Evidence for the Study of London's Late Medieval Manuscript-Book Trade', *BPPB*, pp.87-108, at p.89.

[20] Christianson, 'Manuscript-Book Trade', p.89.

[21] James Raven, *The Business of Books: Booksellers and the English Book Trade, 1450-1850* (New Haven, CN: Yale UP, 2007), p.13.

[22] Doyle, 'Provincial Book Trade', p.13.

[23] M. B. Parkes, *Their Hands Before Our Eyes: A Closer Look at Scribes*, The Lyell Lectures, Oxford, 1999 (Aldershot: Ashgate, 2008), p.52; Graham Pollard, *Notes for a Directory of Cat Street: Oxford Before A.D. 1500*, Bodleian Library Archive, Catalogue of the Papers of Graham Pollard, compiled by Esther Potter (1937/1988); Christianson, 'Manuscript-Book Trade', p.90, especially for the map of 'Bookmen's London in the fifteenth century'.

[24] Doyle, 'Provincial Book Trade', pp.13-29; Stacey Gee, 'The Printers, Stationers and Bookbinders of York before 1557', *Transactions of the Cambridge Bibliographical Society,* 12:1 (2000), 27-54; John Hinks 'The Beginnings of the Book Trade in Leceister', *The Moving Market: Continuity and Change in the Book Trade*, ed. by Peter Isaac and Barry McKay (New Castle, DE: Oak Knoll Press, 2001), pp.27-38.

fifteenth century, the book trade, or rather, the cluster of trades and crafts given that collective term, became increasingly cooperative and organized. For example, in London the eventual incorporation of the 'Stationers' Company' in 1557 was preceded by well over a hundred years of gradual efforts towards professionalization among textwriters and scribes, limners and binders.[25] As shall shortly be seen, some of the same people involved in the trade in new books and in professionalizing these collective trades were also involved in selling second-hand books. Though this has been described as "a widespread trade in second-hand manuscripts,"[26] records of book sales are relatively rare, described as "the subject more of speculation than of clear documentation."[27] However, several notes found jotted into surviving manuscripts identify booksellers by name, and occasionally give further particulars of the sale of the book itself, which may include the names of buyers and the amount of money paid. In due course this chapter will explore some other instances of purchases and prices discovered in a thorough survey. However, considered here first is a smaller group of manuscripts connected with men known to have worked in the second-hand book trade.

Christianson identified twelve known book artisans, who are associated with twenty surviving books which were sold second-hand. Their names, using the most common spellings, are: Peter Bylton, Robert Chirche, Edmund Cok, Richard Colop, John Elys, Thomas Lokton, David Lyonhill, Thomas Marleburgh, William de Nessefylde, John Pye, John Sampson, and Thomas Veysey.[28] These individuals were linked to books as either owners or sellers, mostly by information in inscriptions written on to their leaves. Of those twelve artisan-stationers, eight were "involved with the sale of older manuscripts that were not of their own making" and four with "sale or possession of fifteenth-century books."[29] The books they dealt were probably sold for profit. Some of the examples cited by Christianson suggest second-hand sale less strongly or less specifically than others. These include a manuscript of two parts with an inscription simply indicating that it was bound, but not known to have been sold

---

[25] Peter W. M. Blayney, *The Stationers' Company Before the Charter, 1403-1557* (London: The Worshipful Company of Stationers and Newspapermakers: 2003), p.9.

[26] Johnston and Van Dussen, 'Manuscripts and Cultural History', p.7.

[27] Christianson, 'Manuscript-Book Trade', p.87.

[28] Listed in endnote 45, Christianson, 'Manuscript-Book Trade', p.108.

[29] Christianson, 'Manuscript-Book Trade', p.101, does not specify which stationers fall into each category, and some seem to fit both; the eight are presumably Bylton, Chirche, Lyonhill, Marleburgh, de Nessefylde, Pye, Sampson, and Veysey, and the four possibly Cok, Colop, Elys, and Lokton.

by Edmund Cok;[30] a manuscript belonging to T. Chenne, given ("ex dono") but not definitely sold by Thomas Lokton;[31] repeated illustrations of John Elys' coat of arms in an obituary *kalendar*, which offer no clear indication of sale;[32] a manuscript apparently connected with Thomas Veysey but without an inscription,[33] and, lastly, a common-profit book with an additional legalistic inscription regarding the delivery – but not sale – of the book to Richard Colop.[34] Though these individuals are all rightly recognised as members of the London book trade, in these instances they were not necessarily selling books for profit – or at least the inscriptions are not precise or informative on this matter.

Common profit books

Moreover, other books became second-hand for common profit, as did one book linked to the stationer Richard Colop and a common-profit book (mentioned in chapter 2) with off-cuts used at the back. Common-profit books form a unique group of second-hand manuscripts.[35] These books were usually small-scale, relatively cheaply-made, portable manuscript copies of religious texts. They were bequeathed with conditions attached, with the aim of providing shared use of a book to an ongoing series of deserving readers. The arrangements for one such book were entrusted to Richard Colop, a member of the London book trade. During his life, the grocer John Killum owned London, Lambeth Palace Library, MS 472, and a note towards the end of the volume prescribes its future use after his death as common-profit book. Such arrangements were signalled and stipulated by inscriptions written into the books, which followed a similar form, and which called attention to the book's

---

[30] BL, MS Harley 641, f. 115^{v}: "Edm*un*d Cok ligavit libr*um* istu*m*", "Edmund Cok bound this book"; *British Library Illuminated Catalogue*; Christianson, *Directory*, pp.89-90.

[31] GCC, MS 23/12, f. 1^{v}; James, *GCC Catalogue*, I, p.17; Christianson, *Directory*, p.129. There is an inscription on f. 2^{v}, which reads "liber <…>e*m*pt*us* p*ro* x s" though this cannot be assumed to be associated with the *ex dono* inscription relating to Lokton on f. 1^{v}.

[32] CUL, MS Dd.viii.2, for example on f. 2^{v}. The manuscript was written by Katerine Moleyns, Prioress of the Monastery of Kyngton in Wiltshire; Hardwick and Luard, *CUL Catalogue*, I, pp.334-6.

[33] BodL, MS Auct. D. 4. 5. No folio reference is given by Christianson, *Directory*, pp.168-9; Veysey is not mentioned at all in the *Summary Catalogue*, II.i, p.94.

[34] London, Lambeth Palace Library, MS 472; M. R. James and Claude Jenkins, *A Descriptive Catalogue of the Manuscripts in the Library of Lambeth Palace* (Cambridge: CUP, 1932), V, pp.648-50; Christianson, *Directory*, p.100; *IMEP*, XIII, pp.36-38.

[35] As noted in chapter 2, in addition to BodL, MS Douce 25, the four other known common-profit manuscripts are: CUL, MS Ff.vi.31; BL, MS Harley 993; BL, MS Harley 2336; London, Lambeth Palace Library, MS 472; Wendy Scase, 'Reginald Pecock, John Carpenter and John Colop's "Common Profit" Books: Aspects of Book Ownership and Circulation in Fifteenth-Century London', *Medium Aevum*, 61:2 (1992), 261-270, at p.261.

durability. For instance, in one book made from off-cuts (noted in chapter 2; see figure 1, supplement, p.11) the following is inscribed:

> This booke was maad of þe goodis of a certeyne p*er*soone for a comyn p*rofite* Þat þ*at* p*er*soone þ*at* haþ þis booke com*m*ittid to him of þe p*er*soone þat haþ power to co*m*mitte it. haue þe vss þerof teerme of his lyf. p*re*iyng for þe soule of þe same p*er*soone of whos goodis þis booke was maad / And þ*at* he þ*at* haþ þe forseid vsse of comissiou*n* whanne he occupieþ it not leene it for a tyme to sum oþer p*er*soone / Also þ*at* þat p*er*soone to whom it was committid for þe teerme of lyf / vndir þe forseide co*n*diciou*n*s delyuer it to anoþer p*er*soone þe teerme of his lyf / And so be it delyu*e*red a<nd> committid fro p*er*soone to p*er*soone ~~as longe as þe booke~~ man or wo<man> as longe as þe booke enduriþ /[36]

For comparison, here is the inscription in John Killum's book:

> This booke was maad of þe goodis of Jon killum for a comyne p*ro*fite / That þ*at* p*er*soone þat haþ þis booke committed to him of þe p*er*soone þat haþ power to com*m*itte it : haue þe vse þ*er*of þe teerme of his lyf : p*ra*iyng for þe soule of þe same ion / And þ*at* he þ*at* haþ þe forseid vse of com*m*issioun whanne he occupieþ it not : leeue it for a tyme to sum oþ*er* p*er*soone / Also þ*at* p*er*soone to whom it was com*m*ittid for þe terme of lyf : vndir the forseid conditiou*n*s delyu*e*re it to a noþ*er* p*er*soone þe teerme of his lyf / And so be it delyuerid *and* committid fro p*er*soone to p*er*soone man or womma*n* as long as þe booke enduriþ /[37]

In both inscriptions, there is an awareness of limits of natural human lifespans in contrast to the durability of the book itself. There is careful attention to how the book should be "delyuerid and committid" from person to person, and "vss" or "vse" is limited to the user's "teerme of lyf." By contrast, their stipulated use-value, as an ongoing resource, absolutely depended on the book's durability. There is even an acknowledgement that the book might not last forever but also a hope that it will be used "as long as the booke enduriþ."

Moreover, the appropriate use of each of these common-profit books was carefully outlined in written inscriptions in an effort to safeguard its future sustained reuses. While second-hand common-profit inscriptions certainly suggest awareness of and concern for the ongoing sustainability of particular books, in John Killum's common-profit book, an additional note a few leaves after the typical inscription specifies other practical considerations for ensuring the book's planned use, and links the book to the second-hand bookseller Richard Colop (see figure 1, supplement, p.24). In this note, which located at the back of the book, a few flyleaves on from the

---

[36] BodL, MS Douce 25, f. 72^{r}; *Summary Catalogue*, IV, p.497.

[37] London, Lambeth Palace Library, MS 472, f. 260^{r}.

common-profit inscription, Colop is designated the initial recipient of Killum's manuscript:

> Memorand*um*. Þat þis boke be deliu*er*ed
> to Richard Colop Parchemanere of
> London after my discesse. And
> in caas he die or I : þen I wol it
> be take to som deuowte p*er*sone to
> haue it vnder þe forme *and* condicion
> wretyn in þe ende of þis book heere
> to fore
> Mordon.[38]

Whereas the common-profit note is typical of its kind, this note is much more careful and elaborate in execution. The writer has used a large- module, formal secretary script, and has arranged the body of writing in a neat square on the page. As it is written on the page, the **M** of "Memorand*um*" and "Mordon" are oversized and decorated, as are various other capital letters, and following the end of the inscription is a decorative knotted device. The handwriting is precise, with broad strokes on stems and descenders. There are elegant sharp flicks and angular points throughout the broken shapes of the hand. Care has been taken to make this inscription attractive and that suggests that Mordon expected the note to be seen and to stay with the book. The people involved in this and other common-profit books were, as others have traced, known to each other in various ways, some still not fully established, and those people drew on an awareness of the second-hand book trade to help administer the ongoing use of this manuscript.

Other specific inscriptions are found in the remaining fifteen manuscripts from Christianson's list connected with eight London booksellers.[39] The most forthcoming notes in these manuscripts either clearly designate the sellers as stationers, for example, "J. Pye stacionario Londoniensis", or specify that the book was bought from a known stationer, for example "emptus a dauid lyenel."[40] A few of the inscriptions offer both details. Some are therefore more comprehensively informative; others remain enigmatic in their limited detail. Three manuscripts, sold

---

[38] London, Lambeth Palace Library, MS 472, f. 265^{r}.

[39] The inscriptions in fourteen of these manuscripts are consistent with fifteenth-century hands, however, the inscription in the thirteenth-century manuscript copy of Ulpian's *Soluto matrimonio*, bought from William de Nessefylde, GCC, MS 17/133, dates to 1309-10, and so falls outside the long fifteenth-century focus of this thesis: James, *GCC Catalogue*, I, pp.14-15; Christianson, *Directory*, p.138.

[40] BodL, MS Bodley 110, f. 1^{r}: "John Pye, London stationer", *Summary Catalogue*, II.i, pp.135-136; and CCCC, MS 164, f. 1^{r}: "bought from David Lyonhill.", M. R. James, ed., *A Descriptive Catalogue of the Manuscripts in the Library of Corpus Christi College, Cambridge* (Cambridge: CUP, 1912), I, pp.370-374.

by two different stationers, feature simply the names of their sellers. In a fifteenth-century miscellany, the stationer John Sampson's name appears,[41] and John Pye's name, without further qualification, is noted on the front leaves of two of the manuscripts that he sold. In one of these, Lancashire, Stonyhurst College, MS *Summa de Officiis Ecclesiasticus*, is inscribed "Ion Pye."[42] In the other, London, Gray's Inn, MS 8, it is not even his full name written down; just his first initial and surname: "I. Pye."[43] It is not clear what these jotted names were for. Perhaps they were designed to indicate the stationer's temporary ownership of the book as stock before sale, or maybe they were an early form of commercial branding.

Other manuscript inscriptions are significantly more fulsome, and in addition to naming the bookseller, offer further particulars of second-hand sales. An inscription with the hallmarks of the most precise proof-of-purchase notes is found in a complex composite manuscript containing Hidgen's *Polychronicon*, amongst other works, which was bought by John Gunthorpe in 1492. The book is in various parts, datable between the thirteenth and fifteenth centuries. The buyer saw fit to note down his own name "Joh*ann*is Gunthorp", his rank and role "decani wellens*is*", the name of the bookseller "dauid lyenel", the date of purchase "13 Julii a*nn*o vij^{o} h*enrici* vij^{mi}", and the book's worth "pro iiij s iiijd."[44] This inscription is detailed, and symptomatic of the buyer's interest in his many books, and particularly in his acquisition of them, throughout his life.[45] He is known to have recorded details of acquisition frequently in his books: there are at least twenty-four volumes with his name in them, and sometimes his name is included in notes written in a similar fashion to the one in this purchase of 1492. Indeed, a year later in 1493, an inscription specifies another of his

---

[41] BodL, MS Rawl. C.86, f. 51^{v}, Christianson, *Directory*, p.157; *Quarto Catalogue*, V.ii, p.28; Julia Boffey and Carol M. Meale, 'Selecting the Text: Rawlinson C. 86 and some other books for London readers', *Regionalism in Late Medieval Manuscripts and Texts: Essays Celebrating the Publication of A Linguistic Atlas of Late Medieval English*, ed. by Felicity Riddy, York Manuscripts Conference, University of York (Cambridge: D. S. Brewer, 1991), pp.143-69. Wakelin, 'Imagining the Owner', p.20, mentions this manuscript for an elaborate ownership inscription on f. 30^{v}. Scott, 'Past Ownership', p.163, lists John Sampson as a "citizen and salter of London."

[42] Lancashire, Stonyhurst College, MS *Summa de Officiis Ecclesiasticus*: "John Pye"; *MMBL*, III, pp.397-9.

[43] London, Gray's Inn, MS 8, f. ii^{r}; *MMBL*, II, p.57-8.

[44] CCCC, MS 164, f. 1^{r}: "Dean of Wells", "David Lyonhill", "13 July in the seventh year of the reign of Henry VII", "for 4 s and 4 d"; Christianson, *Directory*, p.130.

[45] On John Gunthorpe, see *BRUC*, pp.275-7, and Daniel Wakelin, 'England: Humanism Beyond Weiss', *Humanism in Fifteenth-Century Europe,* ed. by David Rundle, Medium Aevum Monographs (Oxford: SSMLL, 2012), pp.265-305, at pp.267, 269, 281, 299-303.

books as a second-hand purchase from "I Barrett."[46] The order of the details recorded in this note is identical to that jotted down in the book bought from Lyonhill, and both inscriptions serve to emphasise Gunthorpe's proof of purchase.

Equally informative, and perhaps more revealing of the weight accorded apparently insignificant details in such inscriptions, is the note in a manuscript sold by Thomas Veysey to William Palmer.[47] "Liber M. Will*el*m*i* Palm*er*, ^ quo*n*da*m* p*rec*en*t*or*is* eccl*es*ie Crediton ^ empt*us* a Thoma Veysey, stacion*a*r*io* London. pro xxxiij. s. iiij. d Anno *Christi* 1433, in mense octavo."[48] This inscription was dashed off in a current, cursive hand on a front flyleaf, and was subjected to an insertion which sits just above the line. These inscriptions are accompanied by other jottings on the flyleaf. The buyer Palmer was from the Exeter diocese and studied at Exeter College in Oxford.[49] He went on to bequeath this copy of William Perraud, *De Viciis septem capitalibus et de peccato lingue* to the dean and parishioners of Crediton in Devon, as explicitly indicated by another inscription, in the same hand and ink as the insertion, set just beneath the purchase note. Important to Palmer was the fact of having bought the manuscript for himself, and, like Gunthorpe, he noted the purveyor, place, worth, and date of purchase. This inscription was then doctored by a later hand, to emphasise Palmer's relationship with Crediton. Presumably, Palmer's executors, or the dean and parishioners, were more interested in highlighting Palmer's role in relation to them and their shared place of worship. This gives a glimpse of the vested interests of purchasers, and of other parties involved in transfers of second-hand books.

Sometimes book artisan-stationers mentioned in the sale of manuscripts were involved as executors, which demonstrates that commercial and charitable activities around books were interlinked. Enlisted in this way, stationers were responsible for carrying out the wishes of the testator after death. Perhaps stationers, situated at the heart of London and able through their trade to develop contacts with learned individuals, and with one another, were well-placed to disburse books, but also

---

[46] BL, MS Cotton Tiberius A.ix, f. 2^{r}; Daniel Wakelin, 'Recording Ownership, Recording the Self: Gunthorpe's Example', unpublished paper, 47th International Congress on Medieval Studies, Kalamazoo, Michigan (May 2012).

[47] Oxford, University College, MS 91, f. 3*b; Christianson, *Directory*, pp.168-8.

[48] Oxford, University College, MS 91, f. 3*b: "The book of Master William Palmer, once precentor of Crediton church, bought from Thomas Veysey, London stationer. For 33s. 4d. In the eighth month of the year of our Lord 1433"; H. O. Coxe, ed., 'Catalogus Codicum MSS Collegii Universitatis', *Catalogus Codicum MSS. Qui in Collegiis Aulisque Oxoniensibus Hodie Adservantur* (Oxford: OUP, 1852), I, p.27.

[49] Palmer, *BRUO*, pp.1422-3.

accustomed to dealing in valuable goods. Though he was not selling it, this familiarity with books could account for Colop's role as first recipient of Killum's common-profit book. Three inscriptions in three different manuscripts mention executors in relation to London book artisans. For instance, at the back of a large, beautifully decorated fifteenth-century manuscript of works by Augustine is a note specifying that: "Iste liber Al<…> ex empcione de Py stacionario *et* co-executorib*us*."[50] This inscription clearly associates John Pye in both his role as a stationer and, on this occasion, as co-executor. He is known to have been appointed as an executor to at least two other people, for Richard Okewell in 1446 and in 1452 for Richard Broune, Archdeacon of Rochester.[51] The nature of books as gifts, especially those bequeathed by a testator and managed after their death by executors, will be explored later. This inscription shows that stationers worked together to move second-hand books in a nexus of people and possessions. Thanks to their connections and expertise, stationers could act as important functional members of this network, as executors. In this role, they ensured and sustained the ongoing movement of books between people.

Two other manuscripts bring together two further London book artisan-stationers: Peter Bylton and Richard Colop. The bookbinder and stationer Peter Bylton was active 1404-1454 and worked on Paternoster Row, working from shops rented from London Bridge or, after 1450, in his own building "le Petre et Poule" on the corner of Panyer Alley.[52] The two manuscripts associated with him suggest that in addition to bookbinding he may have "dealt in older books."[53] After Bylton's death, his books were sold off according to his wishes: as Gillespie notes, his will of 1454 "instructs his executors to 'selle all my bokes', which they did."[54] One book, a fourteenth-century copy of works by St Augustine, went for 56s., the other, a thirteenth-century copy of works by St Bernard, for 20s., and both were bought by Richard Hopton. Hopton was Head Master of Eton College 1447-1453 and at the time of buying these books, he would have recently demitted his post, and possibly bought them with a view to later donating them to the College, which he went on to

---

[50] GCC, MS 247/473, f. 187^{r}: "This book Al<…> bought from Py, stationer and co-executor"; James, *GCC Catalogue*, I, pp.297-8.

[51] Christianson, *Directory*, pp.145-8, at p.146.

[52] Christianson, *Directory*, pp.79-82.

[53] Eton College Library, MS 39, f. 213^{r}, and Eton College Library, MS 101, f. 182^{r}; M. R. James, *A Descriptive Catalogue of the Manuscripts in the Library of Eton College* (Cambridge: CUP, 1895), p. 20 and p.40; Christianson, 'Manuscript-Book Trade', p.101.

[54] Alexandra Gillespie, 'Bookbinding', *PBE*, pp.150-172, at p.171.

do.[55] Hopton's purchases were documented on the final flyleaf of each manuscript, and in addition to the value of the book, the inscriptions carefully note that the book was "em*it* ab executorib*us* pet*ri* Bylton."[56] Furthermore, Richard Colop, and the textwriter John Taillour were Bylton's executors, likely to have handled these sales.[57] These examples show that fellow stationers, as well as those outside the trade, drew on stationers' professional expertise when transferring second-hand books, and imply their expertise in dealing in older books.

These stationers' executorial roles, sometimes for one another, hint at the small scale of their working community, the ways in which its highly interconnected nature aided the flow of books between people. Identified hubs of the London book trade suggest that many of these individuals would have worked in close proximity to one another, in "the area immediately surrounding St Paul's."[58] The development of the second-hand book trade depended on this group of people working together. There were certainly close ties between many of these book artisan-stationers, socially, professionally, and geographically. Some took on roles of responsibility in the nascent 'Stationers' Company' and had a sprawling web of connections to other book artisans. This is true, for example, of Robert Chirche,[59] who, at some point during the fifteenth century, sold a composite manuscript, in which, towards the top of the second flyleaf, is a note written in black ink in a deliberate hand: "p*recium* .xx.s. empt*us* de cherch a p*ate*r n*oste*r rowe."[60] This note also confirms that Chirche rented property in one of the areas of London most closely associated with the book trade, Paternoster Row. Similarly, one Thomas Marleburgh is recorded as active in the business of the 'Stationers' Company' alongside several other of his colleagues; he sold second-hand a

---

[55] Hopton gave the books to Eton College in or before 1492-3, although his *ex dono* inscription is now missing; *BRUO*, pp.960-1, at p.961.

[56] Phrase common to both inscriptions: "bought from the executors of Peter Bylton"; in Eton College Library, MS 39, f. 213^{r}; and in Eton College Library, MS 101, f. 182^{r}; *MMBL*, II, pp.672-5 and pp.713-4 respectively.

[57] Scase, '"Common Profit" Books', p.52.

[58] Christianson, 'Manuscript-Book Trade', p.90.

[59] Christianson, *Directory*, pp.87-88, p.99.

[60] BL, MS Sloane 3481, f. 2^{v}: "Price 20s., bought from Cherch on Paternoster Row"; *British Library Catalogue*.

book inscribed: "Me*morandum* q*uod* lib*er*aui Thome Malburgh stacionario" and in the same inscription the price is noted "xxx s."[61]

The bookselling activities of one of the best-attested of these London book artisan-stationers, John Pye, are recorded on the leaves of no less than seven books.[62] The seven books linked to Pye are all copies of theological or religious texts.[63] Two of the three manuscripts that identify Pye by name only have already been mentioned, they are inscribed simply with his initial and surname, or first name and surname. The third inscription to refer to Pye by name, but not occupation, also cites the price paid, and takes the form of a brief note on an endleaf: "Iste liber emptus fuit de Joh*ann*e Pye p*recio* – xxvj s."[64] Another inscription which indicates the price paid to Pye for a book is a short note: "Istu*m* libru*m* emi*t* London a pye stacyonario. p*recium* xx s."[65] Evidently, this also describes Pye specifically as a stationer, as do GCC MS, 247/473, already mentioned in relation to Pye's role as an executor, as well as BodL, MS Bodley 110 (see figure 2, supplement, p.25). A named purchaser was W. Cleue, named as part of the longer inscription in BodL, MS Bodley 110: "Hunc librum emit W. C*leue* de J. Pye stacionario Londoniensis x^{o} die Augusti anno regni regis Edwardi iiij^{d} tercio *1463*, coram Roberto Paling."[66] The other purchaser, T. Eyburhale, was also named in a lengthy note which is now lost.[67] These inscriptions pertaining to John Pye perhaps suggest that this bookseller branded his books with annotations declaring his name, or successful sales. They certainly indicate the almost endlessly variable combinations of details in proofs of purchase associated with stationers. Moreover, they collectively attest to the flow of books through second-hand

---

[61] Christianson, *Directory*, pp.131-2; *DIMEV* 4911; HEHL, HM 744, f. 36^{r}; Dutschke, *HEHL Catalogue*, pp.247-251; art. 6b, in *Thomas Hoccleve: A Facsimile of the Autograph Manuscripts*, ed. by J. A. Burrow and A. I. Doyle, EETS s.s. 19 (Oxford: OUP, 2002), p.xvi; GCC, MS 492/261, f. 148^{v}: "Memorandum. Thomas Marlburgh, stationer delivered […]", "30 s"; James, *GCC Catalogue*, II, p.563.

[62] He was a presence in the London book trade, was made warden of the *Mistery* with Chirche, and was engaged routinely with legal proceedings on behalf of many other members of the trade during the 1440s-1450s, Christianson, *Directory*, pp.145-8, at p.146.

[63] Christianson, 'Manuscript-Book Trade', p.101.

[64] BodL, MS Laud misc.414, f. 100^{v}: "This book was bought from John Pye – 26 s"; *Quarto Catalogue,* II, pp.303-4; dimensions: 250 mm × 170 mm.

[65] BL, Royal MS.8.D.x, f. 206^{r}: "This book bought from London, from the stationer Pye. Worth 20 s"; *British Library Catalogue.*

[66] BodL, MS Bodley 110, f. 1^{r}: "This book W. Cleve bought from J. Pye, London stationer, in the third year of King Edward on the tenth day of August 1463, before Robert Paling"; *Summary Catalogue*, II.i, pp.135-6. Though it may not be linked to the Pye inscription, at the top of the same folio is a note of the price: "precium xx s." ("worth 20s."). If this is the price Cleve paid Pye, it would bring the number of manuscripts to cite prices up to four: Cleve, *BRUO*, pp.437-438.

[67] BL, Royal MS.5.C.iii, Eyburhale bought a manuscript of theological texts from Pye for 27s. 6d.; inscription "at end, now lost", *British Library Catalogue.*

booksellers and on into the hands of new owners. These manuscript examples from the second-hand book trade have shown that in many instances the moment of transfer was immortalized by writing a note into the book itself.

A survey of second-hand books

In addition to economic imperatives for sales, other motives could occasion the second-hand transfer of books. Sometimes books were pledged to chests for cash loans. Sometimes books were given as gifts, status-affirming presentations, or bequests, as seen fleetingly in the examples of stationer-executors, and in charitable, piously-motivated ways, like common-profit books. When records were made about such transfers of ownership or use, they could be proudly and legalistically recorded: like the notes of sales by artisan-stationers above, details of other transfers were inscribed into the books themselves.

To study these other motives, I undertook a survey of one volume of the Bodleian Library's *Summary Catalogue* (volume II.i) to record data about fifteenth-century inscriptions about how books changed hands. To do this, the survey focussed on names written into books and inscriptions that explicitly record a specific moment at which a book became second-hand, such as a purchase, pledge, gift, or bequest. Volume II.i of the *Summary Catalogue* provides a record of Bodleian Library accessions before 1660, in addition to some other miscellaneous manuscripts added to the library's collections in the first half of the seventeenth century. In practice, this catalogue mostly contains manuscripts that entered the library between 1600-1646, and which are now mostly part of the Bodleian Library's Auctarium or Bodley collections.[68] Wherever possible, it offers accounts of the medieval provenance of these early accessions. To create a practical, full database as a resource for analysing these scraps of evidence jotted into books, the following categories were documented: shelfmark, language, material, date of production, illumination, texts, names, and, where known, whether the inscription of a name dated to before the fifteenth century or after, the date of the note recording book movement and the mode of that movement. Some books were left out of the tally entirely, such as manuscripts written after 1530, those with an abbreviated entry, Oriental manuscripts, and manuscript fragments. Even with these exclusions, the survey took into account 837 manuscripts from the volume of the *Summary Catalogue*.

---

[68] 'Preface', *Summary Catalogue*, II.i, pp.v-x, at p.v.

Dates of production, names and book movement were rendered as in the catalogue – often by century, but also as a specific date or date range. For the following survey results, conclusions are drawn about inscriptions that are dated to the years 1400-1500. As the catalogue did not specify which fourteenth-century or sixteenth-century datings of inscriptions were thought to fall between 1375-1400 and 1500-1530, the long-fifteenth-century time-span of the majority of this thesis was not applicable here. And these dates were often guesses on palaeographical grounds, by expert but not infallible cataloguers.[69] Undatable names, or those of uncertain date, were added to the database but not included in the final tally.[70]

How representative is this survey? Whatever its own flaws, which have been minimised as far as possible by decisions about the method, the survey's record of names and notes of exchange depends entirely on the catalogue's levels of inclusivity. Therefore, the data explored in this section should not be taken as an account of the *actual* wider reality of medieval manuscript circulation. The following tallies represent the characteristics of only one distinct cluster of books, which have been subjected to particular selection strategies by patrons, owners, collectors and donors, and eventually, by donors to the Bodleian Library. The sample may be skewed by the nature of some large donations to the Bodleian Library by the libraries of Exeter Cathedral and St George's Chapel, Windsor.[71] Of all donors in this catalogue, the Dean and Chapter of Exeter gave the largest quantity of books to the Bodleian Library in 1602 from the Cathedral Library. Ian Philip notes that this gift was received "through the influence of Bodley's brother Lawrence, a canon of Exeter, who was also a donor in his own right."[72] And what survived to be donated in the 1600s had already been distorted by manuscript survival.[73]

In addition, the categories of names and notes of exchange, are particularly susceptible to distortion by the way in which the catalogue presents information about them. First, the legibility of written names or inscriptions may be variable; sometimes the ink has faded, or has been rubbed away, or erased entirely. Second, some

---

[69] The producers of *Summary Catalogue*, II.i were Falconer Madan and H. H. E. Craster.

[70] Uncertainty about date is clearly denoted by (?) throughout the *Summary Catalogue*, II.i.

[71] *Summary Catalogue*, II.i, p.v.

[72] Ian Philip, *The Bodleian Library in the Seventeenth and Eighteenth Centuries*, The Lyell Lectures, Oxford, 1980-81 (Oxford: Clarendon Press, 1983), p.18.

[73] Michael G. Sargent, 'What do the numbers mean? A Textual Critic's Observations on some Patterns of Middle English Manuscript Transmission', *Design and Distribution of Late Medieval Manuscripts in England,* ed. by Margaret Connolly and Linne R. Mooney (York, The University of York: York Medieval Press, Boydell and Brewer, 2008), pp.205-244, pp.208-213, discusses the variable nature of manuscript survival of different texts.

inscriptions and names were never recorded in the catalogue at all, despite their apparent legibility. This less-than-exhaustive approach is made apparent by the way in which some manuscripts' inscriptions are noted as containing one name, with the remaining names dismissed as a number, or "others." The catalogue records, for instance, names appearing in a paper manuscript of short theological works written by T. Urmuston in the 1480s-1490s, as simply "'Jacobus Caryngton', and others."[74] Despite these shortcomings, analysing the catalogue nevertheless suggests patterns in how medieval people exchanged books, and offers extant examples of how they went about marking those exchanges.

Names in second-hand books

First, this survey generated a rough sense of the prevalence of names marked into medieval books. What the survey suggests is that, of 837 medieval books given to the Bodleian Library before 1660, medieval people before 1500 had marked names in some way – either stand-alone or as part of a longer inscription – on to just under a quarter of those books (24% or 205 out of 837 surveyed).[75] The *Summary Catalogue* sometimes conflates names written as part of longer inscriptions and stand-alone instances of names, and many names are undatable, so this probably falls short of the true total number of names. Though this figure may not be representative of medieval books more widely, it can begin to give us an idea of the sample in question here.

So, what do names in books mean? Do they always signal ownership? Presumably, stand-alone inscriptions of names were mostly the names of owners, although where there is no explicit statement of ownership or information from sources external to the book, this may not be certain. Also, mere names are *static* indications of ownership, rather than inscriptions specifying the second-hand transfer of ownership. For instance, like those other examples of stand-alone names, written as though graffiti-tagging the manuscript (in chapter 3), in a fifteenth-century manuscript of works by Chrysostom and Anselm the name "Wyllyam Dobyson" is marked into the book.[76] "Wyllyam" did not add any further information to claim the book as his own, or specify the purpose of his signature in any other way. Similarly the name "Bychyngham" is inscribed on one of the final flyleaves of a fourteenth-century

---

[74] BodL, MS Bodley 123, f. 205^{v}; *Summary Catalogue*, II.i, p.147. Much of the ink is faded or otherwise illegible.

[75] All percentages are rounded to the nearest whole number.

[76] BodL, MS Bodley 436, f. 207^{r}; *Summary Catalogue*, II.i, p.334.

miscellany, with another name, "Wychyn", a page later, with no further comment.[77] In a French manuscript copy of a romance and an encyclopaedia of natural science, bound in England in the fifteenth century, there is a series of fifteenth-century English names on the flyleaves: "John" and "William Marlynge" or "Merlynge" of Thaxted in Essex, and "Thomas Marmyon" and "<Peter> Young."[78] The precise reason for the original writing of any of these names is not made explicit by inscriptions in the book.

However, some medieval people linked their signature with details about their relationship with the book. One such individual is John Enderby, who wrote "Iste liber constat Joh*ann*i Enderby de louth capell*an*o" into the front of his pocket-sized copy of astrological texts, which includes Chaucer's *Treatise on the Astrolabe.*[79] In this inscription he links himself to his role as chaplain, his location in Lincolnshire, and his ownership of this book. About sixteen similarly proudly-inscribed names of owners are recorded as such by the catalogue, often using phrases such as *iste liber constat* or *pertinet* ("this book belongs to…"). While these terms claim ownership, and do not necessarily or expressly refer to the book's transition to another owner, multiple names written into one book may well signal a book that had numerous owners.

In the 205 books with at least one name, there are 352 discrete inscriptions. The clear majority of manuscripts (67%, or 138 of 205) have only one inscribed name from before 1500; the remaining third (33% or 67 manuscripts) bear more than one. Of those, 10 manuscripts account for 77 names from anytime before 1500 (that is, 5% of the books bear 22% of the total number). These books are replete with numerous names for various reasons, though the most common is that people pledged a book to a chest together, as a group. The most name-filled manuscript in the survey is a copy of the *De Proprietatibus rerum* with sixteen names. In addition to one name contained in a separate *ex dono* note, there is also a *cautio* inscription, which notes that in 1390 the book was pledged to a loan chest (which chest is not known) by fifteen people.[80]

---

[77] BodL, MS Bodley 355, f. 188^{v}, f. 189^{v}; *Summary Catalogue*, II.i, pp.367-8.

[78] BodL, MS Bodley 461, f. 1, f. 274^{v}; *Summary Catalogue*, II.i, p.371.

[79] BodL, MS Bodley 68, f. ii^{v}: "This book belongs to John Enderby, chaplain of Louth"; Louth is in Lincolnshire, and the manuscript is dated to the fifteenth century, *Summary Catalogue*, II.i, pp.228-9; Geoffrey Chaucer, *Treatise on the Astrolabe,* ed. by Sigmund Eisner (Norman: University of Oklahoma Press, 2002), p.54-56; Simon Horobin, 'The Scribe of Bodleian Library MS Bodley 619 and the Circulation of Chaucer's Treatise on the Astrolabe', *Studies in the Age of Chaucer,* 31 (2009),109-124, at p.121; dimensions: 175 mm × 120 mm; the book is bound in a medieval limp binding, enclosed within a seventeenth-century case.

[80] BodL, MS Bodley 749, f. 291^{r}, the *Summary Catalogue,* II.i, pp.535-536 gives only three of the 15 names: Henry Brum, John Port and William Attevill, because the folio is almost completely illegible due to wormholes. The *ex dono* inscription is on f. ii^{v}, and states that the book was given to Exeter Cathedral by Robert Rygghe. Dimensions: 360 mm × 230 mm.

We might conclude that 33% of these books, because they were inscribed with more than one name, qualify as having been second-hand in the pre-1500 period. More than that, it could be assumed that the 10 manuscripts with a great many names written on their pages entered into third- or fourth-hand ownership. Without context, the manuscript with 16 names written on its pages might be assumed to be sixteenth-hand. Without knowing the full inscription in a manuscript, or some idea of the chronology of ownership, it is hard to understand from names inscribed in books whether a book has undergone a change in ownership or use. Books shared amongst a coterie may have been signed by fellow readers or subsequent users; books deposited as a pledge sometimes listed numerous co-depositors, and some books were dedicated for shared use, such as common-profit or library books. For instance, the (apparently) sixteenth-hand book was in fact collectively pledged by 15 people to a loan chest, and, separately, given to Exeter Cathedral by Robert Rygghe.[81] They could not be said to own it in the same way that an outright owner might be said to. (Pledged books will be discussed in more detail soon.) It is not possible to draw firm conclusions about the degree of second-handedness simply from the numbers of names in books.

The age of books

But, however many owners they may have had, typically, by the fifteenth century how old were second-hand books? To find out how old some second-hand books were during the fifteenth century, a survey of a different catalogue was undertaken. It confirms the obvious point that in the fifteenth century people bought new books but also owned, or came into ownership of, older books. Just how old were those older books? What was the typical vintage of the books circulating during that century? And what impressions would a fifteenth-century person have of the extant books available?

That might depend on the comparison between a book's age and a person's life expectancy. What was a typical life expectancy? In common profit books (above), the inscriptions paid attention to both the "teerme of lyf" or human life and the length of time that the book might endure. Though there are a wide range of estimates of life expectancy during the fifteenth century, Christopher Dyer notes that one group of tenants in their twenties were recorded as living for "at least another 23 to 25 years."[82] Taking this figure with a pinch of salt, and a glance at other estimated life expectancies (from birth, or from another age) at this time, let us assign a rough figure

[81] BodL, MS Bodley 749, f. 291^{r} and f. ii^{v} respectively.

[82] Christopher Dyer, *Standards of Living in the Later Middle Ages: Social Change in England,* c. *1200-1520* (Cambridge: CUP, 1998), p.128.

of about fifty years to a typical fifteenth-century lifespan.[83] Life expectancy was highly variable and could be affected by class, climate, diet, regional location, and of course natural disasters such as plague or famine, among many other factors. In a life of about fifty years, what vintage of books might fifteenth-century readers and book users experience? That depends how old the books were. This can be gauged by using an appropriate sample of books exchanged or owned during the fifteenth century. A pertinent list of books was compiled by N. R. Ker in *Medieval Libraries of Great Britain*.[84] This list of 'Donors, Scribes and Other Persons' associated with books in medieval libraries offers a highly relevant sample for the study of ownership and donation.[85] Wherever possible, Ker included transcriptions of inscriptions and datable information found in those extant books. Analysing these details generated suggestive quantitative indications of how old books could be in the fifteenth century, how common old books could be by this time, and whether medieval books were treated sustainably by their owners and donors. The central investigation was into the number of years that tended to elapse between the creation of a book (where datable) and its (datable) ownership or donation. Of the 414 manuscripts from Ker's list that were surveyed, 384 manuscripts had both a known or estimated date of composition and another date.[86] The additional date was usually associated with a verifiable owner and was often a date of death. Occasionally, it was a date at which an individual was known to have been particularly active, or to have flourished in some way, which is marked as "fl." ("floruit"), or the date on which he commenced a particular role. Ker also listed numerous people who copied or arranged the copying of manuscripts, denoted by phrases such as *composuit*, *fieri fecit*, and *inscribitur*, these were left out of my

---

[83] "For those who survived to 25, the remaining life expectancy was 23.3 years", Maria Patrizia Carrieri and Diego Serraino, 'Longevity of Popes and Artists Between the 13th and the 19th Century', *International Journal of Epidemiology,* 34:6 (2005), 1435-1436; for the life expectancy of adult males from the higher ranks of society, see M. A. Jonker, 'Estimation of Life Expectancy in the Middle Ages', *Journal of the Royal Statistical Society, Series A,* 166:1 (2003), 105–17; for life expectancy of monks at Christ Church Canterbury in the fifteenth century, see John Hatcher, 'Mortality in the Fifteenth Century: Some New Evidence', *Economic History Review,* 39 (1986), 19–38.

[84] The beta-version of *MLGB* (online version) has been in development throughout the research period for this chapter, therefore the apparatus is incomplete and could not be utilised for this study. All data was collated from *MLGB* directly. For the developing beta-version, see: online <http://mlgb3.bodleian.ox.ac.uk> (accessed 5 January 2017); on Ker's method, see R. Pfaff, 'N. R. Ker and the Study of English Medieval Manuscripts', *Anglo-Saxon Manuscripts: Basic Readings*, ed. by Mary Richards (London: Routledge, 2001), pp.55-77, at pp.59-63.

[85] N. R. Ker, 'Donors, Scribes and Other Persons Concerned Before 1540 with the Books Recorded on Pages 1-224', *MLGB*, pp.225-321.

[86] This generated a plentiful, workable sample. 30 manuscripts had no known date of production and so were not included.

survey to maintain the focus on second-handedness.[87] Also included in the survey were any further dates written in inscriptions, or inscriptions datable to the fifteenth century by other means, for example by handwriting features. These dates usually also referred to ownership, exchange, or contact between the individual and the book. Although I drew the data from Ker's list of books that were at one point donated to libraries, this is a study of *any* handling of them which Ker's list happens to mention. The survey contrasted the date a book was made and any given date of its fifteenth-century handling. Uncertain dates, untraced texts, and post-medieval inscriptions were left out of the survey.

Of course, books may be recorded as having a specified date of production or just a date range which is the guesswork of cataloguers. But Ker's sample was better than the *Summary Catalogue* because of his regular, clear, and consistent system for specifying dates.[88] A usable date was required to calculate the age and vintage of books. The maximum and minimum possible dates for each range were found, and these were used to calculate the mid-point difference.

This yielded interesting indications of the medieval second-handedness of books. First, the maximum difference between the date of production and other datable point of contact was, on average, 145 years.[89] Taking a rough estimate of life expectancy to be about 50 years, this is significantly more than life expectancy at the time. With these figures in mind, it becomes clear that 145 years was roughly three times the length of a lifespan. At the average maximum possible estimate, then, many books were already of a significant vintage, perhaps three times as old as the average lifetime, by the time they came to their fifteenth-century owners. Second, and in contrast, the average minimum span of time that elapsed between production of a book and recorded contact was 41 years.[90] Yet even this minimum possible average suggests that books had, on average, been extant for most of a generation and therefore were already at least second-hand by the time an inscription was made to record ownership or donation. Finally, averaging the raw results of each book's maximum and minimum possible age yielded a mean difference of 86 years. So, this means that, by the time details of fifteenth-century ownership or donation were

[87] "Composed", "made", and "inscribed."

[88] *MLGB*, p.x; also *MMBL*, II, p.vii.

[89] This average was calculated by finding the maximum possible book-years between the date production, and the date of contact or donation, then dividing this figure by the total number of books in the sample: 55603 book-years ÷ 384 books = 144.79 years.

[90] This was worked out by dividing the minimum possible book-years by the total number of books: 15687 book-years ÷ 384 books = 40.85 years.

inscribed on to their pages, on average books were already well over one generation old and they could be – and were – sustained by successive generations. To go back to the raw data: about 135 manuscripts had been extant for 50 years. At most, they could be around for closer to three lifetimes. Moreover, some of the books in this survey went on to other owners, thereby extending their life span through further circulation. Even the average estimate of 86 years suggests that books from the early fifteenth century, or from previous centuries, were durable, sustainable objects. Though records used in this survey were assembled by Ker from books which ended up in medieval libraries, a setting which may positively influence the survival chances of these manuscripts, the results nevertheless put figures to the assertion that both older and newer books were owned or donated. Furthermore, setting the average vintage of books against estimated human life expectancy gives a sense of how medieval people were evidently comfortable with re-gifting and using old books much older than themselves.

But how long could older books linger on? Did books have a shelf life? This sample of surviving, attestable, datable donations evidently cannot tell us about the books that succumbed to the ravages of time. Because of this, we can never know the real shelf life or survival chances of medieval books.[91] Though such book wastage or destruction in the medieval period is unclear – and many books must be have been lost, worn out or destroyed – the survey sample can confirm the expected average ages of books, when viewed by century. The chart (see figure 3, supplement, p.26) demonstrates that, by the fifteenth century, far fewer eleventh-century books (3 books) were inscribed by their owners or donors than those produced more recently. They had an average age of 399 years.[92] 27 books were datable to the twelfth century, average age 269 years. 76 thirteenth-century books had 179 years' average age. By the fourteenth century, the average age of the 111 books was 99 years. In the fifteenth century, 171 were dated simply to an earlier part of the fifteenth century, then had another recorded point of contract within the same century. The 171 attested books had an average age of only 14 years. This can be attributed to the numbers of books produced in each period, but also to natural wastage cumulatively having a greater affect on older books.

---

[91] As Sargent notes, "there is no way to count the number of manuscripts that did not survive", 'What Do the Numbers Mean?', p.210.

[92] All average ages of books by century were calculated using the minimum date of production, and the average span of time between the production of the book and the datable contact by an owner or donor.

Owners and donors were, though, prepared to use and donate books that were already centuries old. Three manuscripts from the survey are datable, at the earliest, to the eleventh century and were of a considerable vintage – at the upper estimates, between 444-499 years old. They were associated with libraries at Canterbury, Durham, and Westminster in the fifteenth century. BL, MS Arundel 155 was 474 years old when it was given by William Hadley at Christ Church Canterbury;[93] Durham Cathedral, MS C.III.18, was 415 years old when it was inscribed by John Aukland;[94] and when TCC, MS O.7.37 was connected with the monk Richard Tedyngton at Westminster Abbey, the book was as much as 487 years old.[95] The records in Ker's list also attest to 27 manuscripts dated at the earliest to the twelfth century. These books were held by a range of institutions, and were aged on average between 240-341 years. The continued existence of these older manuscripts confirms the effectiveness of their sustainably-made, resilient physical structures. Some may not have been used due to being precious, treasures, or special presents, or only used carefully. The improvements in library arrangements during the course of the Middle Ages involved setting aside separate storage or rooms, and in some places this may have been more effective for preserving books than conditions elsewhere.[96] It is possible that repairs (like those discussed in chapters 1 and 2) kept books in use, or at least intact enough that their value held for the purposes of donation or recording ownership. It is significant that the oldest books in the survey were held by what were already extremely venerable institutions: Canterbury was founded in 997, Durham in 1083 and Westminster in 958.[97] The relative stability, and perhaps the importance, of some religious houses may have contributed to the ongoing longevity of their manuscript holdings. The inscriptions of ownership or donation dating to the fifteenth century do not tell us what combination of variables contributed to their existence, or how they were valued by their owners or donors.

---

[93] BL, MS Arundel 155; 'List of Surviving Books', in *MLGB*, pp.1-218, at p.35; 'List of Donors', p.240.

[94] Durham Cathedral Library, MS C.III.18; 'List of Surviving Books', p.70; 'List of Donors', p.252.

[95] TCC, MS O.7.37; cited as 'MS 1365' in 'List of surviving books', p.196; 'List of Donors', p.314.

[96] Richard Gameson, 'The Medieval Library (to *c.*1450)', *CHLBI I,* pp.13-50.

[97] David Knowles and R. Neville Hadcock, *Medieval Religious Houses: England and Wales* (London: Longmans, Green and Co., 1953), p.61, p.64, p.80 respectively; see also Richard Gameson, *The Earliest Books of Canterbury Cathedral: Manuscripts and Fragments to* c. *1200* (London: The Bibliographical Society, the British Library, the Dean and Chapter of Canterbury, 2008); R. A. B. Mynors, *Durham Cathedral Manuscripts to the End of the Twelfth Century*, printed for the Dean and Chapter of Durham Cathedral (Oxford: OUP, 1939).

Dated transfer of ownership inscriptions

Outside of this list derived from medieval libraries, how were books shared, and how did they fare in the hands of other owners? Returning now to the first volume of the *Summary Catalogue*, it is possible to explore in more detail the transfer of books to other owners. Where names alone do not help to accurately identify ownership patterns, names that form part of longer, more scrupulous inscriptions, specifically designed to record details of ownership or transfer of possession, often say much more about the movement of second-hand books. In the survey from the *Summary Catalogue*, there were 67 discrete inscriptions that could be dated specifically or approximately to the fifteenth century, contained in 50 manuscripts (see figure 4, supplement, p.26).[98] While many of these manuscripts have been rebound since the fifteenth century, most of this group have flyleaves, pastedowns or lifted pastedowns, on which these inscriptions mostly occur, reasonably intact. Some inscriptions provided exact dates, for example, the day, month and year in which a book was pledged. Many, however, were only vaguely datable by the style of the handwriting. The chart (figure 4) gives a sense of the prevalence of these specific and non-specific dates.

Further investigation into the books themselves revealed more about the content, location and nature of the inscriptions.[99] The notes examined in this survey were inscribed almost exclusively into either the front or back of books, usually on to flyleaves or pastedowns. In the survey, there were 13 books with fifteenth-century inscriptions only at the back and 30 books with inscriptions only at the front. 6 books had inscriptions at both the front and back, and 1 had a third inscription about halfway through the manuscript, due to being formed from two book blocks. There were trends in the wording too: popular phrases were used to describe typical modes of movement or valuation conducted between people and institutions. These common phrases were grouped into five clusters according to the kind of movement they described: purchases (*emptus*), valuations (*precium*), pledges (*cautio*), gifts and bequests (indicated by a range of terms, including *ex dono*). In practice, sometimes the clusters overlap, with a few books recording multiple kinds of transfer, presumably on separate occasions, although as will be seen sometimes this may be unclear. Figure 2 gives an

---

[98] For more on "dated" and "datable" manuscripts, see Raymond Clemens and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca; London: Cornell UP, 2007), p.121.

[99] To give an impression of these manuscripts, which were also consulted in person to confirm the *Summary Catalogue*, II.i details, the average height was 280 mm, with an average width of 195 mm; the average ratio of width to height was 0.69 and the average 'surface area' of a book (height × width) was 58380 mm^2.

overview of these clusters. It shows both the actual numbers of inscriptions that fit each category and their proportional relationship, and subdivides each category into specific, mixed and non-specific fifteenth-century dates.

As the chart shows, alongside second-hand books that were valued, pledged, gifted, or bequeathed, were those with annotations which expressly describe their purchase. Many of these are like the *emptus*-type inscriptions discussed previously in relation to second-hand books sold, and in the cases cited, presumably for a profit, by London book artisans. Beyond professionals in the book trade, inscriptions of this kind could be written into a book by anyone. The *emptus* inscriptions considered here cite individuals *not* known to have been involved in the London book trade. A wider range of people purchasing books second-hand acknowledged the second-hand nature of their books in writing. These purchase inscriptions (*emptus*) constituted 4 manuscripts (6%) of the sample. Of course, many simpler valuation inscriptions, usually consisting of just a figure and currency, may well have referred to the price of a book for sale, or for that matter, the value of a book as security for a loan. (These highly abbreviated notes will be discussed shortly.) Combining all the unspecified valuations with explicitly-noted purchases would boost this group to 24% of the inscriptions in the survey. However, though we can imagine what such brief valuations might have been for, the clearest evidence for known acquisition comes from inscriptions that spell out the fact of a book's purchase.

Though books bearing an *emptus* inscription were bought, these manuscripts do not always state their price. There were two examples that did. The first is a manuscript of logical and grammatical treatises from the early fifteenth century with an inscription that it was bought for 26s. and 8d. (p*recium* xxvj s. viij d.)[100] The second is an eleventh-century copy of works by Ambrose, which was given for 6 coins known as 'shields' ("detur pro sex scutis").[101] Putting a number on the cost – and, moreover, actually writing it into the book itself – suggests that the inscription acted as a receipt or proof of purchase. Neither party could easily claim wrongdoing if the details were agreed upon and committed in writing

[100] BodL, MS Bodley 643, f. ii^{r}: "Constat domini de motynden ordinis S*anc*te Trini*tatis*, emptus p*er* f*ratrem* Ricard*um* de Lansyng a*nno* dom*ini* M*illesmo* cccc^{mo} lxvij^{mo}. / p*recium* xxvj s. viij d.", "Owned by the lord of Motynden St Trinity, bought from brother Richard de Lansyng year of our lord 1467. Worth 26s. 8d." There is another note on f. 256^{r} "Iste liber pertinet m*agistro* domini de motynde", *Summary Catalogue*, II.i, pp.281-2; dimensions: 210 mm × 140 mm.

[101] BodL, MS Bodley 866, f. iii^{v}; *Summary Catalogue*, II.i, pp.523-4; *DMLBS*, *scutum, scutus*, sense 2.

Sometimes, where prices are not supplied, the inscription yields other specific details. These might include the names of individuals involved in the transaction. Another manuscript details the names of both parties concerned with the handover of a manuscript. Written prominently at the top of the front pastedown is the following purchase note: "Liber Rob*er*ti Elyot empt*us* London de m*agistro* Will*el*mo Menyman anno gr*aci*e . 1489 . 4 . die Nouembris."[102] The manuscript was both written and bound in England in the fifteenth century, and includes a Sarum calendar, the Martyrology of Usuardus, and various other religious treatises and commentaries. Robert Elyot became the Vice-Provost of Eton from 1482 until his death in 1498.[103] By 1489, when he purchased this manuscript, he was already a powerful – and probably quite wealthy – man. He bought the manuscript from Manyman, of Bath and Wells diocese, who had been a fellow at Lincoln College during the 1470s.[104] Elyot was a generous donor: he gave silver or books to Syon Abbey, to All Souls, Merton, and Eton Colleges, and to a few individuals.[105] But why did he inscribe his name into this purchase? He may have been keen generally to inscribe his name and assert his ownership of his possessions. Or perhaps this munificent donor liked to keep track of the general circulation of his books, to account for his purchases as well as his gifts, and to record details of them in writing.

Other purchasers give even more information. For example, a manuscript written and bound in England in the fifteenth century carries an inscription dated to 1477 which details that it was bought from a carpenter named Sproxton: "Liber fr*atr*is Joh*ann*is Gillyng monachi Bellalande . empt*us* a quodam carpentario . no*min*e sproxton . A*nno* Do*mini* . 1477^{o} . sept*im*o k*alendas* junij."[106] This inscription is written on two lines on the first folio of the manuscript, tucked above the start of the main text. Thus this inscription not only names both the buyer and the seller of the book,

---

[102] BodL, MS Bodley 731, top of front pastedown: "Robert Elyot's book, bought in London from Master William Menyman (or Manyman), in the year of grace 1489, on the fourth day of November." This flyleaf is recycled from a fifteenth-century manuscript of themata for sermons, which has been pasted in upside down, *Summary Catalogue*, II.i, pp.496-497.

[103] Elyot, *BRUO*, p.638.

[104] Manyman, *BRUO*, p.1218.

[105] N. R. Ker, 'Robert Elyot's Books and Annotations,' *The Library*, 5th ser., 30 (1975), 233-237; see also Richard Beadle, 'Robert Elyot – Another Manuscript', *The Library*, 5th ser., 32:4 (1977), 371-372.

[106] BodL, MS Bodley 842, f. 1^{r}: "Book of Brother John Gillyng, monk of Byland. Bought from a certain carpenter named Sproxton. Seventh day of June, year of our Lord 1477"; *Summary Catalogue*, II.i, p.433; dimensions 220 × mm 140 mm. The manuscript also includes a fifteenth-century note that it belonged to Byland, a Cistercian abbey in Yorkshire (f. ii^{v}), see Knowles and Hadcock, *Medieval Religious Houses*, p.106.

but also specifies the location, occupations and date of purchase. Two more examples from the survey typify purchase notes of the most specific kind. Jotted in the back of a three-part manuscript of English Legatine and Provincial ecclesiastical Constitutions, sandwiched into a column adjacent to an index, is a note of purchase by a vicar from Northbourne in Kent: "Iste liber empt*us* a*nn*o d*omini* m^{mo}. cccc^{mo} ⌐lx^{o} 2°, *et con*stat m*agist*ro Thome Langlay vicario de Norbourne […] ¬."[107] Here the statement of purchase is used in conjunction with a robust statement of possession, perhaps reinforced by Langlay's assertion of his role as vicar. Langlay left many notes in the margins of his manuscript, and the vestiges of tabs remain on some folios. In the other manuscript, a Vulgate Bible written in about 1300, an inscription indicates that Richard Swan bought the book from a vicar in Somerset: "Liber Ric*ard*i Swan*n* quem emit a d*omi*no Math*eo* vicario de Mudford vij^{o} die Marcij Anno domini mill*es*imo cccc lxxv^{to}."[108] These unambiguous proofs of purchase are located in time and place, and names and jobs of the individuals are specified. This level of detail and precision lends these notes an almost legalistic tone, and they could have acted as the equivalent of modern-day receipts.

Rather less specific are the majority of *precium*-type notes. These are usually brief, and have a hurried aspect. They are often found in the most accessible spaces in the book. In the survey there were 12 inscriptions (18% of all 67 inscriptions) that denoted that a book was valued at a particular sum (see figure 5, supplement, p.27).[109] They may be as simple as a wobbly, rushed note in secretary handwriting on the front pastedown of a book with fourteenth-century textblock, in a fifteenth-century binding: "p*recium* xiijs. iiij" ("worth 13s. 4d.")[110] Often these take the highly abbreviated form of simply "pcm" for *precium* followed by a number and indication of currency. For instance, in BodL, MS Bodley 750, a fifteenth-century hand jotted on to the final leaf of the book the value "p*reciu*m v s." (and another valuation jotted into the book is £1

---

[107] BodL, MS Bodley 794, f. 205^{r}: "This book was bought in the year of our Lord 1460 and is owned by Thomas Langlay vicar of Norbourne […]"; *Summary Catalogue*, II.i, pp.535-6; dimensions: 295 mm × 190 mm.

[108] BodL, MS Auct. D.5.11, f. 1^{r}: "The book of Richard Swan, which he bought from Matthew vicar of Mudford on the seventh day of March in the year of our Lord 1475"; *Summary Catalogue*, II.i, p.577; dimensions: 130 mm × 90 mm.

[109] This number includes one of the above *emptus*-type inscriptions which did mention a *precium*: BodL, MS Bodley 643; BodL, MS Bodley 866 was not included, because the inscription did not specifically use the term *precium*; furthermore, the survey indicated at least 9 more *precium* inscriptions, although these were left out of the tally here because the date of inscription was uncertain or omitted in the catalogue.

[110] BodL, MS Bodley 809, front pastedown; *Summary Catalogue*, II.i, p.482; dimensions: 250 mm × 170 mm.

16s. 8d.)[111] These can be remarkably cryptic, strangely isolated numbers. Perhaps these expedient jottings were a kind of shorthand for stationers or other booksellers, and in fact did refer to pledge or sale values, even where this was not explicitly noted? But where a note of the *precium* of a book goes unqualified, we can only imagine its purpose.

The results of the survey demonstrate very clearly the sheer range of *precium* figures attributed to books throughout the fifteenth century: the table (again, see figure 5, supplement, p.27) shows in full the findings of book values recorded in inscriptions. Medieval prices look to us today almost incomparable with one another, however, as Jill Mann explains "Medieval thought on the questions of price and value was in no doubt that the process in which value is determined, both relatively and absolutely, is exchange."[112] But valuations did exist, and so I have tried to correlate them with other significant aspects of codicology, such as age, size, number of leaves, and the presence or absence of decoration. The whole group of manuscripts was large in size, with numbers of leaves ranging from 109-399. The average height of this group of fifteen books was 287 mm, with an average width of 201 mm (ratio 0.7, average surface area 61775 mm^2.) Other than a general impression of size, none of the other comparisons revealed any significant patterns. So how might these figures be productively considered?

One way of considering financial values from the fifteenth-century is to calculate what they might be worth today.[113] The value of money itself was variable throughout the fifteenth century, so accurately dated inscriptions are required for this calculation. Only three of these *precium* inscriptions can be dated to a particular year, and specifically linked to a given price. These are: BodL, MS Bodley 251, a gift from a wealthy uncle to his nephew, who then pledged it to a loan chest in 1403, when it was valued at 18 marks (or £12). This sum would have the same spending worth as £5,367.36 today. BodL, MS Bodley 750 was pledged along with other items in 1423/4 for 36s. 8d. (£1 16s. 8d.), and this manuscript-book was valued again on another occasion at 5s. If the pledge-valuation date for this manuscript is rounded to

---

[111] BodL, MS Bodley 750, f. 129^r, "worth 5s."; *Summary Catalogue*, II.i, p.478; dimensions 235 mm × 170 mm.

[112] Jill Mann, 'Price and Value in Sir Gawain and the Green Knight', *Essays in Criticism*, 36 (1986), 294-318, at p.298.

[113] The National Archives maintained a calculator until 2005, which is no longer updated, but still available to calculate figures at rates to that year; this was used here to generate an idea of spending worth in the twenty-first century: 'Currency Calculator', online <http://www.nationalarchives.gov.uk/currency/default0.asp#mid> (accessed 5 January 2017).

1420, this would give a spending power of £860.48 today. Finally, BodL, MS Bodley 643, which was bought in 1467 26s. 8d. (£1 6s. 8d.), would have the same spending worth as £667.44 today.[114] Leaving aside for one moment the vast order of difference between these figures, to us today they sound remarkable costs to pay for a book.

Another way to try to make sense of these figures is to compare them with other fifteenth-century costs of books. For example, 126 books were recorded as having a value of £113 in 1397.[115] Though it is essentially meaningless to say so, this works out at 18s. per book on average. This figure dates to only six years before the pledge-value of BodL, MS Bodley 251 was inscribed on to its pages. Yet, this makes the £12 raised against this book worth just over 13 times the average value of each of those 126 books. Other recorded values discovered by Dyer enable a comparison between 7 books, worth £5 in 1479 (or about 14s. each on average), and BodL, MS Bodley 643, worth £1 6s. 8d. in 1467.[116] This means that BodL, MS Bodley 643 is worth almost double the average value of those books. So, were these examples special books? In addition to their material qualities, these books of course bear texts, though these seem unexceptional. BodL, MS Bodley 251 consists of a commentary on the Bible, from Genesis to Ecclesiasticus, by Nicholas of Lyra. It was written in the first half of the fourteenth century. BodL, MS Bodley 643 is made up of logical and grammatical treatises written by two hands, one of which is identified in the colophon as John Esteby.[117] BodL, MS Bodley 750 is a fourteenth-century manuscript copy of Hugh of St Victor's treatise on Noah's Ark, which also comprises sermons and other religious texts. The price jottings would seem to suggest that while these texts may not have been bestsellers, they were certainly not unwanted, and could still command a princely sum. So in particular, then, was BodL, MS Bodley 251 an exceptionally lavish production that could account for its high price? It is the largest of all the books that feature *precium* inscriptions, at 460 mm × 325 mm, and has the most leaves, at 399.[118] It is also the manuscript that most noticeably signals its value through high grade production: very fine, large-scale parchment, border decoration, illustrations, ornate initials, as well as ample gilding. Though this goes some way to explain the vast

---

[114] BodL, MS Bodley 251; *Summary Catalogue*, II.i, p.314; BodL, MS Bodley 750; *Summary Catalogue II.i*, p.478; BodL, MS Bodley 643; *Summary Catalogue*, II.i, pp.281-2.

[115] Dyer, *Standards of Living*, p.77.

[116] Dyer, *Standards of Living*, p.76.

[117] BodL, MS Bodley 643: Esteby, vicar of Banbury, 1436?-70?, wrote ff. 127-255, except f. 134^{v}, colophon at f. 255^{v}: *Summary Catalogue*, II.i, pp.281-2.

[118] BodL, MS Bodley 251; H. M. B, 'Documents and Records II: The Wanderings of a Manuscript', *The Bodleian Quarterly Record,* 2:17 (1918), 118-120.

difference between the value annotated into this book, and the significantly lower figures jotted into other books, it demonstrates the difficulty in assessing the relationship between price, cost, and value of medieval books.

In stark contrast with these high prices is BodL, MS Bodley 676: when compared with the other *precium* inscriptions in books, this manuscript seems to be very cheaply valued indeed. At 8d., this book cost twelve times less than the next cheapest recorded price: BodL, MS Auct. F.5.30, at 8s., a manuscript of medical treatises written in the second half of the thirteenth century.[119] BodL, MS Bodley 676 is relatively small at 155 mm × 110 mm, at least compared to the average height of 287 mm, and average width of 201 mm. There is a possible offcut amongst the parchment used, which may point to generally low grade parchment.[120] Yet, when compared with others in the survey, this manuscript still seems almost inexplicably cheap. The text is the *Proportiones breves* and was copied in Oxford by the scribe John Buxhale or Boxhole.[121] He was a Carmelite who, at some point in his career, wanted to move from Hitchin to a more rigorously spiritual life as a Carthusian at Sheen in Surrey.[122] Perhaps this desire for a more austere life is matched in the frugal value – in both material terms and attributed value – of this manuscript? The mention of the book's price is embedded in a longer inscription: "Codex iste at*t*inet ad Will*elmu*m Cahyssy prec*iu*m est 8d."[123] It is unclear what this low value signals – was this book a bargain?

Another way to try to make sense of the price notes in books is to assess books with comparable valuations, checking whether books with similar values have any similar characteristics. Two pairs of manuscripts stood out as having like values: BodL, MS Bodley 721 was 30s. (or £1 10s.) and BodL, MS Bodley 858 at 30s. 4d. (or £1 10s. 4d.); BodL, MS Bodley 812 and BodL, MS Bodley 516 were both exactly 20s. (or £1).[124]

---

[119] BodL, MS Auct. F.5.30; *Summary Catalogue*, II.i, pp.528-529.

[120] BodL, MS Bodley 676, f. 72; *Summary Catalogue*, II.i, pp.441-442.

[121] Steven J. Livesey, 'Proportions in Late-Medieval Universities: An Examination of Two Treatises', *Revue d'histoire des textes*, 16 (1986, 1988), 283-310, at p.291.

[122] F. Donald Logan, *Runaway Religious in Medieval England,* c. *1240-1540* (Cambridge: CUP, 2002), p.48.

[123] BodL, MS Bodley 676, f. ii^{r}: "This book belongs to William Cahyssy, worth 8d."

[124] BodL, MS Bodley 721, f. 269^{v}; *Summary Catalogue*, II.i, p.469; BodL, MS Bodley 858, f. 373^{r}; *Summary Catalogue*, II.i, p.513; BodL, MS Bodley 812, f.245^{v}; *Summary Catalogue*, II.i, pp.490-491; BodL, MS Bodley 516, f. vi^{v}; *Summary Catalogue*, II.i, pp.430-431.

Materially and textually, the first two are largely comparable with one another. BodL, MS Bodley 721 was written in the fourteenth century, is part of a commentary on the Epistles of Paul, and BodL, MS Bodley 858 was written in the first half of the fourteenth century and contains a copy of the *Sentences* of Peter Lombard, which has been heavily annotated in the margins. BodL, MS Bodley 721 is 350 mm × 250 mm, whereas BodL, MS Bodley 858 is slightly smaller at 300 mm × 180 mm. Yet BodL, MS Bodley 858 is thicker, and has considerably more leaves (373) compared with BodL, MS Bodley 721 (270). Then again, BodL, MS Bodley 721 has consistently finer quality parchment, with decorated borders in addition to red and blue ink initials. BodL, MS Bodley 858 was made with less consistent parchment quality and has only blue and red ink initials and occasional rubrication. It is not possible to compare the bindings, as BodL, MS Bodley 721 was rebound after the medieval period, whereas BodL, MS Bodley 858 is still bound in English fifteenth-century red leather over oak boards.[125] In this case, similar manuscripts are valued at a similar price.

By contrast, the second pair, BodL, MS Bodley 812 and BodL, MS Bodley 516, are much less comparable. Both were written in Latin and are concerned with religion, but that is about the extent of their similarities. The first consists of sermons, the second of religious texts such as works by Augustine. They differ significantly in age, with the former dating to the early fourteenth century and the latter to the tenth century. The physical size is quite different too, these manuscripts have 246 and 108 leaves, and measure 280 × 185 mm and 225 × 170 mm respectively. Some comparable manuscripts can of course be valued at comparable prices, as suggested by the previous examples. However, despite their similar valuation, this pair of manuscripts displays few comparable features.

Often medieval price tags frustrate a purely financial interpretation. The values attributed to second-hand books are looser and more capacious than these terse little prices might suggest. Second-hand books could stand for much more than a financial value: they operated as tokens in relationships. The valuations may exaggerate or depress the attributed value of a book. Sometimes the price of a book may contain a grain of truth that relates to the costliness of its production. Mann has noted that medieval people distinguished value determined by exchange as opposed to

---

[125] BodL, MS Bodley 721 has flyleaves, though these were perhaps not originally bound with this textblock: f. iii is part of a German deed of 1384, and also bears part of a fifteenth-century Latin prayer in a German hand, ff. iii-iv were perhaps a former wrapper: *Summary Catalogue*, II.i, p.469.

"assay", which was "the process by which the value of precious metals is ascertained."[126] Medieval books were *not* valued in this way, but perhaps an element of weighing up the evident level of investment in the quality and grade of execution took place and contributed to the ongoing possible valuations of a book. Some high grade books may have held their value better than lower grade productions. Yet it is quite feasible that in the fifteenth century booksellers, looking to make a profit on a book, asked inflated prices. Similar inflation of valuations has also been suggested in the *cautio* system, as people sought to maximise loans.[127] On the other hand, in case a borrower defaulted on their loan and the book had to be sold by a stationer, it has also been contended that "the tendency would naturally be rather to undervalue the pledges deposited."[128] Conversely, the sum of a pledge written into a book may once have taken into account other valuables, pledged with the book as supplements. Indeed, sometimes the book stood as a token of circulating value, which may have had little or no relevance to the more or less intelligible cost of its production.

Book pledges

This looseness of valuation is especially true in the case of book pledges to loan chests. The survey results demonstrate that the most common inscriptions in this sample were pledges of books to university chests (19 individual inscriptions, or 31% of all the datable inscriptions). This was a system whereby students could leave a book in an actual chest as security against an interest-free loan. Only a few loan chests survive, and what is thought to be the Billingford college chest is still in Cambridge, at Corpus Christi College.[129] Formulaic pledge inscriptions almost always begin with the word *cautio* (sometimes spelled *caucio*), they usually go on to name the loan recipient, then may note the date, details of any supplements, and finally the value, including any supplements, of the whole pledge. The order of these details may vary. The inscriptions in this survey referred to a number of specific chests in Oxford, including the Celton (or Selton), Dunken (or Duncan), Langton, Robury (or Roubury), Vienna (or Vienne), Waugham (or Vaughan and Hussey), and Winton chests, and to a

---

[126] Mann, 'Price and Value', p.296.

[127] Roger Lovatt, 'Two Collegiate Loan Chests in Late Medieval Cambridge', *Medieval Cambridge: Essays on the Pre-Reformation University*, ed. by P. N. R. Zutshi (Cambridge: Boydell and Brewer, 1993), pp.129-165, at p.162.

[128] H. E. Bell, 'The Price of Books in Medieval England', *The Library*, 4th ser., 17 (1937), 312-332, at p.326.

[129] Lovatt, 'Loan Chests', pp.164-165.

"Byllyngforth" chest.[130] This last chest is a Cambridge University chest, endowed by Richard de Billingford in 1432.[131] Of the chests mentioned, most were set up during the fourteenth century, with the exception of the Duncan chest, which was founded in 1457. Universities were a place in which there was a ready market for books, sold new and second-hand. In these academic towns, stationers (*stationarii*) were specially commissioned booksellers, agents appointed by the University to supply books.[132] They traded in both new and second-hand books. Widely-attested in European universities in the early thirteenth century, *stationarii* are first recorded in 1262 in Oxford and 1275 in Cambridge.[133] University stationers were not just booksellers; they were often also capable of making and repairing books, and stationers also worked for the loan chests as "official valuers of manuscripts and other valuables offered as security."[134] A catalyst for the foundation of the University chests was the expulsion of the Jews in 1290. Jews had long acted as money-lenders to scholars, and in response to the financial crisis that resulted from the expulsion, the University encouraged benefactors to finance loan chests.[135] A book could be pledged to a chest as security (*cautio*) for a loan of cash."[136] Many students used this system and went on to redeem their pledge or pledges. And even if some of these books reverted to the same hands, and were not at any point second-hand *per se*, this system caused books to be redeployed for a time to represent a different kind of value-status.

If a student defaulted on their loan, however, the bursars tasked with administering the chest could sell the book to realise its potential value, releasing it back on to the market for wider circulation. As both Alan Cobban and Roger Lovatt have suggested, loan chests were essentially "endowed pawnshops."[137] The system was

---

[130] See Table 7.1: 'University Loan-Chests', T. H. Aston and Rosamond Faith, 'The Endowments of the University and Colleges to *circa* 1348', *The History of the University of Oxford: The Early Oxford Schools*, ed. by J. I. Catto (Oxford: Clarendon Press, 1984), I, pp.265-309, at pp.276-277.

[131] As distinct from the college chest, just mentioned; Graham Pollard, 'Medieval Loan Chests at Cambridge', *Bulletin of the Institute of Historical Research,* 17 (1939-40), 113-129, at p.123; Billingford, *BRUC*, pp.61-2. For an example of an extant Cambridge University loan chest, see 'A Chest for Treasures (and Books)', online <https://exhibitions.lib.cam.ac.uk/linesofthought/artifacts/a-chest-for-treasures-and-books/> (accessed 5 January 2017).

[132] Elisabeth Leedham-Green, 'University Libraries and Book-sellers', *CHBB III*, pp.316-353, at pp.328-330.

[133] Blayney, *The Stationers Company*, p.15, traces the origin of the term.

[134] George John Gray, *The Earliest Cambridge Stationers & Bookbinders, and the First Cambridge Printer* (Oxford: OUP, 1904), p.9.

[135] Aston and Faith, 'Endowments', p.275.

[136] Parkes, *Their Hands Before Our Eyes*, p.84.

[137] Lovatt, 'Loan Chests', p.130; Alan Cobban, *English University Life in the Middle Ages* (London: Routledge, 2002), p.26.

designed to provide means by which chests could replenish their losses. Though the initial cash loan was related to a stationer's valuation of the book to be pledged, there were limits on how much money could be lent. This was pegged to the rank of the borrower or borrowers, so that different members of the college hierarchy were entitled to borrow tiered amounts. Therefore, the *cautio* arrangement was a mechanism by which books often became temporarily redeployed by being deposited in a chest, but also a way in which they could go on to become second-hand. For example, in 1454 two university stationers, John Doll (just mentioned) and John More, sold off a backlog of unredeemed books.[138] This put books back into circulation, as could a redeemed pledge. Traces of unreedemed books sold on to others can be seen in erasures or crossed-out pledge inscriptions, though this might well also indicate a later owner erasing evidence of the manuscript's sojourn in a loan chest.

In Oxford, it was common for stationers to write in the books that they valued. The hand and mark of Thomas Hunt, an Oxford University stationer, was identified in inscriptions in the survey. Outside the limitations of this survey, his "initials are to be found in a number of books."[139] In one example from the survey, Hunt wrote on the front pastedown of a work by Hilary of Poitiers that the book had been pledged to the Robury chest. The earliest known pledge to this chest was in 1321, and it had been very generously endowed by Gilbert Robury, a judge.[140] The inscription in the manuscript states that Richard Gardyner deposited it on 18 November 1491, with four supplements, for 40 s (£2).[141] Gardyner was a fellow of Oriel College, and held various college and church posts until his death in 1518.[142] The stationer added to the usual details included in the 1491 inscription, by writing his mark: the letters **T** and **H** intertwined. Elsewhere in the survey, another

---

[138] W. A. Pantin and W. T. Mitchell, eds., *The Register of Congregation, 1448–1463*, Oxford Historical Society n.s. 22 (Oxford: Clarendon Press, 1973), p. 193.

[139] Parkes, 'The Provision of Books', p.420; Parkes notes that Hunt's valuation and monogram survive in five books: Oxford, Lincoln College, MS lat.113; BodL, MS Bodley 563, ff. 192^{r}–197^{v} (fragmentary evidence); BodL, MS Auct. D.inf.2.4; BodL, MS Bodley 442; BodL MS Bodley 87, in †M. B. Parkes, 'Thomas Hunt and the Oxford Book-Business in the Late Fifteenth Century', *The Library*, 7th ser., 17:1 (2016), 28-39, at pp.29-30. Falconer Madan, 'Day-Book of John Dorne, Bookseller in Oxford, A.D. 1520', *Collectanea*, ed. by C. R. L. Fletcher, Oxford Historical Society, 1st ser., 5 (Oxford: Clarendon Press, 1885), pp.73-177, at pp.141-143, notes that a list of books, which seem to be printed books valued by Hunt in 1483, survives as the pastedown in BodL, MS Auct. R.sup.1, ff. i-ii.

[140] Aston and Faith, 'Endowments', p.276.

[141] BodL, MS Bodley 442, top of front pastedown; *Summary Catalogue*, II.i, pp.340-341. For an image of this inscription see fig. 2 in Parkes, 'Thomas Hunt', p.32.

[142] Gardyner, *BRUO*, pp.742-3;

manuscript of sermons and theological pieces features a long *cautio* note which also refers to "**T. H.**" in a simpler fashion, in the body of the inscription.[143] Outside the survey, another stationer's mark can be seen in the pledge of a manuscript to the Duncan chest. The initials are either "**I. G.**" for John Godsond, or perhaps "**I. D.**" for John Doll.[144] Oxford stationers were required to use their "special sign" or "monogram" to mark books once they had been officially valued.[145]

Some books in the survey seem to have been deposited only once, as is suggested by a note on one of the front flyleaves of a late thirteenth-century copy of Acts, Epistles and Apocalypse. The manuscript is large and the text well-executed in differing textura hands for the main text and the commentary. The note itself is in small, mixed secretary-anglicana handwriting and includes typical details: the manuscript was deposited in 1432, by Thomas Holgate, in the "Celton" or Selton chest, and was valued at 6s. and 8d.[146] This chest was founded in 1360 by William Selton, Canon of Wells.[147] The note was written on the edge of a lifted pastedown, and – probably since the rebinding of the book – is now upside down at the very foot of the page. Even leaving aside the effects of reorientation and rebinding, this small inscription was probably always unobtrusive. Like many books in the survey, there is no evidence about what happened to this book in the years between this deposit and its accession to the Bodleian Library collections two centuries later: its provenance during this time is unknown. However, this note of deposit demonstrates that even one pledge might cause a book to move physically and to circulate into new terms of ownership.

Similarly, another single deposit of a book took place on 10 March 1450, by John Dorman. This time the chest was not specified in the inscription. Dorman pledged a relatively small, but thick book, made to a high grade of production, which contains a thirteenth-century copy of the Bible. The note recording his deposit takes the form of an almost illegible, scrawled inscription at the foot of the page after the

---

[143] BodL, MS Bodley 87, f. 185^{r}, the final flyleaf, which used to be pasted down; *Summary Catalogue*, II.i, p.92. For an image of this inscription see fig. 1 in Parkes, 'Thomas Hunt', p.30.

[144] Eton College Library, MS 117, f. 211^{v}; James, *Eton Catalogue*, pp.49-50; *MMBL*, II, pp.726-8.

[145] Pollard notes, in total, five fifteenth-century stationers and their monograms: **IG** (John Godsond, 1435-58), **JM** (John More, 1438-70), **ID** (John Dolle, 1447-57), **TH** (Thomas Hunt, 1473-91), and the initials **C. C.** (Christopher Coke, 1493-1501), in 'Loan Chests at Cambridge', p.117.

[146] BodL, MS Auct. D.1.11, f. ii^{v}; dimensions: 300 mm × 210 mm; *Summary Catalogue*, II.i, p.216 notes in error that the book was deposited in the Lincoln chest: the inscription has been partly torn on the name of the chest, but it certainly ends "-lton", therefore it can only be the Selton chest.

[147] Aston and Faith, 'Endowments', p.277.

end of the main text.[148] It records that the book was deemed to be worth 30s. This seems a strikingly high amount, relative to the value of the book pledged by Holgate. Though there may well be other variables involved in the valuation of these books, what is still evident today is that these books are materially very different. Although this Bible is small in scale, presumably designed to be held comfortably in the hand, it is a luxury item. The parchment is thin, consistent and fine in quality, and written on to this surface, the script of the main text is tiny and precisely executed. Throughout Dorman's little book, there are delicate miniatures and illustrated capitals. In contrast, Holgate's large book is not decorated, and its parchment is of less consistent quality: occasionally repaired, with some rough corners and lacunae. The inscriptions in these two manuscripts, pledged by Dorman and Holgate, suggest that the value of pledged books may be related to their material quality.

Sometimes books were pledged more than once by the same person, that is, they were knowingly recycled again through the pledge system. This confirms further the importance of the durability of books, and, given that these pledges were enacted by the same person, also supports the idea that people had vested interests in maintaining their books. Fifteenth-century notes at the back of a beautifully-illuminated Bible, which was written in the late thirteenth century, state that it was deposited by William Newton in the Oxford Langton chest in 1463 and again in 1465 (see figure 6, supplement, p.28).[149] It bears John Godsond's the stationer's mark.[150] The chest was endowed by John Langton, chancellor of England and bishop of Chichester.[151] The pledger Newton was a Bonhomme, and a few leaves before this inscription there is a note that connects the manuscript to the House of Bonhommes at Edington in Wiltshire.[152] This small, independent institution was a "colony" of the earlier House of Bonshommes [*sic*] of Ashridge in Buckingham: both followed the Augustinian Rule.[153] Intriguingly, in the year 1424, which fell between his two pledges

---

[148] BodL, MS Auct. D.5.13, f. 671^{r}, it looks as though the inscription was washed, which has caused the ink to fade, inscription details supplied by *Summary Catalogue*, II.i, pp.84-5; dimensions: 140 mm × 95 mm.

[149] BodL, MS Auct. D.5.14, f. 578^{v}; *Summary Catalogue*, II.i, p.83; dimensions: 145 mm × 105 mm.

[150] BodL, MS Auct. D.5.14, f. 578^{v} "**I. G.**"; compare with plate 15, and discussion of John Godsond's mark in Oxford, Lincoln College, MS lat.113, f. 218^{v}, in Parkes, *Their Hands Before Our Eyes*, p.84.

[151] Aston and Faith, 'Endowments', p.277.

[152] BodL, MS Auct. D.5.14, "Edyndon liber" is jotted at the top of f. 576^{v} and the *Summary Catalogue*, II.i, p.83 suggests that the volume belonged to the house of Bonhommes; Newton, *BRUO*, p.1359.

[153] David Knowles, *Religious Orders in England* (Cambridge: CUP, 1962), I, p.202; Knowles and Hadcock, *Medieval Religious Houses*, p.179.

to the Langton chest, Newton was instituted as Warden of the Chantry at Edington.[154] Perhaps he experienced problems with cashflow during this period of change, and turned to his book – twice – in order to raise some ready money.

Another manuscript was also deposited twice. This thirteenth-century manuscript of homilies features two crossed-out fifteenth-century notes, written in the back.[155] These notes suggest that the book was successfully redeemed at least once. One inscription records the first date the book was deposited, on 5 July 1427. It attests that Thomas Chace pledged the book as a *cautio*, along with four supplements for £8, in the Winton chest in Oxford. Chace was a fellow at Balliol College at this time. The Winton chest was endowed long before by John of Pontoise, bishop of Winchester, in 1306.[156] The other note in the manuscript records the second time that Chace deposited it, on 14 May 1434. This time it was pledged with five supplements, together valued at £6. In the same year Chace became Chaplain to Humphrey, Duke of Gloucester, which was likely a lucrative appointment.[157] Yet these inscriptions suggest that Chace needed cash: Mynors notes that "his name is found constantly in pledge-notes."[158] It was commonplace for people associated with the university to realise capital through the pledge system by treating their books as movable, reliable, re-pledgeable assets.

Towards the end of the fifteenth century, supplements like Chace's were increasingly required to top-up the value of a pledge to a chest. Lovatt argues that there was a "shift across the period in the character of the pledges, away from books and towards other precious objects." This is because some books held their value less well towards the end of the century, due to both the "growing affluence of the borrowers" and the "advent of printing."[159] A typical example of a pledge with supplements is found in BodL, MS Bodley 750, the manuscript of a treatise on Noah's Ark, sermons, and other texts, which contains one of the three specifically datable *precium* inscriptions (and another, undatable, much lower valuation). The overall value

---

[154] R. B. Pugh and Elizabeth Crittall, eds., *Victoria History of the County of Wiltshire* (London: Victoria County History, 1956), III, pp.320-324.

[155] BodL, MS Bodley 252, f. 228^{v}; *Summary Catalogue*, II.i, pp.400-401. These notes are arranged on the page so that they follow on, one after another, in the space left at the end of the main text. The manuscript is large 430 mm × 320 mm and heavy, made of good quality parchment, and features decorative initials in red, blue and green inks.

[156] Aston and Faith, 'Endowments', p.276.

[157] Chace, *BRUO*, pp.379-80.

[158] Mynors, *Balliol Catalogue*, p.xvii.

[159] Lovatt, 'Loan Chests', pp.151-2.

of this pledge was 36s. 8d. in 1423/4. Though the original inscription is now illegible, the items included in this pledge were listed as: "this book, with two other books and a silver belt &c."[160] Some of the items listed as part of Chace's pledges were books, in addition to a "covered cup" and "six silver goblets weighing 20 oz."[161]

As well as individuals pledging a book repeatedly, and with additional items, sometimes books were pledged on several occasions by different people. This perhaps more obviously demonstrates fully recycled transfers of ownership, as books moved in and out of chests as surety for different owners, and sometimes then moved on into new hands. For example, a note on the final flyleaves of a thick manuscript copy of the Vulgate Bible, made in the early fourteenth century, records that it was pledged at least four times during the second half of the fifteenth century; in 1454 to the Langton chest, in 1457 to the Duncan chest, in 1472 by Lewis Neath to an unknown chest, and in 1496 by Jacob Ottes to the Robury chest.[162] This is the earliest-recorded note of deposit to the Duncan chest, which was endowed by Thomas Duncan.[163] Some additional inscriptions have been erased, so there were likely to have been even more pledges of the same book, to the same or other chests. The sustained potential value of this book enabled a series of owners to draw on it as a resource, providing them with financial support time and again.

Likewise, there are at least three *cautio* inscriptions in another manuscript, one of which states that it was a joint deposit by six people. The book is a late fourteenth-century compilation of texts from the Bible by Nicholas of Lyra (BodL, MS Bodley 251, mentioned previously for the high value in one of these pledge-inscriptions).[164] Although two of the inscriptions, dated 1401 and 1403, are almost illegible, one is slightly more intelligible. It details that on 18 March 1402, the book was the surety of masters "Johannis Blew, Ricardi Courtenay, Roberti Newby, Wilelmi Oldeni, Philippi

---

[160] BodL, MS Bodley 750, f. 128^{v}, now erased and illegible, perhaps by washing because the parchment is now puckered. The transcription is supplied by *Summary Catalogue*, II.i, p.478.

[161] BodL, MS Bodley 252, *Summary Catalogue*, II.i, pp.400-401.

[162] BodL, MS Auct. D.3.6, f. 494^{v} and f. 495^{r}, both of which are smaller parchment folios than the main textblock; dimensions: 300 mm × 210 mm. "Lodowyci Neth (?)" is unknown in the *Summary Catalogue*, II.i, p.504, but known to *BRUO*, p.1340; "Jacobi Ottes", or "James Ottes", was sued in the Chancellor's court for debt in 1498, only two years after he pledged this book for a loan (*BRUO*, p.1410).

[163] Aston and Faith, 'Endowments', p.277; Duncan, *BRUO I*, p.605.

[164] BodL, MS Bodley 251, f. 398^{r}, which is the final flyleaf; three of the inscriptions are located two-thirds up the page, just to the right of centre, the other at the foot of the page; *Summary Catalogue*, II.i, p.314.

Morgan, magistri Thome <…>" who deposited it in the "Waugham Hussy" chest.[165] This chest, properly known as the Vaughan and Hussey chest, was endowed almost a century earlier by Sir Thomas Vaughan.[166] So the records jotted in this book tell us that not only was this compilation of Biblical texts deposited multiple times, on this occasion at least six people were involved in using it to secure a loan. Richard Courtenay is the key figure in this group: he led an ambitious, successful, but relatively short life, and enjoyed the "special regard" of Henry V.[167] Richard's influential uncle, William Courtenay, the Archbishop of Canterbury, had bequeathed the book to him for his lifetime only.[168] In short order, Richard pledged it to the loan chest with his friends. The cash raised by this joint pledge was 18 marks.[169] Lovatt explains that one reason for two or more people to deposit a joint pledge was in order "to borrow more than the statutory limit" from the chest, by combining their entitlement.[170] This would have been necessary for pledges of very valuable items. In the fifteenth century, then, pledge-inscriptions make it clear that sustainable books could and did circulate through many hands.

This treatment of books for their exchange value is notably not directly to do with the normal use-value of books as vehicles for learning. The *cautio* system converted a book's valuation into cold, hard cash. Furthermore, the system took books out of circulation and kept them locked in a chest, unread and unused. The pledge chests certainly met a financial need and were likely to be genuinely inspired by well-meant pious motives. At the same time, this was an exclusive system and could hardly be said to benefit the many, the truly deprived or unfortunate. Rather, the cash loans were reserved for members of the University, already learned, possibly well-off men, and even then, only those who owned books could participate, and they could only withdraw a certain amount that was limited by their status. Pledges were a form of charity that utilised books, alongside other objects as supplements, and as assets of value.

But the value attributed to books was both financial and, as we have seen, spiritual, especially for the donors who endowed loan chests. Like most donors, the

---

[165] BodL, MS Bodley 251, f. 398^{r}. Blew and Morgan were both from the St David's diocese; Newby held benefices around Oxford; the others are unknown. See *BRUO*, p.201, p.1312, and p.1353.

[166] Endowed 1317-27, Aston and Faith, 'Endowments', p.277.

[167] Richard Courtenay, *BRUO*, pp.500-502, at p.501.

[168] William Courtenay, *BRUO*, pp.502-504.

[169] BodL, MS Bodley 251, f. 398^{r}, 18 marks is £11 19s. 4d.

[170] Lovatt, 'Loan Chests', p.146.

wealthy individuals who endowed the chests wanted to be recognised in some way for their good works. To this end, chests were often named after their founder, such as some of the chests mentioned here, which were named after Selton, Langton, Duncan, and Vaughan. But more than just reminding students of their name and their munificence, founders of loan chests also expected spiritual returns. It was especially appropriate for donors concerned for their souls to target university students, as this maximised the spiritual return on their investment. As Miri Rubin points out, since the students they were assisting were clerics, "engaged in academic pursuits with a spiritual value" and many of whom were to go on to roles within the Church, "their prayers could be highly valued."[171] It was believed that after death, prayers would speed the soul on to Heaven. Medieval salvation involved "a complex amalgam of strategies to speed progress through Purgatory to eternal bliss."[172] The wider range of strategies included the creation of monumental tombs, chantries, amongst other more modest testaments. Sometimes these strategies requested startling numbers of prayers, such as Archbishop William Courtenay of Canterbury, who provided in his will for 15,000 masses and 2000 matins of All Saints.[173] Though beneficiaries of chests did not ask for prayers in quite these quantities, "the receivers of loans were obliged by the statutes regulating them to pray for the soul of the founder."[174] Therefore prayers were, however indirectly, one of the use-values of pledged books, and the donors relied upon the sustained existence of books to receive their spiritual return.

Due to the poor survival of statutes relating to the Oxford chests, little documentary information exists about these intentions for sustaining prayer in perpetutity. However, the extant records at Peterhouse College, Cambridge demonstrate the chantry function of loan chests. The Peterhouse Chest was founded by Thomas of Barnard Castle and later additional endowments were provided by John Holbroke. Both benefactors enjoyed substantial spiritual benefits in return for their generosity. But neither left the form or nature of these benefits to chance: each

---

[171] Miri Rubin, *Charity and Community in Medieval Cambridge* (Cambridge: CUP, 1987), pp.273-4; see also F. Pegues, 'Philanthrophy and the Universities of France and England', *The Economic and Material Framework of the Medieval University*, ed. by A. L. Gabriel (Indiana: University of Notre Dame Press, 1977), pp.69-80.

[172] R. N. Swanson, 'Praying for Pardon: Devotional Indulgences in Late Medieval England', *Promissory Notes on the Treasury of Merits: Indulgences in Late Medieval Europe,* ed. by R. N. Swanson (Leiden: Brill, 2006), pp.215-240, at p.215.

[173] Joseph Dahmus, *William Courtenay Archbishop of Canterbury 1381-1396* (London: The Pennsylvania State UP, 1966), p.267.

[174] Rubin, *Charity and Community*, p.285.

stipulated the types and quantities of prayers required. Thomas specified that all those who borrowed from the chest were to say the *Pater Noster* and the *Ave Maria* five times, the *De Profundis* once and the three collects, *Deus cuius misericordie, Miserere*, and *Fidelium*. Holbroke gave 20 marks in 1436, and in return every borrower was also obliged to say the *Pater Noster* three times, specifically for the souls of Holbroke and his own benefactors.[175] Such requirements are likely to be typical of loan chest statutes. Thus, the Peterhouse Chest records show how the need for cash brought about the indirect quantification of a book's value in numbers and types of prayers. As Swanson sums it up, the quest for salvation "functioned with two currencies: money (or goods or labour with cash value), and prayers."[176] Books therefore acted as material tokens in a system of exchange which ultimately rewarded founders of loan chests with prayers of intercession.

Gifts and bequests

As hinted at by the book given by William Courtenay to his nephew Richard, second-hand books could also change hands as gifts or bequests. Almost as common as pledges in the survey were inscriptions specifying a book given as a gift.[177] Phrases such as *ex dono* or *dono dedit* ("gift from" or "gave as a gift") are frequently used to note such donations (18 discrete inscriptions, or 27% of the total). Taken literally, these notes would seem to suggest that the books in which they are inscribed were *simply* given as a gift. However, what may have gone unstated in these inscriptions is a slightly different sense of giving: bequest. For the purposes of this survey, notes that did not distinguish this special sense of being bequeathed, which was normally indicated by phrases such as *post obitum* or *executores dederunt* ("after death" or "given by executors"), were counted as simply gifts. This is likely to be an over-conservative approach. To rectify this and to give a more representative sense of the overall giving of books, if we add together all the inscriptions classified as having been given as a gift with all those that do stipulate bequest, this combined group becomes the most common form of inscription by far (32 notes, or 48% of all inscriptions). And in some ways, the differences between non-specific gifts and bequests is less important than what they share. So, however they are categorised, and however specifically those books were inscribed, books that were given – rather than pledged, bought or sold –

[175] Lovatt, 'Loan Chests', p.134.

[176] Swanson, 'Praying for Pardon', p.1.

[177] Indeed, in some manuscripts there are both *ex dono* and *cautio* notes – in this survey, only BodL, MS Bodley 251 featured both of these types of inscription.

are part of the medieval gift economy, and their second-hand circulation also depended on their material resilience. Like other second-hand movement between people, gifts and bequests of books depended on their material sustainability.

The medieval understanding of gifts was rooted in both a spiritual conception of all things as divinely given, and a worldly understanding of the necessity for the exchange of things. In her lectures on early modern gift-giving, Natalie Zemon Davis describes how, at that time, there was an enduring belief inherited from medieval tradition in the inextricable link between human and divine gifts.[178] In addition to this, and on a more everyday plane, there was also a contemporary medieval understanding of the human need for proportionate exchange. This drew, as Mann has noted, on Aristotelian thought.[179]

These tandem spiritual and worldly perspectives also existed in the context of a widespread persistence of gift exchange. This has been explored by anthropologists and economists in different times and places. Gift-giving has come to be thought of as "an essential relational mode, a repertoire of behaviour, a register with its own rules, language, etiquette, and gestures."[180] Through investigating some of these features, gift-theory enables the recovery of the ebb and flow of second-hand books between people in medieval society. Simply by being given, these books are all indubitably second-hand. The crucial question is whether that flowing, ongoing re-circulation of books into other hands was subject to conditions. If any gifts or bequests were subject to specific stipulations, what were they? Were they upheld? Why were the givers concerned to direct future use? Particularly, were donors more or less interested in communal use? Communal or ongoing sequential use, and any indication of either of these as a priority on the donor's part, is considered here as an indicator of a medieval attitude towards sharing books more sustainably, in the sense of enabling multiple uses or lengthy future use. My question here, then, is whether books were given in ways that paid heed to the material longevity and reusable potential of books.

There were of course, as in any culture at any time, certain expectations of what could be given and how it was proper to give it – and this included the practical considerations, such as noting one's name or any conditions attached to the gift. For the noble and educated classes, and alongside others such as merchants who were increasingly engaging with literary culture, books could be given as gifts, as attested by

---

[178] Natalie Zemon Davis, *The Gift in Sixteenth-Century France* (Oxford: OUP, 2000), p.17.

[179] Mann, 'Price and Value', p.298.

[180] Davis, *The Gift*, pp.14-15.

the inscriptions written in their pages. Having said this, and as H. J. Chaytor has noted, books were still "scarce and expensive" at this time, and were "bequeathed in wills with other property of value."[181] The fact that the financial value of manuscripts was recorded in this way at all indicates that they commanded a high price, and were considered alongside other property as significant assets. Although he writes in the context of another time and place, Thorstein Veblen's critical appreciation of excess, expressed in the phrase "conspicuous consumption", neatly encapsulates the kind of sumptuousness of high grade manuscripts given as gifts.[182] Moreover, the inscriptions written into these books can declare a very worldly concern with controlling consumption. Although the valuation of the book was not included in the inscriptions in these gifts, this proprietary treatment of books highlights the way that they carried value. Like pledges, people who gave such precious gifts wanted to be acknowledged, and there was a practical need for the book to survive, so that they might serve donors' desire for prayers.

Many inscriptions in the survey named donors and recipients, whether people or institutions, and insisted the books remain with those named recipients. This could provide a badge of recognition for those familiar with the individuals concerned, and, if the manuscript lasted, could also serve as a form of reputation building even after death. Many medieval people, especially those of means, were particularly assiduous in ensuring the remembrance of their name. Commemorating a family name sought "a kind of temporal immortality."[183] This was not just for vanity; it also ensured that one would be prayed for. As Anne Scott notes, "religious motivations and practical considerations are not so easily separable during this period."[184] This is seen in inscriptions in Bishop Edmund Lacy's manuscripts, in which care was taken to state the name and role of the donor, as well as mentioning the "bo*ne* me*morie*" or fond memory of him.[185] Significantly, one inscription insists that the book should be "in

---

[181] H. J. Chaytor, *From Script to Print: An Introduction to Medieval Vernacular Literature* (London: Folcroft Library Editions, 1974), p.108.

[182] Thorstein Veblen, *Theory of the Leisure Class* (New York: Funk and Wagnalls, 1967), pp.60-80.

[183] P. W. Fleming, 'Charity, Faith and the Gentry of Kent 1422-1529', *Property and Politics: Essays in Later Medieval English History*, ed. by T. Pollard (Gloucester: Alan Sutton, 1984), pp.36-58, at p.53.

[184] Anne M. Scott, 'Experiences of Charity: Complex Motivations in the Charitable Endeavour, *c.* 1100-c.1650', *Experiences of Charity, 1250-1650*, ed. by Anne M. Scott (Farnham: Ashgate, 2015), pp.1-14, at p.10.

[185] Books given by Lacy, with similar inscriptions noting his name, role, and fond memory: BodL, MS Bodley 463, f. 1^{r}; BodL, MS Bodley 720, f. 1^{r}; BodL, MS Bodley 786, f.iv^{v}; BodL, MS Bodley 829, f. ii^{v}.

libraria remansurum" forever.[186] Inscriptions in medieval manuscripts, which often emphasise status, location, and family names, are all part of a more widespread culture of reputation-building and memorialising, which depended – and sometimes insisted – on the enduring presence of those books.

Books could be ostentatiously ornate, but sometimes what looks like vanity is in fact an attempt to ensure longevity – and the sustainability – of memory. In addition to tagging manuscripts with recognisable names, efforts to ensure recognition after death could take monumental and ostentatious forms. Sometimes books were adorned with emblems, used to symbolise individuals or families, such as coats of arms. The second volume of a large, fine *Distinctiones theologicae*, running from M to Z is emblazoned with a coat of arms, as a reminder of its owner, Bishop Edmund Lacy. The large manuscript of *Distinctiones theologicae* was probably made for Lacy, as suggested by the substantial arms and motto added to the highly decorated first folio of the main text. Lacy's arms (azure, three ducks' heads erased argent) are accompanied by his motto "Dominus michi adiutor."[187] Along with his other manuscripts, Lacy also had a tomb constructed in his memory. So, in the wider context of his material funerary provisions, Lacy's manuscripts strongly suggest that he did not want to be forgotten.

Inscriptions explicitly detailing the bequest of a book can be proud, and even ostentatious. That is seen in a group of books that came to the Bodleian Library from Exeter Cathedral. Elaborate inscriptions signal the esteem with which the donor and recipients were held, as well as the status of the gift itself. The handwriting of these inscriptions is extremely smart: they are written in carefully executed high grade textura, and many are placed prominently in the book, either on front flyleaves facing the start of the main text,[188] or beneath it.[189] The words of an inscription, placement in the book, layout on the page, and style of handwriting all work in conjunction to give an impression of the esteem in which a bequest was held. One of the Exeter

---

[186] BodL, MS Bodley 463, f. 1^{r}: "Hunc librum disposuerunt *et* dederunt executores test*ament*i recolende bo*ne* memorie d*omini* Edmundi Lacy dum vixit Exonien*sis* Epi*scopi* de bonis eiusdem Edmundi Eccle*s*ie Cath*edralis* Exonien*sis* Cathenaudu*m* ib*id*em in libraria remansurum ib*id*em in ead*e*m q*uiam* diu durau*e*rit Orate pro eo", "This book was assigned and given by the executors of Edmund Lacy in remembrance of his blessed memory, once bishop of this Cathedral, to remain in the same library in which he himself spent a long time. Pray for him"; *Summary Catalogue*, II.i, pp.374-375; dimensions 290 mm × 220 mm; also Exeter Cathedral Library, MS 3513, *MMBL*, II, p.821-822.

[187] BodL, MS Bodley 268, f.1^{r}: "The Lord is my helper"; *Summary Catalogue II.i*, p.121.

[188] BodL, MS Bodley 315, f. iii^{v}; BodL, MS Bodley 859 (two parts), inscriptions at f. iv^{v} and f. 59^{v}; BodL, MS Bodley 333, f. iii^{v}.

[189] BodL, MS Bodley 463; BodL, MS Bodley 268, f. 2^{r}.

Cathedral manuscripts carries a particularly spectacular inscription: it was dedicated by Canon John Stevens, initially to Roger Keys, then upon his death to the communal library of the cathedral, and pronounces an anathema against anyone who removes the book from the library (see figure 7, supplement, p.29).[190] Stevens, who died in 1459, gave this large manuscript, which includes copies of various commentaries and treatises by Rolle, Grosseteste and others.[191] Keys, mentioned in the inscription, was a Precentor at the Cathedral, and died in 1477.[192] The book's trajectory, from Stevens after his death, through the individual ownership of Keys, and on into the collective ownership of the Cathedral, seems to be assured by this smart, ornate inscription. The dedication note is prominent, displayed on the verso facing the start of the main text, which is itself elaborate, with colourful decoration and gilding. The hand is a high grade textura, executed elegantly and with a great deal of flourishing. The ostentation of the handwriting demonstrates and displays Stevens's gift, and his specific concern to ensure that the book would not be alienated from the library.

An inscription connected with a Cambridge college, suggests that sometimes specific details did not need to be stated. In a fifteenth-century manuscript of treatises on astrology, music, and other subjects, there is an inscription which proves that sometimes the link to a community was not explicitly noted, because it was deemed unnecessary to do so. In the front of this manuscript a parchment fragment has been preserved and pasted on to later paper flyleaves. Tantalisingly, on that fragment is written the following inscription: "Ex dono m*agistri* yngh*a*m qu*on*d*am* h*uius* collegij soci*us*." That is, the college is not named.[193] The omission of the college's name indicates a high level of trust in the community and in the security of the book gift. Moreover, at the time of inscription the book was probably *in situ* in "this college", which is most likely to have referred to Clare Hall, Cambridge, where Yngham was a Fellow in 1402-1403,[194] so that naming the college was deemed unnecessary. The information specified in the inscription is his name and his relationship with the

---

[190] BodL, MS Bodley 315, f. iii^{v}: "[…] anathematizet*ur* eo f*act*o", "[…] let there be an anathema on him who takes me from here" the manuscript measures 350 mm × 250 mm, and has 271 leaves; *Summary Catalogue*, II.i, pp.508-509; Roger Lovatt mentions chaining and anathemas in 'College and University Book Collections and Libraries', *CHLBI I*, pp.152-177, p.159.

[191] Ian Maxted, *Exeter Cathedral Library: A Concordance of Medieval Catalogues and Surviving Manuscripts,* Exeter Working Papers in British Book Trade History (Exeter: Maxted, 1987), p.viii.

[192] Maxted, *Exeter Concordance*, p.vii.

[193] BodL, MS Bodley 300, written on a fragment pasted on to a later paper flyleaf f. i^{v}: "From the gift of Mr Yngham, once a fellow of this college"; *Summary Catalogue*, II.i, pp.386-388; dimensions: 380 mm × 250 mm.

[194] John de Ingham (or Yngham), *BRUC*, p.326.

college, reiterated to consolidate the gift from person to institution, and the assumption that the college is known suggests the strength of that link. Whoever inscribed this note also assumed that the book would not move on from the college. What this gift note implies more generally is that books that were given circulated through networks of human relationships, and moved in ways that were charged with memories of people and places that sometimes did not need to be stated.

In contrast with the assurance of the inscription in Yngham's book, many manuscripts are inscribed with detailed, even directive notes, which are highly specific. The late fourteenth-century compilation of texts from the Bible by Nicholas of Lyra, already mentioned for its four *cautio* notes, was left by the Archbishop of Canterbury William Courtenay to his nephew Richard Courtenay (see figure 8, supplement, p.30).[195] However, he stipulated that should Richard either leave the church, or when he died, the book's ownership should revert to Canterbury Cathedral.[196] Inscriptions in the book demonstrate that William's wishes were carried out. The first is noted prominently in the front of the book, and relates to William's ownership: "Prima pars Lyre Will*elm*i Cowrtenay. Cant*uariensis* archiep*iscop*i." The next inscriptions are the *cautio* notes at the back of the book. The last is a brief note at the front, which copies out William Courtenay's earlier inscription in small, cursive writing above the original inscription, and adds on to the end: "q*uam* <...> dedit eccl*esi*e *Christ*i Cantuar*iensi*."[197] Though the inscriptions themselves do not designate the specific bequest of the book to Richard, these inscriptions suggest that not only did he receive it, but that ultimately it was returned to Canterbury as directed. William Courtenay's double-gift of the book (to Richard, and then to Canterbury) confuses a simple dichotomy of single or shared use of manuscripts, and demonstrates that this sustainable book was expected to be durable enough to be given twice.

---

[195] BodL, MS Bodley 251, William Courtney was appointed Archbishop in 1381, his term ended in 1396. Dahmus, *William Courtenay*, p.162.

[196] From William Courtenay's will: "Next I leave Richard, in case he wishes to be a clerk and is ordained into the priesthood, my dictionary in three volumes together with its calendar. I also leave him the *milleloquium* of St. Augustine and my handsome book called the *lira* bound in two volumes, but with this condition, that if he should remain with sacred things, he shall have these books for his whole life; after his death, or if, may this not happen, he should return to the world, I want all these books to remain the possession of the holy church of Canterbury and be wholly restored to it with my blessing and strict injunction that she protect those books from disfigurement. I want them to be given into his hands whenever he begins in the arts or is a bachelor in civil law or decrees", in Dahmus, *William Courtenay*, p.269; the books were valued at about £300 in the obituary of Christ Church, in John Stevenson, *The Church Historians of England* (London: Seeleys, 1853), IV, p.309.

[197] BodL, MS Bodley 251, f. iii^{v}, f. 398^{v}, f. iii^{v} (again), "which he gave to the church of Christ at Canterbury"; *Summary Catalogue*, II.i, p.314.

Specificity in a book's inscription could limit the charitable and spiritual benefits of a gift to an individual. Like the donors of common-profit books and endowers of Oxford and Cambridge loan chests, testators could also unambiguously specify their desire for prayers. This enabled a book's spiritual benefit, and channelled its spiritual potential towards the salvation of an individual. Four books, one given by John Tillney and two by Lacy all feature inscriptions which ask for prayers in conventional ways.[198] Tillney's book requests the reader to: "Orate specialit*er* p*ro* an*im*a m*agistri* Joh*ann*is Tillney", and longer inscriptions in Lacy's books end: "Orate pro eo."[199] Like other Exeter Cathedral manuscripts mentioned, the inscriptions in Lacy's books were written in large, carefully-executed textura display script. Unambiguous though the wording in each of these inscriptions may seem, the writer of the note in Tillney's book used two kinds of handwriting to drive home the point. Drawing on the hierarchy in scripts available, the scribe wrote "Orate specialit*er*" in a larger, smarter textura hand, before moving into secretary hand. In this inscription, then, handwriting proclaimed the most important component of the inscription, imbuing this request for prayers with added significance, and limiting the spiritual benefit of those prayers to one named individual.

By contrast with those efforts to limit charitable benefit, gifts of books could also forge social bonds. Social bonds included relationships with family, such as the familial bond of William and Richard Courtenay, friends, and colleagues, such as fellow members of a college or cathedral community. Scott describes the contemporary medieval understanding of charity as the "idealised love of one person for another following the Gospel precept: 'A new commandment I give unto you: that you love one another as I have loved you'."[200] Thus charity was a way of expressing one's Christian love for others. Bequests of books, whether they were dedicated to individuals or to a community, were also a way of expressing this "idealised love" through charity, a form of testamentary piety, especially where prayers were expected in return. This shared expression of fellowship and brotherhood had benefits for both the living and the dead: it strengthened the community's understanding of itself as a

---

[198] BodL, MS Bodley 750, f. 129^{r}, given by Tillney; BodL, MS Bodley 463, f. 1^{r}, BodL, MS Bodley 720, f. 1^{r} given by Lacy.

[199] BodL, MS Bodley 750, f. 129^{r} "Pray especially for the soul of Master John Tillney"; BodL, MS Bodley 463, f. 1^{r}: "[…] Pray for me"; BodL, MS Bodley 720, f. 1^{r}, "Hunc libr*um* dederunt Eccl*es*ie Cathe*drali* Exon*iensis* executors testament. bo*ne* me*morie*. Edmundi Lacy nup*er* Exonien*sis* Epi*scopali* de bonis eiusdem Orate p*ro* eo."; *Summary Catalogue*, II.i, p.461; dimensions: 360 mm × 225 mm.

[200] Scott, 'Experiences of Charity', p.9.

corporate body, at the same time as symbolising the donor's commitment to that community, sometimes even after death.

Sometimes a mode of giving trickled down to others, and this can be seen in the emulation of gift-giving habits. Many manuscripts that went on to become part of the Bodleian Library collections carry quite detailed records of medieval donations to Oxford colleges. During the fifteenth century, giving to one's college became increasingly fashionable. Lovatt notes that "the more lowly associates of a college founder tended to follow his example."[201] For instance, William Bygonell followed this pattern in his gift of books to All Souls College, which was founded by Archbishop Chichele. Chichele co-founded the college with Henry VI in 1437, and gave the college 370 manuscripts for its new library.[202] Bygonell was a lawyer in the Canterbury administration, and he acted as Chichele's executor. Bygonell's own gift to All Souls College was a pair of manuscripts, copies of Ludolphus de Saxonia's *De vita Christi*, written by John Chestur in 1444, which, among other books, he had borrowed from the college library.[203] The books were to be given to the named recipient, and then restored to All Souls College Library.[204] In giving his books in this way, Bygonell relied on books as valuable, durable tokens in order to emulate the founder's book giving habits.

Often inscriptions strongly affiliated donors with their alma mater. For example, there is a fulsome *ex dono* note in a twelfth-century copy of St Gregory's homilies, which was given to Merton College in 1463 by Thomas Balsalle.[205] Balsalle was from the Worcester diocese, and became a Fellow of Merton in about 1448.[206] Other fifteenth-century donations to Merton, which also happened to be in the sample, were given by Richard FitzJames and Henry Sever. In their time, both were Wardens of Merton. FitzJames gave BodL, MS Bodley 751, a substantial, twelfth-

---

[201] Lovatt, 'Book Collections', p.155.

[202] Leedham-Green, 'University Libraries', p.320.

[203] BodL, MS Bodley 741 and BodL, MS Bodley 742, f. 2^{r} in both; the manuscripts are a series of discourses on Gospel texts; *Summary Catalogue*, II.i, pp.529-530; dimensions of both: 320 mm × 220 mm; Leedham-Green, 'University Libraries', pp.328-329.

[204] BodL, MS Bodley 741 and BodL, MS Bodley 742, f. 2^{r} in both, erased in both: "<Liber Collegii Animarum Omnium fidelium defunctorum Oxonie ex dono magistri Willelmi Bygonell post mortem magistri Byrkhed>", "Book of All Souls College given by Master William Bygonell after the death of Byrkhed", N. R. Ker, *Records of All Souls College Library, 1437-1600* (Oxford: OUP, 1971), p.106, and p. 160; Bygonell, *BRUO*, p.330.

[205] BodL, MS Bodley 696, f. 152^{v}: "Liber Collegij de Mertone ex dono magistri Thome Balsalle […]", "Merton College's book, given by Master Thomas Balsalle […]"; *Summary Catalogue*, II.i, p.404.

[206] Balsall, *BRUO I*, p.100; F. M. Powicke, ed., *The Medieval Books of Merton College* (Oxford: OUP, 1931), p.219.

century manuscript that was probably written in France, which is decorated with illuminated capitals and initials. On the flyleaf facing the start of the main text is inscribed a short note of donation. This follows on from a rough list of contents, and both are written in secretary handwriting. It gives details of FitzJames' roles as Bishop and as Warden: "Ex dono d*omini* Ric*ardi* Fitz James nup*er* Cicest*rensis* Epi*scopi et* Custod*ia* isti*us* Collegij. Cui*us* a*nim*e p*ro*picie*tur* de*us* Ame*n*."[207] In 1468, Sever gave two manuscripts to his college: BodL, MS Bodley 689, a twelfth-century French manuscript of Latin works attributed to St Ambrose, and BodL, MS Bodley 757, a copy of commentaries attributed to St Ambrose, written in Latin in England in the first half of the fifteenth century.[208] Inscribed into the front of both manuscripts are discreet, secretary script notes on the verso of the leaf before the start of the main text, which outline the conditions of the gift, and begin with a statement of affiliation to Merton: "Liber dom*us* scolar*ium* de Merton*e* ex dono mag*istri* Henri*ci* Seuer sacre pagine professoris ac Custod*is* eiusd*em*, incathenat*us* in libraria ad co*mmun*em vsum ibidem studer*e* volenc*ium*, a*nno* do*mini* M*illesimo* cccc^{mo} lxviij^{o}."[209] Clearly stated here is the intention that the book should be *incathenatus* ("chained") in the library for the "common use" of Merton students. Though the inscription might seem selfishly preoccupied with Sever's role and relationship with Merton, it is actually in service of a more communal sentiment.

Books made available for the "common use" of college members could be achieved in two ways: inscriptions in books "frequently specified" that donated books should be kept in a chained library, like Sever's, or "more rarely" that the book should be available for borrowing.[210] In Oxford's fifteenth-century college communities it was customary to follow a practice, adopted from religious communities, whereby the college's book collection was split into two parts. One part was distributed to the college community annually (known as the *electio* system), and the other was reserved

---

[207] BodL, MS Bodley 751, f. v^{v}: "Given by Richard FitzJames, bishop of Chichester and Warden of this college. May God bless his soul Amen"; Warden of Merton 1483-1507, *BRUO*, pp.691-2; *Summary Catalogue*, II.i, pp.406-407; dimensions: 295 mm × 195 mm.

[208] BodL, MS Bodley 689, *Summary Catalogue*, II.i, p.412; dimensions: 390 mm × 280 mm and BodL, MS Bodley 757, *Summary Catalogue*, II.i, pp.411-412; dimensions: 260 mm × 180 mm; both given by Henry Sever, Warden 1456, "a considerable benefactor" to Merton, *BRUO*, pp.1672-3.

[209] BodL, MS Bodley 689, f. i^{v}, and BodL, MS Bodley 757, f. ii^{v}: "Merton College's book, given by Henry Seuer, a professor of holy writ, and warden of the same, chained in the library for the common usage of students of the same place, in the year of our Lord 1468."

[210] Lovatt, 'Book Collections', pp.158-159.

in the library for reference only, and usually chained.[211] The library at All Souls was set up in exactly this way, and was modelled on the library at New College founded by William of Wykeham, where Chichele had himself studied.[212] Several fifteenth-century lists for the *electiones* system survive from Merton College.[213] This was a yearly ballot for lending out books (the unchained ones) from the college collection to Fellows, in order of seniority.[214] FitzJames, just mentioned, was elected Warden of Merton on 20 March 1483. The next year he "instituted an oath" for students admitted to the Library of the college, which obliged students to swear that they would not remove or damage the books, and that they would report others who did so.[215] Though none of the books in the survey had inscriptions suggesting that they were once distributed as *electiones*, Sever's instructions to chain his book and to make it available for the common use of students at Merton suggests that not only did donors have expectations about how their books would be used, but also they insisted on provisions to ensure books' long-term safe-keeping.

Like college libraries or loan chests, ecclesiastical libraries attracted, accumulated, and sometimes re-distributed second-hand books. An especially smart inscription in the front of one manuscript, written in the second half of the fifteenth century, commemorates it as the gift of John Row (or Rowe) to Exeter Cathedral.[216] The text is Robert Holcot's commentary on the Book of Wisdom, and its donation to the Cathedral Library came from within the community: Row was the Subdean of the Cathedral. Two notes are inscribed on the verso facing the beginning of the main text. The upper inscription is in a legible but small, current secretary hand. In contrast, the lower inscription is undeniably showy. It is arranged evenly over two lines in neatly executed, large module textura handwriting, adorned with decorative ascenders and flicks. It proudly and deliberately connects the book with Row and Exeter: "Liber Holcote super sapiens Ex dono mag*ist*ri Joh*ann*is Row huius Eccl*es*ie

---

[211] Christine Ferdinand, 'Magdalen College and the Book Trade, 1450-1550', *The Book Trade and Its Customers 1450-1900: Historical Essays for Robin Myers*, ed. by Giles Mandelbrote, Arnold Hunt, and Alison Shell (New Castle, DE: Oak Knoll Press, 1997), pp.175-187, at p.180.

[212] H. E. Salter and Mary D. Lobel, eds., *A History of the County of Oxford: The University of Oxford* (London: OUP for the University of London Institute of Historical Research, 1954), III, pp.173-193.

[213] N. R. Ker notes two *electiones* lists for Merton from 1410 and 1457, in 'Books of Philosophy at Merton College in 1372 and 1375', *Books, Collectors and Libraries: Studies in the Medieval Heritage*, ed. by Andrew G. Watson (London: Hambledon Press, 1985), pp.331-378, at p.332; Powicke, *Merton Catalogue*, pp.xxii-xxiii.

[214] Leedham-Green, 'University Libraries', p.323.

[215] Powicke, *Merton Catalogue*, p.xxxi.

[216] Rowe, *BRUO*, p.1598-9.

quondam Subdecani."[217] This inscription firmly defines the relationships between the donor, and his status as Subdean, with the recipient institution, and of course with the book object itself. Thus emblazoned, future users of the book can be in no doubt that they are handling a lasting symbol of Row's connection with Exeter.

The corporate bonds of ecclesiastical or college communities were important, especially since those communities were home to those religious who could pray most effectively for the soul. Exeter Cathedral's own library accumulated volumes from various named donors: John Stevens, Henry Webber, Edmund Lacy, William Fylham, Walter Gybbes, Robert Rygghe and John Snetesham.[218] Each of these men are identified with their roles – and with Exeter – in book inscriptions, as already seen in the cases of John Row and Edmund Lacy. These were important men in their community, and Nicholas Orme has noted that dignitaries like these men, in addition to more minor members of the clergy, were often resident in and around Exeter.[219] This was an active, engaged community, working to worship God through their lives and their actions, and many of their acts of bequest suggested community concern to safeguard and sustain books given to the Cathedral. The giving of books could also enable participation – from beyond the grave – in the future education of protégées. Minor clergy of Exeter Cathedral were sometimes bequeathed books that were intended to support their religious education. Henry Webber gave a book specifically dedicated to the "com*m*uni librarie Eccl*es*ie Cath*edral*is Exon*iensis*."[220] The manuscript now is made up of two parts: the first includes copies of works by St Augustine; the second is an early fifteenth-century copy of Wyclif's *De mandatis*. He also bequeathed breviaries to Alan Clerk, William Martyn, and William Wolf, and a Bible and a quire

---

[217] BodL, MS Bodley 279, f. 3^{v}: "The book of Holcote's commentary on the Book of Wisdom, given by John Row, once subdean of this church." This inscription faces the beginning of the main text on f. 4^{r}; *Summary Catalogue*, II.i, p.275; dimensions: 380 mm × 260 mm.

[218] BodL, MS Bodley 315, "Johannes Steuenys", a Canon; BodL, MS Bodley 320 and BodL, MS Bodley 333 given by "Henry Webber", who was a Dean (and who also gave Exeter Cathedral Library MS 3516, still there today); BodL, MS Bodley 268, BodL, MS Bodley 463, BodL, MS Bodley 720, BodL, MS Bodley 786, and BodL, MS Bodley 859, given by "Edmundi Lacy", a Bishop; BodL, MS Bodley 830, "Willelmi Fylham", a Chancellor (manuscript mentioned previously for a *precium* inscription); BodL, MS Bodley 810, "Walterus Gybbys", a Canon (who also donated Exeter Cathedral Library MS 3512, still there today); BodL, MS Bodley 749 "Roberti Rygghe" (previously mentioned for a *cautio* inscription); BodL, MS Bodley 744 and BodL, MS Bodley 748, both given by "Johannis Snetesham", a Canon and Chancellor (who also gave BodL, MS Wood empt.15).

[219] Nicholas Orme, *Minor Clergy of Exeter Cathedral Biographies: 1250-1548* (Exeter: Devon and Cornwall Record Society, 2013), p.2.

[220] BodL, MS Bodley 333, f. iii^{v}: "the communal library of Exeter Cathedral"; dimensions: 335 mm × 230 mm; Maxted, *Exeter Concordance*, p.viii; *Summary Catalogue*, II.i, p.276.

of miracles to John Symon.[221] Due to the particular make-up of Exeter Cathedral's community, which included many natives of the area, "relations between the lesser cathedral clergy, the parish clergy, and the city laity were close and often cordial."[222] In giving such spiritually supportive presents to Clerk, Martyn, Wolf, and Symon, who were minor members of his community, Webber was confirming his relationships with these men at the same time as maintaining an involvement in their ongoing spiritual instruction. The movement of books consolidated and sustained Webber's expression of both social and spiritual values, even after death.

Conclusions

In each of these case studies, the book became a carrier of potential prayers which required the preservation of the book. Worldly value was ultimately entailed to the glory of God, and both financial and spiritual value depended on physical material. This led people to make stipulations about the long-term endurance of their bequests. For instance, in a lengthy inscription by William Wey, near the beginning of a manuscript authored by Wey and later given to the house of Bonhommes at Edington, which he joined towards the end of his life, there is a robust statement of his "wyl" in donating his "goodys."[223] He had strong ideas about what should happen to his book, as well as to the other gifts he made to the chapel at Edington. Wey itemised his donations: hangings, vestments, relics, and three books, and went on to stipulate that "My wyl ys that thes afore wret be nat alyened fro the chapel of the Sepulke nether fro the holy monastery of Edyngdon."[224] Ultimately the book came into the Bodleian Library collections, so at some point during the book's history, Wey's injunction was ignored. Although donors like him were evidently proud to hand over ownership of such "goodys", they also insisted on conditions that would govern the future location and reuse of their books.

Everyone involved in these systems of transfer was invested in the sustained existence of books. What the foregoing manuscript inscriptions have shown is that the

---

[221] For details of these other books given gifts see Orme, *Minor Clergy*, p.80, p.191, p.298, and p.244.

[222] Hannes Kleineke, 'Civic Ritual Space and Conflict in Fifteenth-Century Exeter', *Ritual and Space in the Middle Ages: Proceedings of the 2009 Harlaxton Symposium,* ed. by Frances Andrews (Donington: Shaun Tyas, 2011), pp.165-178, at p.169.

[223] BodL, MS Bodley 565, ff. 2^{r}-2^{v}; *Summary Catalogue*, II.i, pp.323-324; dimensions: 230 mm × 170 mm. For more on Wey's pilgrimage narratives, and more on the codicology of this manuscript, see Mary Boyle, 'William Wey's Itinerary to the Holy Land: Bodleian Library, MS. Bodl. 565 (c.1470)', *Bodleian Library Record,* 28:1 (2015), 22-36. Wey, *BRUO*, pp.2028-9; for more on Wey's life, see Francis Davey, *The Itineraries of William Wey* (Oxford: Bodleian Library, 2010).

[224] BodL, MS Bodley 565, ff. 2^{r}-2^{v}, at f. 2^{r}.

material sustainability and durability of books were often in striking alignment with other fifteenth-century concerns, such as conducting oneself piously and charitably by giving a common-profit book; ensuring cashflow by pledging a book to a loan chest; commemorating relationships with others through gifts of books; and eliciting prayers for the soul by various means involving books. As we have seen, whether a gift was given in the form of a common profit book, funding for a loan chest, or as a bequest, donors could expect prayers in return. In this way, books, functioned like chantries, and through inscriptions donors ensured that the conditions of use were understood. All these modes of book circulation, and the benefits that could be derived from them, depended on the ongoing existence of manuscripts.

Such giving of books was a feature of the wider fifteenth-century culture of gift-giving, which was "part of the symbolic articulation of social and personal relations", and is "at any time an act of self-expression, of the presentation of one's innermost values."[225] The "innermost values" of the fifteenth-century individuals (and their communities) encountered in this chapter were highly religious, and the movement of books in these contexts reflected the key concerns of their milieux. Those making careful provision for their material possessions were mindful of books' chances of survival. In this chapter, explicit attention to how long the book endured was seen in common-profit inscriptions, the many fine details of other inscriptions about second-hand transfer (which others were expected to read and heed), and stipulations that insisted that books be chained, or forbade the alienation of books from their nominated location, all of which improved the survival chances of books. They could, after all, enable ongoing book use "for as longe as þe booke endurip."[226]

[225] Rubin, *Charity and Community*, p.1.

[226] BodL, MS Douce 25, f. 72r.

Conclusion

This thesis argues that many aspects of fifteenth-century manuscript culture were sustainable. It has been noted elsewhere in other studies that recycling occurred in medieval books, and this has been enough to satisfy most scholarly purposes. What is overlooked in these studies is *how* books came to be recycled. Book makers, owners, and users chose not only to recycle materials; they also chose from the outset (within certain technical and material parameters) to craft books so that they lasted, as well as to reuse books, and to recycle their component materials. People were invested in making books durable, and they also recycled and reused them. Fifteenth-century people's choices in crafting and reusing their books point to an ethos of sustainability in manuscript culture.

But what if this is not sustainability? While this thesis has described features such as pulled holes, recycled flyleaves, and marginal doodles as examples of sustainability, it could have interpreted the same case studies of craftsmanship and reuse of manuscripts as damage, decay, or destruction of book materials. It is also true that fifteenth-century people destroyed and wasted resources. And they grappled with many concerns that seem to be the antithesis of sustainability: the *memento mori* tradition and other reminders of death and destruction were widespread. For instance, the Black Death of 1348 had changed England's population dramatically, and its legacy was everywhere and evidenced in material culture. These entropic aspects of medieval culture chime with the demise of many manuscripts, for example their survival only as fragments, and the recent edited collection *Book Destruction in the West* has emphasized this aspect of books' materiality; Erik Kwakkel has investigated discarded parchment, and Kathryn Rudy has studied the wear and tear of frangible medieval manuscripts.[1] In contrast with those, and similar studies of manuscripts in decay, this thesis has offered a new narrative, interpreting manuscripts as sustainable, ever-evolving entities.

This thesis also offers a new narrative about the impulses behind aspects of late medieval book production. Book history, like many forms of historical inquiry, is

---

[1] Adam Smyth and Gill Partington, eds., *Book Destruction in the West, from the Medieval to the Contemporary* New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014); Erik Kwakkel, 'Discarded Parchment as Writing Support in English Manuscript Culture', *Manuscripts Before 1400, English Manuscript Studies 1100-1700*, 17 (2013), 238-261; Erik Kwakkel, 'Destroying Medieval Books – and Why That's Useful', Tumblr, <https://medievalbooks.nl/2014/10/31/destroying-medieval-books-and-why-thats-useful/> (accessed 5 January 2017); Kathryn M. Rudy, *Postcards on Parchment: The Social Lives of Medieval Books* (New Haven and London: Yale UP, 2015).

often concerned with uncovering the economic imperatives that guide the course of history. An economically-focussed historiography produces one kind of narrative about the past, but it risks overlooking other stories about manuscript culture. This thesis has retrieved the choices made by fifteenth-century book producers and users from an otherwise solely economic historical narrative. Inspired by ecocriticism instead, this thesis tells a different story: fifteenth-century people made choices to sustain books by making them durable, and by avoiding waste, and these decisions were not always driven by cost, effort, or resource scarcity. Of course, decisions to make durable books or to avoid waste often intersected with economic motives. This thesis acknowledges this intersection but shifts away from the assumption that economic considerations always constitute the bottom line. Fifteenth-century people were also concerned to make and use books in ways enabled by the materials, technology, tools, aesthetics, and expectations of their time, and they used books to express identity, perform relationships, and display religious convictions, for example by using older books for new educational purposes, or by bequeathing or presenting them as gifts.

By exploring sustainable aspects of this manuscript culture, this thesis uncovers more about the reuse and recycling of manuscripts. The long fifteenth-century was a period of development in the production of books, and while there were innovations, many practices and processes endured, and physical materials themselves endured from one generation to the next. Books were made, remade, and reused in myriad ways, many of which had been undertaken in the centuries before this period, and similar practices continued in the following centuries. Material reuses and second-hand circulation have both been well-studied for the Dissolution of the monasteries and the Reformation, for instance in work on pastedowns by N. R. Ker, and more recently in work by Adam Smyth.[2] But recycling also happened long before medieval books were rendered culturally obsolete. The choices made by people making and reusing books in the fifteenth century can be understood in the context of the culture of that period as guided by what we would call, in modern terms, sustainable considerations.

The Introduction explored what that term *sustainability* might mean and how we have hitherto understood attitudes to ecology, environment, and materiality in the

---

[2] N. R. Ker, *Fragments of Medieval Manuscripts Used as Pastedowns in Oxford Bindings,* 3rd ser., 4 (Oxford: Oxford Bibliographical Society, 2004 for 2000); Adam Smyth, 'Cutting and Authorship in Early Modern England', *Authorship* 2:2 (2013), online, <http://dx.doi.org/10.21825/aj.v2i2.790>.

Middle Ages. Turning then to manuscripts themselves, chapter 1 revealed processes of production and repair that were sustainable. First, it showed that because parchment, made from the skins and hides of animals, was a byproduct of animal husbandry (for meat or wool products), the supply of animal skins, far from random cruel violence, was a sustainable part of medieval agricultural supply-chains. Then, the chapter analyzed parchment-making processes through the material traces in parchment, and through contemporary medieval recipes which recorded fifteenth-century concerns about how to make parchment well, to avoid waste, and to last for a long time, which embraced and enhanced durability. Finally, it revealed that when skins and hides were damaged, people responded to that damage by tolerating it, accommodating it, or repairing it. The parchment used in books was treated so that it would last and be conserved in ways that would avoid waste.

The second chapter presented examples of parchment reused in books as acts of recycling. It was recycled as off-cuts, reinforcing strips, quire guards, flyleaves, pastedowns, limp covers, and palimpsests. In these case studies, parchment from one book was reused to sustain another book. Thus, parchment was valued for its material properties: resilience, pliability, high-tearing strength, resistance to rubbing, and (when made well and kept dry) long-term durability. In various milieux, such as religious or educational institutions, these material properties offered opportunities to recycle parchment in order to sustain other books.

Chapter 3 addressed the sustainable reuse of marginal spaces in books for opportunistic markings. These spaces in the margins or flyleaves of manuscripts were prized as writing supports for making marks. Manuscripts from the Douce and Laud collections in the Bodleian Library provided examples of a range of marks, including doodles, tentative efforts towards writing such as signatures, alphabets, and short phrases, as well as recipes, charms, and verses. Doodles, pen tests, and other marks suggest that people treated books like scrap or wax tablets for ephemeral purposes and thereby avoided wasting other materials. On the other hand, recipes, charms, and verses indicate that books could also be treated as a repository to cultivate memorization, for record, and for future reference. All of these marks depended on the physical durability of the manuscript.

In chapter 4, notes written into manuscripts were investigated for evidence of second-hand circulation. This chapter explored the second-hand book trade, common-profit books, pledges to loan chests, gifts of books, and the motivations and relationships represented by such notes in books. In these cases, books acted like

chantries and functioned as carriers of potential prayers. Conditions of use – or stern injunctions against alienation – were sometimes inscribed into books to improve their survival chances, because realizing the potential for prayers depended on ensuring the physical preservation, the shelf life, of the book.

What unite the practices explored in these chapters are commitments to resilience, durability, and making well, in addition to sparing use, recycling, and resourcefulness. They reveal a commitment to two kinds of sustainability in the production and use of late medieval manuscripts: the durability of books and their component parts, and the reduction of waste, through the reuse of parchment and books. Sustainability was manifested variously as making parchment durable, repairing it, avoiding waste, recycling pieces of parchment, protecting books, writing into the marginal spaces of books, and circulating books second-hand. These sustainable phenomena were achieved through human agency and involved many skills. The working skills of craftsmen and resourcefulness of book users and owners are the different focus here, in comparison with other theoretical work on ecocriticism and materiality which has focused on the agency of objects and materials. This human focus, on the aptitude of parchmeners, and on the penmanship of doodlers, on stationers' sales, and donors' gifts of books, shifts the ecocritical critique away from narratives about parchment as murder and wasteful Western consumerism, towards a more positive vision of sustainability. Medieval people were not victims of the material world: they shaped their environment, including their manuscripts. This study fully acknowledges this, and highlights the agency of parchmeners, scribes, binders, menders, annotators, owners, and donors of books.

In wider fifteenth-century manuscript culture books sustained people, and people sustained books. That said, aside from chapter 3's discussion of penmanship and certain kinds of notes written into marginal spaces, this thesis is not concerned with reading, or with writing. However, the interest in preserving and sustaining old ideas in material form is a typical part of the late medieval mindset in other ways. As is well known, in medieval literature, writers loved reusing ideas. Literary recycling was a way of venerating earlier authors and was considered a virtue in its own right. This form of literary creativity was cherished in intellectual culture more widely. Although such bookish recycling is not the same as recycling books, this literary culture depended upon the kinds of manuscripts – scholarly ones in cathedrals, practical ones with marginal notes and doodles – explored in this thesis. Parchment was the substrate that enabled literature's very existence, as well as its longer-term

durability. Moreover, fifteenth-century experiences of writing or reading books were conditioned by the materiality of manuscripts, or as D. F. McKenzie put it, "forms effect meaning."[3] The sustainable aspects of manuscript culture explored in this thesis invite us to think more deeply about literary culture as material practice, its own sustainability as an activity, and its sustaining of ideas.

[3] D. F. McKenzie, *Bibliography and the Sociology of Texts*, The Panizzi Lectures (Cambridge: CUP, 1999), p.13.

Images, diagrams, graphs, and table

Images included by kind permission of: the Bodleian Library, the Wren Library at Trinity College, Cambridge, the Henry E. Huntington Library, Lambeth Palace Library, and the Master and Fellows of St John's College Library, Cambridge. Images and diagrams not to scale. References in full in the bibliography.

Chapter 1

Fig. 1: BodL, MS e Mus. 198* hairy parchment wrapper.

Fig. 2: TCC, MS R.14.45, f. 57[r] (or, p.101), recipes for parchment and vellum.

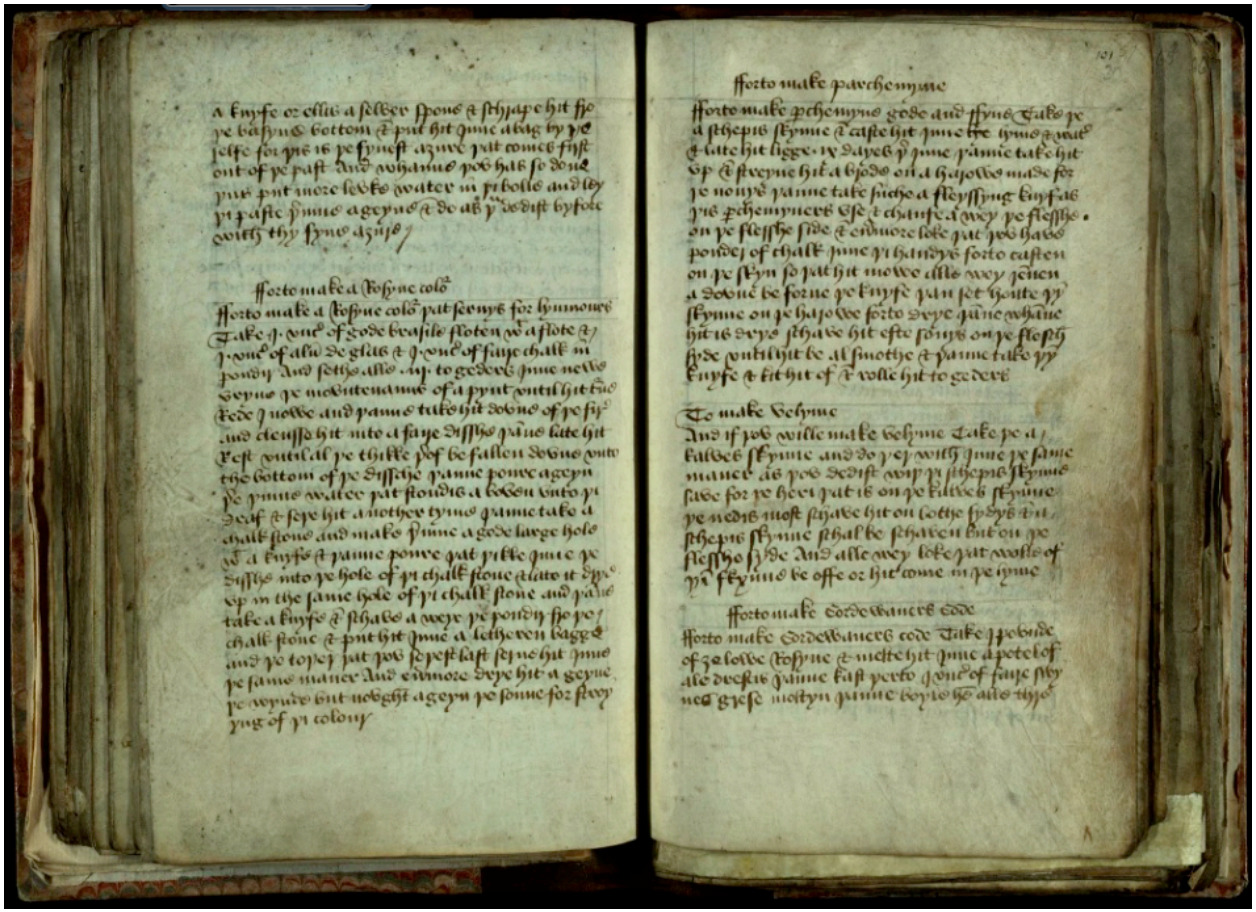
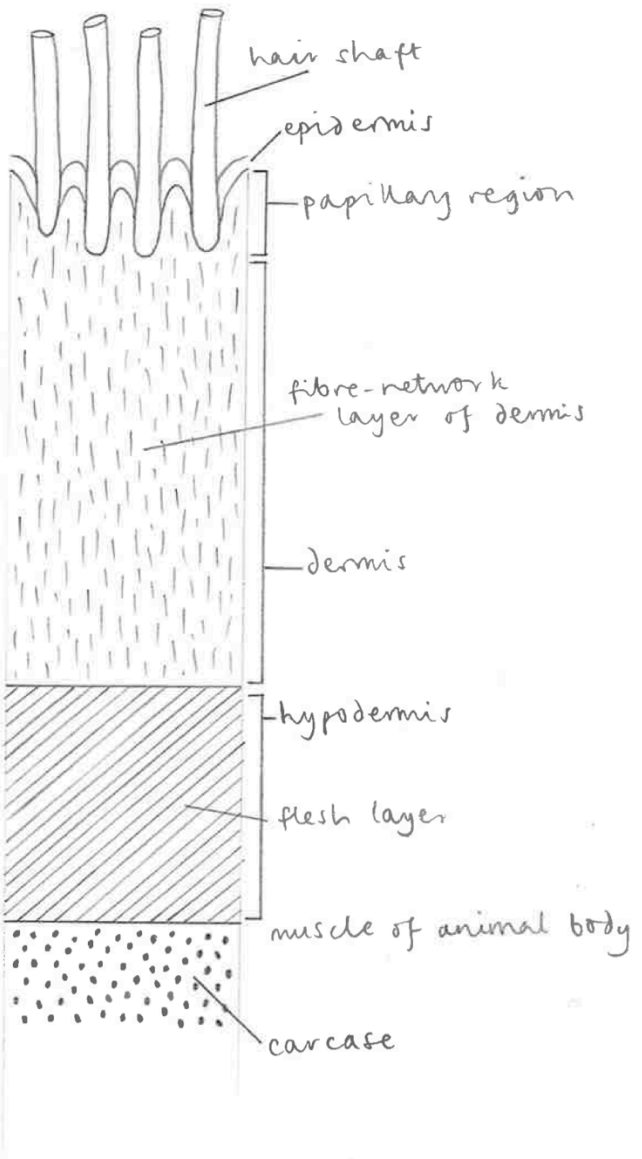
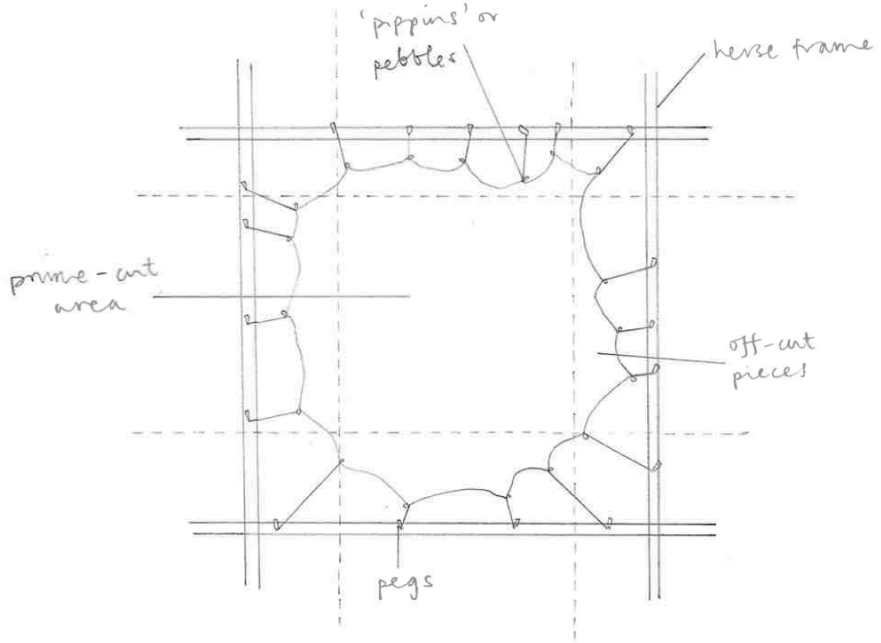


Fig. 3: diagram to show the layers of mammalian skin.[917]



[917] Modelled on Ronald Reed, *Ancient Skins, Parchments and Leathers* (London and New York: Seminar Press, 1972), fig. 1 at p.14.

Fig. 4: the "prime cut" and surrounding "off-cuts" on the herse.[918]



[918] Modelled on Jiří Vnouček, 'The Manufacture of Parchment for Writing Purposes and the Observation of the Signs of Manufacture Surviving in Old Manuscripts', *Care and Conservation*, 8 (2005), pp.74-92, fig. 28a at p.77.

Fig. 5: HEHL, MS HM 129, f. 25r, holes.

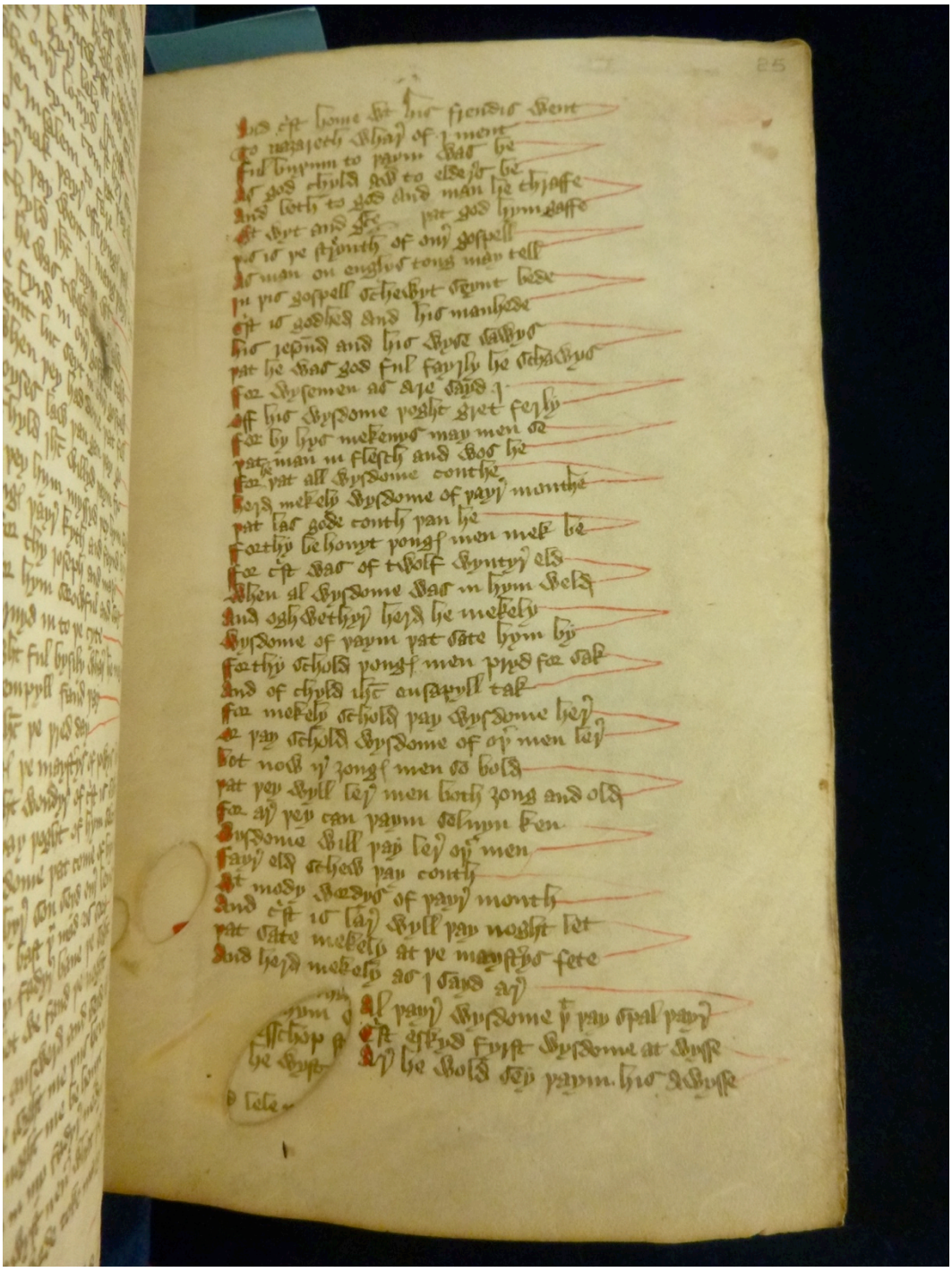


Fig. 6: BodL, MS Bodley 744, f. 45^{r}

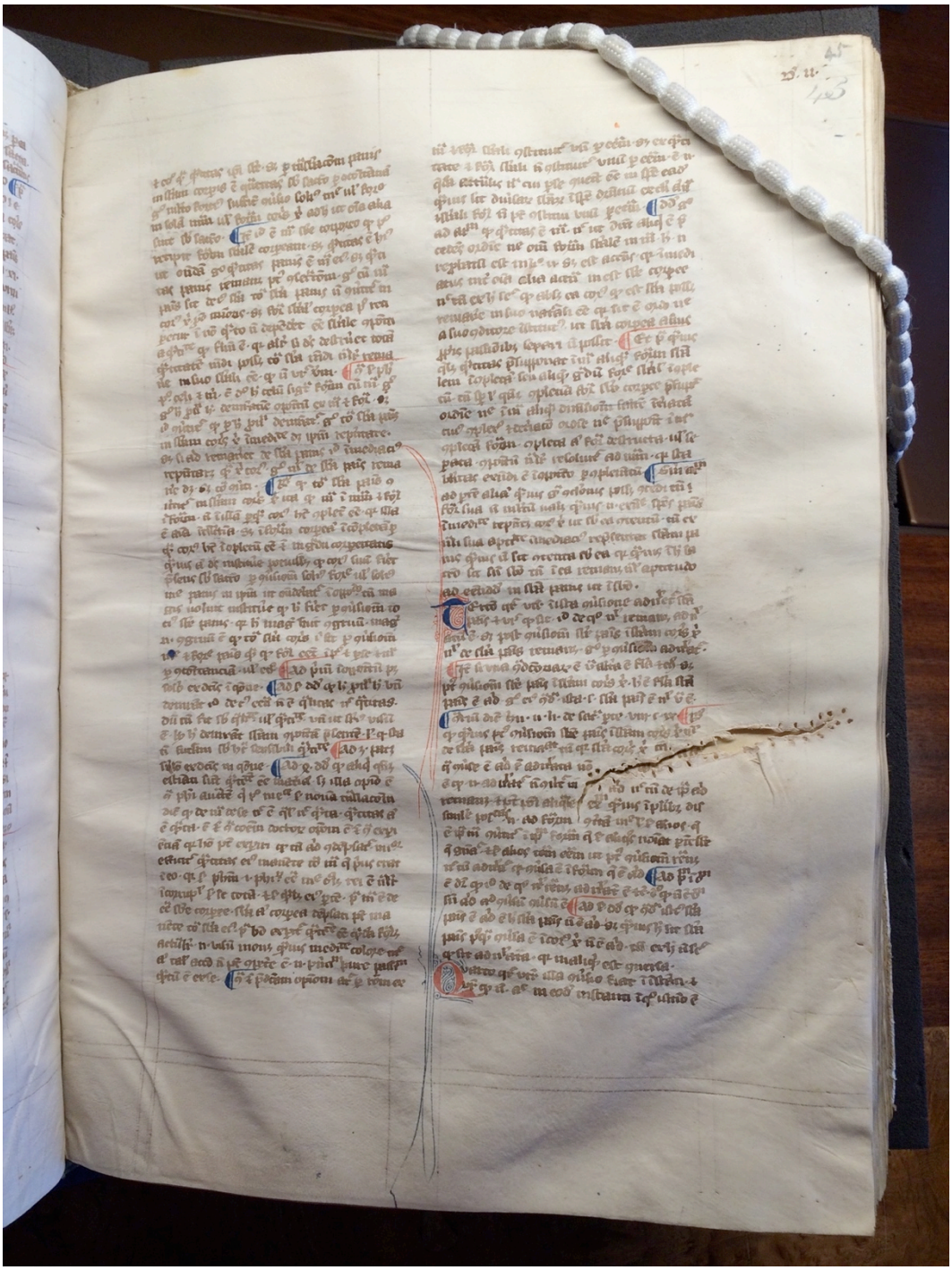


Fig. 7a: BodL, MS Douce 369, f. 94v, parchment damage.

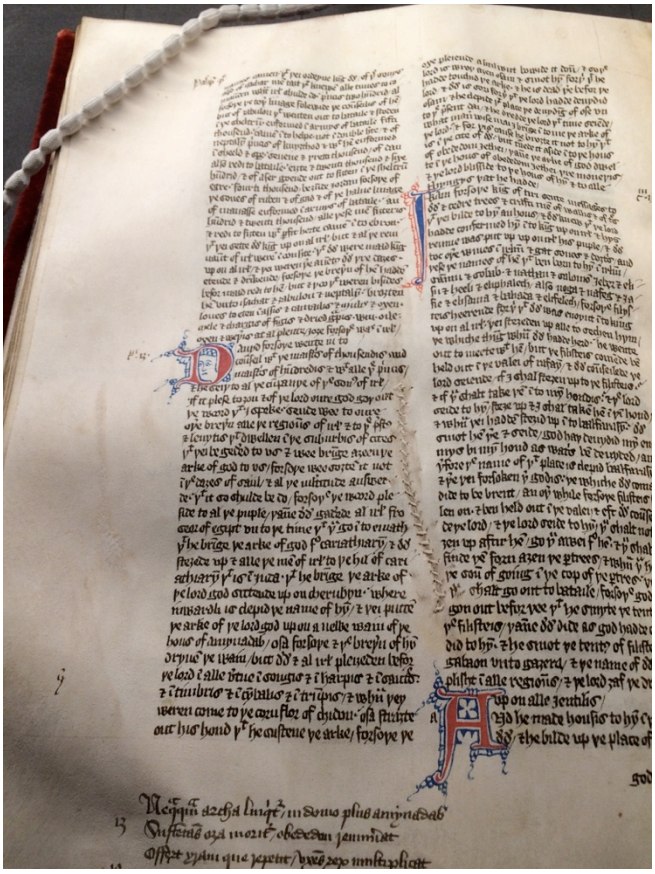
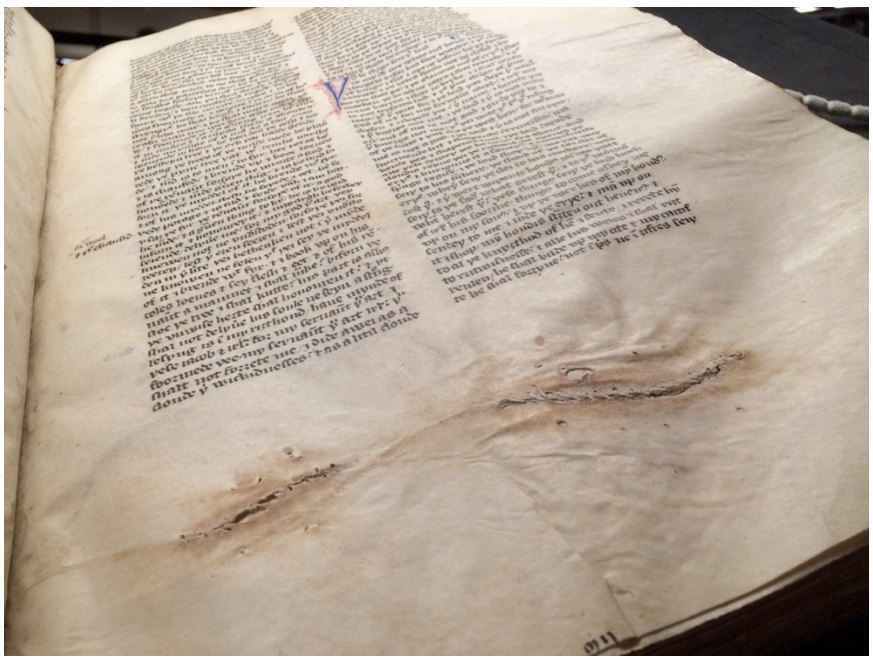


Fig. 7b: BodL, MS Douce 369, f. 221r, parchment damage.



Chapter 2

Fig. 1: BodL, MS Douce 25, f. 72[r], off-cuts.

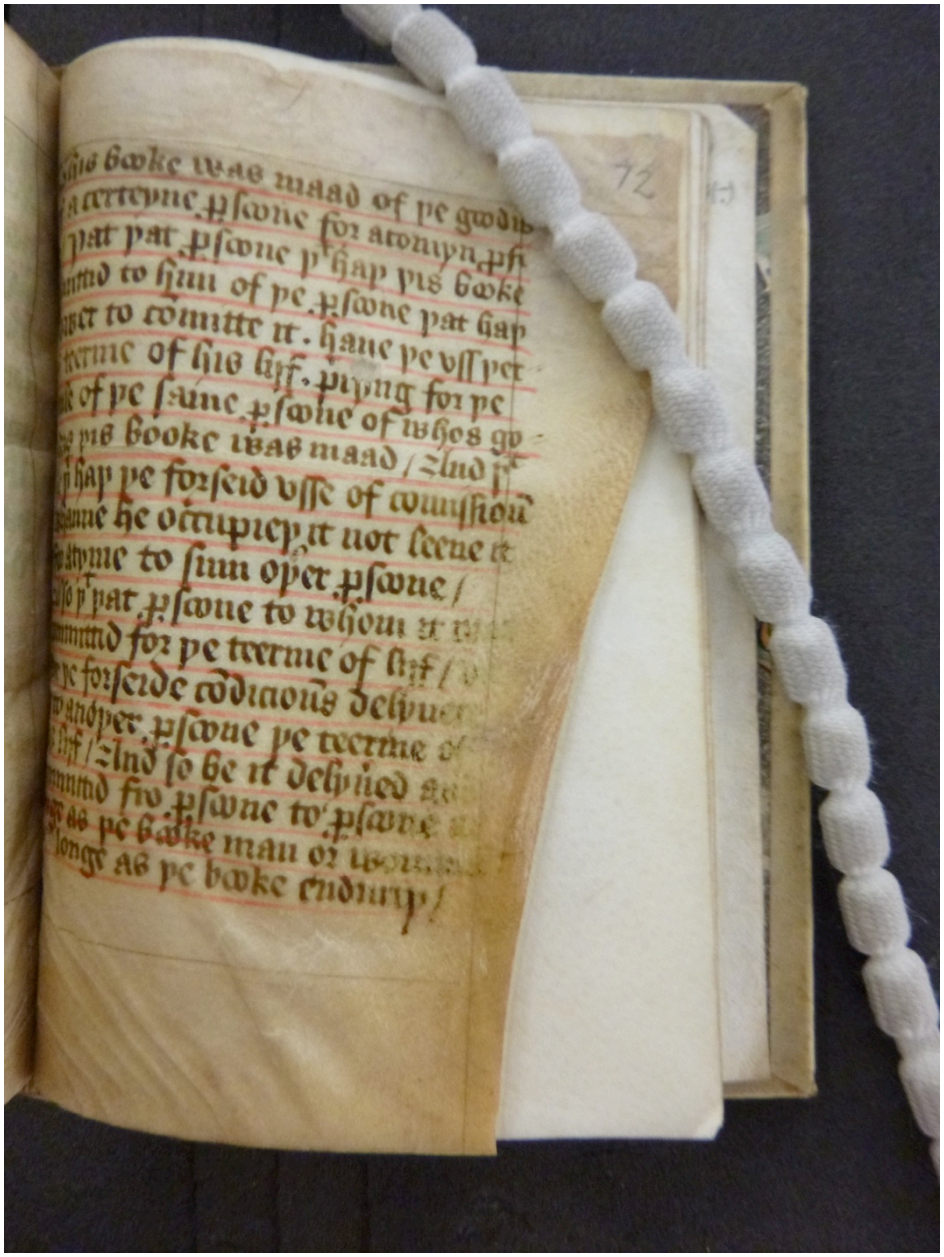
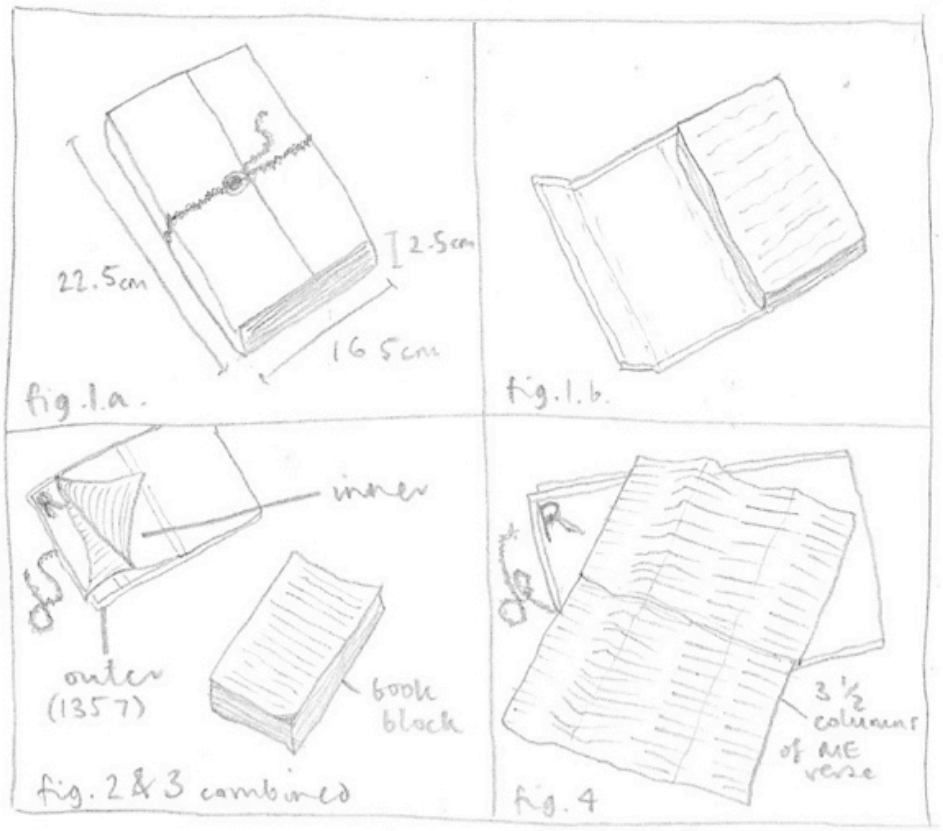


Fig. 2: HEHL, MS HM 144, recycled reinforcing strips.

Fig. 3: Oxford, Hertford College, MS e. 4, ff. 49^{v}-50^{r}, palimpsested quire guards.

Fig. 4a: BodL, MS Ashmole 33, diagrams.[919]



[919] Diagram modelled on Stephen H. Shepherd, 'Four Middle English Charlemagne Romances: A Revaluation of the Non-Cyclic Verse Texts and the Holograph Sir Ferumbras', (unpublished doctoral thesis, University of Oxford, 1988), figs. 1-4 from p.18 onwards (not numbered).

Fig. 4b: BodL, MS Ashmole 33, inner cover.

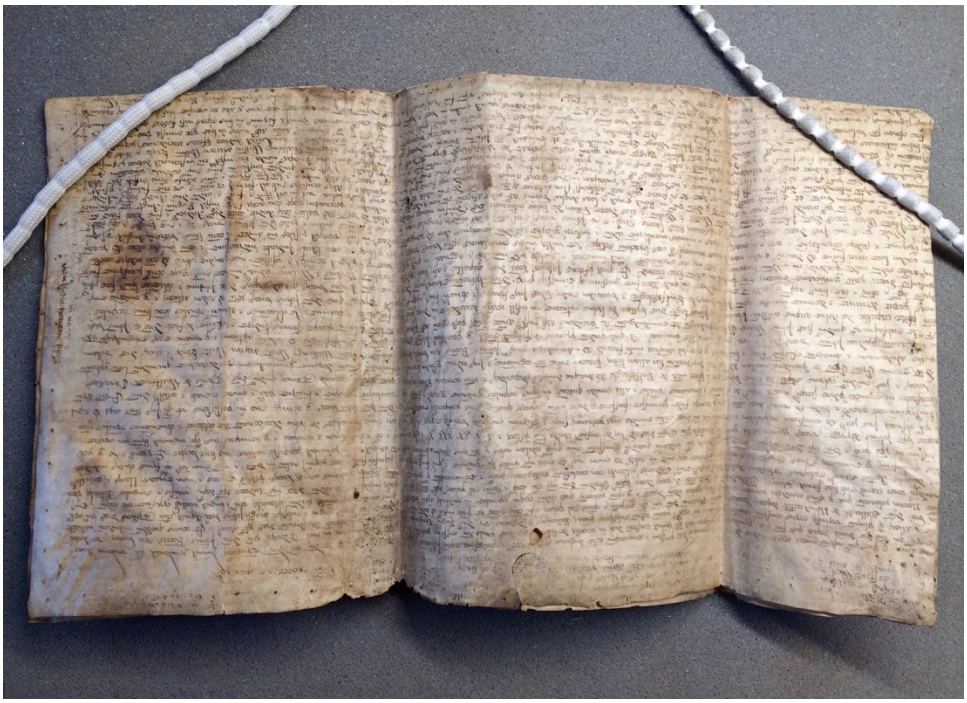


Fig. 4c: BodL, MS Ashmole 33, outer cover.

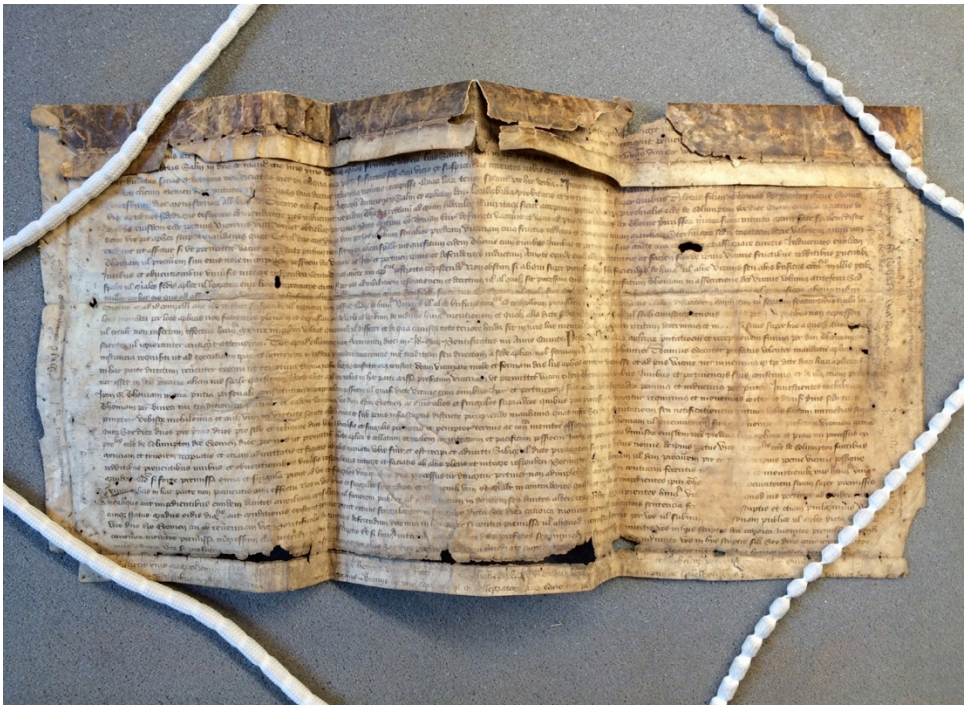


Fig. 5: SJC, MS S.54, diagram of limp cover.

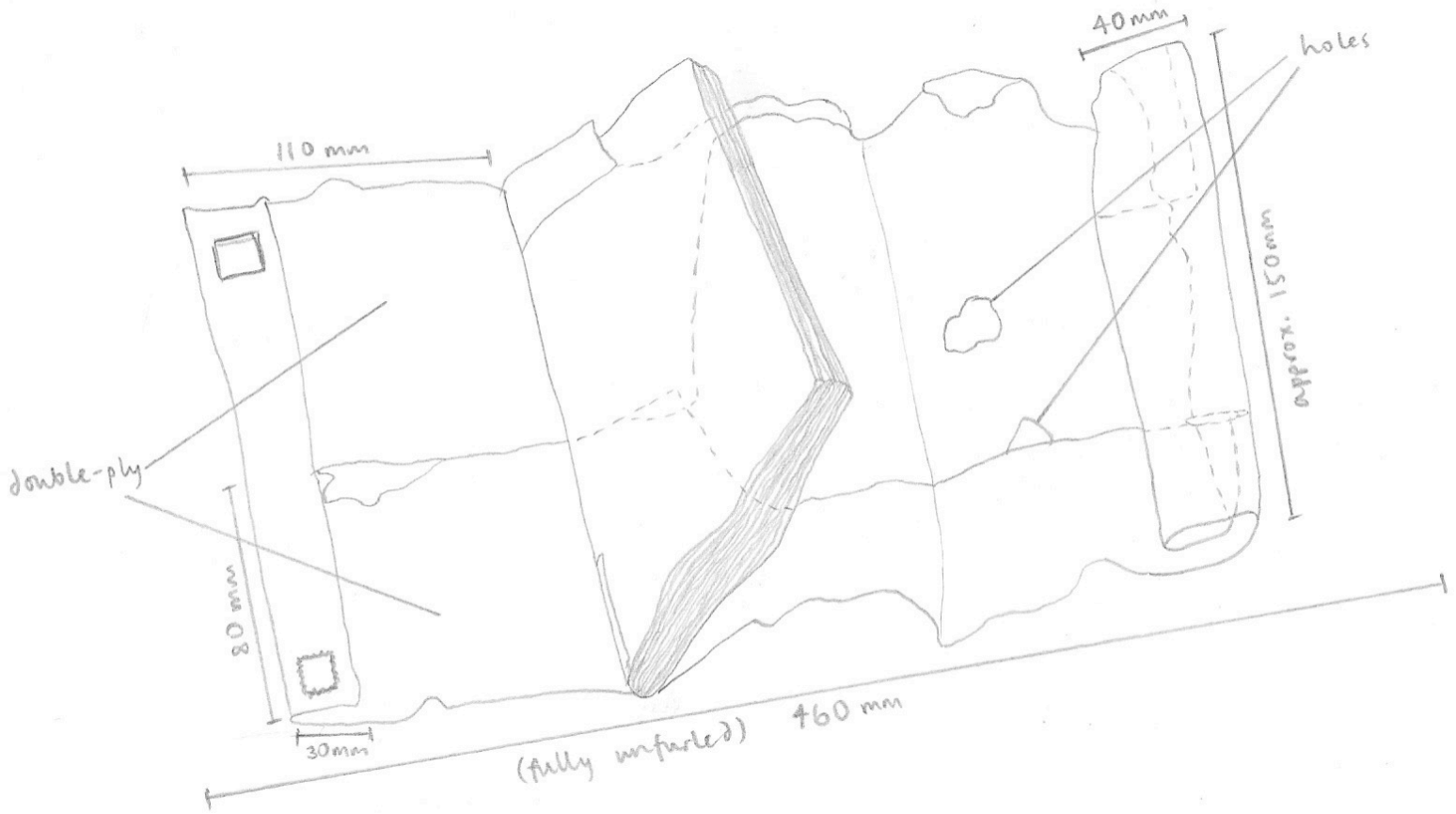


Fig. 6a: BodL, MS Rawl.C.35, ff. 112^{v}-113^{r}, palimpsest and glimpse of undertext.

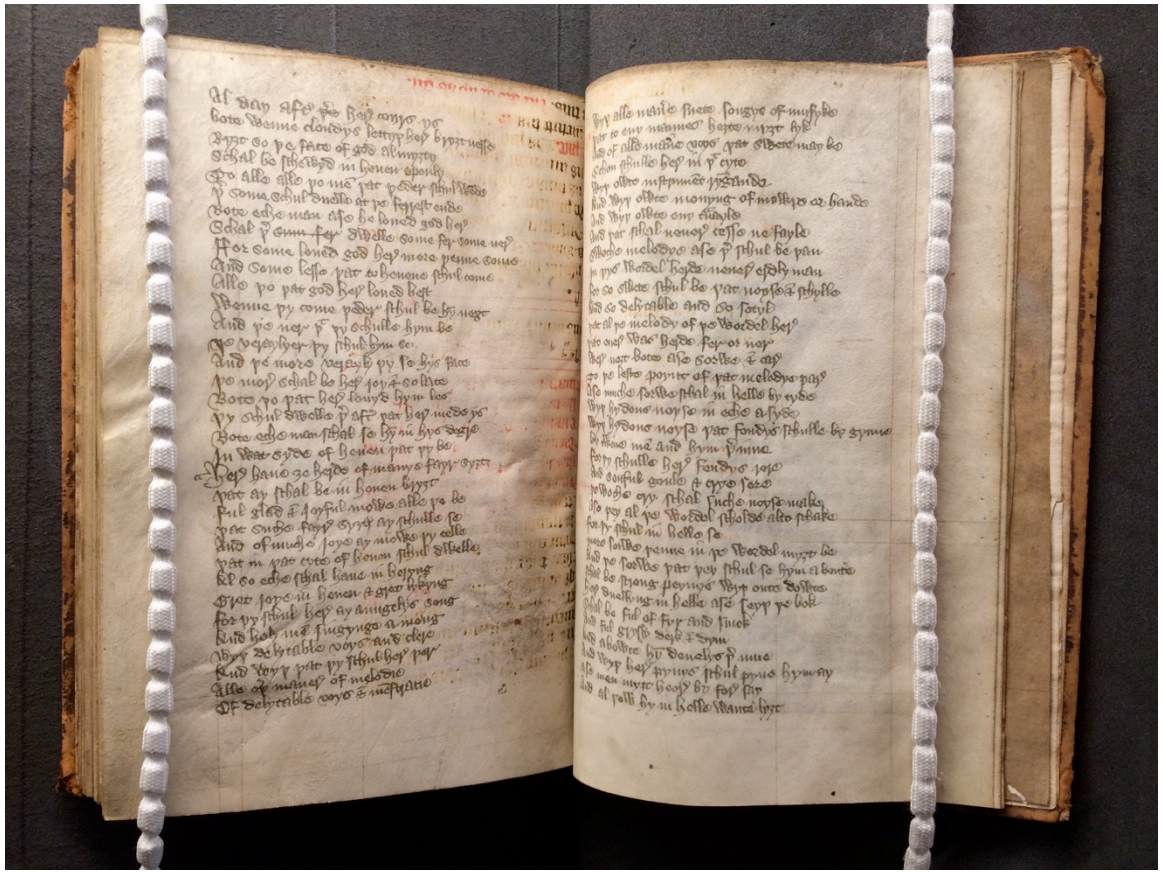
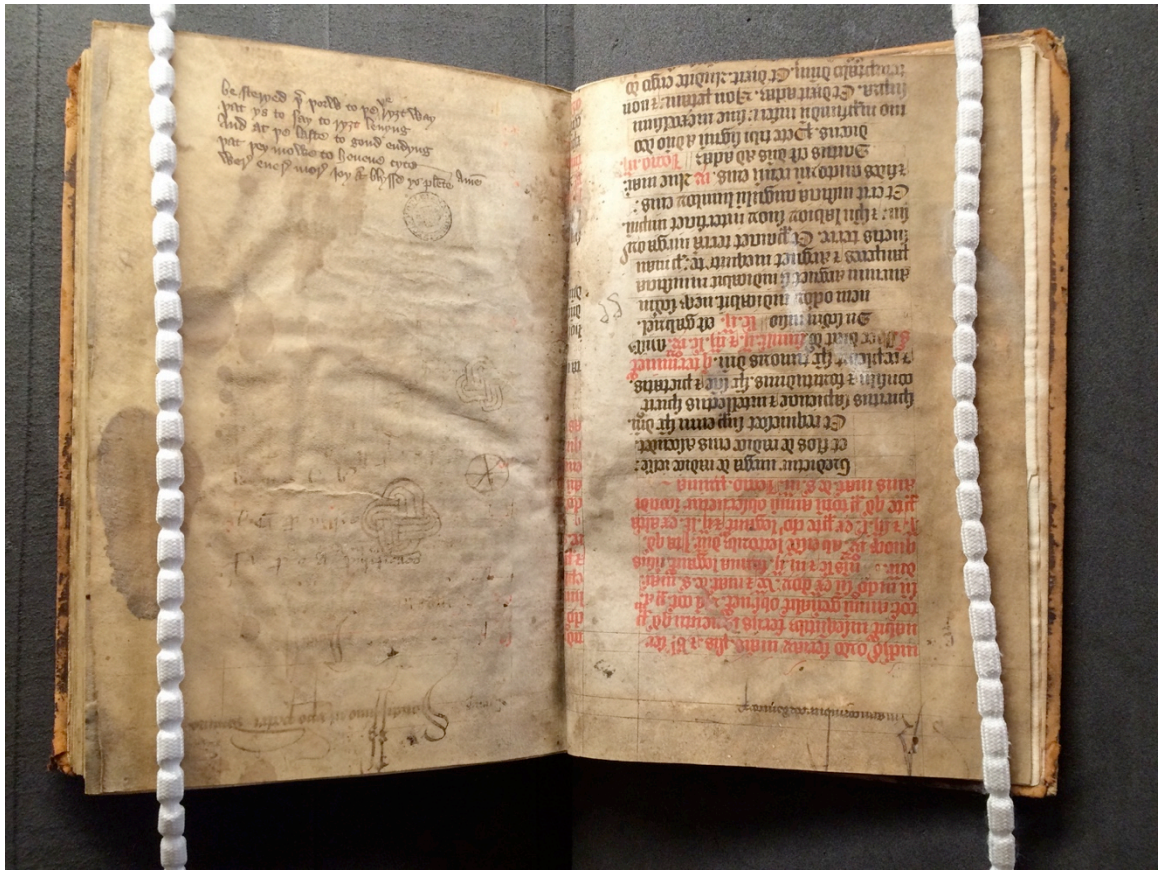


Fig. 6b: BodL, MS Rawl.C.35, ff. 117^{v}-118^{r}, palimpsest and intact undertext flyleaf.



Chapter 3

Fig. 1: BodL, MS Douce 302, f. 35^{v}, markings on a back flyleaf.

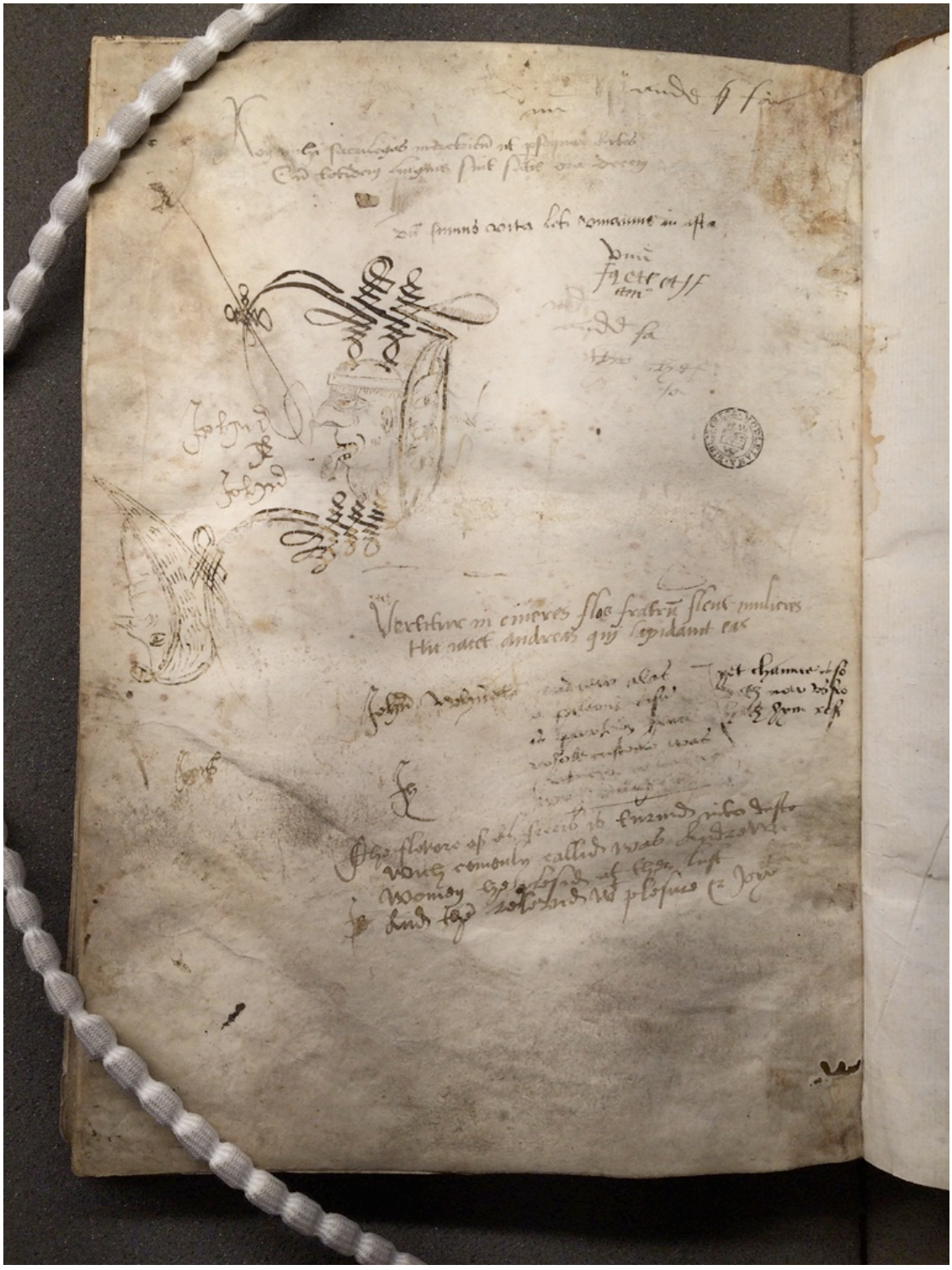


Fig. 2: BodL, MS Douce 109, f. iv^{v}, markings on a front flyleaf.

Fig. 3: BodL, MS Douce 103, f. 15[r], alphabet.

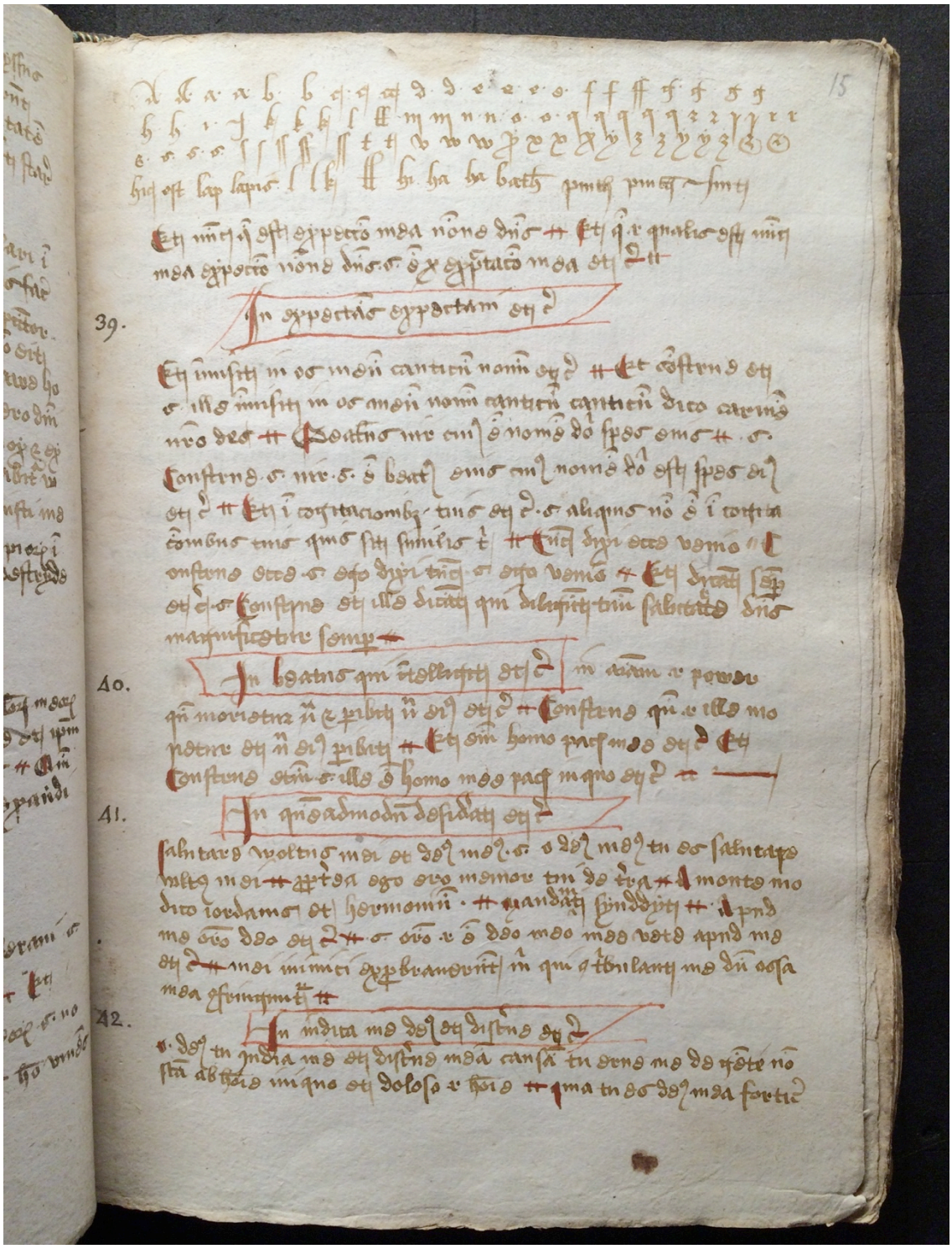


Fig. 4: BodL, MS Douce 84, f.ii^{v}-iii^{r}, recipes written across front flyleaves.

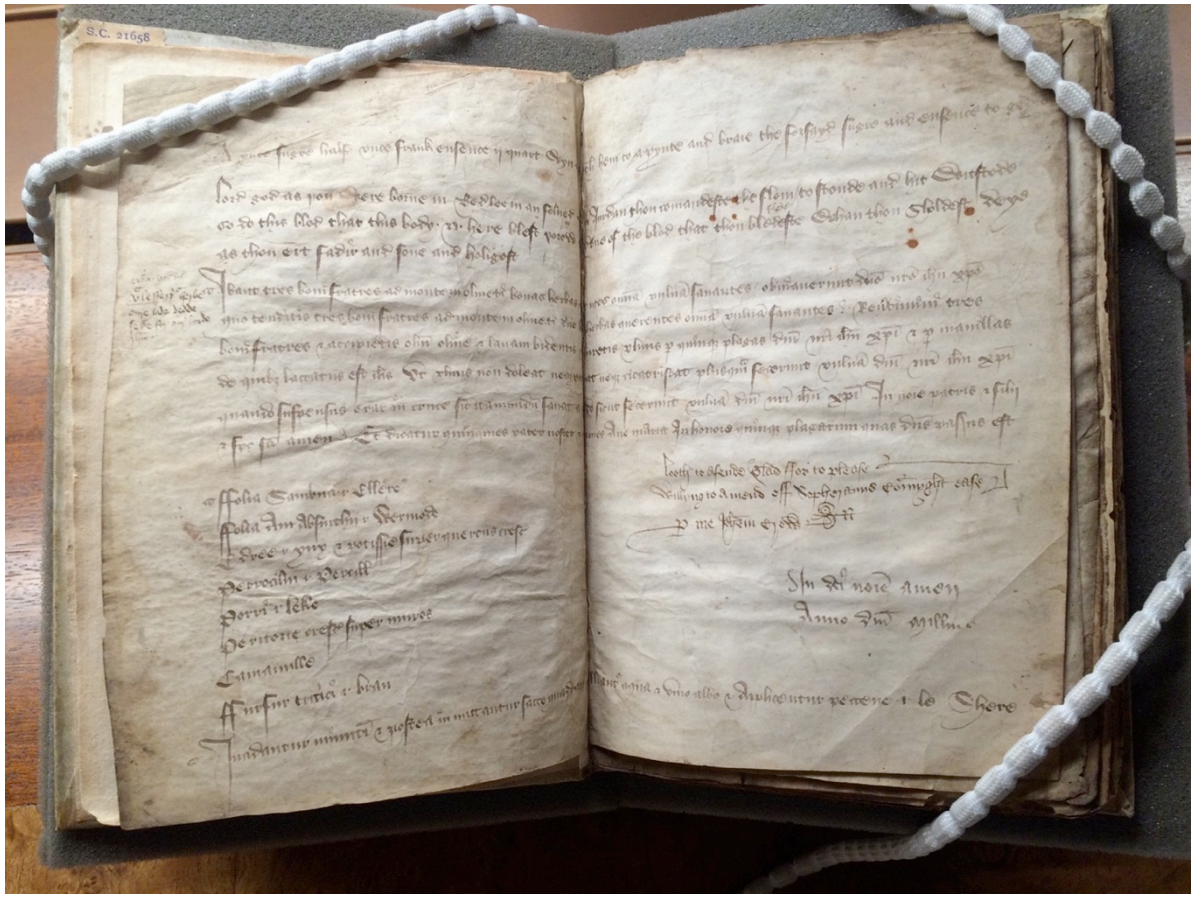
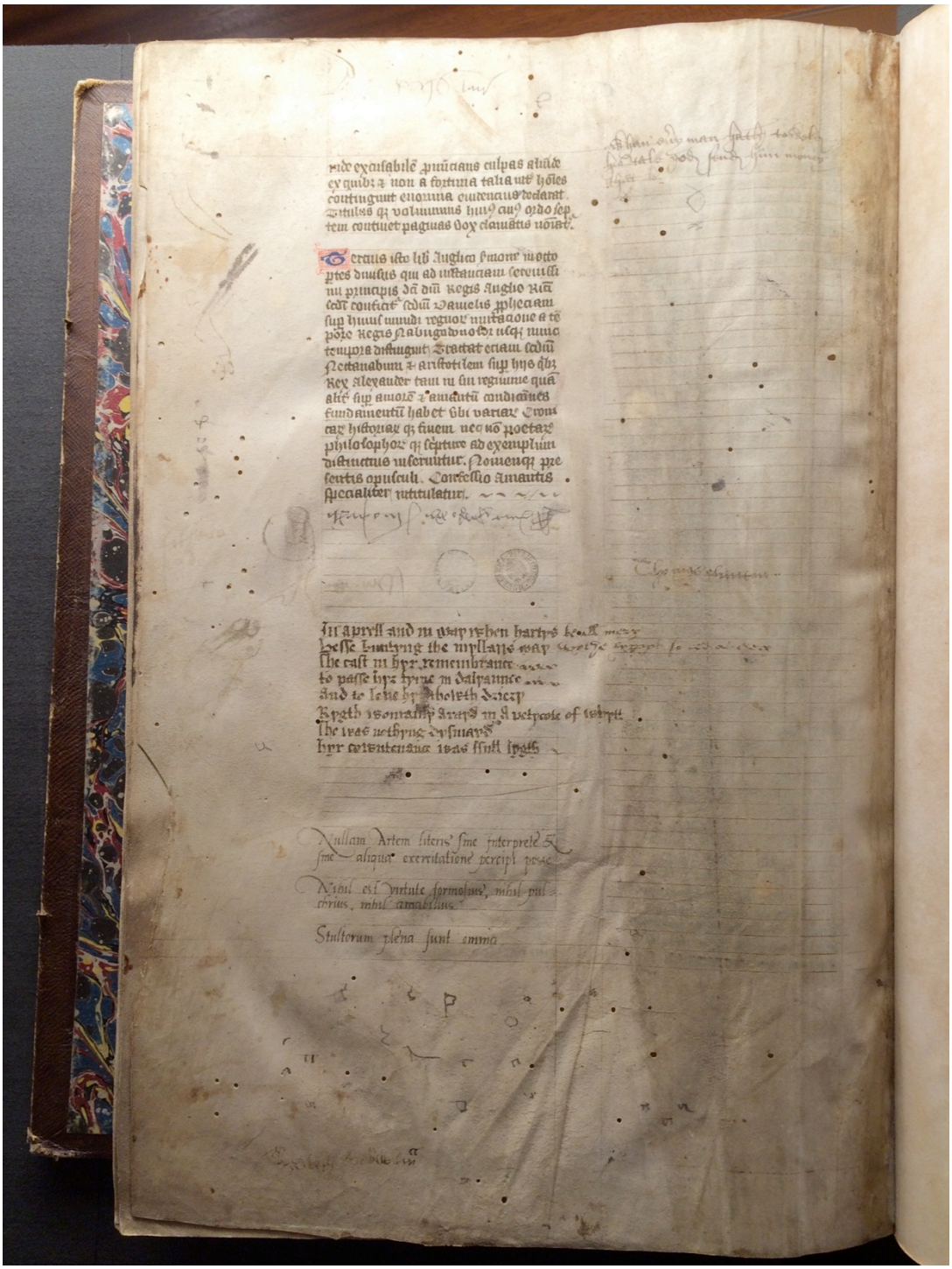


Fig. 5: BodL, MS Laud misc.609, f. 170va, verse added to the last leaf.



Chapter 4

Fig. 1: London, Lambeth Palace Library, MS 472, f. 265r, note on a back flyleaf.

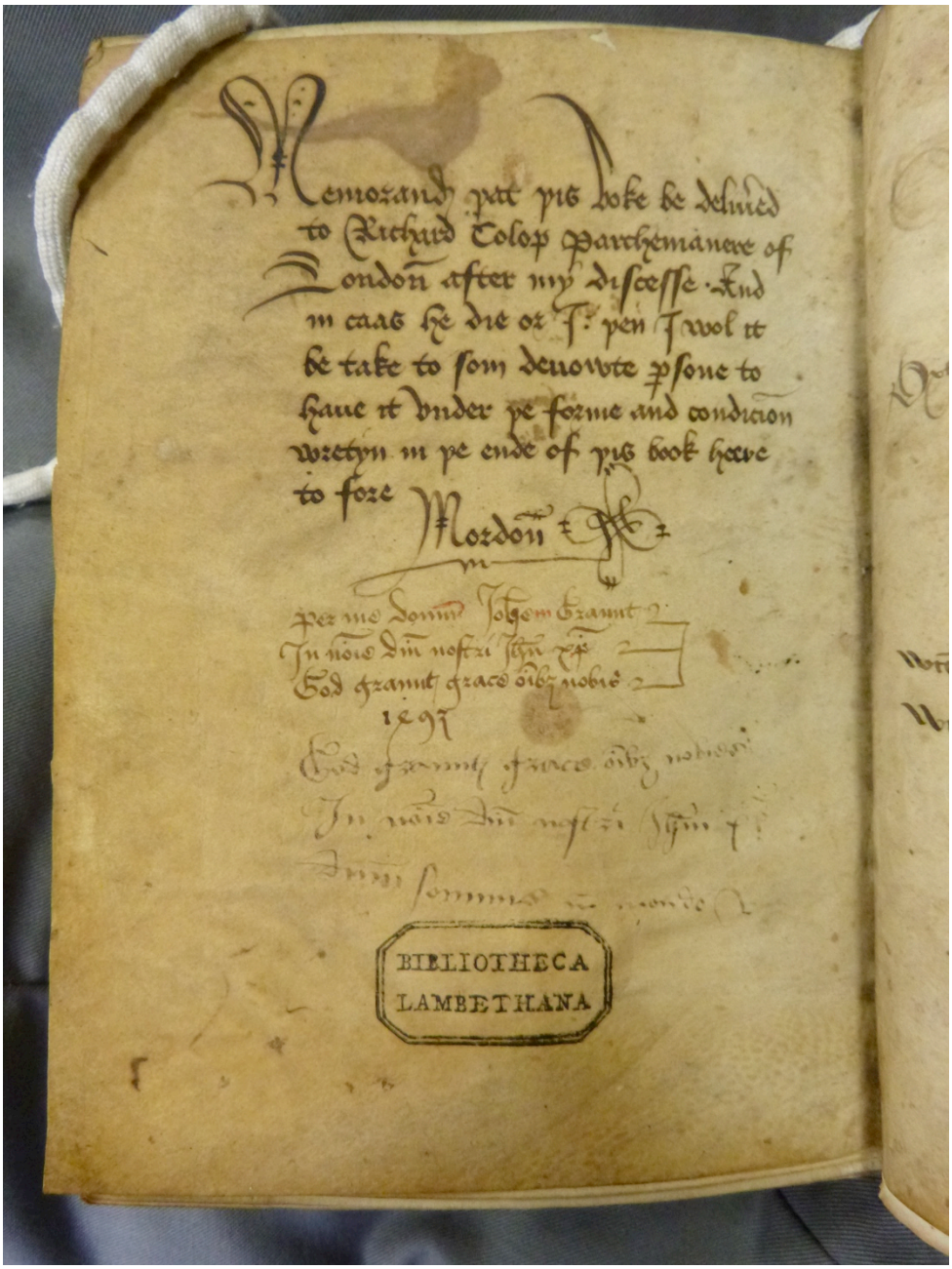


Fig. 2: BodL, MS Bodley 110, f. 1r.

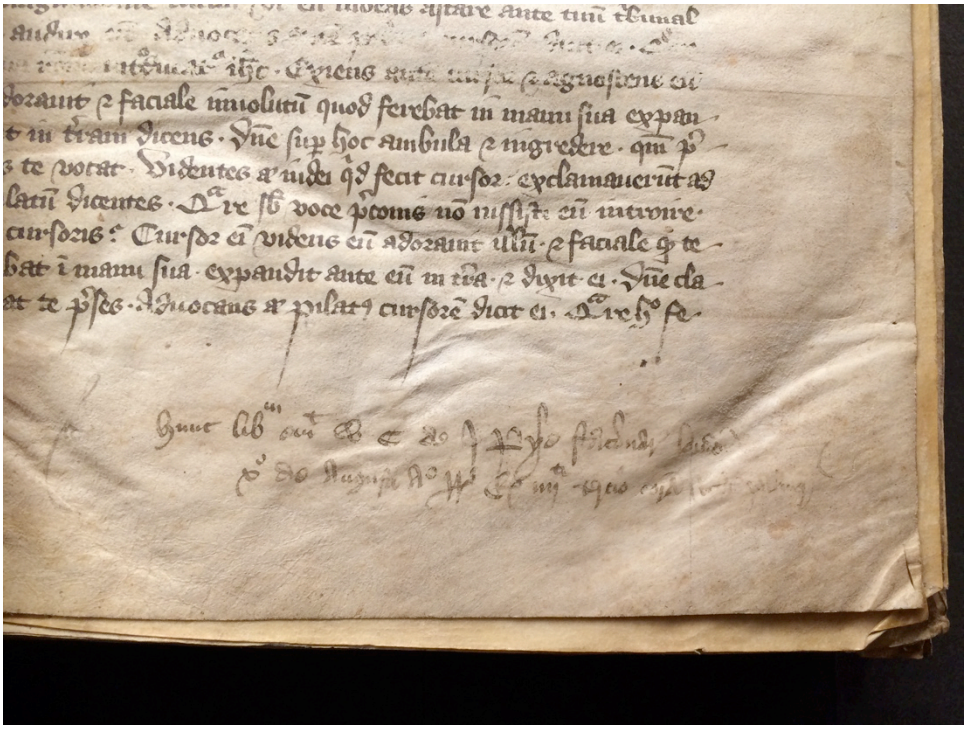


Fig. 3: chart to show numbers of manuscripts with datable ownership or donation inscriptions, by century (from the survey of *MLGB*.)

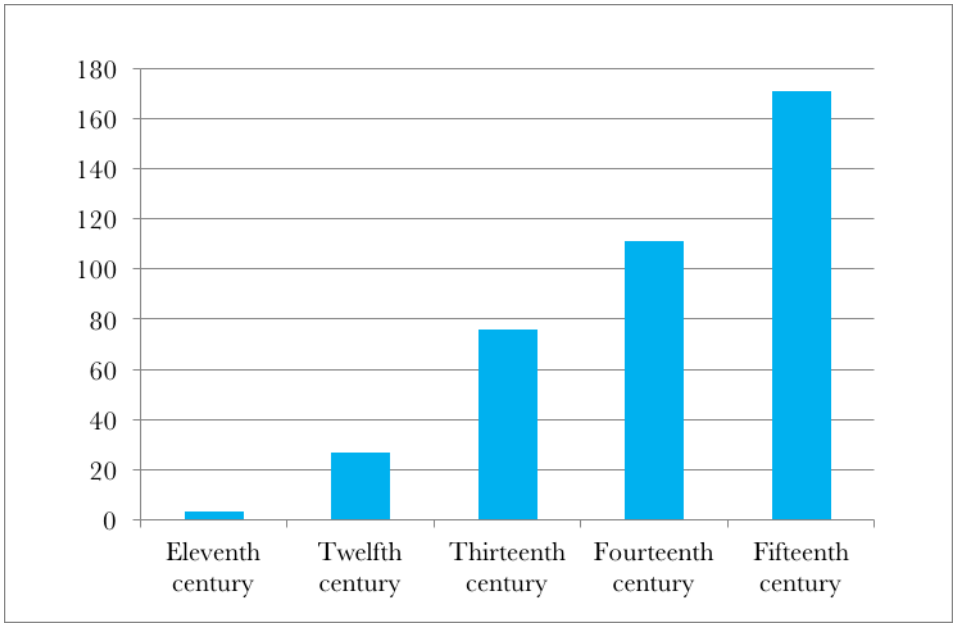


Fig. 4: chart to show numbers of datable inscriptions referring to different kinds of book movement (from the survey of *Summary Catalogue*, II.i.)

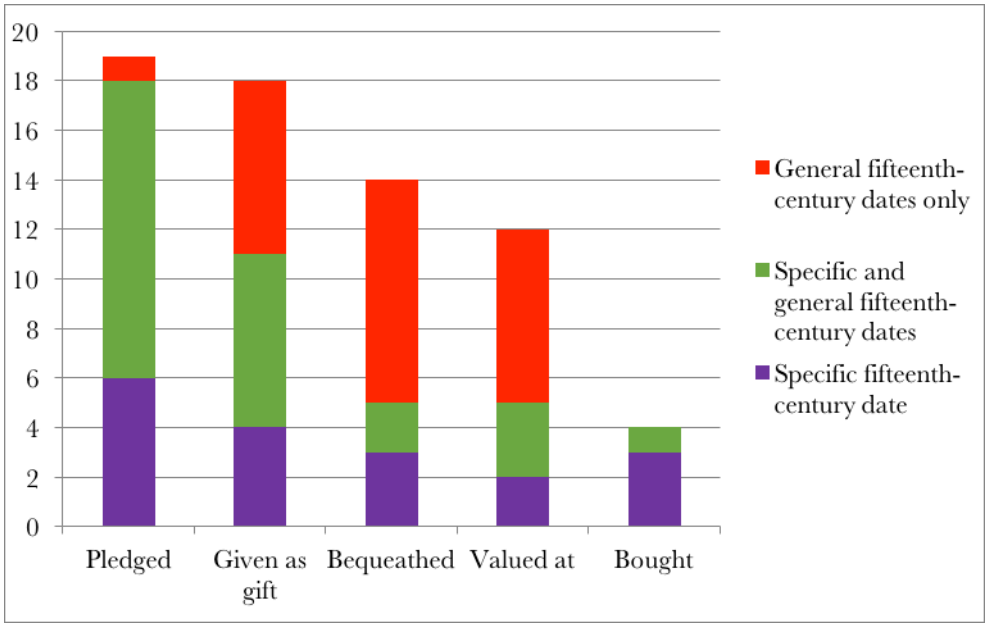


Fig. 5: table to show the values of *precium* inscriptions in books, with certain dates (from the survey of *Summary Catalogue*, II.i.)

Manuscript Shelfmark	**Value**
Bodl. 251	18 marcis[920] = £12
Bodl. 753 (first price)	5 marcas = £3 6s. 8d.
Bodl. 753 (second price)	40 s. = £2
Bodl. 750 (pledged price, also bequeathed)	36s. 8 d. = £1 16s. 8d.
Bodl. 750 (*precium* price)	5s.
Bodl. 858	30s. 4d. = £1 10s. 4d.
Bodl. 721	30s. = £1 10 s.
Bodl. 643	26s. 8 d. = £1 6s. 8d.
Bodl. 830 (also bequeathed)	25s. = £1 5s.
Bodl. 809	13s. 4[d.] = £1 1s. 4d.
Bodl. 812	20 sol*idi*[921] = £1
Bodl. 516 (also bequeathed)	20s. = £1
Bodl. 689 (also given as a gift)	6s. 8d. (a gold noble)
Bodl. 866	6 *scutis*
Auct. F. 5. 30	8s.
Bodl. 676	8d.

[920] Marks and pounds were used primarily as a unit for accounting; the value of marks varied across the medieval period, however, marks were worth two-thirds of a pound, or 13s. 4d., 'Money', online, <https://www.nottingham.ac.uk/manuscriptsandspecialcollections/researchguidance/weightsandmeasures/money.aspx> (accessed 7 January 2017); *DMLBS*, *marca*, *marcus*, sense 2: (as measure of commodities) and sense 3: mark (as unit of exchange or money).

[921] *DMLBS*, *solidus*, sense 3: made of the same substance throughout, (as sb. m.) coin, originally made of one metal throughout, shilling.

Fig. 6: BodL, MS Auct. D.5.14, f. 578^{v}, *cautio* inscription and stationer's mark.

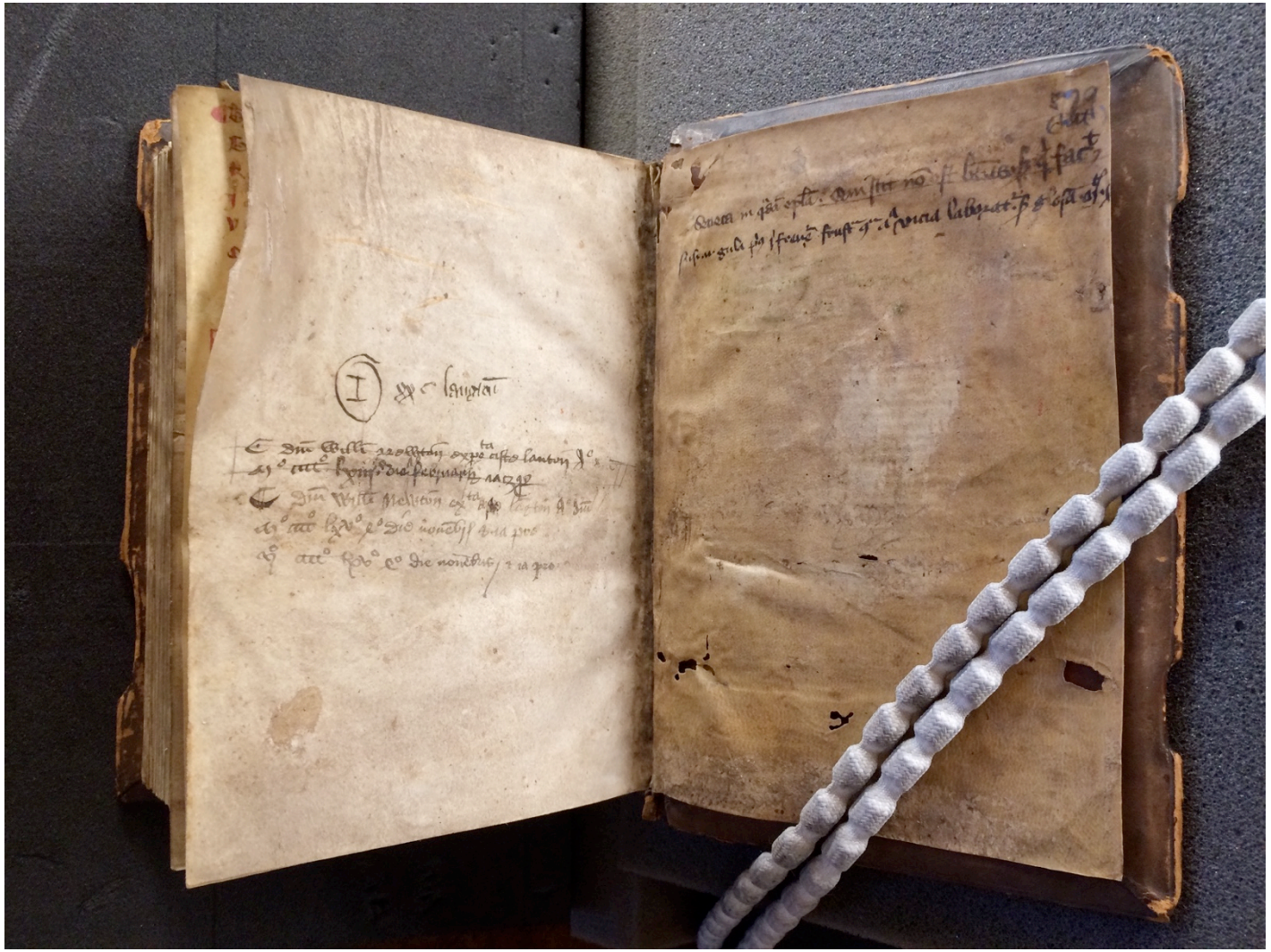


Fig. 7: BodL, MS Bodley 315, f. iii^{v}, front flyleaf with donation inscription.

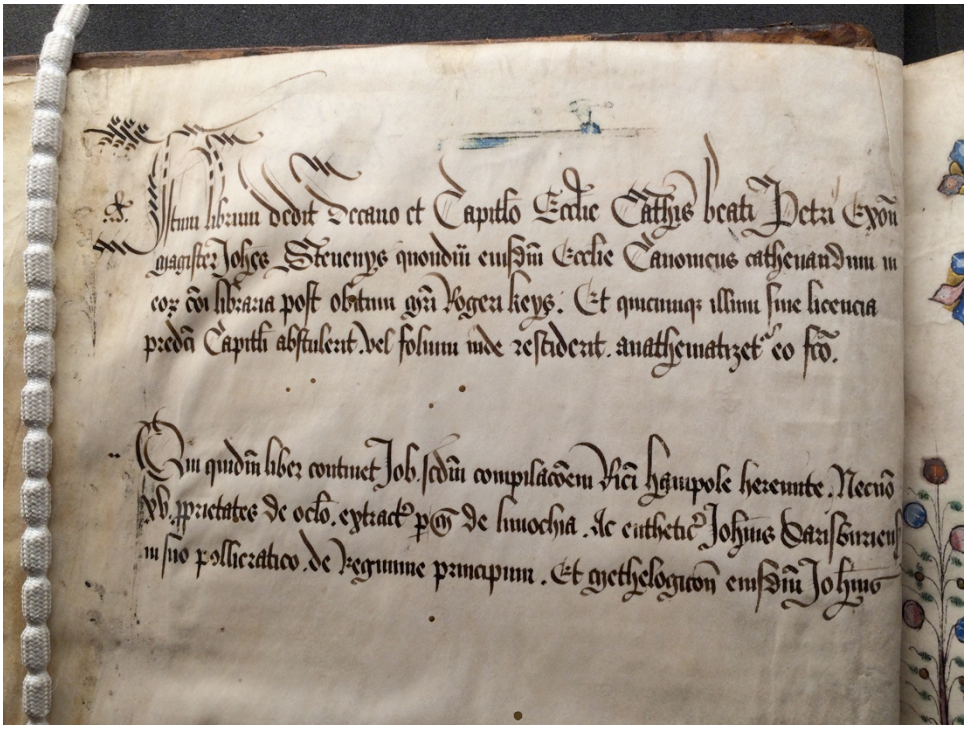
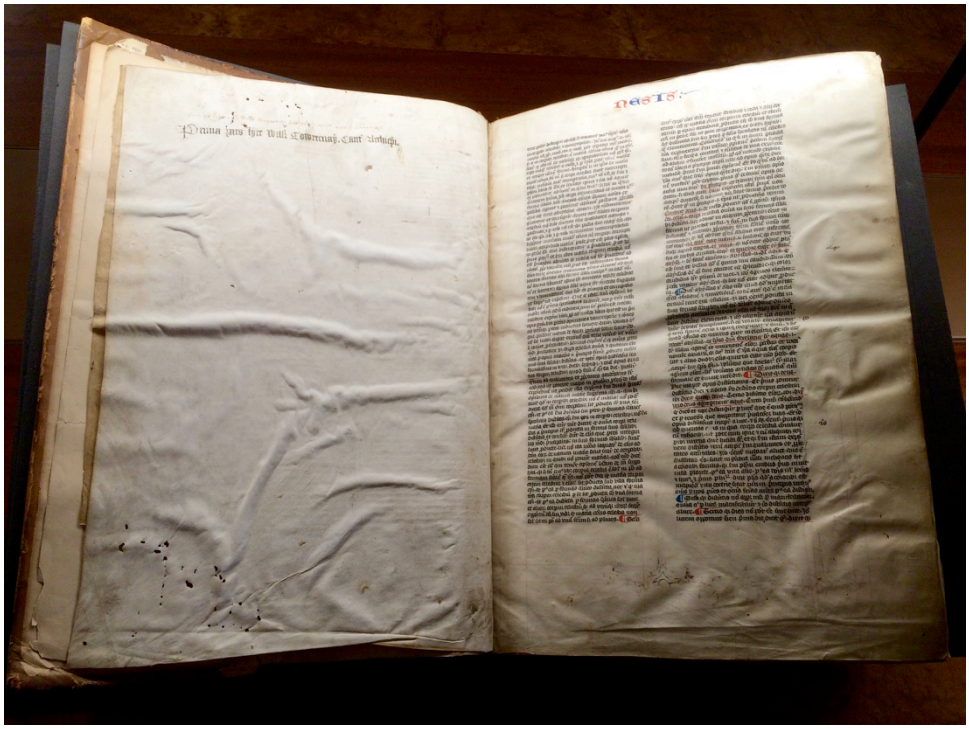
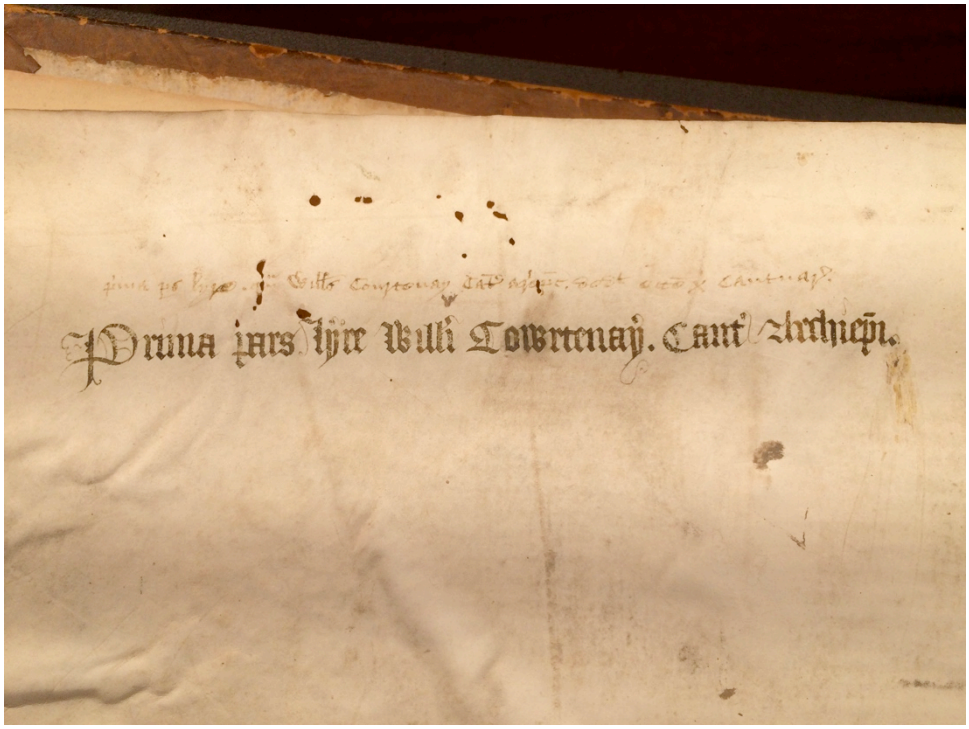


Fig. 8: BodL, MS Bodley 251, f. iii^{v}, front flyleaf with two inscriptions.





Select Bibliography

Manuscripts consulted and cited

Cambridge, Cambridge University Library,

MS Dd.v.76

MS Dd.viii.2

MS Ee.i.13

MS Ff.vi.31

Cambridge, Gonville and Caius College Library,

MS 17/133

MS 23/12

MS 107/176

MS 247/473

MS 492/261

Cambridge, St John's College Library,

MS E.2

MS F.22

MS S.35

MS S.54

Cambridge, Trinity College Library,

MS O.7.37 (MS 1365)

MS O.8.36

MS R.3.22

MS R.14.45

Durham, Durham Cathedral Library,

MS C.III.18

Eton, Eton College Library,

MS 39

MS 42

MS 101

MS 117

Exeter, Exeter Cathedral Library,

MS 3505B

MS 3512

MS 3513

MS 3516

MS 3520

London, British Library,

MS Cotton Julius D.viii

MS Harley 218

MS Harley 641

MS Harley 993

MS Harley 2336

MS Sloane 4

MS Sloane 73

MS Sloane 1313

MS Sloane 2584

MS Sloane 3481

Royal MS 5 C III

Royal MS 8 D X

London, Gray's Inn,

MS 8

London, Lambeth Palace Library,

MS 472

Oxford, Bodleian Library,

MS Ashmole 33

MS Ashmole 52

MS Ashmole 366

MS Ashmole 750

MS Ashmole 1280

MS Ashmole 1494

MS Auct. D.1.11

MS Auct. D.3.6

MS Auct. D.4.5

MS Auct. D.5.11

MS Auct. D.5.13

MS Auct. D.5.14

MS Auct. F.5.30

MS Barlow 24

MS Bodley 68

MS Bodley 87

MS Bodley 110

MS Bodley 123

MS Bodley 251

MS Bodley 252

MS Bodley 268

MS Bodley 279

MS Bodley 300

MS Bodley 315

MS Bodley 333

MS Bodley 355

MS Bodley 436

MS Bodley 442

MS Bodley 461

MS Bodley 463

MS Bodley 516

MS Bodley 563

MS Bodley 565

MS Bodley 643

MS Bodley 676

MS Bodley 648

MS Bodley 686

MS Bodley 689

MS Bodley 696

MS Bodley 720

MS Bodley 721

MS Bodley 731

MS Bodley 741

MS Bodley 744

MS Bodley 749

MS Bodley 750

MS Bodley 751

MS Bodley 757

MS Bodley 787

MS Bodley 794

MS Bodley 809

MS Bodley 810

MS Bodley 812

MS Bodley 830

MS Bodley 842

MS Bodley 858

MS Bodley 859

MS Bodley 866

MS Canon. misc. 128

MS Digby 2

MS Digby 14

MS Digby 15

MS Digby 20

MS Digby 24

MS Digby 230

MS Douce 1

MS Douce 25

MS Douce 33

MS Douce 52

MS Douce 54

MS Douce 60

MS Douce 78

MS Douce 84

MS Douce 103

MS Douce 109

MS Douce 126

MS Douce 141

MS Douce 156

MS Douce 228

MS Douce 257

MS Douce 302

MS Douce 322

MS Douce 323

MS Douce 335

MS Douce 372

MS Douce 369

MS e Mus. 1

MS e Mus. 16

MS e Mus. 23

MS e Mus. 35

MS e Mus. 39

MS e Mus. 42

MS e Mus. 53

MS e Mus. 54

MS e Mus. 76

MS e Mus. 110

MS e Mus. 111

MS e Mus. 116

MS e Mus. 124

MS e Mus. 146

MS e Mus. 187

MS e Mus. 212

MS e Mus. 229

MS e Mus. 232

MS e Mus. 198*

MS Laud misc.36

MS Laud misc.414

MS Laud misc.444

MS Laud misc.609

MS Laud misc.735

MS Laud misc.739

MS Lyell 32

MS Lyell 33

MS Lyell 36

MS Rawl. C.35

MS Rawl. C.86

MS Rawl. C.299

MS Rawl. D.403

MS Rawl. D.1220

MS Rawl. poet.163

MS Selden supra.56

Oxford, Hertford College,

MS e.4 (MS 2)

Oxford, University College,

MS 91

MS 97

San Marino, CA, Henry E. Huntington Library,

MS HM 114

MS HM 129

MS HM 132

MS HM 144

MS HM 744

MS HM 19918

MS HM 27187

Worcester, Worcester Cathedral Library,

MS F.12

MS F.37

MS F.72.

MS F.114

MS F.121

MS F.161

MS Q.15

MS Q.93

Manuscript and early printed works cited but not consulted in person

Cambridge, Corpus Christi College, Parker Library,

MS 164

Exeter, Exeter Cathedral Library,

MS 3501 (the *Exeter Book*)

Hertfordshire, Hatfield House, Cecil Papers, Box S/1

Italy, Bologna, Biblioteca Universitaria,

MS 1456

Lancashire, Stonyhurst College,

MS Summa de Officiis Ecclesiasticus

Lincoln, Lincoln Cathedral Library,

MS 91 (the 'Thornton manuscript')

London, British Library,

MS Add. 48978

MS Arundel 155

MS Cotton Tiberius A.ix

MS Sloane 88

Oxford, Bodleian Library,

Douce BB 200

MS Auct. D.inf.2.4

MS Auct. R.sup.1

MS Eng. poet.a.1 (the 'Vernon manuscript')

Oxford, Lincoln College,

MS lat.113

Reykjavík, Árni Magnússon Institute,

AM 666 b 4to

San Marino, CA, Henry E. Huntington Library,

MS EL 26 C 9 (the 'Ellesmere Chaucer')

Sweden, National Library of Sweden,

MS Isl. Perg. 4 No. 15

Sweden, Uppsala, University Library,

MS C.494

Wormsley, Wormsley Library,

MS 12 (the 'Byland Bede')

Printed and digital primary texts

Chaucer, Geoffrey, *Treatise on the Astrolabe*, ed. by Sigmund Eisner (Norman: University of Oklahoma Press, 2002).

Clarke, Mark, ed., *The Crafte of Lymmyng and the Maner of Steynyng: Middle English Recipes for Painters, Stainers, Scribes and Illuminators*, EETS o.s. 347 (Oxford: OUP, 2016).

Hanna, Ralph, and Sarah Wood, *Richard Morris's Prick of Conscience: A Corrected and Amplified Reading Text*, EETS o.s. 342 (Oxford: OUP, 2013).

Horstmann, Carl, ed., *Yorkshire Writers: Richard Rolle of Hampole and His Followers*, 2 vols. (London: Sonnenschein, 1896).

Hudson, Ann, *English Wycliffite Sermons,* 5 vols. (Oxford: Clarendon Press, 1983).

Lydgate, John, 'The Debate of the Horse, Goose, and Sheep', *The Minor Poems of John Lydgate*, ed. by Henry Noble MacCracken, EETS o.s. 192 (1934), pp.539-566.

MacCracken, Henry Noble, ed., *The Minor Poems of John Lydgate*, EETS o.s. 192 (London: OUP, 1934).

Powell, Susan, *John Mirk's Festial,* EETS o.s. 335, 2 vols. (Oxford: OUP, 2009-2011).

Robbins, Rossell Hope, *Secular Lyrics of the XIVth and XVth Centuries* (Oxford: Clarendon Press, 1952 and 1961).

Scase, Wendy, ed., *A Facsimile Edition of the Vernon Manuscript: Oxford, Bodleian Library MS Eng. Poet. A. 1*, Bodleian Digital Texts 3 (Oxford: Bodleian Library, Oxford University, 2012).

Seymour, M. C., ed., *The Defective Version of Mandeville's Travels*, EETS o.s. 319 (Oxford: OUP, 2002).

York, Edward of, *The Master of Game: The Oldest English Book on Hunting*, ed. by William A. Baillie-Grohman and F. N. Baillie-Grohman (New York: Duffield, 1909, repr. Philadelphia: University of Pennsylvania Press, 2005).

Zupitza, J., ed., *The Romance of Guy of Warwick: Edited from the Auchinleck Manuscript in the Advocates' Library, Edinburgh, and from MS 107 in Caius College, Cambridge*, 3 vols., EETS e.s. 49 (Bungay: Clay and Sons, 1887).

Secondary sources

'Book of Kells' exhibition at Trinity College, Dublin.

'Marks of Genius' exhibition at the Weston Library, Bodleian Libraries, Oxford (21 March-20 September 2015).

'Royal Manuscripts: Genius of Illumination' exhibition at the British Library, London (11 November 2011-13 March 2012).

Aberth, John, *An Environmental History of the Middle Ages: The Crucible of Nature* (London: Routledge, 2013).

Albarella, Umberto, '"The Mystery of Husbandry": Medieval Animals and the Problem of Integrating Historical and Archaeological Evidence', *Antiquity,* 73:282 (1999), 867-75.

Albarella, Umberto, 'Size, Power, Wool and Veal: Zooarchaeological Evidence for Late Medieval Innovations', *Environment and Subsistence in Medieval Europe: Papers of the Medieval Europe Brugge 1997 Conference* 9, ed. by Guy de Boe and Frans

Verhaeghe (Zellik: Instituut voor het Archeologisch Patrimonium, 2007), pp.19-30.

Albarella, Umberto, 'Tawyers, Tanners, Horn Trade and The Mystery of The Missing Goat', *The Environmental Archaeology of Industry*, ed. by Peter Murphy and Patricia E. J. Wiltshire, *Symposia of the Association for Environmental Archaeology 20* (Oxford: Oxbow Books, 2003), pp.71-83.

Allen, Valerie, *On Farting: Language and Laughter in the Middle Ages* (New York: Palgrave Macmillan, 2007).

Amtower, Laurel, *Engaging Words: The Culture of Reading in the Later Middle Ages* (New York: Palgrave Macmillan, 2000),

Andrade, Jackie, 'What Does Doodling Do?' *Applied Cognitive Psychology*, 24 (2010), 100-106.

Andrews, Frances, ed., *Ritual and Space in the Middle Ages: Proceedings of the 2009 Harlaxton Symposium* (Donington: Shaun Tyas, 2011).

Archimedes Project, 'Archimedes Palimpsest', online <http://www.archimedespalimpsest.org/> (accessed 5 January 2017).

Arnheim, Rudolf, *The Power of the Centre: a Study of Composition in the Visual Arts* (Berkeley; London: University of California Press, 1988).

ASLE-UKI, 'Call for papers', ASLE-UKI One-day Symposium at the University of Wales Trinity St David, 15 March 2013, online <http://asle.org.uk/wp-content/uploads/2014/10/ASLE-UKI-sustainability_symposium-cfp.pdf> (accessed 5 January 2017).

Aston, T. H., and Rosamond Faith, 'The Endowments of the University and Colleges to *circa* 1348', *The History of the University of Oxford: The Early Oxford Schools*, ed. by J. I. Catto (Oxford: Clarendon Press, 1984), pp.265-309.

Avrin, Leila, *Scribes, Script and Books: The Book Arts from Antiquity to the Renaissance* (London: British Library, 1991; repr. Chicago: American Library Association, 2010).

B., H. M., 'Documents and Records II: The Wanderings of a Manuscript', *The Bodleian Quarterly Record,* 2:17 (1918), 118-120.

Badham, Sally, *Medieval Church and Churchyard Monuments* (Oxford: Shire Books, 2011).

Bahr, Arthur, 'Miscellaneity and Variance in the Medieval Book', *The Medieval Manuscript Book: Cultural Approaches* (Cambridge: CUP, 2015), pp.181-198.

Bain, Heather, 'Binding Marvell: Form and Content in Book Arts', *Andrew Marvell Newsletter,* 5:1 (2013), 9-16.

Baker, Nicholson, *Double Fold: Libraries and the Assault on Paper* (New York: Random House, 2001).

Bale, Anthony, 'Belligerent Literacy, Bookplates and Graffiti: Dorothy Helbarton's Book', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014), pp. 89-111.

Baswell, Christopher, 'Talking Back to the Text: Marginal Voices in Medieval Secular Literature', *The Uses of Manuscripts in Literary Studies: Essays in Memory of Judson Boyce Allen*, ed. by Charlotte Cook Morse, Penelope Reed Doob, and Marjorie Curry Woods (Western Michigan University: Medieval Institute Publications, 1992), pp.121-160.

Bate, Jonathan, *Romantic Ecology: Wordsworth and the Environmental Tradition* (Oxford: Routledge, 1991).

Bate, Jonathan, *The Song of the Earth* (London: Picador, 2000).

Beadle, Richard, 'English Autograph Writings of the Later Middle Ages', *Gli autografi medievali: problemi paleografici e filologici: atti del Convegno di studio della Fondazione Ezio Franceschini, Erice 25 settembre – 2 ottobre 1990*, ed. by Paolo Chiesa and Lucia Pinelli (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1994), pp.249-68.

Beadle, Richard, 'Robert Elyot – Another Manuscript', *The Library*, 5th ser., 32:4 (1977), 371-372.

Beal, Peter, *A Dictionary of English Manuscript Terminology 1450-2000* (Oxford: OUP, 2008).

Bearman, Frederick A., 'The Origins and Significance of Two Late Medieval Textile Chemise Bookbindings in the Walters Art Gallery', *Journal of the Walters Art Gallery: Essays in Honor of Lilian M. C. Randall*, 54 (1996), 163-187.

Bell, David N., *What Nuns Read: Books and Libraries in Medieval English Nunneries* (Kalamazoo: Cistercian Publications, 1995).

Bell, H. E., 'The Price of Books in Medieval England', *The Library*, 4th ser., 17 (1937), 312-332.

Bennett, Jane, 'Powers of the Hoard: Further Notes on Material Agency', *Animal, Vegetable, Mineral: Ethics and Objects*, ed. by Jeffrey Jerome Cohen (Washington, DC: Oliphaunt Books, 2012), pp.237-72.

Bennett, Jane, *Vibrant Matter: A Political Ecology of Things* (Durham: Duke UP, 2010).

Bennett, Tony, and Patrick Joyce, eds., *Material Powers: Cultural Studies, History and The Material Turn* (London: Routledge, 2010).

Birrell, J., 'Procuring, Preparing and Serving Venison', *Food in Medieval England*, *Food in Medieval England: Diet and Nutrition*, ed. by C. M. Woolgar, D. Serjeantson, and T. Waldron (Oxford: OUP, 2006), pp.176-188.

Black, William Henry, ed., *Quarto Catalogue*, X: *A Descriptive, Analytical and Critical Catalogue of the Manuscripts Bequeathed Unto the University of Oxford by Elias Ashmole: Also of Some Additional MSS. Contributed by Kingsley, Lhuyd, Borlase and Others*, 2 vols. (Oxford: OUP, 1845-1866).

Blayney, Peter W. M., *The Stationers' Company Before the Charter, 1403-1557* (London: The Worshipful Company of Stationers and Newspapermakers: 2003).

Bloxam, Jim, 'The Beast, the Book and the Belt: An Introduction to the Study of Girdle or Belt Books from the Medieval Period', *Breaking and Shaping Beastly Bodies: Animals as Material Culture in the Middle Ages*, ed. by Aleksander Pluskowski (Oxford: Oxbow Books, 2007), pp.80-97.

Bodleian Libraries, Oxford, *Medieval Libraries of Great Britain* (beta version), online <http://mlgb3.bodleian.ox.ac.uk> (accessed 5 January 2017).

Boffey, Julia, 'Manuscript and Print: Books, Readers and Writers', *A Companion to Medieval Poetry*, ed. by Corinne Saunders (Oxford: Wiley Blackwell, 2010), pp.538-554.

Boffey, Julia, and Carol M. Meale, 'Selecting the Text: Rawlinson C. 86 and some other books for London readers', *Regionalism in Late Medieval Manuscripts and Texts: Essays Celebrating the Publication of a Linguistic Atlas of Late Medieval English, York Manuscripts Conference, University of York*, ed. by Felicity Riddy, York Manuscripts Conference, University of York (Cambridge: D. S. Brewer, 1991).

Boffey, Julia, and Virginia Davis, eds., *Recording Medieval Lives: Proceedings of the 2005 Harlaxton Symposium* (Donington: Shaun Tyas, 2009).

Boffey, Julia, *Manuscript and Print in London c.1475-1530* (London: The British Library, 2012).

Boivin, Nicole, *Material Cultures, Material Minds: The Impact of Things on Human Thought, Society, and Evolution* (Cambridge: CUP, 2008).

Borland, Jennifer, 'Unruly Reading: The Consuming Role of Touch in the Experience of a Medieval Manuscript', *Scraped, Stroked, and Bound: Materially*

Engaged Readings of Medieval Manuscripts, ed. by Jonathan Wilcox (Turnhout: Brepols, 2013), pp.97-114.

Bosworth-Toller Anglo-Saxon Dictionary, online <http://www.bosworthtoller.com> (accessed 5 January 2017).

Boyd, Beverly M., *Chaucer and the Medieval Book* (San Marino: Huntington Library 1973).

Boyle, Mary, 'William Wey's Itinerary to the Holy Land: Bodleian Library, MS. Bodl. 565 (*c.*1470)', *Bodleian Library Record,* 28:1 (2015), 22-36.

Bozzolo, Carlo, and Ezio Ornato, *Pour une Histoire du Livre Manuscript au Moyen Âge: Trois Essais de Codicologie Quantitative* (Paris: Éditions du Centre National de la Recherche Scientifique, 1983).

Braswell, Laurel, *The Index of Middle English Prose, Handlist IV: A Handlist of Douce Manuscripts containing Middle English Prose in the Bodleian Library, Oxford* (Cambridge: D. S. Brewer, 1987).

Brown, Bill, 'Objects, Others, and Us (The Refabrication of Things)', *Critical Inquiry,* 36:2 (2010), 183-217.

Brown, Bill, 'Thing Theory', *Critical Inquiry,* 28:1 (2001), 1-22.

Brown, Michelle P., *Understanding Illuminated Manuscripts: A Guide to Technical Terms* (London: British Library, 1994), online <https://www.bl.uk/catalogues/illuminatedmanuscripts/glossary.asp> (accessed 5 January 2017).

Brownrigg, Linda L., and Margaret M. Smith, eds., *Interpreting and Collecting Fragments of Medieval Books* (Los Altos Hills, California: Anderson-Lovelace, 2000).

Brunius, Jan, *From Manuscripts to Wrappers: Medieval Book Fragments in Swedish National Archives*, Skrifter utgivna av Riksarkivet 35 (Växjö: Davidsons Tryckeri, 2013).

Buell, Lawrence, *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination* (Oxford: Blackwell Publishing, 2005).

Burrow, J. A., and A. I. Doyle, eds., *Thomas Hoccleve: A Facsimile of the Autograph Manuscripts*, EETS s.s. 19 (Oxford: OUP, 2002).

Burton, Janet, 'Documenting the lives of Medieval Nuns', *Recording Medieval Lives: Proceedings of the 2005 Harlaxton Symposium*, ed. by Julia Boffey and Virginia Davis (Donington: Shaun Tyas, 2009), pp.14-24.

Bynum, Caroline Walker, *The Resurrection of the Body in Western Christianity, 200-1336* (New York: Columbia UP, 1995).

Cambridge University loan chest, in 'A Chest for Treasures (and Books)', online <https://exhibitions.lib.cam.ac.uk/linesofthought/artifacts/a-chest-for-treasures-and-books/> (accessed 5 January 2017).

Camille, Michael, 'Preface', *Mirror in Parchment: The Luttrell Psalter and The Making of Medieval England* (London: Reaktion Books, 2013).

Camille, Michael, *Image on the Edge: The Margins of Medieval Art* (London: Reaktion Books, 1992).

Carrieri, Maria Patrizia, and Diego Serraino, 'Longevity of Popes and Artists Between the 13th and the 19th Century', *International Journal of Epidemiology*, 34:6 (2005), 1435-1436.

Carruthers, Mary J., *The Book of Memory: A Study of Memory in Medieval Culture* (Cambridge: CUP, 2008).

Carson, Rachel, *Silent Spring* (London: Penguin, 1999, first publ. 1962 by Houghton Mifflin).

Carus Wilson, E. M., 'The Overseas Trade of Bristol', *Studies in the English Trade in the 15th Century*, ed. by Eileen Power and M. M. Postan (London: Routledge, 1933, repr. 2006), pp.183-246.

Catto, J. I., and T. A. R. Evans, eds., *The History of the University of Oxford: Late Medieval Oxford* (Oxford: Clarendon Press, 1992).

Catto, J. I., ed., *The History of the University of Oxford: The Early Oxford Schools* (Oxford: Clarendon Press, 1984).

Cavallo, Adolfo S., *Medieval Tapestries in the Metropolitan Museum of Art* (New York: Metropolitan Museum of Art, 1993).

Cavanaugh, Susan H., 'A Study of Books Privately Owned in England 1300-1450' (unpublished doctoral thesis, University of Pennsylvania, 1980).

Cayley, Emma, and Susan Powell, eds., *Manuscripts and Printed Books in Europe 1350-1550: Packaging, Presentation and Consumption* (Liverpool: Liverpool UP, 2015).

Champion, Matthew, *Medieval Graffiti: The Lost Voices of England's Churches* (London: Ebury Press, 2015).

Chartier, Roger, *Inscription and Erasure: Written Culture from the Eleventh to the Eighteenth Century*, trans. Arthur Goldhammer (Philadelphia: University of Pennsylvania Press, 2007).

Chaytor, H. J., *From Script to Print: An Introduction to Medieval Vernacular Literature* (London: Folcroft Library Editions, 1974).

Chiesa, Paolo, and Lucia Pinelli, eds., *Gli autografi medievali: problemi paleografici e filologici: atti del Convegno di studio della Fondazione Ezio Franceschini, Erice 25 settembre – 2 ottobre 1990* (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1994).

Christianson, C. Paul, 'Evidence for the Study of London's Late Medieval Manuscript-Book Trade', *Book Production and Publishing in Britain 1375-1475*, ed. by Jeremy Griffiths and Derek Pearsall (Cambridge: CUP, 1989), pp.87-108.

Christianson, C. Paul, ed., *A Directory of London Stationers and Book Artisans, 1300-1500* (New York: Bibliographical Society of America, 1990), online <http://hdl.handle.net/2027/heb.08874.0001.001> (accessed 15 January 2017).

Cistercians Project, online <http://cistercians.shef.ac.uk/ > (accessed 6 June 2016).

Clanchy, Michael, *From Memory to Written Record: 1066-1307* (Oxford: Wiley-Blackwell, 2013).

Clarke, Mark, *The Art of All Colours: Mediaeval Recipe Books for Painters and Illuminators* (London: Archetype Publications, 2001).

Clarkson, Christopher, 'Rediscovering Parchment: The Nature of the Beast', *The Paper Conservator: Vellum and Parchment*, *The Journal of the Institute of Paper Conservation,* 16 (1992), 5-26.

Clarkson, Christopher, *Limp Vellum Binding and Its Potential as a Conservation Type Structure for the Rebinding of Early Printed Books: A Break with Nineteenth and Twentieth Century Rebinding Attitudes and Practices* (Oxford: Christopher Clarkson, 1982 repr. 2005).

Clemens, Raymond, and Timothy Graham, *Introduction to Manuscript Studies* (Ithaca and London: Cornell UP, 2007).

Clement, Richard W., 'A Survey of Antique, Medieval, and Renaissance Book Production', *Art into Life: Collected Papers from the Kresge Art Museum Medieval Symposia*, ed. by Carol Garrett Fisher and Kathleen L. Scott (East Lansing: Michigan State UP, 1995), pp.9-47.

Cloonan, Michèle Valerie, *Early Bindings in Paper: A Brief History of European Hand-made Paper-Covered Books with a Multilingual Glossary* (London: Mansell Publishing Limited, 1991).

Cobban, Alan, *English University Life in the Middle Ages* (London: Routledge, 2002).

CodeX Project, BioArCh, University of York, <https://www.york.ac.uk/archaeology/research/current-projects/codex/> (accessed 5 January 2017).

Cohen, Jeffrey Jerome, ed., *Animal, Vegetable, Mineral: Ethics and Objects* (Washington, DC: Oliphaunt Books, 2012).

Coleman, Joyce, *Public Reading and the Reading Public in Late Medieval England and France* (Cambridge: CUP, 1996).

Connolly, Margaret, and Linne R. Mooney, eds., *Design and Distribution of Late Medieval Manuscripts in England* (York, The University of York: York Medieval Press, Boydell and Brewer, 2008).

Connolly, Margaret, *The Index of Middle English Prose, Handlist XIX: Manuscripts in the University Library, Cambridge (Dd-Oo)* (Cambridge: D. S. Brewer, 2009).

Cooper, Helen, and Sally Mapstone, eds., *The Long Fifteenth Century: Essays for Douglas Gray* (Oxford: Clarendon Press, 1997).

Copeland, Rita, ed., *Criticism and Dissent in the Late Middle Ages* (Cambridge: CUP, 1996).

Corfield, Penelope J., and Derek Keene, eds., *Work in Towns 850-1850* (Leicester: Leicester UP, 1990).

Cowgill, Jane, Margarethe de Neergaard, Nick Griffiths, et al., *Knives and Scabbards* (Woodbridge: Boydell, 2000).

Cox, J. Charles, *Notes on the Churches of Derbyshire: The Hundred of Morleston and Litchurch and General Supplement*, 4 vols. (Chesterfield: W. Edmunds, 1879).

Coxe, H. O., and R. W. Hunt, eds., *Quarto Catalogue*, II: *Laudian Manuscripts* (Oxford: Bodleian Library, 1858-1885; repr. 1973).

Coxe, H. O., ed., *Catalogus Codicum MSS. Qui in Collegiis Aulisque Oxoniensibus Hodie Adservantur*, 2 vols. (Oxford: OUP, 1852).

Coxe, H. O., ed., *Quarto Catalogue*, III: *Catalogi Codicum Manuscriptorum Bibliothecae Bodleianae Pars Tertia Codices Graecos et Latinos Canonicianos Complectens* (Oxford: Clarendon Press, 1854).

Craig-McFeely, Julia, 'Digital Image Archive of Medieval Music: The Evolution of a Digital Resource', *Digital Medievalist,* 3 (2007/8) online <http://digitalmedievalist.org/journal/3/mcfeely/> (accessed 5 January 2017).

Crane, Susan, 'Introduction: Animal Discourses and Animal Studies', *New Medieval Literatures,* 12 (2010), 117-119.

Craster, H. H. E., and N. Denholm-Young, eds., *A Summary Catalogue of Western Manuscripts in the Bodleian Library at Oxford Which Have Not Hitherto Been Catalogued*

in the Quarto Series: Collections and Miscellaneous MSS. Acquired During the Second Half of the 17th Century (Oxford: Clarendon Press, 1937).

da Rold, Orietta, 'Materials', *The Production of Books in England 1350-1550*, ed. by Alexandra Gillespie and Daniel Wakelin (Cambridge: CUP, 2011), pp.12-33.

Dagenais, John, 'Decolonizing the Medieval Page', *The Future of the Page,* ed. by Peter Stoicheff and Andrew Taylor (London: University of Toronto Press, 2004), pp.37-70.

Dagenais, John, 'That Bothersome Residue: Toward a Theory of the Physical Text', *Vox Intexta: Orality and Textuality in the Middle Ages*, ed. by A. N. Doane and Carol Braun Pasternak (Wisconsin: The University of Wisconsin Press, 1991).

Dahmus, Joseph, *William Courtenay Archbishop of Canterbury 1381-1396* (London: The Pennsylvania State UP, 1966).

Davey, Francis, *The Itineraries of William Wey* (Oxford: Bodleian Library, 2010).

Davies, R. T., *Medieval English Lyrics* (London: Faber and Faber, 1963).

Davis, Norman, ed., *Paston Letters and Papers of the Fifteenth Century*, 2 vols (Oxford: Clarendon Press, 1971), online <http://name.umdl.umich.edu/Paston> (accessed 5 January 2017).

de Boe, Guy, and Frans Verhaeghe, ed., *Environment and Subsistence in Medieval Europe: Papers of the Medieval Europe Brugge 1997 Conference,* 9 (Zellik: Instituut voor het Archeologisch Patrimonium, 2007).

de Hamel, Christopher, *Cutting Up Manuscripts for Pleasure and Profit* (Charlottesville: Book Arts Press, 1996).

de Hamel, Christopher, *Medieval Craftsmen: Scribes and Illuminators* (London: British Museum Press, 1992).

de la Mare, A. C., ed., *Catalogue of the Collection of Medieval Manuscripts Bequeathed to the Bodleian Library, Oxford by James P. R. Lyell* (Oxford: Clarendon Press, 1971).

de Neergaard, Margarethe, 'The Use of Knives, Shears, Scissors and Scabbards, *Knives and Scabbards* (Woodbridge: Boydell, 2000), pp.51-61.

Declercq, Georges, 'Introduction: Codices Rescripti in the Early Medieval West', *Early Medieval Palimpsests*, ed. Georges Declercq, Bibliologia, 26 (Turnhout: Brepols, 2007), pp.7-22.

Declercq, Georges, ed., *Early Medieval Palimpsests*, Bibliologia, 26 (Turnhout: Brepols, 2007).

Derolez, Albert, *The Palaeography of Gothic Manuscript Books from the Twelfth to the Early Sixteenth Century* (Cambridge: CUP, 2003).

Doane, A. N., and Carol Braun Pasternak, eds., *Vox Intexta: Orality and Textuality in the Middle Ages* (Wisconsin: The University of Wisconsin Press, 1991).

Doubleday, H. Arthur, and William Page, eds., *A History of the County of Hampshire,* 5 vols. (London: Victoria County History, 1903).

Douglass, Rebecca, 'Ecocriticism and Middle English Literature', *Medievalism and the Academy II: Cultural Studies*, ed. by David Metzger (Cambridge: Brewer, 1998, publ. 2000), pp.136-63.

Doyle, A. I., 'Codicology, Palaeography, and Provenance', *A Facsimile Edition of the Vernon Manuscript: Oxford, Bodleian Library MS Eng. Poet. A. 1*, ed. by Wendy Scase, Bodleian Digital Texts 3 (Oxford: Bodleian Library, Oxford University, 2012), pp.1-19.

Doyle, A. I., 'The English Provincial Book Trade before Printing', *Six Centuries of the Provincial Book Trade in Britain*, ed. by Peter Isaac (University of Michigan: Oak Knoll Press, 1990), pp.13-29.

Doyle, Alister, 'Romans, Han Dynasty Were Greenhouse Gas Emitters: Study', *Reuters*, 3 October 2012 <http://uk.reuters.com/article/2012/10/03/us-climate-romans-idUSBRE89212020121003> (accessed 5 January 2017).

Duffy, Christina, 'The Discovery of a Watermark on the St Cuthbert's Gospel using Colour Space Analysis', *Electronic British Library Journal,* 2 (2014), 1-14, online <http://www.bl.uk/eblj/2014articles/article2.html > (accessed 5 January 2017).

Dutschke, C. W., ed., *Guide to Medieval and Renaissance Manuscripts in the Huntington Library*, 2 vols. (San Marino, CA: Huntington Library, 1989).

Dutton, Elisabeth, John Hines and R. F. Yeager, eds., *John Gower: Trilingual Poet: Language, Translation and Tradition* (Cambridge: Brewer, 2010).

Dyer, Christopher, 'Sheepcotes: Evidence for Medieval Sheepfarming', *Medieval Archaeology,* 39 (1995), 136-64.

Dyer, Christopher, *Everyday Life in Medieval England* (London: Hambledon Press, 2000).

Dyer, Christopher, *Lords and Peasants in a Changing Society: The Estates of the Bishopric of Worcester, 680-1540* (Cambridge: CUP, 1980)

Dyer, Christopher, *Making a Living in the Middle Ages: The People of Britain 850-1520* (London: Yale UP, 2009).

Dyer, Christopher, *Standards of Living in the Later Middle Ages: Social Change in England,* c. *1200-1520* (Cambridge: CUP, 1998).

Eckenrode, T. R., 'English Cistercians and Their Sheep During the Middle Ages', *Cîteaux: Commentarii Cisterciensis,* 24 (1973), 250-66.

Edwards, A. S. G., and Derek Pearsall, 'The Manuscripts of the Major English Poetic Texts', *Book Production and Publishing in Britain 1375-1475*, ed. by Jeremy Griffiths and Derek Pearsall (Cambridge: CUP, 1989), pp.257-78.

Ellis, R., ed., *The Medieval Translator: The Theory and Practice of Translation in the Middle Ages* (Cambridge: Brewer, 1989).

Emden, A. B., *A Biographical Register of the University of Cambridge to 1500* (Cambridge: CUP, 1963).

Emden, A. B., *A Biographical Register of the University of Oxford to A. D. 1500*, 3 vols. (Oxford: Clarendon Press, 1957).

Ervynck, Anton, Bieke Hillewaert, Ann Maes, and Mark Van Strydonck, 'Tanning and Horn-Working at Late- and Post-Medieval Bruges', *The Environmental Archaeology of Industry*, ed. by Peter Murphy and Patricia E. J. Wiltshire, *Symposia of the Association for Environmental Archaeology,* 20 (Oxford: Oxbow Books, 2003), pp.60-70.

Farrell, Jerome, *The Leathersellers' Company: A Short History* (London: Trident Printing, 2008).

Fein, Susanna Greer, ed., *John the Blind Audelay: Poems and Carols* (Oxford, Bodleian Library, MS Douce 302), TEAMS (Kalamazoo: Medieval Institute Publications, 2009).

Ferdinand, C. Y. 'Library administration (*c.* 1475-1640)', *The Cambridge History of Libraries in Britain and Ireland, I: to 1640,* ed. by Elisabeth Leedham-Green and Teresa Webber (Cambridge: CUP, 2013), pp.565-591.

Ferdinand, Christine, 'Magdalen College and the Book Trade, 1450-1550', *The Book Trade and Its Customers 1450-1900: Historical Essays for Robin Myers*, ed. by Giles Mandelbrote, Arnold Hunt, and Alison Shell (New Castle, DE: Oak Knoll Press, 1997), pp.175-187.

Fiddyment, Sarah, Bruce Holsinger et al., 'Animal Origin of 13th-Century Uterine Vellum Revealed Using Noninvasive Peptide Fingerprinting', *Proceedings of the National Academy of Sciences,* 112:49 (2015), 15066-15071.

Finlay, Michael, *Western Writing Implements in the Age of the Quill Pen* (Penrith: The Pen and Pencil Gallery, 1990).

Fischer, Franz, Christiane Fritze, Georg Vogeler, eds., *Codicology and Palaeography in the Digital Age II* (Institut für Dokumentologie und Editorik: Norstedt, 2011).

Fisher, Carol Garrett, and Kathleen L. Scott, eds., *Art into Life: Collected Papers from the Kresge Art Museum Medieval Symposia* (East Lansing: Michigan State UP, 1995).

Fisher, John L., ed., *A Medieval Farming Glossary of Latin and English Words*, revised by Avril and Raymond Powell (Essex: Essex Record Office Publications, 1997).

Flannery, Mary C., 'Privy Reading', *Spaces for Reading in Later Medieval England,* ed. by Mary C. Flannery and Carrie Griffin (Basingstoke: Palgrave Macmillan, 2016), pp.149-164.

Flannery, Mary C., and Carrie Griffin, eds., *Spaces for Reading in Later Medieval England* (Basingstoke: Palgrave Macmillan, 2016).

Fleming, Juliet, *Graffiti and the Writing Arts of Early Modern England* (London: Reaktion Books, 2001).

Fleming, P. W., 'Charity, Faith and the Gentry of Kent 1422-1529', *Property and Politics: Essays in Later Medieval English History*, ed. by T. Pollard (Gloucester: Alan Sutton, 1984), pp.36-58.

Fletcher, C. R. L., ed., *Collectanea*, Oxford Historical Society, 1st ser., 5 (Oxford: Clarendon Press, 1885).

Foot, Mirjam, 'Bookbinding 1400-1557', *The Cambridge History of the Book in Britain, III: 1400-1557*, ed. by Lotte Hellinga and J. B. Trapp (Cambridge: CUP, 2014), pp.109-127.

Foot, Mirjam, 'English Decorated Bookbindings', *Book Production and Publishing in Britain 1375-1475*, ed. by Jeremy Griffiths and Derek Pearsall (Cambridge: CUP, 1989), pp.65-86.

Forshall, Josiah, and Frederic Madden, eds., *The Holy Bible, Containing the Old and New Testaments, with the Apocryphal Books, in the Earliest English Versions Made from the Latin Vulgate by John Wycliffe and His Followers*, 4 vols. (Oxford: OUP, 1850).

Frankis, P. J., 'Two Minor French Lyric Forms in English', *Neuphilologische Mitteilungen,* 60 (1959), 66-71.

Freeman, Carol, 'Feathering the Text', *Rethinking Chaucerian Beasts*, ed. by Carolynn Van Dyke (Basingstoke: Palgrave Macmillan, 2012), pp.33-47.

Frow, John, 'Matter and Materialism: A Brief Pre-History of the Present', *Material Powers: Cultural Studies, History and The Material Turn*, ed. by Tony Bennett and Patrick Joyce (London: Routledge, 2010), pp.25-37.

Fuchs, Robert, 'Old Restorations and Repairs in Manuscripts', *Care and Conservation,* 6 (2002), 224-241.

Gabriel, A. L., ed., *The Economic and Material Framework of the Medieval University* (Indiana: University of Notre Dame Press, 1977).

Gameson, Richard, 'The Medieval Library (to *c.*1450)', *The Cambridge History of Libraries in Britain and Ireland, I: to 1640*, ed. by Elisabeth Leedham-Green and Teresa Webber (Cambridge: CUP, 2013), pp.13-50.

Gameson, Richard, *The Earliest Books of Canterbury Cathedral: Manuscripts and Fragments to* c. *1200* (London: The Bibliographical Society, the British Library, the Dean and Chapter of Canterbury, 2008).

Garrard, Greg, *Ecocriticism* (Oxford: Routledge, 2012).

Gayk, Shannon, and Robyn Malo, 'The Sacred Object', *Journal of Medieval and Early Modern Studies,* 44:3 (2014), 458-467.

Gee, Stacey, 'The Printers, Stationers and Bookbinders of York before 1557', *Transactions of the Cambridge Bibliographical Society,* 12:1 (2000), 27-54.

Getty, Paul, and H. George Fletcher, *The Wormsley Library: A Personal Selection by Sir Paul Getty* (London: Maggs Bros. in co-operation with the Pierpoint Morgan Library & Museum New York, 1999).

Gilchrist, Roberta, *Medieval Life: Archaeology and the Life Course* (Cambridge: Boydell, 2012).

Gillespie, Alexandra, 'Bookbinding', *A Companion to the Early Printed Book in Britain 1476-1558*, ed. by Vincent Gillespie and Susan Powell (Cambridge: Brewer, 2014).

Gillespie, Alexandra, 'Bookbinding', *The Production of Books in England 1350-1550*, ed. by Alexandra Gillespie and Daniel Wakelin (Cambridge: CUP, 2011), pp.150-172.

Gillespie, Alexandra, and Daniel Wakelin, 'Introduction', *The Production of Books in England 1350-1550*, ed. by Alexandra Gillespie and Daniel Wakelin (Cambridge: CUP, 2011), pp.1-11.

Gillespie, Alexandra, and Daniel Wakelin, eds. *The Production of Books in England 1350-1550* (Cambridge: CUP, 2011).

Gillespie, Alexandra, keynote lecture, 4th Biennial BABEL Working Group Meeting: 'Off the Books', Toronto, Canada (9 October 2015).

Gillespie, Vincent, and Anne Hudson, ed., *Probable Truth: Editing Medieval Texts from Britain in the Twenty-First Century* (Turnhout: Brepols, 2013).

Gillespie, Vincent, and Susan Powell, eds., *A Companion to the Early Printed Book in Britain 1476-1558* (Cambridge: Brewer, 2014).

Goddard, Stephen H., 'Probationes Pennae: Some Sixteenth-Century Doodles on the Theme of Folly Attributed to the Antwerp Humanist Pieter Gillis and His Colleagues', *Renaissance Quarterly*, 41 (1988), pp.242-267.

Gould, Karen, 'Terms for Book Production in a Fifteenth-Century Latin-English Nominale (Harvard Law School Library MS. 43)', *The Papers of the Bibliographical Society of America*, 75:1 (1985), 75-99.

Gray, Douglas, 'Introduction', *Oxford Book of Late Medieval Verse and Prose* (Oxford: OUP, 1989), pp.3-44.

Gray, George John, *The Earliest Cambridge Stationers & Bookbinders, and the First Cambridge Printer* (Oxford: OUP, 1904).

Gregson, Nicky, and Louise Crewe, *Second-hand Cultures* (Oxford, New York: Berg, 2003).

Griffin, Carrie, 'Instruction and Information from Manuscript to Print: Some English Literature 1400-1650', *Literature Compass*, 10 (2013), 667-676.

Griffin, Carrie, 'Reconsidering the Recipe: Materiality, Narrative and Text in Later Medieval Instructional Manuscripts and Collections', *Manuscripts and Printed Books in Europe 1350-1550: Packaging, Presentation and Consumption*, ed. by Emma Cayley and Susan Powell (Liverpool: Liverpool UP, 2013), pp.135-149.

Griffiths, Jane, *Diverting Authorities: Experimental Glossing Practices in Manuscript and Print* (Oxford: OUP, 2014).

Griffiths, Jeremy, and Derek Pearsall, eds., *Book Production and Publishing in Britain 1375-1475* (Cambridge: CUP, 1989).

Grindley, Carl James, 'Reading *Piers Plowman* C-Text Annotations: Notes toward the Classification of Printed and Written Marginalia in Texts from the British Isles 1300-1641', *The Medieval Professional Reader at Work: Evidence from Manuscripts of Chaucer, Langland, Kempe, and Gower*, ed. by Kathryn Kerby-Fulton and Maidie Hilmo (Victoria: University of Victoria, English Literary Studies, 2001), pp.73-141.

Guddat-Figge, Gisela, *Catalogue of Manuscripts Containing Middle English Romances* (München: W. Fink, 1976).

Gullick, Michael, 'From Parchmenter to Scribe: Some Observations on the Manufacture and Preparation of Medieval Parchment Based Upon a Review of the Literary Evidence', *Pergament, Geschichte, Struktur, Restaurierung und Herstellung*, ed. by Peter Rück (Sigmaringen: Thorbecke, 1991), pp.145-157.

Gullick, Michael, 'The Bindings', *A Descriptive Catalogue of the Medieval Manuscripts in Worcester Cathedral Library*, ed. by Thomson, Rodney M., and Michael Gullick (Cambridge: Published on behalf of the Dean and Chapter of Worcester Cathedral by Brewer, 2001), pp.xvii-xlviii.

Gullick, Michael, and Nicholas Hadgraft, 'Bookbindings', *The Cambridge History of the Book in Britain, II: 1100-1400*, ed. by Nigel Morgan and Rodney M. Thomson (Cambridge: CUP, 2014), pp.95-109.

Gullick, Michael, ed., *Pen in Hand: Medieval Scribal Portraits, Colophons and Tools* (Walkern: Red Gull Press, 2006).

Gumbert, J. P., 'Codicological Units: Towards a Terminology for the Stratigraphy of the Non-Homogeneous Codex', *Segno e testo: International Journal of Manuscripts and Their Transmission,* 2 (2004), 17-42.

Gumbert, J. P., 'On Folding Skins, According to Gilissen', *Gazette du livre medieval* 43 (2003), 47-51.

Gumbert, J. P., 'Skins, Sheets, and Quires', *New Directions in Later Medieval Manuscript Studies: Essays from the 1998 Harvard Conference* ed. by Derek Pearsall (York: York Medieval Press, 2000), pp.81-90.

Gumbert, J. P., 'The Sizes of Manuscripts: Some Statistics and Notes', *Hellinga Festschrift / Feestbundel / Mélanges: Forty-Three Studies in Bibliography Presented to Prof. Dr. Wytze Hellinga on the Occasion of his Retirement from the Chair of Neophilology in the University of Amsterdam at the End of the Year 1978*, ed. by Wytze Hellinga and A. R. A. Croiset van Uchelen (Amsterdam: Nico Israel, 1981), pp.277-288.

Hadgraft, Nicholas, 'English Fifteenth Century Book Structures' (unpublished doctoral thesis, University College London, 1997).

Hamer, Richard, *A Choice of Anglo-Saxon Verse* (London: Faber and Faber Limited, 1977).

Hanawalt, Barbara A., and Lisa J. Kiser, 'Introduction', *Engaging with Nature: Essays on the Natural World in Medieval and Early Modern Europe*, ed. by Hanawalt and Kiser (Notre Dame: University of Notre Dame Press, 2008), pp.1-8.

Hanawalt, Barbara A., and Lisa J. Kiser, eds., *Engaging with Nature: Essays on the Natural World in Medieval and Early Modern Europe* (Notre Dame: University of Notre Dame Press, 2008).

Hanna, Ralph, *Introducing English Medieval Book History: Manuscripts, their Producers and their Readers* (Liverpool: Liverpool UP, 2013).

Hanna, Ralph, *London Literature, 1300-1380* (Cambridge: CUP, 2005).

Hardman, Phillipa, 'Bodleian Library, MS Ashmole 33: Thoughts on Reading a Work in Progress', *Middle English Texts in Transmission: A Festschrift Dedicated to Toshiyuki Takamiya on his 70th Birthday*, ed. by Simon Horobin and Linne R. Mooney (Woodbridge, Suffolk: The Boydell Press, 2014), pp.88-103.

Hardman, Phillipa, 'Domestic Learning and Teaching: Investigating Evidence for the Role of "Household Miscellanies" in Late-Medieval England', *Women and Writing* c.*1340*-c.*1650: The Domestication of Print Culture*, ed. by Anne Lawrence-Mathers and Phillipa Hardman (The University of York: York Medieval Press, 2010), pp.15-33.

Hardwick, C., ed., *A Catalogue of Manuscripts Preserved in the Library of the University of Cambridge*, 5 vols. (Cambridge: CUP, 1856-1867).

Hatcher, John, 'Mortality in the Fifteenth Century: Some New Evidence', *Economic History Review,* 39 (1986), 19–38.

Hector, L. C., *The Handwriting of English Documents* (Dorking: Kohler and Coombes, 1980).

Heller, Steven, 'The Cognitive Benefits of Doodling', *Atlantic*, 9 July 2015 <http://www.theatlantic.com/entertainment/archive/2015/07/doodling-for-cognitive-benefits/398027/> (accessed 5 January 2017).

Hellinga, Lotte, and J. B. Trapp, eds., *The Cambridge History of the Book in Britain, III: 1400-1557* (Cambridge: CUP, 2014).

Hellinga, Wytze, and A. R. A. Croiset van Uchelen, eds., *Hellinga Festschrift / Feestbundel / Mélanges: Forty-Three Studies in Bibliography Presented to Prof. Dr. Wytze Hellinga on the Occasion of his Retirement from the Chair of Neophilology in the University of Amsterdam at the End of the Year 1978* (Amsterdam: Nico Israel, 1981).

Hicks, Dan, and Mary C. Beaudry, 'Introduction: Material Culture Studies: A Reactionary View', *The Oxford Handbook of Material Culture Studies,* online <10.1093/oxfordhb/9780199218714.0001> (2012).

Hilmo, Maidie, 'The Power of Images in the Auchinleck, Vernon, *Pearl*, and Two *Piers Plowman* Manuscripts', *Opening Up Middle English Manuscripts: Literary and Visual Approaches*, ed. by Kathryn Kerby-Fulton, Maidie Hilmo and Linda Olson (Ithaca, London: Cornell UP, 2012), pp.153-205.

Hinks, John, 'The Beginnings of the Book Trade in Leceister', *The Moving Market: Continuity and Change in the Book Trade*, ed. by Peter Isaac and Barry McKay (New Castle, DE: Oak Knoll Press, 2001), pp.27-38.

Hobson, Geoffrey D., *English Binding Before 1500*, The Sandars Lectures 1927 (Cambridge: CUP, 1929).

Hoffman, Tom, *Guilds and Related Organisations in Great Britain and Ireland: A Bibliography*, online <http://www.bbk.ac.uk/lib/elib/databases/tom-hoffman/tom-hoffman-bibliography-on-the-guilds> (accessed 5 January 2017).

Holsinger, Bruce, 'Of Pigs and Parchment: Medieval Studies and the Coming of the Animal', *PMLA,* 124 (2009), 616-623.

Holsinger, Bruce, 'Parchment Ethics: A Statement of More Than Modest Concern,' *New Medieval Literatures* 12 (2010), 131-6.

Horman, William, *Vulgaria*, ed. by M. R. James (Oxford: The Roxburghe Club, 1926).

Horobin, Simon, 'The Scribe of Bodleian Library MS Bodley 619 and the Circulation of Chaucer's Treatise on the Astrolabe', *Studies in the Age of Chaucer,* 31 (2009),109-124.

Horobin, Simon, and Linne R. Mooney, eds., *Middle English Texts in Transmission: A Festschrift Dedicated to Toshiyuki Takamiya on his 70th Birthday* (Woodbridge, Suffolk: The Boydell Press, 2014).

House of Commons, 'Vellum: Printing Record Copies of Public Acts', online, 11 May 2016 <http://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7451> (accessed 5 January 2017).

Isaac, Peter, and Barry McKay, eds., *The Moving Market: Continuity and Change in the Book Trade* (New Castle, DE: Oak Knoll Press, 2001).

Isaac, Peter, ed., *Six Centuries of the Provincial Book Trade in Britain* (University of Michigan: Oak Knoll Press, 1990).

Ivy, G. S., 'The Bibliography of the Manuscript Book', *The English Library Before 1700*, ed. by Francis Wormald and C.E. Wright (London: The Athlone Press, 1958), pp.32-65.

Jackson, Heather J., *Marginalia: Readers Writing in Books* (Toronto: University of Toronto Press, 2001).

James, M. R., and Claude Jenkins, eds., *A Descriptive Catalogue of the Manuscripts in the Library of Lambeth Palace* (Cambridge: CUP, 1930-1932).

James, M. R., ed., *A Descriptive Catalogue of the Manuscripts in the Library of Corpus Christi College, Cambridge*, 2 vols. (Cambridge: CUP, 1912).

James, M. R., ed., *A Descriptive Catalogue of the Manuscripts in the Library of Eton College* (Cambridge: CUP, 1895).

James, M. R., ed., *A Descriptive Catalogue of the Manuscripts in the Library of Sidney Sussex College*, Cambridge (Cambridge: CUP, 1895).

James, M. R., ed., *A Descriptive Catalogue of the Manuscripts in the Library of St. John's College Cambridge* (Cambridge: CUP, 1913).

James, M. R., ed., *A Descriptive Catalogue of the Manuscripts in the Library of Gonville and Caius College*, 2 vols. (Cambridge: CUP, 1907-1908).

James, M. R., ed., *The Western Manuscripts in the Library of Trinity College, Cambridge: A Descriptive Catalogue*, 4 vols. (Cambridge: CUP, 1900-1904).

James, M. R., ed., *Vulgaria* (Oxford: The Roxburghe Club, 1926).

Jervis, Ben, *Pottery and Social Life in Medieval England: Towards a Relational Approach* (Oxford: Oxbow Books, 2014).

Johnson, Eleanor, 'The Poetics of Waste: Medieval English Ecocriticism', *PMLA,* 127.3 (2012), 460-476.

Johnson, Eric J., 'Scarring, Tears, Veins and Hair: The Imperfections of Medieval Parchment,' The Ohio State University Libraries, online <https://library.osu.edu/blogs/rarebooks/2008/12/01/107/> (accessed 5 January 2017).

Johnston, Michael, and Michael Van Dussen, 'Introduction: Manuscripts and Cultural History', *The Medieval Manuscript Book: Cultural Approaches,* ed. by Michael Johnston and Michael Van Dussen (Cambridge: CUP, 2015), pp.1-16.

Johnston, Michael, and Michael Van Dussen, eds., *The Medieval Manuscript Book: Cultural Approaches* (Cambridge: CUP, 2015).

Jonker, M. A., 'Estimation of Life Expectancy in the Middle Ages', *Journal of the Royal Statistical Society, Series A,* 166:1 (2003), 105–17.

Joyce, Patrick, and Tony Bennett, 'Introduction', *Material Powers: Cultural Studies, History and The Material Turn*, ed. by Tony Bennett and Patrick Joyce (London: Routledge, 2010), pp.1-21.

Justice, Stephen, 'Inquisition, Speech, and Writing: A Case from Late Medieval Norwich', *Criticism and Dissent in the Late Middle Ages*, ed. by Rita Copeland (Cambridge: CUP, 1996), pp.289-322.

Kalof, Linda, *Looking at Animals in Human History* (London: Reaktion Books, 2007).

Kay, Sarah, 'Legible Skins: Animals and the Ethics of Medieval Reading', *postmedieval: a journal of medieval cultural studies,* 2 (2011), 13–32.

Keefer, Sarah Larrat, and Rolf H. Bremmer Jr., 'Introduction', *Signs on the Edge: Space, Text and Margin in Medieval Manuscripts*, ed. by Sarah Larrat Keefer and Rolf H. Bremmer Jr., Mediaevalia Groningana n.s., 10 (Leuven: Peeters, 2007), pp.3-6.

Keefer, Sarah Larrat, and Rolf H. Bremmer Jr., *Signs on the Edge: Space, Text and Margin in Medieval Manuscripts*, Mediaevalia Groningana n.s., 10 (Leuven: Peeters, 2007).

Keene, Derek, and Alexander R. Rumble, 'Trades and Marketing', *Survey of Medieval Winchester,* 3 vols. (Oxford: OUP, 1985), pp.249-365.

Ker, N. R. *Pastedowns in Oxford Bindings* (Oxford: Oxford Bibliographical Society, 2000).

Ker, N. R., 'Oxford College Libraries before 1500', *Books, Collectors and Libraries: Studies in the Medieval Heritage*, ed. by Andrew G. Watson (London: The Hambledon Press, 1985), pp.301-320.

Ker, N. R., 'Robert Elyot's Books and Annotations,' *The Library*, 5th ser., 30 (1975), 233-237.

Ker, N. R., 'The Books of Philosophy Distributed at Merton College in 1372 and 1375', *Books, Collectors and Libraries: Studies in the Medieval Heritage*, ed. by Andrew G. Watson (London: The Hambledon Press, 1985), pp.331-378.

Ker, N. R., and A. J. Piper, eds., *Medieval Manuscripts in British Libraries,* 5 vols. (Oxford: Clarendon Press, 1969-2002).

Ker, N. R., ed., *Catalogue of Manuscripts Containing Anglo-Saxon* (Oxford: Clarendon Press,1957).

Ker, N. R., *Fragments of Medieval Manuscripts Used as Pastedowns in Oxford Bindings,* Oxford Bibliographical Society, 3rd ser., 4 (Oxford: Oxford Bibliographical Society, 2004 for 2000).

Ker, N. R., ed., *Medieval Libraries of Great Britain: A List of Surviving Books*, Royal Historical Society Guides and Handbooks, 3, 2nd edn. (London: Offices of the Royal Historical Society, 1941; 1964).

Ker, N. R., ed., *Medieval Manuscripts in British Libraries*, 5 vols. (Oxford: Clarendon Press, 1977).

Ker, N. R., *Records of All Souls College Library, 1437-1600* (Oxford: OUP, 1971).

Kerby-Fulton, Kathryn, and Maidie Hilmo, eds., *The Medieval Professional Reader at Work: Evidence from Manuscripts of Chaucer, Langland, Kempe, and Gower* (Victoria: University of Victoria, English Literary Studies, 2001).

Kerby-Fulton, Kathryn, Maidie Hilmo and Linda Olson, eds., *Opening Up Middle English Manuscripts: Literary and Visual Approaches* (Ithaca, London: Cornell UP, 2012).

Kidd, Peter, ed., *Catalogue of the Medieval and Renaissance Manuscripts c.1300-c.1500 from the Collection of T. R. Buchanan in the Bodleian Library, Oxford* (Oxford: Bodleian Library, 2000).

Kingsford, Charles Lethbridge, ed., *Stonor Letters and Papers 1290-1483* (London: Offices of the Society, 1919), online <http://name.umdl.umich.edu/ACA1723.0001.001> (accessed 5 January 2017).

Kleineke, Hannes, 'Civic Ritual Space and Conflict in Fifteenth-Century Exeter', *Ritual and Space in the Middle Ages: Proceedings of the 2009 Harlaxton Symposium,* ed. by Frances Andrews (Donington: Shaun Tyas, 2011), pp.165-178.

Knowles, David, and R. Neville Hadcock, *Medieval Religious Houses: England and Wales* (London: Longmans, Green and Co., 1953).

Knowles, David, *Religious Orders in England,* 3 vols. (Cambridge: CUP, 1962).

Kowaleski, Maryanne, 'Town and Country in Late Medieval England: The Hide and Leather Trade', *Work in Towns 850-1850*, ed. by Penelope J. Corfield and Derek Keene (Leicester: Leicester UP, 1990), pp.57-73.

Kowaleski, Maryanne, *Local Markets and Regional Trade in Medieval Exeter* (Cambridge: CUP, 2003).

Kwakkel, Erik, 'A Love Story Hidden in a Hat', Tumblr <http://erikkwakkel.tumblr.com/post/55554381477/a-love-story-hidden-in-a-hat-you-are-looking-at-a> (accessed 5 January 2017).

Kwakkel, Erik, 'Broidery on a Medieval Page', Tumblr, <http://erikkwakkel.tumblr.com/post/52258862048/broidery-on-a-medieval-page-holes-in-the-pages-of> (accessed 5 January 2017).

Kwakkel, Erik, 'Commercial Organization and Economic Innovation', *The Production of Books in England 1350-1550*, ed. by Alexandra Gillespie and Daniel Wakelin (Cambridge: CUP, 2011), pp.173-191.

Kwakkel, Erik, 'Cultural Residue in Medieval Manuscripts', *The Medieval Manuscript Book: Cultural Approaches*, ed. by Michael Johnston and Michael Van Dussen (Cambridge: CUP, 2015), pp.60-76.

Kwakkel, Erik, 'Destroying Medieval Books – and Why That's Useful', Tumblr <https://medievalbooks.nl/2014/10/31/destroying-medieval-books-and-why-thats-useful/> (accessed 5 January 2017).

Kwakkel, Erik, 'Discarded Parchment as Writing Support in English Manuscript Culture', *Manuscripts Before 1400*, *English Manuscript Studies 1100-1700* 17 (2013), 238-261.

Kwakkel, Erik, 'Halloween (4): Stabbed, Cut and Stitched Back Together', Tumblr, <http://erikkwakkel.tumblr.com/post/65552828979/halloween-4-stabbed-cut-and-stitched-back> (accessed 5 January 2017).

Kwakkel, Erik, 'Holsterbooks and Off-cut Manuscripts', Bodleian Library Manuscript Masterclass, University of Oxford (24 February 2014).

Kwakkel, Erik, 'Late Medieval Text Collections: A Single Author Typology Based on Single-Author MSS', *Author, Reader, Book: Medieval Authorship in Theory and Practice*, ed. by Erik Kwakkel and Stephen Partridge (Toronto: University of Toronto Press, 2012), pp.56-79.

Kwakkel, Erik, 'Medieval Kids' Doodles on Birch Bark', Tumblr <http://erikkwakkel.tumblr.com/post/67681966023/medieval-kids-doodles-on-birch-bark-heres> (accessed 5 January 2017).

Kwakkel, Erik, 'Party Time', Tumblr <http://erikkwakkel.tumblr.com/post/107251005026/party-time-the-first-and-last-text-line-on-the> (accessed 5 January 2017).

Kwakkel, Erik, and Stephen Partridge, eds., *Author, Reader, Book: Medieval Authorship in Theory and Practice* (Toronto: University of Toronto Press, 2012).

Lähnemann, Henrike, 'Manuscript Fragments in Medieval Dresses', Workshop for the Manuscript and Text Seminar at Queen's College, Oxford (4 June 2014).

Lalou, Élisabeth, ed., *Les tablettes à écrire de l'Antiquité à l'Epoque Moderne,* Bibliologia, 12 (Turnhout: Brepols, 1992).

Langwe, Monica, *Limp Bindings from the Vatican Library* (Sollerön, Sweden: Monica Langwe, 2013).

Larsen, René, ed., *Improved Damage Assessment of Parchment, IDAP Assessment, Data Collection and Sharing of Knowledge* (Luxembourg: The Royal Danish Academy of

Fine Arts, School of Conservation, Office for Official Publications of the European Communities, 2007).

Latham, R. E., and others, *Dictionary of Medieval Latin from British Sources*, online <http://www.dmlbs.ox.ac.uk/publications/online> (accessed 5 January 2017).

Lawrence-Mathers, Anne, and Phillipa Hardman, eds., *Women and Writing* c.*1340-*c.*1650: The Domestication of Print Culture* (The University of York: York Medieval Press, 2010).

Leedham-Green, Elisabeth, 'University Libraries and Book-sellers', *The Cambridge History of the Book in Britain, III: 1400-1557*, ed. by Lotte Hellinga and J. B. Trapp (Cambridge: CUP, 2014), pp.316-353.

Leedham-Green, Elisabeth, and Teresa Webber, eds., *The Cambridge History of Libraries in Britain and Ireland, I: to 1640* (Cambridge: CUP, 2013).

Lewis, R. E., N. F. Blake and A. S. G. Edwards, eds., *Index of Printed Middle English Prose* (New York and London: Garland Publishing Inc., 1985).

Lewis, Robert E., and Angus McIntosh, eds., *A Descriptive Guide to the Manuscripts of the 'Prick of Conscience'* Medium Aevum Monographs, n.s., 12 (Oxford: Society for the Study of Medieval Language and Literature, 1982).

Lewis, Robert E., gen. ed., *Middle English Dictionary*, online <http://quod.lib.umich.edu/m/med/> (accessed 5 January 2017).

Lewisohn, Cedar, *Abstract Graffiti* (London: Merrell, 2011).

Ligatus, University of the Arts, London, *The Language of Bindings Thesaurus*, online <http://www.ligatus.org.uk/lob/> (accessed 5 January 2017).

Lindkvist, Harald, 'Richard Rolle's "Meditatio de Passione Domini"', *Skrifter Utgifna af K. Humanistiska Vetenskaps-Samfundet i Uppsala,* 19:3 (1917), 34-59.

Livesey, Steven J., 'Proportions in Late-Medieval Universities: An Examination of Two Treatises', *Revue d'histoire des textes*, 16 (1986, 1988), 283-310.

Logan, F. Donald, *Runaway Religious in Medieval England,* c. *1240-1540* (Cambridge: CUP, 2002).

Lovatt, Roger, 'College and University Book Collections and Libraries', *The Cambridge History of Libraries in Britain and Ireland, I: to 1640*, ed. by Elisabeth Leedham-Green and Teresa Webber (Cambridge: CUP, 2013), pp.152-177.

Lovatt, Roger, 'Two Collegiate Loan Chests in Late Medieval Cambridge', *Medieval Cambridge: Essays on the Pre-Reformation University*, ed. by P. N. R. Zutshi (Cambridge: Boydell and Brewer, 1993), pp.129-165.

MacFarlane, Robert, *Landmarks* (London: Penguin, 2015).

MacFarlane, Robert, *The Old Ways: A Journey on Foot* (London: Penguin Hamish Hamilton, 2012).

Macray, W. D., Richard W. Hunt, Andrew G. Watson, Allen Thomas, eds., *Quarto Catalogue*, IX.i: *Digby Manuscripts*, reproduction of the 1883 catalogue (Oxford: Bodleian Library, 1999).

Macray, W. D., ed., *Quarto Catalogue*, V: *Catalogi Codicum Manuscriptorum Bibliothecae Bodleianae Partis Quintae Fasciculus Primus (-Quintus) Ricardi Rawlinson Codicum Classes [A-D] Complectens* (Oxford: OUP, 1862-1900).

Madan, Falconer, 'Day-Book of John Dorne, Bookseller in Oxford, A.D. 1520', *Collectanea*, ed. by C. R. L. Fletcher, Oxford Historical Society, 1st ser., 5 (Oxford: Clarendon Press, 1885), pp. 73-177.

Madan, Falconer et al., eds., *A Summary Catalogue of Western Manuscripts in the Bodleian Library at Oxford Which Have Not Hitherto Been Catalogued in the Quarto Series: Collections Received Before 1660 and Miscellaneous MSS. Acquired During the First Half of the 17th Century*, 7 volumes (Oxford: Clarendon Press, 1953).

Malden, Henry Elliot, ed., *Selections From the Correspondence and Memoranda of Cely Family Merchants of the Staple AD 1475-1488* (London: Longmans, Green and Co., 1900), online <http://www.r3.org/on-line-library-text-essays/the-cely-papers/> (accessed 5 January 2017).

Mandelbrote, Giles, Arnold Hunt, and Alison Shell, eds., *The Book Trade and Its Customers 1450-1900: Historical Essays for Robin Myers* (New Castle, DE: Oak Knoll Press, 1997).

Mann, Jill, 'Price and Value in Sir Gawain and the Green Knight', *Essays in Criticism*, 36 (1986), 294-318.

Marland, Pippa, and John Parham, 'Remaindering: the Material Ecology of Junk and Composting', *Green Letters: Studies in Ecocriticism* 18:1 (2014), 1-8.

Mason, Rowena, 'Tradition of Recording UK Laws on Vellum May Be Saved', *Guardian,* 15 February 2016, <http://www.theguardian.com/politics/2016/feb/15/lords-overruled-recording-laws-vellum-goat-calf-skin> (accessed 5 January 2017).

Maxted, Ian, *Exeter Cathedral Library: a Concordance of Medieval Catalogues and Surviving Manuscripts*, Exeter Working Papers in British Book Trade History (Exeter: Maxted, 1987), p.viii.

McKenzie, D. F., *Bibliography and the Sociology of Texts*, The Panizzi Lectures (Cambridge: CUP, 1999).

McKitterick, Rosamund, 'Palimpsests: Concluding Remarks', *Early Medieval Palimpsests*, ed. Georges Declercq, Bibliologia, 26 (Turnhout: Brepols, 2007), pp.145-151.

Meale, Carol M., and Derek Pearsall, eds., *Makers and Users of Medieval Books: Essays in Honour of A. S. G. Edwards* (Cambridge: Brewer, 2014).

Metzger, David, ed., *Medievalism and the Academy II: Cultural Studies* (Cambridge: Brewer, 1998, publ. 2000).

Meyer, Jesse, 'Parchment Production: A Brief Account', *Scraped, Stroked, and Bound: Materially Engaged Readings of Medieval Manuscripts*, ed. by Jonathan Wilcox (Turnhout: Brepols, 2013), pp.93-96.

Mills, Robert, *Suspended Animation: Pain, Pleasure and Punishment in Medieval Culture* (London: Reaktion Books, 2006).

Mooney, Linne R., and Estelle Stubbs, *Scribes and the City: London Guildhall Clerks and the Dissemination of Middle English Literature, 1375-1425* (The University of York: York Medieval Press, 2013 repr. 2014).

Mooney, Linne R., ed., *The Index of Middle English Prose, Handlist XI: Manuscripts in the Library of Trinity College, Cambridge* (Cambridge: Brewer, 1995).

Mooney, Linne, Daniel W. Mosser, Elizabeth Solopova, Deborah Thorpe, David Hill Radcliffe, eds., *The Digital Index of Medieval English Verse*, based on the *Index of Middle English Verse* (1943) and its *Supplement* (1965), online <http://www.dimev.net> (accessed 5 January 2017).

Mooney, Linne, Simon Horobin, and Estelle Stubbs, *Late Medieval English Scribes*, online <http://www.medievalscribes.com> (accessed 5 January 2017).

Morgan, Nigel, and Rodney M. Thomson, eds., *The Cambridge History of the Book in Britain, II: 1100-1400* (Cambridge: CUP, 2014).

Morrison, Susan Signe, *Excrement in the Late Middle Ages: Sacred Filth and Chaucer's Fecopoetics* (Basingstoke: Palgrave Macmillan, 2008).

Morrison, Susan Signe, *The Literature of Waste: Material Ecopoetics and Ethical Matter* (Basingstoke: Palgrave Macmillan, 2015).

Morse, Charlotte Cook, Penelope Reed Doob, and Marjorie Curry Woods, eds., *The Uses of Manuscripts in Literary Studies: Essays in Memory of Judson Boyce Allen* (Western Michigan University: Medieval Institute Publications, 1992).

Morton, Timothy, *Ecology Without Nature: Rethinking Environmental Aesthetics* (Cambridge, MA and London: Harvard UP, 2007).

Murphy, Peter, and Patricia E. J. Wiltshire, eds., *The Environmental Archaeology of Industry, Symposia of the Association for Environmental Archaeology 20* (Oxford: Oxbow Books, 2003).

Muzerelle, Denis, *Vocabulaire codicologique*, online <http://codicologia.irht.cnrs.fr> (accessed 5 January 2017).

Mynors, R. A. B., *Durham Cathedral Manuscripts to the End of the Twelfth Century*, printed for the Dean and Chapter of Durham Cathedral (Oxford: OUP, 1939).

Mynors, R. A. B., ed., *Catalogue of the Manuscripts of Balliol College, Oxford* (Oxford: Clarendon Press, 1963).

Nardizzi, Vin, 'Medieval Ecocriticism', *postmedieval: a journal of medieval cultural studies,* 4.1 (2013), 112-123.

Netherton, Robin, and Gale R. Owen-Crocker, eds., *Medieval Clothing and Textiles* (Woodbridge: Boydell Press, 2010).

Netz, Reviel, William Noel, Natalie Tchernetska, Nigel Wilson, eds., *The Archimedes Palimpsest: Catalogue and Commentary,* 2 vols. (Cambridge: CUP for the Walters Art Museum, 2011).

Norfolk Medieval Graffiti Survey, online <http://www.medieval-graffiti.co.uk> (accessed 5 January 2017).

Nottingham Special Collections, 'Money', online, <https://www.nottingham.ac.uk/manuscriptsandspecialcollections/researchguidance/weightsandmeasures/money.aspx> (accessed 7 January 2017).

O'Connell, Mark, 'The Marginal Obsession with Marginalia', *New Yorker*, 26 January 2012 <http://www.newyorker.com/books/page-turner/the-marginal-obsession-with-marginalia> (accessed 5 January 2016).

O'Connor, Terry, 'Thinking About Beastly Bodies', *Breaking and Shaping Beastly Bodies: Animals as Material Culture in the Middle Ages*, ed. by Aleksander Pluskowski (Oxford: Oxbow Books, 2007), pp.1-10.

Ogilvie-Thomson, S. J., ed., *The Index of Middle English Prose, Handlist VIII: Manuscripts Containing Middle English Prose in Oxford College Libraries* (Cambridge: Brewer, 1991).

Ogilvie-Thomson, S. J., ed., *The Index of Middle English Prose, Handlist XVI: Manuscripts in the Laudian Collection, Bodleian Library, Oxford* (Cambridge: Brewer, 2000).

Oliver, Jeff, and Tim Neal, eds., *Wild Signs: Graffiti in Archaeology and History* (Oxford: Archaeopress, 2010).

Orme, Nicholas, *Education and Society in Medieval and Renaissance England* (London: The Hambledon Press, 1989).

Orme, Nicholas, *Medieval Schools: From Roman Britain to Renaissance England* (New Haven, London: Yale UP, 2006).

Orme, Nicholas, *Minor Clergy of Exeter Cathedral Biographies: 1250-1548* (Exeter: Devon and Cornwall Record Society, 2013).

Owen, Kirsty, 'Traces of Presence and Pleading: Approaches to the Study of Graffiti at Tewkesbury Abbey', *Wild Signs: Graffiti in Archaeology and History*, ed. by Jeff Oliver and Tim Neal (Oxford: Archaeopress, 2010), pp.35-46.

Oxford English Dictionary, online <http://www.oed.com> (accessed 5 January 2017).

Pächt, Otto, and J. J. G. Alexander, eds., *Illuminated Manuscripts in the Bodleian Library Oxford*, 3 vols. (Oxford: Clarendon Press, 1966-1973).

Pantin, W. A., and W. T. Mitchell, eds., *The Register of Congregation, 1448–1463*, Oxford Historical Society, n.s. 22 (Oxford: Clarendon Press, 1973).

Parkes, M. B., 'Thomas Hunt and the Oxford Book-Business in the Late Fifteenth Century', *The Library*, 7th ser., 17:1 (2016), 28-39.

Parkes, M. B., 'The Planning and Construction of the Ellesmere Manuscript', *The Ellesmere Chaucer: Essays in Interpretation*, ed. by Martin Stevens and Daniel Woodward (San Marino, CA: Huntington Library, 1997), pp.41-47.

Parkes, M. B., 'The Provision of Books', *The History of the University of Oxford: Late Medieval Oxford*, ed. by J. I. Catto and T. A. R. Evans (Oxford: Clarendon Press, 1992), pp.407–83.

Parkes, M. B., *Their Hands Before Our Eyes: A Closer Look at Scribes*, The Lyell Lectures, Oxford, 1999 (Aldershot: Ashgate, 2008).

Pearsall, Derek, and Elizabeth Salter, *Landscapes and Seasons of the Medieval World* (London: Paul Elek, 1973).

Pearsall, Derek, ed., *New Directions in Later Medieval Manuscript Studies: Essays from the 1998 Harvard Conference* (York: York Medieval Press, 2000).

Pegues, F., 'Philanthrophy and the Universities of France and England', *The Economic and Material Framework of the Medieval University*, ed. by A. L. Gabriel (Indiana: University of Notre Dame Press, 1977), pp.69-80.

Pergamena New York, 'Manuscript Uterine Calf Parchment', online <http://www.pergamena.net/parchment-products/manuscript-uterine-calf-parchment> (accessed 5 January 2017).

Perkins, Nicholas, and Alison Wiggins, *Romance of the Middle Ages* (Oxford: Bodleian Library, 2012).

Perry, Ryan, 'The Material Text: Reading, Identity, and the Late Medieval Book', London Medieval Society Colloquium: 'Who Read What in the Middle Ages?', Queen Mary University London (17 November 2012).

Pfaff, R., 'N. R. Ker and the Study of English Medieval Manuscripts', *Anglo-Saxon Manuscripts: Basic Readings*, ed. by Mary Richards (London: Routledge, 2001), pp.55-77.

Philip, Ian, *The Bodleian Library in the Seventeenth and Eighteenth Centuries*, The Lyell Lectures, Oxford, 1980-81 (Oxford: Clarendon Press, 1983).

Pickering, O. S., and V. M. O'Mara, eds., *The Index of Middle English Prose, Handlist XIII: Manuscripts in Lambeth Palace Library, Including Those Formerly in Sion College* (Cambridge: Brewer, 1999).

Pickwoad, Nicholas, 'The Interpretation of Bookbinding Structure: An Examination of Sixteenth-Century Bindings in the Ramey Collection in the Pierpoint Morgan Library', *The Library,* 6th ser., 17:3 (1995), 290-249.

Pickwoad, Nicholas, 'The Use of Fragments of Medieval Manuscripts in the Construction and Covering of Bindings on Printed Books', *Interpreting and Collecting Fragments of Medieval Books*, ed. by Linda L. Brownrigg and Margaret M. Smith (Los Altos Hills, California: Anderson-Lovelace, 2000), pp.1-20.

Pluskowski, Aleksander, ed., *Breaking and Shaping Beastly Bodies: Animals as Material Culture in the Middle Ages* (Oxford: Oxbow Books, 2007).

Pollard, Graham, 'Medieval Loan Chests at Cambridge', *Bulletin of the Institute of Historical Research,* 17 (1939-40), 113-129.

Pollard, Graham, 'On the Repair of Medieval Bindings', *The Paper Conservator,* 1 (1976), 35-36.

Pollard, Graham, *Notes for a directory of Cat Street: Oxford before A.D. 1500*, Bodleian Library Archive, Catalogue of the Papers of Graham Pollard, compiled by Esther Potter (1937/1988).

Pollard, T., ed., *Property and Politics: Essays in Later Medieval English History* (Gloucester: Alan Sutton, 1984).

Pouzet, Jean-Pascal, 'Book Production Outside Commercial Contexts', *The Production of Books in England 1350-1550*, ed. by Alexandra Gillespie and Daniel Wakelin (Cambridge: CUP, 2011), pp.212-238.

Pouzet, Jean-Pascal, 'Southwark Gower: Augustinian Agencies in Gower's Manuscripts and Texts – Some Prolegomena', *John Gower: Trilingual Poet: Language, Translation and Tradition*, ed. by Elisabeth Dutton, John Hines and R. F. Yeager (Cambridge: Brewer, 2010), pp.11-25, at p.17.

Power, Eileen, and M. M. Postan, eds., *Studies in the English Trade in the 15th Century* (London: Routledge, 1933, repr. 2006).

Powicke, F. M., ed., *The Medieval Books of Merton College* (Oxford: OUP, 1931).

Price, Leah, *How to Do Things with Books in Victorian Britain* (Princeton: Princeton UP, 2013).

Pugh, R. B., and Elizabeth Crittall, eds., *Victoria History of the County of Wiltshire,* 18 vols. (London: Victoria County History, 1956).

Pulsiano, Phillip, 'Jaunts, Jottings and Jetsam in Anglo-Saxon Manuscripts', *Florilegium,* 19 (2002), 189-216.

Ramirez, Janina, *Illuminations: The Private Lives of Medieval Kings*, Oxford Film and Television collaboration with the British Library for the BBC, 2013.

Ranft, P., *Medieval Theology of Work: Peter Damian and the Medieval Religious Renewal Movement* (New York: Palgrave Macmillan, 2016).

Raven, James, *The Business of Books: Booksellers and the English Book Trade, 1450-1850* (London: Yale UP, 2007).

Raymond, Joad, *Pamphlets and Pamphleteering in Early Modern Britain* (Cambridge: CUP, 2006).

Redclift, Michael, 'Sustainable Development (1987-2005), An Oxymoron Comes of Age', *Sustainable Development,* 13 (2005), 212-227.

Reed, Ronald, *Ancient Skins, Parchments and Leathers* (London: Seminar Press, 1972).

Reed, Ronald, *The Nature and Making of Parchment* (Leeds: The Elmete Press, 1975).

Reiter, Eric H., 'Recycling the Written Word: Manuscript Fragments and Late Medieval Readers', *Interpreting and Collecting Fragments of Medieval Books*, ed. by Linda L. Brownrigg and Margaret M. Smith (Los Altos Hills, California: Anderson-Lovelace, 2000), pp.189-204.

Richards, Mary, ed., *Anglo-Saxon Manuscripts: Basic Readings* (London: Routledge, 2001).

Richardson, Malcolm, *Middle-Class Writing in Late Medieval London* (London: Pickering and Chatto, 2011).

Riddy, Felicity, ed., *Regionalism in Late Medieval Manuscripts and Texts: Essays Celebrating the Publication of a Linguistic Atlas of Late Medieval English, York Manuscripts Conference, University of York* (Cambridge: D. S. Brewer, 1991).

Ringler Jr., William A., *Bibliography and Index of English Verse in Manuscript 1501-1558*, prepared and completed by Michael Rudick and Susan J. Ringler (London: Mansell Publishing Limited, 1992).

Robertson, Kellie, 'Medieval Things: Materiality, Historicity, and the Premodern Object', *Literature Compass,* 5 (2008), 1060-1080.

Robinson, P. R., 'The "Booklet": A Self-Contained Unit in Composite Manuscripts', *Codicologica: Essais typologiques,* 3 (1980), 46-69.

Rosewell, Roger, *Medieval Wall Paintings* (Oxford: Shire Books, 2014).

Rouse, Richard H., and Mary A. Rouse, 'The Vocabulary of Wax Tablets', *Vocabulaire du livre et de l'écriture au Moyen Age: Actes de la table ronde Paris 24-26 septembre 1987*, ed. by Olga Weijers (Turnhout: Brepols, 1989), pp.220-30.

Rubin, Miri, *Charity and Community in Medieval Cambridge* (Cambridge: CUP, 1987).

Rück, Peter, ed., *Pergament, Geschichte, Struktur, Restaurierung und Herstellung* (Sigmaringen: Thorbecke, 1991).

Rudd, Gillian, *Greenery: Ecocritical Readings of Late Medieval English Literature* (Manchester: Manchester UP, 2007).

Rudy, Kathryn M., *Postcards on Parchment: The Social Lives of Medieval Books* (New Haven and London: Yale UP, 2015).

Rundle, David, 'Parliament and the Vellum Debate, Part I', online, 6 March 2016, <https://bonaelitterae.wordpress.com/2016/03/06/parliament-and-the-vellum-debate-part-i/> (accessed 5 January 2017).

Rundle, David, and Scott Mandelbrote, 'Corrigenda', in N. R. Ker, *Fragments of Medieval Manuscripts Used as Pastedowns in Oxford Bindings,* 3rd ser., 4 (Oxford: Oxford Bibliographical Society, 2004 for 2000), pp.†1-29, at pp.†1-2.

Rundle, David, ed., *Humanism in Fifteenth-Century Europe,* Medium Aevum Monographs, n.s. 30 (Oxford: Society for the Study of Medieval Language and Literature, 2012).

Rust, Martha Dana, *Imaginary Worlds in Medieval Books: Exploring the Manuscript Matrix* (Basingstoke: Palgrave Macmillan, 2007).

Ruzzier, Chiara, 'The Miniaturisation of Bible Manuscripts in the Thirteenth Century: A Comparative Study', *Form and Function in the Late Medieval Bible*, ed. by Eyal Poleg and Laura Light (Leiden: Brill, 2013), pp.105-125.

Ryder, Michael L., 'The Biology and History of Parchment', *Pergament, Geschichte, Struktur, Restaurierung und Herstellung*, ed. by Peter Rück (Sigmaringen: Thorbecke, 1991), pp.25-33.

Salisbury, Joyce, *The Beast Within: Animals in the Middle Ages* (London: Routledge, 2011).

Salter, H. E., and Mary D. Lobel, eds., *A History of the County of Oxford: The University of Oxford* (London: OUP for the University of London Institute of Historical Research, 1954).

Sapart, C. J., G. Monteil, M. Prokopiou, et al., 'Natural and Anthropogenic Variations in Methane Sources During the Past Two Millennia', *Nature,* 490 (2012), 85-88.

Sargent, Michael G., 'What do the numbers mean? A Textual Critic's Observations on some Patterns of Middle English Manuscript Transmission', *Design and Distribution of Late Medieval Manuscripts in England,* ed. by Margaret Connolly and Linne R. Mooney (York, The University of York: York Medieval Press, Boydell and Brewer, 2008), pp.205-244.

Saul, Nigel, *English Church Monuments in the Middle Ages: History and* Representation (Oxford: OUP, 2009).

Saunders, Corinne, ed., *A Companion to Medieval Poetry* (Chichester: Wiley Blackwell).

Sawyer, Daniel, 'Codicological Evidence of Reading in Late Medieval England, with Particular Reference to Practical Pastoral Verse' (unpublished doctoral thesis, University of Oxford, 2016).

Scala, Elizabeth and Sylvia Frederico, eds., *The Post-Historical Middle Ages* (Basingstoke: Palgrave Macmillan, 2009).

Scala, Elizabeth, and Sylvia Frederico, 'Introduction', *The Post-Historical Middle Ages*, ed. by Elizabeth Scala and Sylvia Frederico (Basingstoke: Palgrave Macmillan, 2009), pp.1-12.

Scase, Wendy, 'Reginald Pecock, John Carpenter and John Colop's "Common Profit" Books: Aspects of Book Ownership and Circulation in Fifteenth-Century London', *Medium Aevum,* 61:2 (1992), 261-270.

Scattergood, V. J., 'Two Medieval Book Lists', *The Library*, 5th ser. 23:3 (1968), 236-239.

Schmidt, Kari Anne Rand, ed., *The Index of Middle English Prose, Handlist XVII: Manuscripts in the Library of Gonville and Caius College, Cambridge* (Cambridge: Brewer, 2001).

Scholla, Agnes, 'Libri sine asseribus: zur Einbandtechnik, Form und Inhalt mitteleuropäischer Koperte des 8. bis 14. Jahrhunderts' (unpublished doctoral thesis, University of Leiden, 2002).

Sciacca, Christine, 'Stitches, Sutures, and Seams: "Embroidered" Parchment Repairs in Medieval Manuscripts', *Medieval Clothing and Textiles*, ed. by Robin Netherton and Gale R. Owen-Crocker (Woodbridge: Boydell Press, 2010), pp.57-92.

Scott-Warren, Jason, 'Reading Graffiti in the Early Modern Book', *Huntington Library Quarterly*, 73 (2010), 363-381.

Scott, Anne M., 'Experiences of Charity: Complex Motivations in the Charitable Endeavour, *c.* 1100-c.1650', *Experiences of Charity, 1250-1650*, ed. by Anne M. Scott (Farnham: Ashgate, 2015), pp.1-14.

Scott, Anne M., ed., *Experiences of Charity, 1250-1650* (Farnham: Ashgate, 2015).

Scott, Kathleen L., 'Past Ownership: Evidence of Book Ownership by Merchants in the Later Middle Ages', *Makers and Users of Medieval Books: Essays in Honour of A. S. G. Edwards*, ed. by Carol M. Meale and Derek Pearsall (Cambridge: Brewer, 2014), pp.150-177.

Scott, Kathleen, 'Representations of Scribal Activity in English Manuscripts, *c.* 1400-1490: A Mirror of the Craft?', *Pen in Hand: Medieval Scribal Portraits, Colophons and Tools*, ed. by Michael Gullick (Walkern: Red Gull Press, 2006), pp.115-150.

Seetah, Krish, 'The Middle Ages on the Block: Animals, Guilds and Meat in the Medieval Period', *Breaking and Shaping Beastly Bodies: Animals as Material Culture in the Middle Ages*, ed. by Aleksander Pluskowski (Oxford: Oxbow Books, 2007), pp.18-31.

Sennett, Richard, *The Craftsman* (London: Penguin Books, 2008).

Serjeantson, D., and T. Waldron, eds., *Diet and Craft in Towns: The Evidence of Animal Remains from the Roman to the Post-Medieval Periods*, British Archaeological Reports, British Series 199 (Oxford: British Archaeological Reports, 1989).

Serjeantson, Dale, 'Animal Remains and the Tanning Trade', *Diet and Craft in Towns: The Evidence of Animal Remains from the Roman to the Post-Medieval Periods*, eds. D. Serjeantson and T. Waldron, British Archaeological Reports, British Series 199 (Oxford: British Archaeological Reports, 1989), pp.129-46.

Seymour, M. C., 'The English Manuscripts of Mandeville's Travels', *Edinburgh Bibliographical Society Transactions*, 4:5 (1966), 169-210.

Seymour, M. C., ed., *A Catalogue of Chaucer Manuscripts*, 2 vols. (Aldershot: Scholar, 1995).

Shailor, Barbara, *The Medieval Book: Illustrated from the Beinecke Rare Book & Manuscript Library* (Toronto: University of Toronto Press, 1991).

Shepherd, S. H. A., 'The Ashmole *Sir Ferumbras*: Translation in Holograph', *The Medieval Translator: The Theory and Practice of Translation in the Middle Ages*, ed. by R. Ellis (Cambridge: Brewer, 1989), pp.103-121.

Shepherd, Stephen H., 'Four Middle English Charlemagne Romances: A Revaluation of the Non-Cyclic Verse Texts and the Holograph Sir Ferumbras' (unpublished doctoral thesis, University of Oxford, 1988).

Sheppard, Jennifer, *Census of Western Medieval Bookbinding Structures to 1500 in British Libraries* (Cambridge: British Census Project, 1997).

Sherman, William H., 'The Reader's Eye: Between Annotation and Illustration', Keble Medieval and Renaissance Research Cluster, Keble College, Oxford (8 February 2013).

Sherman, William H., *Used Books: Marking Readers in Renaissance England* (Philadelphia: University of Pennsylvania Press, 2008).

Simpson, James, 'Bonjour Paresse: Literary Waste and Recycling in Book 4 of Gower's "Confessio Amantis"', *Proceedings of the British Academy,* 151 (2007), 257-84.

Skemer, Don C., *Binding Words: Textual Amulets in the Middle Ages* (Philadelphia: Pennsylvania State Press, 2006).

Smith, Margaret M., 'Preface', *Interpreting and Collecting Fragments of Medieval Books*, ed. by Linda L. Brownrigg and Margaret M. Smith (Los Altos Hills, California: Anderson-Lovelace, 2000), pp.xi-xv.

Smith, Margaret M., *The Title Page, its Early Development, 1460-1510* (London: The British Library, 2000).

Smyth, Adam, 'Burning to Read: Ben Jonson's Library Fire of 1623', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014), pp.34-54.

Smyth, Adam, 'Cutting and Authorship in Early Modern England', *Authorship* 2:2 (2013), online, <http://dx.doi.org/10.21825/aj.v2i2.790>.

Smyth, Adam, and Gill Partington, 'Introduction', *Book Destruction in the West, from the Medieval to the Contemporary*, ed. by Adam Smyth and Gill Partington (Basingstoke: Palgrave Macmillan, 2014), pp.1-14.

Smyth, Adam, and Gill Partington, eds., *Book Destruction in the West, from the Medieval to the Contemporary*, New Directions in Book History (Basingstoke: Palgrave Macmillan, 2014).

Solopova, Elizabeth, *Manuscripts of the Wycliffite Bible in the Bodleian and Oxford College Libraries* (Liverpool: Liverpool UP, 2016).

Steel, Karl, *How to Be a Human: Animals and Violence in the Middle Ages* (Columbus: The Ohio State UP, 2011).

Stevens, Christian, and Roland Verhé, 'Primary Production of Raw Materials', *Renewable Bioresources: Scope and Modification for Non-Food Applications* (Oxford: Wiley, 2004).

Stevens, Martin, and Daniel Woodward, eds., *The Ellesmere Chaucer: Essays in Interpretation* (San Marino, CA: Huntington Library, 1997).

Stevenson, John, *The Church Historians of England,* 5 vols. (London: Seeleys, 1853).

Stinson, Timothy, 'Counting Sheep: Potential Applications of DNA Analysis to the Study of Medieval Parchment Production', *Codicology and Palaeography in the Digital Age II,* ed. by Franz Fischer, Christiane Fritze, Georg Vogeler (Institut für Dokumentologie und Editorik: Norstedt, 2011), pp.191-207.

Stock, Brian, *The Implications of Literacy: Written Language and Models of Interpretation in the Eleventh and Twelfth Centuries* (New Jersey: Princeton UP, 1983).

Stoddard, Roger E., 'Looking at Marks in Books', *The Gazette of the Grolier Club*, n.s., 51 (2000), 27-47.

Stoicheff, Peter, and Andrew Taylor, eds., *The Future of the Page* (London: University of Toronto Press, 2004).

Storm van Leeuwen, Jan, 'Review of Agnes Scholla's Thesis: *Libri sine asseribus*', *Quaerendo* 35:1 (2005), 150-152.

Strand, Augusta, 'The Examination and Conservation of a Medieval Manuscript with Embroidered Repairs', *Care and Conservation,* 8 (2005), 113-122.

Strand, Augusta, Uppsala Library, 'A Medieval Book Mended with Silk Thread', online <https://web.archive.org/web/20131017052042/http://www.ub.uu.se/en/Just-now/Projects/Completed-projects/A-medieval-book-mended-with-silk-thread/> (accessed 5 January 2017).

Suffolk Medieval Graffiti Survey, online <http://www.medieval-graffiti-suffolk.co.uk> (accessed 5 January 2017).

Swanson, R. N., 'Praying for Pardon: Devotional Indulgences in Late Medieval England', *Promissory Notes on the Treasury of Merits: Indulgences in Late Medieval Europe,* ed. by R. N. Swanson (Leiden: Brill, 2006), pp.215-240.

Swanson, R. N., ed., *Promissory Notes on the Treasury of Merits: Indulgences in Late Medieval Europe* (Boston, MA: Brill, 2006).

Szirmai, J. A., *The Archaeology of Medieval Bookbinding* (Aldershot: Ashgate, 1992).

Taavitsainen, Irma, 'Middle English Recipes: Genre Characteristics, Text Type Features and Underlying Traditions of Writing', *Journal of Historical Pragmatics,* 2:1 (2001), 85-113.

Taavitsainen, Irma, ed., *The Index of Middle English Prose, Handlist X: Manuscripts in Scandinavian Collections* (Cambridge: Brewer, 1994).

Teasdale, M. D., N. L. van Doorn, et al., 'Paging Through History: Parchment as a Reservoir of Ancient DNA for Next Generation Sequencing' *Philosophical Transactions of the Royal Society B: Biological Sciences,* 370:1660 (2015), 20130379, online <http://dx.doi.org/10.1098/rstb.2013.0379>.

The Churches Conservation Trust, 'Wallpaintings Uncovered', online <http://www.historyextra.com/wallpaintings> (accessed 5 January 2017).

The National Archives, 'Currency Calculator', online <http://www.nationalarchives.gov.uk/currency/default0.asp#mid> (accessed 5 January 2017).

Thompson, Daniel V., 'Medieval Parchment Making', *The Library*, 4th ser., 16 (1935), 113-117.

Thompson, Daniel V., 'Trial Index to Some Unpublished Sources for the History of Medieval Craftsmanship', *Speculum*, 10 (1935), 410-431.

Thompson, Daniel V., *The Materials and Techniques of Medieval Painting* (New York: Dover Books, 1956).

Thomson, David, *A Descriptive Catalogue of Middle English Grammatical Texts* (London: Garland Publishing, 1979).

Thomson, Rodney M., 'Parchment and Paper, Ruling and Ink', *The Cambridge History of the Book in Britain, II: 1100-1400*, ed. by Nigel Morgan and Rodney M. Thomson (Cambridge: CUP, 2014), pp.75-84.

Thomson, Rodney M., and Michael Gullick, eds., *A Descriptive Catalogue of the Medieval Manuscripts in Worcester Cathedral Library* (Cambridge: Published on behalf of the Dean and Chapter of Worcester Cathedral by Brewer, 2001).

Thorpe, Deborah Ellen, 'Young Hands, Old Books: Drawings by Children in a Fourteenth-Century Manuscript, LJS MS. 361', *Cogent Arts and Humanities,* 3: 1196864 (2016), 1-18.

Tilley, Christopher Y., *Handbook of Material Culture* (London: Sage, 2006).

Timmerman, Anke, 'Of Dirty Books and Bread', online <http://recipes.hypotheses.org/2859> (accessed 5 January 2017).

Tohma, Sakura, 'Making & Testing Iron Gall Ink', online <https://www.westdean.org.uk/study/school-of-conservation/blog/books-and-library-materials/making-testing-iron-gall-ink> (accessed 5 January 2017).

Tschichold, Jan, *The Form of the Book* (London: Lund Humphries, 1991).

United Nations, 'Our Common Future' (New York: UN, 1987), online <http://www.un-documents.net/our-common-future.pdf> (accessed 5 January 2017).

Urban Dictionary, online <http://www.urbandictionary.com/define.php?term=upcycle> (accessed 5 January 2017).

Ustick, W. L., "'Parchment' and 'Vellum'", *The Library*, 4th ser., 16 (1936), 439-440.

Van Dyke, Carolynn, ed., *Rethinking Chaucerian Beasts* (Basingstoke: Palgrave Macmillan, 2012).

Vauchez, André, ed., *Encyclopedia of the Middle Ages* (Oxford: OUP, 2005), online <http://www.oxfordreference.com/view/10.1093/acref/9780227679319.001.0001/acref-9780227679319-e-2106?rskey=Tki5hl&result=1> (accessed 5 January 2017).

Veale, Elspeth, *The English Fur Trade in the Later Middle Ages*, London Record Society, 38 (London: London Record Society, 2003).

Veblen, Thorstein, *Theory of the Leisure Class* (New York: Funk and Wagnalls, 1967).

Vnouček, Jiří, 'The Manufacture of Parchment for Writing Purposes and the Observation of the Signs of Manufacture Surviving in Old Manuscripts', *Care and Conservation,* 8 (2005), pp.74-92.

Vnouček, Jiří, 'Typology of the Damage of Parchment in Manuscripts of the Codex Form', *Improved Damage Assessment of Parchment, IDAP Assessment, Data Collection*

and Sharing of Knowledge, ed. by René Larsen (Luxembourg: The Royal Danish Academy of Fine Arts, School of Conservation, Office for Official Publications of the European Communities, 2007), pp.27-30.

Wakelin, Daniel, '"Thys ys my boke": Imagining the Owner in the Book', *Spaces for Reading in Later Medieval England*, ed. by Mary C. Flannery and Carrie Griffin (Basingstoke: Palgrave Macmillan, 2016), pp.13-33.

Wakelin, Daniel, 'Editing and Correcting', *Probable Truth: Editing Medieval Texts from Britain in the Twenty-First Century*, ed. by Vincent Gillespie and Anne Hudson (Turnhout: Brepols, 2013), pp.241-59.

Wakelin, Daniel, 'England: Humanism Beyond Weiss', *Humanism in Fifteenth-Century Europe,* ed. by David Rundle, Medium Aevum Monographs, n.s. 30 (Oxford: Society for the Study of Medieval Language and Literature, 2012), pp.265-305.

Wakelin, Daniel, 'Recording Ownership, Recording the Self: Gunthorpe's Example', unpublished paper, 47th International Congress on Medieval Studies, Kalamazoo, Michigan (May 2012).

Wakelin, Daniel, and Christopher Burlinson, 'Evidence for the Construction of Quires in a Fifteenth-Century English Manuscript', *The Library,* 7th ser. 9:4 (2008), 383-396.

Wakelin, Daniel, *Scribal Correction and Literary Craft: English Manuscripts 1375-1510* (Cambridge: CUP, 2014).

Walter, Katie L., 'Introduction', *Reading Skin in Medieval Literature and Culture*, ed. by Katie L. Walter (Basingstoke: Palgrave Macmillan, 2013), pp.1-10.

Walter, Katie L., ed., *Reading Skin in Medieval Literature and Culture* (Basingstoke: Palgrave Macmillan, 2013)

Warrington, Bridget, 'Conservation Report on the Pembroke Fragments', online, <https://www.english.cam.ac.uk/manuscriptslab/conservation-report-on-the-pembroke-fragments/> (accessed 5 January 2017).

Watson, Andrew G., ed., *A Descriptive Catalogue of the Medieval Manuscripts of All Souls College Oxford* (Oxford: OUP, 1997).

Watson, Andrew G., ed., *Books, Collectors and Libraries: Studies in the Medieval Heritage* (London: Hambledon Press, 1985).

Watson, Ben, 'Oodles of Doodles? Doodling Behaviour and its Implications for Understanding Palaeoarts', *Rock Art Research*, 25 (2008), 35-60.

Weetman, Jamieson, 'Testamentary Piety and Charity in London, 1279-1370' (unpublished doctoral thesis, University of Oxford, 2013).

Weijers, Olga, ed., *Vocabulaire du livre et de l'écriture au Moyen Age: Actes de la table ronde Paris 24-26 septembre 1987* (Turnhout: Brepols, 1989).

Whalley, Joyce Irene, *Writing Implements and Accessories from the Roman Stylus to the Typewriter* (London: David & Charles, 1975).

White Jr., Lynn, 'The Historical Roots of Our Ecologic Crisis', *Science,* 155:3767 (1967), 1203-1207.

Wilcox, Jonathan, 'Introduction: The Philology of Smell', *Scraped, Stroked, and Bound: Materially Engaged Readings of Medieval Manuscripts*, ed. by Jonathan Wilcox (Turnhout: Brepols, 2013), pp.1-14.

Wilcox, Jonathan, ed., *Scraped, Stroked, and Bound: Materially Engaged Readings of Medieval Manuscripts* (Turnhout: Brepols, 2013).

Woodcock, Matthew, 'England in the Long Fifteenth Century', *A Companion to Medieval Poetry*, ed. by Corinne Saunders (Oxford: Wiley Blackwell, 2010), pp.501-519.

Woods, Chris, 'Conservation Treatments for Parchment Documents', *Journal of the Society of Archivists*, 16:2 (1995), 221-238.

Woolgar, C. M., 'Meat and Dairy Products in Late Medieval England', *Food in Medieval England: Diet and Nutrition*, ed. by C. M. Woolgar, D. Serjeantson, and T. Waldron (Oxford: OUP, 2006), pp.88-101.

Woolgar, C. M., D. Serjeantson, and T. Waldron, eds., *Food in Medieval England: Diet and Nutrition* (Oxford: OUP, 2006).

Wormald, Francis, and C. E. Wright, eds., *The English Library Before 1700* (London: The Athlone Press, 1958).

Yaeger, Patricia, 'Editor's Column: The Death of Nature and the Apotheosis of Trash; or, Rubbish Ecology', *PMLA,* 123.2 (2008), 321-339.

Zemon Davis, Natalie, *The Gift in Sixteenth-Century France* (Oxford: OUP, 2000).

Zutshi, P. N. R., ed., *Medieval Cambridge: Essays on the Pre-Reformation University* (Cambridge: Boydell and Brewer, 1993).