

## Chapter 2. Literary approaches

There is a still-increasing quantity of evidence attesting to the long life and wide dissemination of 'Properties', in the form of manuscripts, incunables and fragments of the 19 Books, and in other medieval writings deemed to be derived from the compilation. In the past, students of 'Properties' worked in some isolation on locally available manuscripts and printed materials, and separate scholarly traditions developed in European countries, each with their own claims to affinity with Bartholomew. These include France, where he studied and where most of the Latin manuscripts reside; Germany, where he taught and wrote; Italy, birthplace of the Franciscan Order and location of the earliest vernacular translation; and England. Now, researchers have the benefit of easier access to manuscripts and incunables. In addition, they have the benefit of a century of insights and labours from other scholars and can gain a clearer picture of the context in which the compiler lived and worked. Over the past century, researchers have focused mainly on the identity and career of Bartholomaeus Anglicus; on the manuscript tradition of the Latin 'Properties' and the English translation, *On the Properties of Things*; on the nature of the text; and on the genre that comprises 'Properties' and other medieval compilations of knowledge. The accumulation of studies reflects changes in the way the modern world has responded to a medieval compilation of knowledge and its related concepts.

### The search for the compiler and his work

In 1888 Léopold Delisle brought Bartholomew to the attention of European scholars when he catalogued and wrote about a set of singly-bound manuscripts in the Bibliothèque nationale, Paris, which all dealt with the properties of things. Delisle concluded that they were all 'du même genre', the aim of which was to use the observation of natural phenomena for the instruction and edification of the faithful. He recognised that they all dealt with properties of the natural world but included symbolic properties, leading to speculation on their medieval authorship and literary function.<sup>1</sup> Among them was a scarcely-known fourteenth-century allegorical treatise which he named *Proprietates rerum moralizatae*, 'The moralised properties of things', which bore an evident close relationship to another one, *De proprietatibus rerum*, 'On the properties of things'. Delisle argued that the former was derived from the latter and therefore the compiler of *De proprietatibus rerum* must pre-date the fourteenth century and could not be the supposed Glanville, known as a learned British author since Leland's time. Having thus shaken the basis of belief in Bartholomew's late-Middle English origins, Delisle further asserted from the internal evidence in Book 15's chapter on France that the compiler was a fellow Frenchman.<sup>2</sup>

A flurry of debate about the author and his country of origin, in German and French, followed Delisle's article. P. Perdrizet examined textual evidence for the English, not French, nationality of the author. H. Matrod gave an enthusiastic account of the Bibliothèque nationale's manuscripts of 'Properties' from a French Franciscan perspective, seeing Bartholomew as a popular guide into the 'garden' of science and Roger Bacon, on the other hand, as a direct investigator of nature. Matrod was convinced of Bartholomew's enriching influence on English culture, saying that Shakespeare, Jonson, Spenser, Marlowe, Massinger, Lyly and Drayton were 'all nourished by *De Proprietatibus*'.<sup>3</sup> In Germany, Anton Schönbach and Edmund Voigt turned their attention to the history of the manuscripts of 'Properties' and to the problems of textual consistency and affiliation.<sup>4</sup> T. Plassmann, also a Franciscan, to some extent quelled the argument about Bartholomew's origins, citing contemporary sources to establish that Bartholomew lived early in the thirteenth century, taught in Paris and worked in Magdeburg, and that only 'Properties' could be safely assigned to him.<sup>5</sup> Meanwhile in England, the antiquarian Robert Steele had published an 'epitome' of extracts from Berthelet's 1535 edition of Trevisa. The German scholars approached 'Properties' as philologists and codicologists, but prefatory comments by Steele and William Morris show that their interest in the work was largely political and aesthetic. Steele justifies his interest in Bartholomew's work by saying that 'Properties' was one of the documents 'by the help of which we rebuild for ourselves the fabric of mediaeval life'; Morris praises the 'quaint floweriness' of the language, fancifully modernised by Steele, and recommends the book as a corrective to 'the just-past epoch of intelligence dominated by Whig politics'.<sup>6</sup> Steele's book testifies mainly to a late-Victorian conception of the Gothic, but it did serve to maintain scholarly awareness, in the English-speaking world, of Bartholomew and his work.

After World War I, Gerald Se Boyar, an American Franciscan, reviewed the literature on 'Properties' in a seminal work that brought the topic into the ambit of English-speaking scholars. He aimed to make a careful study of the encyclopaedia as a whole and to fix its place in the history of the encyclopaedic writings of the Middle Ages.<sup>7</sup> Se Boyar was also keen to convince readers of a connection between Bartholomew and Shakespeare and to show 'that Shakespeare was at least familiar with the book, whether he owned a copy or not, and that it was an important reference book'.<sup>8</sup>

In 1952, Elizabeth Brockhurst followed the lead of Se Boyar's research but her resources were limited. Using only material in the British Library, she confined her analysis to parts of Book 1 of the English translation, and parts of Books 2, 3 and 4 from the Latin 'Properties'.<sup>9</sup> For Brockhurst, the only available printed version, other than the sixteenth-century editions in the British Library, was Steele's pastiche. Nevertheless, she adduced evidence for the work's popularity

and for the continuity of its core content over time, situated the translation within the Trevisa canon, and described seven of the manuscripts of the English *Properties*. Her method and approach, given her lack of access to data, were narrowly focused upon textual affiliation and variation within a very small sample of manuscripts and incunables. In France, Pierre Michaud-Quantin was similarly constrained in the 1960s. He suggested that one must consider how the encyclopaedias answered the needs of readers in order to gain 'une perspective sur la culture et la mentalité du milieu dans lequel elles sont apparues'. But Michaud-Quantin has not space enough in a short article to do more than reinforce the notion that 'Properties' was a somewhat inadequate textbook of information.<sup>10</sup>

Over time, and in separate countries, research into the context in which the work appeared and the excavation of related documents have brought the compiler more clearly into focus. Most recently, Juris Lidaka has clarified the time and circumstances of composition, while Michael Seymour has fleshed out the few biographical details to create a speculative biography, and to reconstruct Bartholomew's use of literary sources.<sup>11</sup> The well-attested identity of the compiler as a Franciscan of a particular time and place is now sufficiently established to underpin further investigations of his work.

## Later approaches

During the 1960s, work began in England and America on Michael Seymour's three-volume critical edition (1974–88) of Trevisa's translation.<sup>12</sup> Seymour's edition was a major achievement which made the work, with the addition of critical apparatus, accessible to scholars of Middle English. The research that was involved in achieving a 'best reading' of Trevisa's lost copy-text, and in tracing the Latin exemplars possibly available to him, also cultivated a still-productive research area into the manuscript provenances and affiliations. In addition, the team of editors involved in the project went on to provide much of the English-language literature on *Properties*, in further critical editions of manuscript sections of the work.<sup>13</sup>

In particular, it produced studies of John Trevisa and his work as a pioneer translator of serious prose works into the vernacular.<sup>14</sup> In the context of Lollard dissent at this time and of the contentious issue of Bible translation, Trevisa's work as a stage in the establishment of vernacular prose writing and his involvement in the translation of devotional prose works have been the subject of conjecture.<sup>15</sup> Together the comprehensive work of David Fowler on the life and work of John Trevisa, the Seymour edition of *Properties* and modern studies of late-fourteenth-century literary patronage in England and in France provide a clearer picture of the culture and the conditions of production within which *Properties* appeared in an English vernacular dialect.<sup>16</sup>

The quantity of research into the manuscript tradition of 'Properties' and *Properties* involved in the edition also led to studies of individuals and institutions that owned or bequeathed copies in France and England.<sup>17</sup> Seymour brought together evidence for ownership of 'Properties' in England and France on the basis of wills and library catalogues. Anthony Edwards took the search further, looking at contemporary writings showing evidence of other writers' direct knowledge of the work in the later Middle Ages. He concluded that 'Properties' and its translation came to be a resource freely mined by other writers, and he cites evidence from direct citations and borrowings found in late-medieval texts across a wide range of genres.<sup>18</sup> The important studies of the translation, the ownership and the borrowings, help to contextualise the work within a widening English readership of the later Middle Ages.

The modern edition of Trevisa's *Properties*, and the significant body of secondary literature surrounding it, open up the subject for research into the work's function for English readers, writers and sermon audiences of that era. However, while it is an essential basis for further research, Seymour's edition of *Properties* is haunted by the ghost of the lost exemplar towards which the editors aspire. The pursuit of a complete version of the text involves a particular approach and special skills, but it usefully draws attention to another possible approach: that of seeing the manuscript tradition as multi-stranded. In one strand, the work maintains basic integrity in its 19 Books, a repository of ancient wisdom maintained in ecclesiastical and academic libraries; in others, readers adapt it and abstract from it to meet new needs, and according to the methods of production available to them.

## The question of genre

Because a number of compilations appear around the turn of the thirteenth century, coeval with the translations from Aristotle and the growth of secular colleges in Paris, they have been grouped together in the literature and labelled 'encyclopaedias'. Robert Collison lists 'Properties' as one of the medieval encyclopaedias that amass contemporary knowledge from the Christian, Arab and Buddhist medieval worlds.<sup>19</sup> K. W. Humphreys includes 'Properties' among the 'scientific books' held in the library of St Croce, Florence, in 1426.<sup>20</sup> An exhibition held in the Newberry Library, Chicago, to commemorate the 200th anniversary of the *Encyclopaedia Britannica*, includes Wynkyn de Worde's 'Properties' as the first printed example of the genre.<sup>21</sup>

In the introduction to their volume on Christian imagery, R. Kaske and his colleagues comment: 'During the past several decades, we have become increasingly aware of the allusive density of medieval literature, and of the extent to which much of its imagery depends on certain large bodies of traditional Christian learning.' While potentially of great value as a clue to the multivalent

nature of medieval works, this density can be hard for us to penetrate.<sup>22</sup> To assist the reader in this task Michael Twomey, in an appendix to the volume, lists and describes compendia roughly contemporary with 'Properties' that he categorises as 'major' and 'minor' encyclopaedias.<sup>23</sup> He includes 'Properties' among the major works, along with Isidore of Seville's *Etymologiae*, Rabanus Maurus' *De rerum naturis*, Honorius Augustodunensis' *Elucidarium* and *Imago mundi*, the German *Lucidarius* (c.1190, a guide for the laity); Alexander Neckam's *De naturis rerum* and *Laus sapientie divine*; Thomas of Cantimpré's *Liber de natura rerum* and Vincent of Beauvais' *Speculum maius*. Twomey finds the 'minor' works harder to categorise, but includes Isidore's *De natura rerum*; Ps-Isidore's *De ordine creaturarum*; Bede's *De natura rerum* and *Summarium Heinrici*; Lambert of St Omer's *Liber floridus*; Hildegard of Bingen's *Physica* and *Causae et curae*; Pseudo-Hugh of St Victor's *De bestiis et aliis rebus*; *Secretum secretorum*; Arnoldus Saxo's *De finibus rerum naturalium* (mid-thirteenth century); Brunetto Latini's *Trésor*; *Book of Sidrach* (mid-thirteenth century, also called *Fountain of All Knowledge*); and *Placides et Timéo* (a platonic dialogue, c.1250–1300). He includes some of Bartholomew's near-contemporary sources, such as the work *Magnae derivationes* by Ugucione da Pisa (d.1210: 'an etymological dictionary with an encyclopedic range'). Twomey considers that this work formed the basis for the alphabetically organized *Catholicon* by Johannes de Balbis, completed in 1286.

Such a survey allows us to see Bartholomew's undertaking in the context of a widely felt impulse to compile useful knowledge, and to realise that although the compilers presented their work in different ways, they partook of the same pool of authorised knowledge, borrowed from each other, and shared the same general views about the value and purpose of their undertakings. This appendix is a useful database for the researcher, as it supplies an overview of each work's content and dissemination history and does indeed provide one kind of map of the genre.

## The faulty encyclopaedia

As recently as 1987 a symposium held at Caen (published 1991) showed that the idea of the medieval encyclopaedia as a genre was still firmly in place.<sup>24</sup> Among the papers, Sylvain Louis summarises the French thinking at that time on 'Properties', while M. De Bouïard sees the genre as the expression of a new phase of medieval natural philosophy, comprising two types of encyclopaedia: the scientific/objective, and the symbolic/edifying. He sees a 'liberating' change occurring, from the latter to the former, and remnants of allegorisation as 'contaminating' some of the 'scientific' type.<sup>25</sup> In English-language histories also, as an encyclopaedia 'Properties' fell short in the judgement of historians who tended to assess it by criteria we apply today to that type of work — impartiality, balance, order, consistency, factual accuracy and careful editing.<sup>26</sup> The earlier twentieth-century literature on the history of western science tended,

therefore, to place 'Properties' and comparable works within the march of progress and to find them wanting. Lynn Thorndike expressed the view that writings such as 'Properties' represented a primitive stage of scientific thought, and their longevity was therefore deplorable. In his later work, reprinted in 1967, Thorndike reproved the late-medieval encyclopaedists for failing to 'advance'.<sup>27</sup> To Charles Raven, their works were inconsistent, repetitive, subjective, without original thought or analysis, and cluttered up with marvellous and legendary content.<sup>28</sup> Even more recently, Edward Grant stated: 'Without access to the hard core of Greek science, the Western world could not rise above the level of the Latin encyclopedists.'<sup>29</sup>

## The world-book tradition

In the last decades of the twentieth century, the earlier assumptions about 'Properties' and its peers started to be questioned as historians rethought the nature of so-called medieval science as an enterprise in its own right and with a particular function in its own time. The contentious issue of genre arises in part from the fact that Bartholomew placed side by side the teachings of the Church Fathers and extracts from the works of Aristotle newly available in Latin — for him and his readers, the respectively old and revered, and modern and controversial. David Greetham examines 'Properties' as a specifically Franciscan work, addressing what he sees as a fundamental problem; namely, that Bartholomew is trying to provide biblical exegesis, practical information and affective stories all at the same time. Thus his work 'exemplifies the intellectual discomforts of the medieval philosophy of science'.<sup>30</sup> Greetham concludes, however, that the inherent contradictions within 'Properties' contributed to its popularity, and helped to transmit a 'tensioned and ambiguous' philosophy of nature through the course of the Middle Ages and into the sixteenth century. More recently, and in the context of an ongoing debate about the nature of medieval investigation of the natural world, David Lindberg concludes:

Science was no more autonomous and isolated, no more situated in a social and institutional vacuum, during the medieval period than in more recent eras; and we cannot pretend to have fully grasped the nature and significance, or even the content, of medieval science until we have thoroughly contextualized it.<sup>31</sup>

Contextual elements relevant to this study include the role of the thirteenth-century church as the primary patron of learning and its efforts to combat Cathar heresy; changing techniques of book production; the expansion of the book market into the lay world; and the friars' pursuit of a philosophy of nature combining allegorical and classical elements. The troubles surrounding the Catholic church at the time were an important factor in the production of authoritative books; French and Cunningham show that the friars' compilations,

particularly those of the Dominicans, were tools designed for waging intellectual war on the Cathars. This urgent ecclesiastical need for patronage and control through teaching had a gradual effect on the theory and practice of authorship and compilation.<sup>32</sup> In addition, the friars — particularly the Franciscans — were intent upon the study of the natural world as a way of understanding God. French and Cunningham also examine and elucidate the character and function of the friars' natural philosophy (which privileges light and its symbolic properties) in the context of the concerns of the church and of the Order. They conclude that Roger Bacon, for example, drew on 'Properties' to investigate physical phenomena, especially light, in order to align Aristotle's teaching with Franciscan beliefs and orthodox doctrine: 'The famous medieval conflict between "science" and "religion" is in fact a construct of the nineteenth century. The medieval discipline of natural philosophy, by contrast, was one in which nature was explored in the cause of defending Roman Catholicism — fighting heresy and promoting lay spirituality.'<sup>33</sup>

The inclusion of religious allegory in the medieval compilations, then, has been a problem for historians because it appears to muddy the springs of scientific thought and to contradict their assumed purpose. In the 1980s, 'Properties' and its encyclopaedic contemporaries became the subject of illuminating research in Europe. Christel Meier traces the sources, models and likely functions of the *compilatio* as a genre and suggests new ways of defining it in medieval terms, noting a discrepancy between the negative judgements of modern readers and the positive approval of medieval commentators. She suggests that we need to see the compilations not as high-medieval innovations, but as products of a long tradition dating from late antiquity and formed by minds already ripe. Their function was to act as combined library substitute, repository of knowledge and guide to salvation.<sup>34</sup> Heinz Meyer points out that the fourteenth-century derivatives of 'Properties', the *Liber moralizatae* mentioned above and the *Reductium morale* of Pierre Bersuire, testify that the properties of the material world as described by Bartholomew could indeed hold moral and ethical significations for the clerical reader and fulfil the criterion of moral *utilitas*. He asserts that the consistent body of marginal glosses occurring in early Latin manuscripts were an essential vehicle within the earliest manuscripts for the allegorical and moral meanings of the text. The later shedding of the glosses in fourteenth-century manuscripts indicates that readers became more interested in the work as a source of factual, rather than moralised, accounts of the properties of things. However, the complexity of 'Properties' forbids a simple antithesis between worldly and spiritual readings, and may offer a reason for its success under different conditions.<sup>35</sup>

## ***Compilatio* and *utilitas***

Thanks to the work of Christel Meier, Heinz Meyer and others, the so-called encyclopaedias are now considered to be representatives of a long-standing medieval tradition of *compilatio* — that is, the encyclopaedic compilation made for a specific set of purposes and following certain scholarly conventions.<sup>36</sup> Meier concludes that compilers from Isidore of Seville in the seventh century, to Bartholomew and his peers in the thirteenth, take the Genesis account of creation as a temporal or conceptual starting point for a book of the world, and use a title such as *imago mundi* or *speculum mundi* to reflect that universal scope. Some compilers (such as Vincent de Beauvais) choose a six-day format that mirrors the six-day genesis of the created world; others (such as Bartholomew) order the content from Creator to created, incorporeal to corporeal, reflecting cosmic hierarchy. Meier notes that individual works give the impression not of chaos or lack of form but of a closed and complete order: the variety of things of all kinds appears as abundance and perfection, so that the 'world book' again resembles the world itself; like the world, nobody can grasp it all, but they can recognise that there is an ordering principle at work. In addition, a 'world book' that describes creation implies the inverse notion that the world is a book that we can read. The main reason for compiling given throughout the life of the genre is the work's functional and moral *utilitas* in leading to knowledge of God. She deduces that the fundamental criteria for a medieval world book are that it should function as a library substitute, as a repository of knowledge and as a guide to salvation; compilers should use the technique of excerption and maintain a tight connection with tradition.<sup>37</sup> In these conclusions and criteria, Meier provides us with a way of thinking about the compilation genre and about Bartholomew's task of aspiring, first and foremost, towards moral and spiritual usefulness.

Questions about the genre opened up by such reappraisal have been the topic of a major colloquium in the past decade.<sup>38</sup> Papers focus upon the significance and function of the 'encyclopaedias' in the intellectual life of the Middle Ages; not only European compendia of knowledge, but also Arabic and Jewish. The papers cover 'Definitions and theoretical questions'; 'Organisation of knowledge'; 'Epistemology of encyclopaedic knowledge'; 'Cultural and political uses'; and 'Reception and transmission of texts'. In this last category, Juris Lidaka takes 'Properties' as a case-study, and provides a résumé of recent findings concerning the compiler in his social and political context. Lidaka draws conclusions from a study of features of the Paris book trade that help our understanding of the work's earliest exposure to a widening readership.<sup>39</sup> Christel Meier's paper published in the same volume summarises and clarifies, in English, her theory of the functions and purposes of the world-book genre and the concept of moral utility that underpins it.<sup>40</sup>

At the time of writing, the most concentrated research on the genre, and on 'Properties' in particular, is being carried out by an international team of researchers based at the Universities of Münster in Germany, Orléans in France and Louvain-la-Neuve in Belgium. This project includes the preparation of a new edition of 'Properties' in parallel text (Latin and French), which will treat the marginal glosses as an integral part of the text.<sup>41</sup> At the Catholic University of Louvain, a team of researchers is currently studying 'encyclopedias as images of the world and as vehicles of change in Islamic and western thought in the Middle Ages'.<sup>42</sup> This includes examinations by Godefroid de Callataÿ into intellectual exchanges between east and west; studies of the bestiary and animal iconography by Baudouin Van den Abeele, who is also a participant in the new edition of 'Properties' mentioned above; and particular attention on the part of Jérémy Loncke to 'Properties' as a significant representative of the genre.<sup>43</sup> These and other researchers have spoken on Bartholomew's work and on other aspects of the encyclopaedic genre at colloquia held in 2003 and 2005.

### Other corners of the field

It will be seen that European scholars have been interested in Bartholomew for a long time. But 'Properties' and its compiler are only one aspect of a much larger field of study that has been increasingly well-dug in recent decades: that is, the studies of what medieval texts can reveal about medieval 'science' — both as explanation of, and the practice of preserving knowledge about, the material world and its contents, predicated upon a belief in the world's purposeful creation by God. Meier's assessment of the major compilations as images of a world created and provided for by God, formulated as aids to salvation as well as learning, serve to validate this broader project. Any study, therefore, of medieval responses to 'Properties' must take into account seminal and ongoing researches into medieval concepts of knowledge and its moral utility; medieval literary theory; methods of codifying, organising and presenting knowledge in compilations of various kinds; and of the sources, content and forms of informational texts.

In particular, two related kinds of medieval compilation, each with its own manuscript tradition and its own specialist scholars, complement the discursive sources. One of these is the codification of medieval world history and Christian teaching represented in the works of art we know as *mappaemundi*, the development of which tends to parallel that of the world-book encyclopaedias. The other is the medieval body of received wisdom about 'things' made during the six days of Creation — animals, birds, fishes and plants — and their religious significance, embodied in the tradition of bestiary manuscripts dating from late antiquity to the fifteenth century. Recent studies in these areas, as well as this study of the reception of 'Properties', indicate that while there are obviously formal differences between maps, bestiaries and compilations such as 'Properties',

they can all be seen as clerical productions directed towards the goal of preserving religious knowledge and teaching Catholic doctrine. Indeed, Margriet Hoogvliet has argued that maps and encyclopaedias should be seen as complementary and the name *mappamundi* applied to both.<sup>44</sup> Similarly, the bestiary literature has proliferated in recent decades.<sup>45</sup> Scholars conclude that animals and birds could be significant in the Middle Ages as objects of practical interest encountered in real life; analogues of humanity; players in the important historical events recounted in the Christian Scriptures; and visible signs of the 'invisible things of God' that the preacher needed to expound. Writers therefore valued an authoritative source-book on the symbolic properties of creatures. In clerical and secular adaptations of the later Books of 'Properties', that is, those about birds, plants and animals, we find Bartholomew described as 'Master of kind' and even as 'Bartholomew the bestiary'. As later chapters will show, this study is therefore also indebted to modern exponents of the bestiary and of medieval animal symbolism.<sup>46</sup>

To conclude this survey of the long-accumulated literature on Bartholomew and his work, it should be pointed out that our compilation here is one example of a textual type within an increasingly explored area. The earlier literature on 'Properties' is an invaluable resource in that so much groundwork has been done as a basis for fresh research into the compiler, the manuscripts and the translations, and the place these occupied in late-medieval English life and letters. Twentieth-century research into the context in which the work appeared, and the excavation of related documents, has brought the compiler more clearly into focus. Research into the genre of the thirteenth-century *compilatio* as a tool of the militant Catholic church, and as part of a wider exchange of knowledge between east and west, has improved our understanding of the genre's context and function. However, in the present century, important ongoing research is being shared and published in languages other than English. The important studies of the English translation, the later-medieval ownership of manuscripts and the literary borrowings from Bartholomew help to contextualise the work within a widening English readership of the later Middle Ages. The size and scope of the work has so far prevented the appearance of a detailed reception history, but the present study offers a limited contribution to such a project by examining, in English, the work's transmission and diffusion in a significant area of its medieval and early-modern readership.

## NOTES

<sup>1</sup> Delisle, 1888, follows this clarification (p.352) with a description of Thomas de Cantimpré's *Liber de natura rerum*, also little-known at the time, and which he considered 'tout a fait digne d'être placé a coté du *De proprietatibus rerum*' (p.365); and with some 'opuscules' in manuscripts that seem to be related in character though fragmentary (pp.384–8). Delisle was regarded as the founder of the wealth and orderliness of the BN mss collection and his word carried weight: Blasselle, B. et J. Melet-Sanson, *La Bibliothèque Nationale, Mémoire de l'Avenir*, Paris: Gallimard, 1991, pp.67–8; Tesnière, M., *Creating*

*French Culture: Treasures from the Bibliotheque Nationale de France*, New Haven and London: Yale University Press, 1995, pp.xxxix–xl.

<sup>2</sup> Delisle, p.335; for the present study the ms of the *Moralizatae* (variously referred to in the literature as the *Liber moralizate*, *moralisate/ae*, *liber de moralitatibus* and henceforth referred to as LM) used is BNF Ms Lat. 3332.

<sup>3</sup> Matrod, p.478: 'sont tous nourris du *De Proprietatibus*'.

<sup>4</sup> Schönbach, A., "Des Bartholomeus Anglicus Beschreibung Deutschlands gegen 1240", *Mitteilungen des Instituts für Österreichische Geschichtsforschung* 17 (1906): 56–62; Voigt, 1910.

<sup>5</sup> Plassmann, T., "Bartholomaeus Anglicus", *Archivum franciscanum historicum* 12 (1919): 68–109. Perdrizet, P., "Barthélemy l'Anglais et son description de l'Angleterre", *Journal des savants* 7 (1909): 170–5; Matrod, H., "Roger Bacon et Fr. Barthélemy D'Angleterre", *Etudes franciscaines* XXVIII (1912): 468–83; Plassmann, T., "Bartholomaeus Anglicus", *Archivum franciscanum historicum* 12 (1919): 68–109.

<sup>6</sup> Steele, Robert, *Medieval Lore from Bartholomeus Anglicus*, London: De la More Press, 1893, reprinted 1905, p.2; Morris, William, Preface, in Steele, pp.xii–xiii.

<sup>7</sup> Se Boyar, p.169.

<sup>8</sup> Se Boyar, p.168.

<sup>9</sup> Brockhurst, 1952; Seymour acknowledges Brockhurst's role in English-language studies of 'Properties', with a quotation from Chaucer: 'evere she roode the foremoste of oure route' (Seymour, 1975–88, Dedication).

<sup>10</sup> Michaud-Quantin, p.107. His examples are the works of Neckam, Bartholomew and Cantimpré, and the *Compendium Philosophia*, all 'little' by comparison with the work of Vincent de Beauvais.

<sup>11</sup> It has not been questioned (to my knowledge) that there was a sole maker. The fact that there is a preface attached to early manuscripts of 'Properties', in which a *compiler* sets out his intentions concerning the work as a whole, has allowed scholars to assume that a single mind and hand composed the 19 Books (as Salimbene had implied in the 1280s: see Chapter 1, note 6, above).

<sup>12</sup> Seymour, 1975–88.

<sup>13</sup> These and other unpublished PhD and MA studies of 'Properties' of which I am aware are: Keen, E., *From Bartholomaeus to Batman: Four hundred years of the Properties of Things*, The Australian National University, 2002; Lidaka, Juris, *Bartholomaeus Anglicus' De Proprietatibus Rerum*, Book XIX, Chapters on Mathematics, Measures, and Music: A Critical Edition of the Latin Text in England, Northern Illinois University, 1988; Clinton, 1982; Hamilton, Ruth Elaine, *Of Fire and of Air: Notes and Commentary on Books 10 and 11 of John Trevisa's Translation of Bartholomaeus Anglicus' De Proprietatibus Rerum*, Northwestern University, 1982; Hutchison, Ann McCall, *An Edition of Book VI of John Trevisa's English Translation of De Proprietatibus Rerum by Bartholomaeus Anglicus*, University of Toronto, 1974; Wallis, F., *Structure and Philosophy in Mediaeval Encyclopaedias*, McGill University, Montreal, 1974; Brockhurst, 1952.

<sup>14</sup> Especially, Lawler, 1983; Waldron, Ronald, "John Trevisa and the use of English", *Proceedings of the British Academy* LXXIV (1988): 171–202; Waldron, Ronald, "Trevisa's 'Celtic complex' revisited", *Notes and Queries* 20 (1989): 303–7; Waldron, Ronald, "Trevisa's original prefaces on translation: a critical edition" in *Medieval English Studies Presented to George Kane*, edited by E. D. Kennedy, R. Waldron and J. S. Wittig, Woodbridge: D. S. Brewer, 1988.

<sup>15</sup> See Fowler, D. C., "John Trevisa and the English Bible", *Modern Philology* 58 (1960): 81–98; Fowler, D. C., "More about John Trevisa", *Modern Language Quarterly* 32 (1971): 243–51; Fowler, D. C., "New light on John Trevisa", *Traditio* 18 (1963): 289–317; and Fowler, D. C., *The Life and Times of John Trevisa, Scholar*, University of Washington Press, 1995; Hudson, Anne, *Lollards and their Books*, The Hambledon Press, 1985, p.199, concludes that Trevisa's expressions on temporal power 'remain within the bounds of orthodoxy'.

<sup>16</sup> Invaluable studies of this context include Bennett, Michael J., "The court of Richard II and the promotion of literature" in *Chaucer's England: Literature in Historical Context*, edited by Barbara J. Hanawalt, 3–20. Minneapolis: University of Minnesota Press, 1992; Byrne, Donal, "Rex imago Dei: Charles V of France and the Livre des propriétés des choses", *Journal of Medieval History* 7 (1981): 97–113; Green, Richard Firth, *Poets and Princepleasers: Literature and the English Court in the Late Middle Ages*: University of Toronto Press, 1980; Scattergood, V. J., "Literary culture at the court of Richard II" in *English Court Culture in the Late Middle Ages*, edited by V. J. Scattergood and J. W. Sherborne, 29–43. London: Duckworth, 1983; Salvat, Michel, "Science et pouvoir à Mantoue et à Paris au XIVe siècle" in *L'Encyclopédisme. Actes du Colloque de Caen 12–16 janvier 1987*, edited by Annie Becq, 389–94. Paris: Éditions Aux Amateurs de Livres, 1991.

- <sup>17</sup> Seymour, 1974, "English owners"; Seymour, M. C., "Some medieval French readers of De Proprietatibus Rerum", *Scriptorium* XXVII (1974): 100–2.
- <sup>18</sup> Edwards, A. S. G., "Bartholomeus Anglicus, De Proprietatibus Rerum and medieval English literature", *Archiv* 222 (1985): 121–8.
- <sup>19</sup> Collison, pp.54–63.
- <sup>20</sup> Humphreys, K. W., *The Book Provisions of the Medieval Friars 1215–1400*, Amsterdam: Erasmus, 1964, p.114.
- <sup>21</sup> Wells, James M., *The Circle of Knowledge: Encyclopedias Past and Present*, Chicago: The Newberry Library, 1968.
- <sup>22</sup> Kaske, Groos and Twomey (eds), p.xvii.
- <sup>23</sup> Twomey, 1988, pp.182–215.
- <sup>24</sup> Louis, Sylvain, "Le projet encyclopédique de Barthélemy l'Anglais" in Becq, ed, pp.147–51.
- <sup>25</sup> De Boüard, Michel, "Réflexions sur l'encyclopédisme médiéval" in *L'Encyclopédisme. Actes du Colloque de Caen 12–16 janvier 1987*, edited by Annie Becq, 281–290. Paris: Klincksieck, 1991, p. 284: 'dans la seconde moitié du XIIe siècle, les esprits étaient murs pour accueillir la 'philosophie naturelle' d'Aristote et de ses commentateurs arabes ... Le véritable "décollage" des sciences ne se manifesterait cependant que dans le troisième quart du XIIIe siècle.'
- <sup>26</sup> For example, Brockhurst, 1952, pp.33–4, finds many 'faults of arrangement' and undue repetition; Long, 1979, pp.9–12, finds 'errors of fact' and lack of synthesis; Seymour, 1992, p.147, finds Bartholomew's treatment of some items 'unbalanced and disappointing'.
- <sup>27</sup> Thorndike, Lynn, *Science and thought in the fifteenth century*: Columbia University Press, 1929, p.12.
- <sup>28</sup> Raven, Charles E., *English Naturalists from Neckam to Ray*: Cambridge University Press, 1947.
- <sup>29</sup> Grant, E., *Physical Science in the Middle Ages*, New York: John Wiley, 1971, p.13.
- <sup>30</sup> Greetham, D. C., "On Cultural Translation: From Patristic Repository to Shakespeare's Encyclopedia" in *Voices in Translation: The Authority of "Olde Bookes" in Medieval Literature: Essays in Honor of Helaine Newstead*, edited by Deborah M. Sinnreich-Levi and Gale Sigal, 69–84. New York: A. M. S. Press, 1992.
- <sup>31</sup> Lindberg, David, "Medieval science and its religious context", *Osiris* (1995), p.66.
- <sup>32</sup> A. J. Minnis discusses the development of literary theories and methods during the thirteenth and fourteenth centuries in the context of demand for effective guides to the art of preaching and teaching: Minnis, A. J., *Medieval Theory of Authorship*, Aldershot: Wildwood House, 1984, pp.160–3.
- <sup>33</sup> French and Cunningham, "About this book", front flyleaf.
- <sup>34</sup> Meier, 1984, p.470; Meier, Christel, "Organisation of knowledge and encyclopaedic *ordo*: Functions and purposes of a universal literary genre" in *Pre-Modern Encyclopaedic Texts. Proceedings of the Second COMERS Congress, Groningen, 1–4 July 1996*, edited by Peter Binkley, 103–26, Leiden New York Cologne: Brill, 1997: Meier considers about 20 compilations plus their translations and revisions, including those by Hrabanus Maurus, Isidore of Seville, Honorius of Autun, Thomas de Cantimpré, Bartholomew the Englishman, Vincent de Beauvais, Brunetto Latini and Gossuin de Metz.
- <sup>35</sup> Meyer, Heinz, "Bartholomäus Anglicus, De proprietatibus rerum: Selbstverständnis und Rezeption", *Zeitschrift für deutsches Altertum und deutsche Literatur* 117 (1988): 237–74; Meyer, 1990, p.313.
- <sup>36</sup> Parkes, 1991, pp.52–60; Minnis, A. J., A. B. Scott and D. Wallace, *Medieval Literary Theory and Criticism, c.1100–c.1375: the Commentary Tradition*: Oxford University Press, 1988.
- <sup>37</sup> Meier, 1984, p.470; for her argument in English see Meier, 1997; also Parkes, M. B., "The influence of the concepts of *ordinatio* and *compilatio* on the development of the book" in *Scribes, Scripts, and Readers: Studies in the Communication, Presentation, and Dissemination of Medieval Texts*, 35–69. London: Hambleton Press, 1991. See pp.52–4 on the concept of *ordinatio*; pp.58–60 on *compilatio* as a sophisticated scholarly tool in the thirteenth century; p.58 on Bonaventure's distinction between the *compilator*, *auctor*, *commentator* and *scriptor*. There were well-understood conventions to be observed by the *compilator*, including the stated aim of *utilitas*, the modest disclaiming of authorship, the appeal for correction or improvement, and the commending of his sources as superior authorities.
- <sup>38</sup> Binkley, Peter, ed, *Pre-Modern Encyclopaedic Texts. Proceedings of the Second COMERS Congress, Groningen, 1–4 July 1996*, 103–26, Leiden New York Cologne: Brill, 1997.
- <sup>39</sup> Lidaka, 1997.
- <sup>40</sup> Meier, 1997. See also Ribémont, B., "On the definition of an encyclopaedic genre in the Middle Ages", in Binkley, ed, pp.47–61.
- <sup>41</sup> Van den Abeele, Meyer et Ribémont, 1999.

<sup>42</sup> <<http://cyclopes.fltr.ucl.ac.be/recherches/index.htm>>, *Encyclopédies comme images du monde et comme vecteurs d'échanges intellectuels dans l'Islam et l'Occident au Moyen Age*, Projet F. S. R. de l'Université catholique de Louvain, Belgium, 2006.

<sup>43</sup> *Le discours encyclopédique arabe et latin au Moyen Age: L'incorporation des saviors étrangers*, Louvain-la-Neuve, 14–15 novembre 2003; *Une lumière venue d'ailleurs: Héritages et ouvertures dans les encyclopédies d'Orient et d'Occident au Moyen Age*, Louvain-la-Neuve, 19–21 mai 2005; see <<http://cyclopes.fltr.ucl.ac.be/colloques>>.

<sup>44</sup> Hoogvliet, Margriet, "Mappae Mundi and Medieval Encyclopaedias: Image versus Text", in Binkley, ed, 63–74, pp.63–4; David Woodward and also Evelyn Edson examine the evidence for their didactic and symbolic functions: Woodward, David, "Medieval mappamundi" in *Cartography in Prehistoric, Ancient and Medieval Europe and the Mediterranean*, edited by J. B. Harley and David Woodward, 286–370, Chicago and London: The University of Chicago Press, 1987, pp.287, 304; Woodward, David, "Reality, Symbolism, Time, and Space in Medieval World Maps", *Annals of the Association of American Geographers* 75 (1985): 510–21; Edson, Evelyn, *Mapping Time and Space: How Medieval Mapmakers Viewed Their World*, London: The British Library, 1997, pp.145–90; studies of the Hereford map elucidate in detail the relation of function to form and content in a particularly rich example: Harvey, P. D. A., ed, *The Hereford World Map: Medieval World Maps and their Context*; Westrem, Scott. D., *The Hereford Map*, Turnhout: Brepols, 2001. The essential descriptive catalogue and index to known maps is Déstombes, Marcel, ed. *Mappemondes AD 1200–1500*, Amsterdam: N. Israel, 1964.

<sup>45</sup> M. R. James (*The Bestiary*: Oxford University Press, 1928) drew attention to the genre in the pre-war period; Florence McCulloch (*Medieval Latin and French Bestiaries*, University of North Carolina Press, 1960), and later Willene B. Clark and Meradith McMunn (*Birds and Beasts in the Middle Ages: The Bestiary and its Legacy*. Philadelphia: University of Pennsylvania Press, 1989) elucidated their content and examined the teaching function of aviaries and bestiaries. Meanwhile, Francis Klingender (*Animals in Art and Thought to the End of the Middle Ages*, London: Routledge and Kegan Paul, 1971) produced a comprehensive, illustrated survey of evidence for the ubiquity and importance of animals and birds in medieval religion and art. See also Houwen, L., "Animal parallelism in medieval literature and the bestiaries: a preliminary investigation", *Neophilologus* 78 (1994), 483–96; Clark, Willene B., "The illustrated medieval aviary and the lay-brotherhood", *Gesta* XXI (1982): 63–74. Recently, Debra Hassig (Hassig, Debra, ed, *The Mark of the Beast*, London and New York: Routledge, 1999; and *Medieval Bestiaries: Text, Image, Ideology*: Cambridge University Press, 1995) has clarified the interplay between text and images in English bestiaries, and the way they can give us insights into social as well as spiritual concerns.

<sup>46</sup> Bestiary manuscripts typically include a frontispiece depicting Adam naming the beasts, a scene from apocryphal history which implicitly places the ensuing list of creatures in a broader narrative framework; that of creation and prelapsarian paradise: see Klingender, p.28. From this point of view, the encyclopaedic texts subsume the bestiary as the Genesis account of creation subsumes what God made on each of the six days: Keen, E., 'Separate or Together? Questioning the relationship between the encyclopedia and bestiary traditions', *Journal of the Australian Early Medieval Association*, vol.2 (2006) pp. 121–39.