

Medical Recipes from the Yorkist Court

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One of the frustrations of studying medieval medical recipes is that while we have multitudes of recipes recorded in medical treatises of the period, we often have no way of knowing which, if any, of the recipes in these texts were not only recommended, but actually used in the treatment of patients. When a manuscript provides evidence of prescriptions given to identifiable patients, therefore, it is of considerable interest. Attention was recently drawn by Peter Murray Jones to three such manuscripts from the fifteenth century, one of which was in use at the courts of Edward IV and Richard III.¹ The manuscript in question, British Library Harley MS 1628, is a collection of medical texts and glossaries suitable for use by an apothecary. However, what makes this manuscript particularly interesting is not its main texts but the prescriptions which have been added to blank leaves and margins throughout, many of which are for named individuals. Over forty patients are named in the manuscript, and most of these can be identified as having a connection with the court of Edward IV.² Some of these names are familiar, for example Lady Richmond (f. 2r), and Thomas Rotherham Bishop of Lincoln (f. 31r), while others are less so, for example John Stanford (f. 153v). There are also a number of recipes for the king. Some of these are simply labelled 'for the king', others 'for King Edward' (f. 155r) or 'for King Edward IV' (f. 154v).³ In addition to these Peter Murray Jones identifies the Richard named in two recipes on folio 24r with King Richard III.⁴ The manuscript was still in use in Richard III's reign, as indicated by a dated prescription 'Electuary for Lady Denham 31 July 1483' (f. 3v), and possibly into Henry VII's reign as indicated by a prescription for Thomas Grayson on folio 157v dated 1489, although this date is barely legible.⁵ A recipe for the duke of Clarence (f. 96v) indicates that the manuscript was in use before his death in 1478. Occasionally recipes are attributed to a named physician, some

¹ Peter Murray Jones, 'Witnesses to medieval medical practice in the Harley Collection' *electronic British Library Journal* 2008, Article 8.

² See Jones, 'Witnesses', pp. 10-13 for full list.

³ Here and throughout I have translated the Latin of the manuscript.

⁴ Jones, 'Witnesses', p. 7.

⁵ Lady Denham was the wife of John Denham of Denham, who is also given two prescriptions in the manuscript, on ff. 64v and 78r. John Denham appeared on various commissions for both Edward IV and Richard III. In 1478 he was granted £100 yearly from various manors 'in recompense of his having been compelled by George, late duke of Clarence, to pay to the latter divers great sums of money' (*CPR 1476-1485*, p. 137). Thomas Grayson was a yeoman of the king's chamber under Edward IV, and received a grant of land in Cornwall from Richard III in March 1484 'for his good service against the rebels', *CPR 1476-1485* pp. 97, 415).

of whom were contemporary physicians connected with the court; for example William Hattecliffe, who before his death in 1480 had been physician to both Henry VI and Edward IV, and James Frise, who was first employed by Edward IV in 1461 and remained in his service throughout his reign, continuing in favour under Richard III but leaving royal employment on the accession of Henry VII.⁶

The principal royal apothecary for the whole of Edward IV's reign was John Clerk, who was appointed in 1462 and died early in March 1484.⁷ It is tempting to suggest him as a possible owner of Harley 1628, if only because 'the owner of this manuscript would have moved in just the same court circles'.⁸ The possibility of a connection between John Clerk and the manuscript is strengthened by the appearance of two of the named patients from Harley 1628 in his will.⁹ The first of these, Thomas Bledlow, had appointed John Clerk as his executor and also left him a bequest: 'Item I biqueth to John Clerke grocer the kynges Apotecary v marks praying him to be friendly unto my wife and my children as my special and singular trust is in hym'.¹⁰ In view of this close connection it is interesting that Bledlow appears in Harley 1628 with one of only three personal references in the manuscript 'for Thomas Bledlow and for me myself'.¹¹ The other person named in both Clerk's will and Harley 1628 is Nicholas Lathell, who appears on folio 78v of the manuscript, and to whom Clerk left £3 6s 8d.¹² While there is no definite proof that John Clerk owned Harley 1628, it appears at least very likely that he was

⁶ For details of William Hattecliffe see C.H. Talbot and E.A. Hammond, *Medical Practitioners in Medieval England, a Biographical Register*, London 1965, pp. 398-99, where this manuscript is incorrectly cited as BL MS Harley 168. For James Frise see Talbot and Hammond, *Practitioners*, pp. 96-98. Prescriptions for Edward IV attributed to William Hattecliffe exist in other manuscripts, for which see Peter Murray Jones 'The Tabula Medicine: an evolving encyclopaedia', *English Manuscript Studies*, vol. 14 (2008), pp. 60-85, on p. 74, and Linda Ehrsam Voigts, 'A doctor and his books: the manuscripts of Roger Marchall (d.1477)', *New Science Out of Old Books. Studies in Manuscripts and Early Printed Books in Honour of A.I. Doyle*, Richard Beadle and A. J. Piper, eds., Aldershot 1995, pp. 248-314, on p. 277. I am indebted to Anne Sutton for drawing my attention to Linda Voigts' paper.

⁷ For Clerk's appointment as royal apothecary, see *CPR 1461-67* p. 122.

⁸ Jones, 'Witnesses', p. 7.

⁹ Lesley Boatwright, Moira Habberjam, and Peter Hammond (eds.) *The Logge Register of PCC Wills, 1479-1486*, Richard III Society, London 2008, will no. 80, pp. 274-76.

¹⁰ Public Record Office, PROB/11/6, ff. 260r-262v, esp. f. 260.

¹¹ Jones, 'Witnesses', p. 7, BL MS Harley 1628 f. 154r. The other two personal references are 'dragetum ffor my maystres' on f. 2r and a recipe for a lohoc 'of my own invention' on f. 61v.

¹² Boatwright et al, *Logge*, p. 276. I read the name Lathell in BL MS Harley 1628 where Peter Murray Jones reads 'bathel' ('Witnesses', p. 11). Lathell was in the Exchequer under Edward IV, was clerk of the pipe there under Richard III, and rose to be third baron of the Exchequer under Henry VII: *CPR 1461-1467* p. 55, *CPR 1477-1485* p. 406, *CPR 1485-1492* pp. 98, 258. Nicholas Lathell also received a legacy in Thomas Bledlow's will, PROB/11/6, f. 260r.

its owner.¹³

The additional recipes in the manuscript vary considerably in the amount of detail they give, from the most basic, mere lists of ingredients and weights with no instructions at all, through those with minimal instructions for making up (for example the instructions for making *Aqua Temporata* (f. 23v), 'distil the water in the same way as rosewater') to some giving detailed, clear instructions for preparation, such as the fourteen lines given to describe making ceruse of roots (f. 34v). In a similar way, the prescriptions for named individuals vary. Some are positively terse, 'ypocras for the lady, mother of the king, duchess of York. Take of cinnamon five ounces' (f. 98r), while others are very detailed, for example the recipe for *theriac diacasseron* prescribed by James Friis for Edward IV (f. 29r), which gives a list of ingredients with full instructions for preparing the medicine.¹⁴ It is tempting to see the briefer entries, such as that for the duchess of York quoted above, as being a record for accounting purposes, indicating who was to pay for a particular substance supplied. If this were the case, it might explain why some entries are not only for named patients but for patients belonging to a particular retinue or a named place, for example 'Henry Brynkell dwellyng wt the chanceler of lyncolln' (f. 24v), 'for Master Martyn Joyner of aderbery' (f. 24v), or 'for Mr William Walker person of Radmyll and Ardyngle in Sussex' (f. 24r).¹⁵ Edward IV's household ordinances state that payment for medicines was to be given to the royal apothecary subject to verification by the physician.¹⁶ Perhaps some of the briefer marginal notes provided a record that could be produced if necessary should there be a query whether a particular medicine was ordered.

It is commonly recommended in medieval medical treatises that more expensive ingredients should be used for rich or noble patients, and omitted for those less able to pay.¹⁷ It is no surprise, therefore, to find in this manuscript, with its royal connections, two recipes for an electuary made of gemstones (ff. 24r, 25r).¹⁸ Other recipes in the manuscript contain expensive substances; for example,

¹³ The prescription dated 1489 would show that the manuscript continued in use after Clerk's death, though not necessarily at court at this date.

¹⁴ Quoted in full in Jones, 'Witnesses', p. 7.

¹⁵ William Walker was a fellow of All Souls' College, Oxford, in 1462. He became rector of Rodmell, Sussex, in 1477, and after receiving, in April 1477, a papal dispensation to hold an additional incompatible benefice, he became rector of Ardingley, Sussex, in May 1478, see A.B. Emden, *A Biographical Register of the University of Oxford to AD 1500*, 3 vols, Oxford 1957-59, vol. 3, p. 1964.

¹⁶ See Leslie G. Matthews *The Royal Apothecaries*, London 1967, p. 54.

¹⁷ For an interesting discussion of 'nobility' in medicines, see Peter Murray Jones 'Herbs and the medieval surgeon', *Health and Healing from the Medieval Garden*, Peter Dendle and Alain Touwaide, eds., Woodbridge 2008, pp. 162-79, on p. 168.

¹⁸ An electuary is a medicine in the form of a paste, usually sweetened with sugar or honey.

a plague medicine on folio 2r contains pearls and coral, and a long recipe for the duchess of Burgundy on folio 29v (probably dating from her visit to her brother's court in the summer of 1480) contains, as well as herbs and spices, emeralds, sapphires, and other gems, coral, pearls, gold and silver. However, these substances do not appear only in recipes for the king and his family; the third recipe for Mr Thomas Wylkynson on folio 32v contains sapphires, emeralds, pearls and gold. Moreover, some of the recipes prescribed for royal patients are simple enough to have been supplied to patients of any social class; several of the recipes for the king, for example that on folio 22v, are entirely or predominantly herbal. The gemstones were not, we may deduce, being added willy-nilly to every recipe simply for the sake of charging a rich patient more money. That might in any case be quite a risk for the apothecary to take, as patients were notoriously likely to forget, on being cured, that they still owed money for the treatment prescribed to them when they were ill. Edward IV occasionally spent a great deal on medicines. John Clerk's charges for medicines supplied to the king 'more than doubled between 1462 (£41) and 1464 (£87)'.¹⁹

In the marginal recipes we are not always told for what illness the patient is receiving the treatment, nor are we always told what form the medicine is to take. Sometimes, however, it is possible to work this out from the contents of the recipe, as in the following example: 'For the Lord Gloucester. Take betony, bugle, sanicle, plantain, stitchwort, pimpernel, of each 2 pounds, of wax 4 pounds, resin, perosin, of each 2 pounds, turpentine, 1 pound' (f. 156r). In this case the inclusion of wax suggests that the result would be in the form of an ointment (actually, as the measurements indicate, it would make rather a lot of ointment!). We are not told here for what illness this ointment has been prescribed. These particular herbs, however, are all recommended in medieval herbals as wound treatments, and indeed for most of them wounds are either the only thing for which they are recommended, or the only thing for which they are recommended as an external application such as the ointment here.²⁰ It seems likely, therefore, that this prescription is for a wound treatment, and indeed a recipe very similar to this is frequently recommended in BL MS Harley 1736, a treatise on surgery dating from the mid-fifteenth century, where stitchwort, sanicle, pimpernel, and betony, among

¹⁹ Carole Rawcliffe, 'Consultants, careerists and conspirators: royal doctors in the time of Richard III' *The Ricardian*, vol. 8, (1988-90), pp. 250-58, on p. 251.

²⁰ The herbals used for reference were *A Middle English translation of Macer Floridus de Viribus Herbarum*, ed Gosta Frisk, *Essays and Studies on English Language and Literature*, vol. 3, Uppsala 1949, and *Agnus Castus, a Middle English herbal*, ed G. Brodin, *Essays and Studies on English Language and Literature*, vol. 6, Uppsala 1950. Tony Hunt, *Plant Names of Medieval England*, Cambridge 1989, was used to identify the herbs in the recipe. The only identification which is very tentative is sanicle, which is one of many possible translations of the Latin name *apium* in the recipe, but which I have selected on the basis of similar recipes in other manuscripts, such as that quoted below.

other herbs, are mixed with a variety of fats, resins, wine and wax to produce a 'precies oynment for consowndynge and gendrynge of flesche' in wounds, which is called 'unguentum viride'.²¹ It is tempting, in view of the large quantity of ointment which this recipe would make, to associate it with the medicines Clerk was instructed to supply to the duke of Gloucester before the Scottish campaign of 1482.²²

Five of the marginal recipes in Harley 1628 are stated to be for the plague, and Peter Murray Jones has drawn attention to these as a witness of the fear of epidemic disease.²³ However, these are not the only prescriptions within the manuscript that can be identified as plague remedies. The 'plaster of Emanuel Maior' for example, for which a recipe is given on folio 23v, is also found in the treatise on plague by John of Burgundy, which was widely copied in the fifteenth century.²⁴ In John of Burgundy's treatise it is also suggested that people protect themselves against the plague by burning aromatic substances: 'put four live coals in an earthenware vessel and sprinkle a little of the following powder on them and inhale the smoke through mouth and nostrils before going to sleep. Take white frankincense, labdanum, storax, calaminth, and wood of aloes, and grind them to a very fine powder. And do this as often as a foetid or bad odour can be detected in the air' and by carrying in the hand 'a ball of ambergris or other suitable aromatic'.²⁵ Harley 1628 contains no less than six recipes for *pomum ambre*, just such a ball of aromatic substances, on folios 14v, 35v, 155r, and 158r. That on folio 35v is identified as being for the king. Two other recipes for the king on folio 35v are for 'fumigations', and are related in their ingredients to those recommended by John of Burgundy: one of them includes labdanum, storax, olibanum, aloes wood, ambergris, musk, camphor, and rose water, for example. It seems likely, therefore, that the recipes for the king on folio 35v represent a series of prescriptions for protection against the plague. Other recipes for the king which may have been prescribed as preventatives against the plague are the fumigations on folios 68r and 156r, and *aqua imperiale* on folio 154v. A similar recipe for *aqua imperiale* appears in another fifteenth century recipe collection, where it is stated to be 'a preciose water for all maner of poison and namely for pestilence for as philosophers seyn it is impossibull that any man shuld dey of poison and of pestilence who so usith

²¹ BL MS Harley 1736, f. 40a. For Harley 1736 see S.J. Lang, 'John Bradmore and his book *Philomena*', *Social History of Medicine*, vol. 5 (1992), pp. 121-130, and S.J. Lang, 'The *Philomena* of John Bradmore and its Middle English Derivative: a Perspective on Surgery in Late Medieval England', unpublished PhD thesis, University of St. Andrews 1998.

²² For the medicines supplied to this campaign see F. Devon, ed., *Issues of the Exchequer Henry III to Henry VI, from the Pell Records*, London 1837, pp. 503-4.

²³ Jones, 'Witnesses', p. 7.

²⁴ For John of Burgundy's plague treatise see Rosemary Horrox, *The Black Death*, Manchester 1994, pp. 184-193.

²⁵ Horrox, *Black Death*, p. 187.

to drynk of that water ...'.²⁶ In view of these prescriptions it is interesting to note that John Clerk supplied Edward IV with £10 worth of medicines for protection against the plague in 1471, a bad plague year.²⁷

Harley 1628 contains thirteen headings 'for the king', or 'for King Edward', and some of these headings apply not just to one recipe but to a series of recipes, perhaps prescribed at the same time, for example three recipes on folio 23r and six on folio 78v. The recipes prescribed for the king include one 'julep', three 'nectars', five distilled waters, three 'electuaries', four 'fumigations', one '*pomum ambre*', one 'clyster' and two other medicines. Only once is there any indication as to why the medicine was being prescribed; *theriac diacasseron* on folio 29r, mentioned above, is prescribed 'against venoms', which could include the venom of pestilential diseases as well as actual poison. However, as in the case of the plague remedies discussed above, comparison with recipes in other medical books of the period can allow informed guesses to be made as to what was troubling the king when a particular recipe was prescribed. Take for instance the 'clyster' (enema), the third recipe on folio 78v. A clyster could be prescribed for many ailments in the fifteenth century, principally because it was considered a less violent means of purging the body of superfluous humours than giving a purgative by mouth.²⁸ However, some unusual ingredients of this clyster give a clue as to its use. The clyster was to consist of three sorts of mirobolans (a type of fruit), anise, acanthus, fennel, mallow, hollyhock, rue, centaury and lovage, boiled in chicken broth and then blended with *treffere cerasenica*, salt, an electuary of blessed thistle, and the oils of chamomile, violets, anise and rue, with honey, egg yolk, and butter.²⁹ We know from John Arderne's fourteenth century 'Treatise on Clysters' that mirobolans, herbs (including some of those mentioned in the recipe above) salt, honey, butter and oil were common ingredients of clysters.³⁰ The more unusual ingredients in our recipe would be the chicken broth and egg yolk. However, Arderne suggests that in sicknesses where the patient is unable to take much food, as for example in chronic or acute fevers,

²⁶ Warren R. Dawson, *A Leechbook or Collection of Medical Recipes of the Fifteenth Century*, London 1934, pp. 299-300.

²⁷ J.F.D. Shrewsbury, *A History of the Bubonic Plague in the British Isles*, Cambridge 1970, p. 147, R.S. Gottfried, *Epidemic Disease in Fifteenth Century England: the Medical Response and its Demographic Consequence*, Leicester 1978, pp. 44, 49. For the payment to John Clerk, Devon, *Issues of the Exchequer*, p. 493, Rawcliffe, 'Consultants, careerists, and conspirators', p. 257, Matthews, *Royal Apothecaries*, p. 51.

²⁸ See Peter Murray Jones, *Medieval Medical Miniatures*, London 1984, p. 127, or his new edition *Medieval Medical Miniatures in Illuminated Manuscripts*, London 1988, p. 100.

²⁹ For mirabolans see Faye Marie Getz, ed., *Healing and Society in Medieval England*, Wisconsin 1991, p. 342, where the different types are identified. *Treffere cerasenica* was a cleansing medicine, see Getz, *Healing and Society*, p. 358. The herbal ingredients were identified with the aid of Hunt, *Plant Names*.

³⁰ John Arderne, *Treatises of Fistula in Ano, Haemorrhoids, and Clysters*, ed D'Arcy Power, London 1910, pp. 74-78.

the patient may be given nourishment 'by a clystrye of any norischyng liquore, as of any potage or mylke of almandez or sich other.³¹ It may be, therefore, that this clyster with its nourishing chicken broth and egg yolk was used to treat the king during an illness, possibly a fever, which caused loss of appetite. It is possible that the other recipes on folio 78v represent a series of prescriptions for treatment of the same condition, though there is little possibility of identifying what exactly that condition was.

Sometimes, as in the case of the plague remedies discussed above, it is possible to compare prescriptions in Harley 1628 with recipes recommended in other contemporary medical or surgical works. The medicine prescribed for John Fitzherbert on folio 24v is one such case.³² John Fitzherbert was treated for weeping eyes with a combination of recipes; a preparation of herbs and other substances boiled together and strained, which was presumably used to wash the eyes (although this is not stated), and pills to take, the latter following a recipe attributed to William Hattecliffe. The instructions for making the water specify that the mixture is to be strained through a doubled cloth, presumably to ensure that not even fine particles remained which might irritate the eyes. The pills may have been intended to purge the head of whatever superfluity was considered to be the internal cause of the problem. They contain, among other ingredients, colocynth pulp, which is a dangerous purgative.³³ This is also recommended in pills for weeping eyes by London surgeon John Bradmore (d. 1412) in his surgical treatise *Philomena*.³⁴ The water prescribed for John Fitzherbert also contains substances recommended by Bradmore for weeping eyes: tuthie, haematite, and roses, all used here for John Fitzherbert, also appear in recipes in *Philomena* for the treatment of this condition.³⁵ A relationship can thus be seen between the treatments offered to Fitzherbert and those recommended in other texts, although the recipes are not exact duplicates. In this way we can see that the medical and surgical treatises of the period were of practical use to those prescribing medicines, with the same or broadly the same treatments being used by the physician prescribing, or the apothecary providing, the medicines used in Harley 1628, and the authors of near-contemporary treatises such as Bradmore's *Philomena* or John of Burgundy's work on the plague.

³¹ Arderne, *Treatises*, p. 78.

³² John Fitzherbert progressed from being 'one of the tellers of the Exchequer' in 1474 (*CPR* 1476-77, p. 458) to the office of remembrancer in the Exchequer in 1480 (*CPR* 1477-85, p. 202), in which position he was confirmed by Richard III in April 1485 (*CPR* 1477-85, p. 534) and by Henry VII in September 1485 (*CPR* 1485-92, p. 7).

³³ *Citrillus colocynthis*, bitter apple or colocynth.

³⁴ BL MS Sloane 2272, ff. 241v and 245r, for which see Lang, 'John Bradmore', and Lang, 'The *Philomena* of John Bradmore'.

³⁵ BL MS Sloane 2272, f. 245v.

Not all the recipes in Harley 1628 are 'medical' as we would use the term today. Folios 34v-35r of the manuscript contain a series of recipes for cosmetics. This is not particularly unusual; medical manuscripts containing sections on cosmetics include the surgical texts of Theodoric and Guy de Chauliac, among others.³⁶ The recipes on folios 34v-35r differ from most of the recipes in the manuscript, however, not only in being for cosmetics, but also in that they are written entirely in English. The name 'Monsenior hary dewke de bokyngham' appears above the recipes, and in the same handwriting, but his connection with them is not made clear. Whether they were supplied for him, in the way that the other recipes in the manuscript were supplied for their named patients, or whether the recipes were supplied by the duke of Buckingham to the owner of the manuscript, there is now no way of knowing, though the detailed nature of the recipes makes the latter seem more likely. The recipes on folio 34v are for ceruse, that is, a substance used to whiten the skin. Instructions are given for 'divers cerusis', one made of wheat or barley flour, one from charlock roots, with a note to say that the same method can be used for other roots such as lily, wild vine, lovage, and others, and that ceruse of lead can be prepared in the same way 'to be used in medicines for the clarifying of the skynne'. On folio 35r a recipe for one such clarifier is given, which uses among other ingredients ceruse of lead and ceruse of roots prepared following the instructions given on folio 34v. The recipes are given in considerable detail, with good instructions for every stage of the procedure, and even for how the resulting starchy substance is to be stored: 'in a close box of tre' (i.e. in a wooden box with a well-fitting lid), 'in a fayr glass suerly stopped', 'in a close boxe of tynne'. The clarity of the instructions is increased by a number of comparisons to everyday methods and objects: a powder is to be made 'with a molire on a marbill stone as ye grynde colowres' (i.e. as a painter prepares his pigments with a muller), and the ceruse of roots is to be made into 'litill smale pelettes as grete as a hasill note'. The inclusion of such comparisons is typical of Middle English recipes in other collections, for example the Middle English versions of the works of Gilbertus Anglicus and John Bradmore.³⁷ It is clear from the instructions on folio 35r that these substances are not to be used as face paints but are to be left on the face overnight and 'on the morrow take the water of strawberry levys wilde tansy bene flowris and rosis and warme them and wete a sponge or ells a softe lynne clothe

³⁶ For Theodoric (13th Century) see Eldridge Campbell and James Colton, *The Surgery of Theodoric*, vol. 2 (books III and IV), New York 1960, where treatments for whitening the skin appear on pp. 162-66. For Guy de Chauliac I have used the Middle English version, Margaret S. Ogden, ed., *The Cyrurgie of Guy de Chauliac*, Oxford 1971, where cosmetic recipes appear on pp. 427 and 431-32.

³⁷ For the use of such comparisons in the Middle English version of Gilbertus Anglicus see Getz, *Healing and Society*, p. xlvii, and for their increased use in the Middle English version of Bradmore see Lang, 'The *Philomena* of John Bradmore', pp. 119-120.

therin and wasshe softly the face'. In other words these are not make-up as such, but rather a cosmetic treatment for the skin. Another suggestion on folio 35r for whitening the skin is to anoint the face at night with the blood of a hen or a hare, laid on hot and left until morning before washing off. Both the desire for a white skin and this method of obtaining it lasted well into the seventeenth century, when ladies used to wash their hands after a hunt in the blood of the deer, in order to make them white.³⁸

The marginal additions to BL MS Harley 1628 therefore bear witness to more than one aspect of fifteenth century life, containing prescriptions for treatments varying from whitening the skin to preventing the plague, taking in frenzy and weeping eyes along the way. The patients who are treated include both men and women, from (literally) the highest in the land to the relatively humble, from the king, the duke of Buckingham, and the lord chancellor, to the parson of Ardingley and 'a man Okyngam'. What is more, the prescriptions also confirm the utility of other contemporary treatises by their recommendation of similar substances for similar ailments. The manuscript stands, as stated by Peter Murray Jones in his paper drawing attention to it, as one of the 'key witnesses to medical practice in late medieval England'.³⁹

³⁸ See Keith Thomas, *Man and the Natural World*, London 1983, p. 29.

³⁹ Jones, 'Witnesses', p. 2.