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Article

Medieval Trees

Tom White

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THE PRESENCE OF AN ESSAY ON PREMODERN CULTURE in a collection organised around the term ecology will, in itself, strike some readers as odd. How might medieval iconographic traditions, or philosophical and literary works, products of a world very different to our own, relate to our current ecological concerns?[1] Or worse, might ecomedievalism amount to little more than a nostalgia for the simpler life of agriculture and animal husbandry pedalled by popular representations of the medieval past? In her response essay to the recent special issue of the journal *Postmedieval*, Jane Bennett describes that issue's topic, ecomaterialism, as 'an attempt to re-describe human experience so as to uncover more of the activity and power of a variety of nonhuman players amidst and within us'.[2] It is through a similar project of redescription that I aim to suggest ways in which medieval cultural forms might productively obtrude on modern ways of thinking about the world and its variegated inhabitants. In particular, and as Bennett recognises, the medieval period offers numerous ways to think anew about how humans 'share the world with a wider range of actants than the matter/life or inorganic/organic divide acknowledge'.[3] The issue of *Postmedieval* in which Bennett's comments appear organised its essays on ecomaterialism around eight elements: the four traditional components of elemental theory (earth, water, air, and fire), as well as road, glacier, cloud, and abyss. My own approach is slightly different; rather than a particular element, the following discussion is concerned with a particular, and often particularly turbulent, concatenation of these elements: trees.

Trees have come in for some criticism in contemporary philosophy. Gilles Deleuze and Félix Guattari's influential *A Thousand Plateaus* rejects the arboreal as overly hierarchical; compared to the rhizome and body without organs, trees are transcendental rather than immanent.[4] The symbolic trees of the premodern period are, in contrast, both immanent and transcendental, rhizomic and arboreal, as they integrate the nonhuman beauty and timespans of real trees with 'human shaping or *techne*'.[5] In Norse mythology, the evergreen

ash tree Yggdrasil holds the nine worlds in its branches and roots, while in *The Voyage of Saint Brendan*, a tenth-century account of the travels of the fifth-century saint, a resplendent tree visited each Easter by Brendan and his followers is home to a flock of birds that sing the liturgical hours in harmony. At St. Peter's church, Barton-upon-Humber, the permanence of stone evokes wood as the exterior of the tenth-century tower echoes the timber frames of a previous, perhaps pagan, place of worship [fig. 1]. In the late-medieval period, the works of Geoffrey Chaucer and Thomas Malory contain an array of trees and forests, many of which draw into question the human/nature binary even as they seem to reinforce it. It is not my intention in what follows to suggest that premodern cultural forms can provide us with any direct solutions to our current ecological concerns. What they undoubtedly can show us though is that considerations of apparent binaries such as human/nonhuman, matter/life, and nature/culture have not always been the same and, by doing so, 'offer artifacts that have enduring power to prompt our thinking in different directions and to move us affectively'.[6]

Figure 1

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Medieval thinkers inherited from Aristotle an understanding of the world as one 'in which all material objects, from rocks to sticks to human bodies, are an elemental gallimaufry endowed with substantial form that directs both *potentia* and actual motions'.[7] This Aristotelian world-view was accompanied by the idea of the *scala naturae*, the principle that all 'material entities [are] arrayed on a

sliding scale of sentience, from rocks to plants to animals to humans'.[8] In his fifteenth-century work *De docta ignorantia* (On Learned Ignorance), Nicholas of Cusa emphasises the sense of coherence the hierarchical *scala naturae* imparts on the natural world:

> All things, however different, are linked together. There is in the genera of things such a connection between the higher and the lower that they meet in a common point; such an order obtains among species that the highest species of one genus coincides with the lowest of the next higher genus, in order that the universe may be one, perfect, continuous.[9]

Similarly, Bartholomeus Anglicus's thirteenth-century encyclopaedia *De proprietatibus rerum* (On the Order of Things) begins with God and the angels before considering in turn man, the various animals and plants, and finally rock and stone. Elsewhere, certain medieval thinkers seem to have conceived of the world in ways that are perhaps not so distant from modern ecological thinking. In his fourteenth-century work *Lecturae super Genesim* (Lectures on Genesis), an attempt to explain the events of the book of Genesis in accordance with contemporary scientific theories, theologian Henry of Langenstein seems to recognise that the natural world around him is one of interdependent beings co-existing in a series of interwoven collectives.[10] Of course, this is not to suggest that in medieval thinkers like Henry we might glimpse a modern ecological consciousness that came too soon; Henry's writings on trees, plants and animals are unwaveringly teleological and hierarchical. The human inhabitants of medieval Europe understood that the world had been created for their use and that therefore, while part of the world, they were ultimately distinct from it. Predating Enlightenment science and Cartesian dualism, the medieval period cultivated its own sense of the separateness of human and natural realms.

However, not all medieval conceptualisations of the world adhere to a stable and unbridgeable bifurcation of nature and culture, or of the human and nonhuman. On numerous occasions medieval literary works and iconographic traditions seem to call into question the overarching coherence of a divinely ordered and instituted natural world. The *tête de feuilles* encountered frequently in the decorative schemes of churches and as doodles in the margins and unused pages of manuscripts, and the 'ympe-tre' [grafted tree] of the fourteenth-century romance *Sir Orfeo*, a place where human and fairy worlds overlap, attest to powerful forms of nonhuman agency and intricate, complex relationships between the human and nonhuman. Elsewhere, Middle English practical writing on the growing and grafting of trees suggests, in both content and form, a human mastery over the natural world that sounds just too good to be true. Fourteenth-century travel narrative the *Book of Sir John Mandeville* contains an array of remarkable encounters with the inhabitants (human and otherwise) of the world. Descriptions of the arboreal occur frequently in the *Book*; at various points trees and wood evoke nonhuman timespans and seem to pass between brute matter and living thing in a manner that overflows simple allegory. Finally, Geoffrey Chaucer's lists of trees in the *Knight's Tale* and the *Parliament of Fowls* afford glimpses of a poet seemingly concerned with the destructive impact of humans on the world around them, and, furthermore, of the complexities of the social construction of that natural world, the issue, that is, of 'the extent to which it is philosophically sound (and politically justifiable) to insist on extreme social constructivism as the basis on which to ground one's view of the environment'.[11]

In what follows I attempt to evoke the form of the medieval *florilegium*; in medieval Latin *florilegium* could be used to refer to both a collection of short written extracts around a particular theme and a literal collection of flowers (the word is a literal rendering of the Greek term for 'anthology', from *anthos* 'flower'), and usually consisted of extracts of writings from church fathers and early Christian authors. While what follows will be too discursive to qualify as a true *florilegium*, I wish to retain the sense of a fragmentary, even anti-holistic approach to the topic at hand. The brief discussions below therefore function as a way of raising connections between premodern culture and contemporary ecological thinking. Each of the entries represents a 'borderland' or margin where culture and nature, human and nonhuman meet and, as such, are places where we might find new and challenging ways to think about the past *and* present.[12] With all of this in mind, my own project of redescription begins with the figure of the *tête de feuilles*, a medieval motif as ubiquitous as it is unsettling.

Tête de feuilles

Placed high on the interior columns of churches [fig. 2], or as seemingly incidental doodles on unused manuscript folios, the *tête de feuilles* is sometimes easy to miss. However, once noticed, it is certainly difficult to forget. The origins of this figure remain somewhat obscure, but what is clear is that between the twelfth and sixteenth centuries they became one of the most popular motifs of ecclesiastical sculpture. They occur in numerous locations in church spaces, from interior columns to armrests and misericords.

Figure 2

In its alliance of human and nonhuman, the figure of the *tête de feuilles* raises numerous questions that engage productively with some of the central tenets of modern ecological theory, particularly ideas of symbiosis and the radical openness to existence as always being a type of *co*-existence that this requires. Is the human face sprouting branches and leaves, or the tree a human face? The *tête de feuilles* provides no simple answer, no obvious suggestion of an easily resolvable man-becoming-tree or tree-becoming-man trajectory. Carolyn

Dinshaw has also recently written on the ecological valence of this motif: 'do they show leaves transforming into man, or man into vegetation? Or both, somehow?' she asks. Like Dinshaw, I would suggest that the latter answer, that such figures 'show these opposing trajectories held in tension', provides the most interesting and challenging way to engage with these figures.[13] In doing so, this recurring motif suggests an ambivalence towards the *scala naturae* apparently so central to medieval thought, as the strict boundary between man and plant, separated by the animal kingdom, suddenly becomes thick and porous, rather than thin and rigid.

'Interconnection' and 'interdependence' run the risk of becoming the clichés of ecological theory and criticism, if indeed they have not done so already. As Timothy Morton argues, in some ecocritical trends interconnection too easily suggests a comfy holism that replaces the more abject and unsettling aspects of ecological awareness with a warm feeling of 'holistic belonging'.[14] Morton's 'Dark Ecology' asks that 'instead of insisting on being part of something bigger, we should be working with intimacy. Organicism is not ecological [...] Interdependence implies differences that cannot be totalized'.[15] At once set in stone or ink and in motion, the *tête de feuilles* suggests a similar sense of intimacy, an intimacy that shatters any illusion of human wholeness and separateness from the world; with 'what is supposed to be *outside* gushing from deep *inside*,' we see in these motifs 'the most basic conceptual boundary in the process of being deconstructed'.[16] The *tête de feuilles* provides a way of thinking about a nature no longer simply outside of the human, but one that is, and has always been, a part of us.

The 'ympe-tre' of Sir Orfeo

The figure of the *tête de feuilles*, a place where the human and nonhuman not only meet but where the boundary between the two is held in suspense, evokes many of the key concerns of ecocriticism and ecomaterialism. Through the figure of the 'ympe-tre', fourteenth-century romance *Sir Orfeo* suggests a similarly complex and lively relationship between the arboreal and human. Itself a narratological graft of different cultural myths, *Orfeo* is a medievalised account of the legend of Orpheus and Eurydice: drawing on both the thirteenth-century *Ovide Moralisé* tradition and Celtic folklore, the narrative relocates 'Orfeo' and 'Heurodis' to England, with a 'fairy kingdom' ruled by an enigmatic but finally benevolent king standing in for Hades and Pluto. The role played by the 'ympe-tre' in the narrative has prompted a wealth of critical interpretation. Numerous potential analogues have been identified over the last century, without any succeeding in entirely reincorporating this arboreal figure into a specific allegorical context or traceable textual tradition.[17] Early in the poem, Heurodis

> Tok two maidens of priis [worth],
> And went in an undrentide [late morning]
> To play bi an orchard side,
> To se the floures sprede and spring,
> And to here the foules sing.
> Thai sett hem doun all three
> Under a fair ympe-tre
> (64-70)[18]

It is while asleep under this 'ympe-tre' that Heurodis is visited by the fairy king,

who threatens her with death if she does not return the next day to the same spot. Heurodis does return and, despite the best efforts of Orfeo and 'ten hundred knights' (l.183), disappears from their midst.

The 'ympe-tre' grows both 'bi an orchard side', the supposed domain of human mastery over nature, but also where two worlds overlap; it is an entranceway to another world, a world in which, as Orfeo will later discover, human and natural laws are suspended, and time itself seems to have come to a standstill. The 'living nexus' of the 'ympe-tre' is not simply 'two arboreal species conjoined into heterogeneous singularity, but nature and culture in a union that asks why we ever divided the realms';[19] the compound 'ympe-tre' itself replicates this grafted form, a union rendered even closer by the original 'ympetre' of the Auchinleck manuscript's copy of the poem (the hyphenated form in this instance being a convention of modern editing).[20] Having located the fairy realm after ten years searching (and having passed through *another* elemental entranceway to the fairy kingdom, this one made of stone), Orfeo discovers Heurodis again asleep 'under an ympe-tre' (l.407). The refusal of the 'ympe-tre' to be explained entirely by Christian symbolism, or through reference to close medieval literary parallels, mirrors the vibrancy of this variegated object in the poem: it is an object that prompts not only a momentary problem of classification, but narrative. Heurodis' abduction seems to lack an obvious agent but the tree itself, which becomes an actant, Bruno Latour's term for objects that possess a lively efficacy as they mediate a myriad of relationships, rather than passively submitting to human use.[21] Both entrances, the arboreal and the lithic, 'reveal what the elements offer to the vagrant imagination: realms where laws of time, custom, meaning and relation become new'.[22]

Godfridus super Palladium

As in the case of the 'living nexus' of *Orfeo*, grafted trees play a central role in the horticultural treatise *Godfridus super Palladium*, a work preserved in its Middle English translation in a number of fifteenth-century manuscripts.[23] In many of these manuscripts, such as London, British Library MS Harley 1785, the advice on growing and grafting trees of the treatise is compiled alongside various other practical texts, including calendars and astrological tables and diagrams. The text comprises of two enumerated lists, the first of 64 desired effects, the second of 64 corresponding explanations of how these are to be achieved:

> 1. To graffen trees whos apples shul have no cores / 2. To colouren fruyt groweng of what colour thou wilt / 3. To make a tree to beren every yeer, and that the fruyt have savour after what spice thu wilt / 4. To make an old tree bigynneng to waxe drye to quyken agayn / 5. To make a sour fruyt swete / 6. To make perles or other diverse thinges to growe withinne an appull / 7. To setten almande trees, walshe-not trees, chirye trees, or persik & peches [...][24]

Number six, making a pearl or precious stone appear to have grown inside an apple, turns out to involve little more than concealing the object in the fruit when it has 'floured [flowered] and somwhat growen' and then marking the branch 'by some notable signe'.[25] Trees are here made to bear up objects valued by humans, though quite *why* remains unclear: what does such an act prove? and to whom?

The fourteenth and fifteenth centuries saw an explosion in the popularity of such *Fachliteratur*: works on medicine, phrenology, and agriculture, amongst other topics, circulated in an increasing number of copies in the late-fourteenth century and into the fifteenth. 'Literary' and 'non-literary' are not, of course, transhistorical concepts, and Lisa Cooper suggests we think of these works as establishing a 'poetics of practicality': their copying and reading did not simply offer practical utility, but also held imaginative gratification for readers interested in the relationship between textual and extra-textual worlds.[26] As Julie Orlemanski has also recently written, drawing on Slavoj Žižek's brief account of 'the movement from things to their signs' in his *The Puppet and the Dwarf*, medieval practical texts present 'the *representation* of information' rather than simply that information itself. That is, 'the informational or technological "effect" was a common stylistic *desideratum*' in such late-medieval texts.[27]

This 'effect' of information is foregrounded when, for example, we realise that many of these texts contain small but frequent errors. Considering *Godfridus super Palladium* in these terms, and also alongside the likes of *Sir Orfeo* and the *tête de feuilles*, opens it to considerations beyond its apparent utility towards the type of relationship it models between humans and nature. Its form, a symmetrical pair of lists, suggests that the text was written for practical use. However if we consider this form as, in itself, modelling a particular relationship between human and nonhuman worlds then it becomes possible to read *Godfridus super Palladium* as, paradoxically, a testament to the *limits* of human control over nature. Lists attempt to order, to make sense of the world, to allow us, as Bruno Latour writes, to 'become superior to that which is greater than us'.[28] From the liminal space between past, present and future that the form of the list establishes, *Godfridus super Palladium* suggests a stable circuit of actions and results, actions imparted by thinking humans on a malleable, obedient nature. However, in doing so, it betrays the partialness of this control, the potential disjunction between the inscription and reading of textual and extra-textual worlds.

The Book of Sir John Mandeville

Fourteenth-century travel narrative the *Book of Mandeville* details the (fictitious) near global circumnavigation of its narrator Sir John Mandeville, an English knight from St. Albans. Its origins remain obscure, though it was probably originally written in Anglo-Norman French around 1360. Less one distinct text than a complex, overlapping web of translations, redactions and rewritings, the *Book* was immediately popular, spreading across Europe during the fourteenth and fifteenth centuries.[29] In the *Book*, trees and wood are encountered as both quotidian sources of food and materials, and transcendental symbols of Christian tradition. In the description of the four trees used to make the cross, incorporated into the *Book* from the thirteenth-century *Legenda aurea* (Golden Legend), the immanent and transcendental are interwoven: olive is used for the 'table of the tytle' as it 'betokens pees [peace], as the story of Noe [Noah] beres witness', while cypress is used for the vertical column as it 'es [is] well smelland, so that the smelle of his [ie Jesus's] body schuld not greve to men that come forby'.[30]

Elsewhere in the *Book*, trees and wood seem to pass between brute matter and living thing, evoking nonhuman timespans as they do so. The oak tree that has existed 'fra [from] the begynyng of the world' conflates a number

of medieval traditions to produce an arboreal actant with its own restless vibrancy. Mandeville recounts the symbolic valence of this tree in characteristically hedged terms:

> thai say […] that it was allway grene and bare lefes unto the tyme that oure lord died on the crosse and then it dried. And so did, as sum men saise, all the treesse in the werld or elles thai failed in thaire hertes and become holle [hollow] within.

The 'vertu' of this tree seems to overflow its incorporation into Christian history though, Mandeville concludes his account noting the talismanic properties of this ancient oak: 'wha so [whoso] beres any porcion theroff apon him he salle never be travelled [troubled] with the falland eville [falling evil, ie epilepsy] ne his hors salle never be afounded [foundered] whils he hase it apon him'.[31]

The oak tree 'fra the begynyng of the world' signals back to a time beyond immediate human memory, Mandeville's frequent 'thai say' and 'as sum men say' evoking the transitory nature of human speech and forms of knowing in the face of a natural object that knows a deeper temporality. Later in his travels, Mandeville encounters further remarkable trees, in this instance 'treez that will nowther [neither] brynne [burn] or rot'.[32] Signalling a distant future rather than an unknowable past, the future tense here describes natural objects that will outlast their human counterparts. Thinking ecologically involves 'thinking big', in terms of scales of distance *and* time.[33] The trees of the *Book of Mandeville* encourage us to think beyond the corporeal limits of the human to a time-to-come no less deep than that which has passed.

Chaucer's *Knight's Tale* and *Parliament of Fowls*

Chaucer's *Knight's Tale* is the first and longest of the *Canterbury Tales*; as the tale of the courtly knight it 'partakes of an overtly formal and anthropocentric world in which literary conventions thrive'.[34] But it is also a tale in which a brief description of trees destroyed to produce a monument for a deceased knight presents a momentary glimpse of a fraught relationship between the human and natural worlds of Chaucer's tale. The 'grove' of the *Knight's Tale* is the setting for much of its action, but is itself almost entirely eradicated by the close of the tale. Part of it is destroyed in order for the three temples of Arcite, Palamoun and Emelye (dedicated to Venus, Mars and Diane respectively) to be built: this destruction is not narrated, but instead the third section of the tale opens with the temples already built. However, later in the tale, a further destruction of the wood in order to furnish materials for Arcite's funeral pyre *is* narrated. In this instance, Chaucer provides us with an extended *occupatio* listing the trees destroyed, with the list resembling an abject echo of Adam's naming of the animals in Genesis:

> But how the fyr was maked upon highte,
> As ook, firre, birch, aspe, alder, holm [holm oak], popler,
> Wylugh [willow], elm, plane, assh, box, chasteyn [chestnut], lynde [lime tree], laurer [laurel],
> Mapul, thorn, bech, hasel, ew, whippeltree [cornel-tree] —
> How they weren feld shal nat be toold for me;
> […] Ne how the beestes and the briddes alle
> Fledden for fere, whan the wode was falle;
> Ne how the ground agast was of the light,

> That was nat wont to seen the sonne bright
> (l.2919-32)[35]

This list affords a view of the variety of the local ecosystem of the grove, but only at its point of destruction. The grove here becomes not only a collection of individuated trees, rather than the generalised backdrop for human actions it has largely been until this point, but also a habitat for a variety of 'beestes' and 'briddes'. This is only a momentary sight of the grove outside of the domain of human society, and Chaucer's description of the effect of this deforestation is, of course, itself anthropomorphic (the ground was 'agast' and 'not wont' to 'seen' the sunlight). However, it nevertheless does suggest a fleeting sense that, prior to its destruction, the human relationship to, and interaction with, the grove was only one of many.

The *occupatio* of the *Knight's Tale* is not the only occasion in Chaucer's works in which a list of trees provides a point at which the relationship between human and natural worlds emerges. In his earlier *Parliament of Fowls*, Chaucer had already used a similar technique to detail the trees of a literary garden of love, featuring Venus's temple and numerous allegorical figures such as Delyt [Delight], Desir, and Plesaunce. The *Parliament of Fowls* is a dream vision in which the lovesick narrator finds himself in the garden having fallen asleep reading a book; before the appearance of Lady Nature, the central figure of the poem, Chaucer lists the trees visible in this garden:

> The byldere ok, and ek the hardy ashe;
> The piler elm, the cofre unto carayne;
> The boxtre pipere, holm to whippes lash;
> The saylynge fyr; the cipresse, deth to playne;
> The shetere ew; the asp for shaftes pleyne;
> The olyve of pes, and eke the dronke vyne;
> The victor palm, the laurer to devyne.
> (176-82)

> [The oak for building, and also the hardy ash; / The elm for both pillars and coffins for corpses; / The boxwood tree for making pipes; the holm for whips; / The fir for ship's masts; the cypress, mourning symbol; / The yew for arrows; the asp for bow shafts; / The olive as symbol of peace, and also the vine as symbol of drunkenness; / The palm as symbol of victory, and the laurel of divination.]

Trees are here circumscribed by their functional potential for human use; rather than things possessing their own intrinsic value, essence or sense of agency they are instead presented as 'the raw material for human symbolic systems and, even more practically, as the source of technology'. Chaucer's appropriation of this nonhuman world, like the *occupatio* of the *Knight's Tale*, signals, from within a formalised and conventional setting, to a world *outside* such 'artistic colonization'.[36] In doing so, both lists call attention to the nature/culture and human/nonhuman binaries, destabilising them even as their place at the centre of Chaucer's poetic frameworks seems to be reaffirmed.

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The examples above suggest ways in which trees and wood pass between brute matter and living object in medieval literary works and iconographic traditions, attesting to nonhuman timespans and disturbing stable and stabilising boundaries as they do so. Trees and wood prompt stories, becoming actants in

narratives in which human protagonists are recast as but one type of player in the rich tangle of 'a worldly world, a world where we, our ideas and power relations, are not alone, were never alone, will never be alone'.[37] Medieval ecocriticism represents an opportunity not only to apply contemporary ecological thinking to a wide array of premodern cultural forms, but also, in a self-reflexive move, to unsettle some of the terms of that discussion. Theory can help open a text to new questions, to allow it to say things it perhaps cannot articulate in its own terms and it is this approach that characterises 'green' readings of medieval works. The medieval period suggests ways in which this relationship might be reciprocal, as texts themselves 'intervene in theories, prompting us to restructure our approaches, challenging our terms of inquiry'.[38] This reflexiveness is central to ecocriticism, which might *begin* with natural topics (such as trees), but goes on to extend its attention to issues of 'anthropocentrism, ecocentrism, living systems, environmental degradation, ecological and scientific literacy, and an investment in expunging the notion that humans exist apart from other life forms'.[39]

As Jeffrey Jerome Cohen writes, in the face of an increasingly disenchanted world 'we need more models for thinking about the nonhuman from as many times as possible, nature with our art and art with our science. The Middle Ages are a good place to discover such challenging stories'.[40] The Middle Ages provide us with an archive of texts and artifacts that prompt us to think anew about past, present *and* future, and about our relationship to a world that we can no longer consider to be simply 'around' us, but of which we are, and have always been, one part of many. Following Aristotle's assertion that contemplation is, in fact, the highest form of praxis, Timothy Morton formulates the laconic injunction that we 'don't just do something', but 'sit there!'[41] Turning to the medieval past offers one way, amongst many, to begin.

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Notes

1.   Thanks to Anthony Bale, Jonathan Anderson, Rebecca DeWald, Matt Harle, and Natalie Joelle for a number of thoughtful comments and provocations as I wrote and revised this essay.

2.   Jane Bennett, 'The Elements', *postmedieval*, 4 (2013), pp. 105-11 (p. 109). See also Jeffrey J. Cohen and Lowell Duckert's 'Howl: Editor's Introduction' in the same issue (pp. 1-5) for their articulation of the scope of ecomaterialism, an expanded form of ecocriticism that 'compels us to think of our own existence as interstitial beings. It asks us to hear the howls of heterogeneous life forms – everywhere and from every thing' (p. 5). Also in the same issue, Vin Nardizzi's 'Medieval Ecocriticism' book review essay provides an excellent survey of the important place of discussions of the premodern period in the development of ecocriticism, as well as of more recent works that have been germane to my thinking in this essay (pp. 112-23).

3.   Bennett, 'The Elements', p. 106.

4.   Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, trans. B. Massumi, (Minneapolis, MN: University of Minnesota Press, 1986).

5.   Alfred Siewers, *Trees* (Washington: George Washington University Medieval and Early Modern Studies Institute Ecologies Roundtable, 2012) http://archive.org/details/EcologiesroundtableDiscussion [audio recording, accessed 11/05/2012].

6.   Carolyn Dinshaw, 'Ecology', in *A Handbook of Middle English Studies*, ed. by Marion Turner (London: Wiley-Blackwell, 2013), pp. 347-62 (p. 355).

7.   Kellie Robertson, 'Exemplary Rocks', in *Animal, Vegetable, Mineral: Ethics and Objects*, ed. by Jeffrey Jerome Cohen (Washington DC: Oliphaunt Books, 2012), pp. 91-122 (p. 96).

8.   Ibid., p. 99.

[9]   A. O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* (Cambridge, MA: Harvard University Press, 1936), p. 80.

[10]   Nicholas Steneck, *Science and Creation in the Middle Ages: Henry of Langenstein (d.1397) on Genesis* (Notre Dame: Notre Dame University Press, 1976), p. 111.

[11]   Lisa J. Kiser, 'Chaucer & the Politics of Nature', in *Beyond Nature Writing: Expanding the Boundaries of Ecocriticism*, ed. by Karla Armbruster and Kathleen R. Wallace (Charlottesville: University of Virginia Press, 2011), pp. 41-56 (p. 50).

[12]   Gillian Rudd, *Greenery: Ecocritical readings of late medieval literature* (Manchester: Manchester University Press, 2007), p. 4.

[13]   Dinshaw, 'Ecology', p. 351.

[14]   Timothy Morton, 'Queer Ecology', *PMLA*, 125.2 (2010), pp. 273-82 (p. 279).

[15]   Ibid., p. 278.

[16]   Dinshaw, 'Ecology', p. 351.

[17]   C. R. Jirsa, 'In the Shadow of the Ympe-tre: Arboreal Folklore in *Sir Orfeo*', *English Studies*, 89.2 (2008), pp. 141-51. Jirsa's article traces many of these proposed interpretations and textual parallels. In addition, Jirsa argues that 'classical and medieval arboreal lore' provides a more fruitful way to approach 'Heurodis' fateful slumber', but acknowledges immediately that this 'small but significant body of material does not definitively clarify this element of the poem' (p. 143).

[18]   All references from *Old and Middle English c.890-c.1400: An Anthology* 2nd edn, ed. by Elaine Treharne (Oxford: Blackwell Publishing, 2004), pp. 436-48. Though I have followed Treharne in glossing 'undrentide' in this instance as 'late morning', the precise time at which the events in *Orfeo* take place has been the subject of much debate, as 'undrentide' could be used to refer to a variety of times from early morning to early afternoon.

[19]   Jeffrey Jerome Cohen, 'An abecedarium for the elements', *postmedieval*, 2 (2011), pp. 291-303 (p. 301). As Cohen also notes, 'ympe-tre' could be used in the medieval period to refer to trees conjoined both by human hands and naturally through inosculation.

[20]   *Sir Orfeo* survives in three manuscripts: Edinburgh, National Library of Scotland MS Advocates 19.2.1 (the Auchinleck manuscript); London, British Library MS Harley 3810; and Oxford, Bodleian Library MS Ashmole 61.

[21]   See esp. Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network Theory* (Oxford: Oxford University Press, 2007).

[22]   Cohen, 'An abecedarium for the elements', p. 302.

[23]   The *Godfridus super Palladium* was inspired by the *Opus agriculturae* of fourth-century Roman writer Palladius. Relatively little is known about its original author, who recent studies have identified as a Gottfried von Franken. The work was probably translated from the original Latin into Middle English by Benedictine monk Nicholas Bollard, whose own treatise on planting and grafting is usually found alongside the *Godfridus super Palladium* in the surviving English manuscripts. See D. G. Cylkowski, 'A Middle English Treatise on Horticulture: *Godfridus super Palladium*' in *Popular and Practical Science of Medieval England* ed. by Lister M. Matheson (Woodbridge: Boydell and Brewer, 1994), pp. 301-29 for introductory notes and edition of the text.

[24]   Transcribed from London, British Library MS Harley 1785, fol.20r. Abbreviations expanded and some spellings modernised. On the flyleaf of the manuscript is a rough ink drawing of a grafted tree replete with various types of fruit and leaves.

[25]   Ibid.

[26]   Lisa Cooper, 'The Poetics of Practicality', in *Middle English*, ed. by Paul Strohm (Oxford: Oxford University Press, 2007), pp. 491-505.

[27]   Julie Orlemanski, 'Physiognomy and Otiose Practicality', *Exemplaria*, 23.2 (2011), pp. 194-218 (p. 198).

[28]   Bruno Latour, *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge, MA: Harvard University Press, 1999), p. 65. Latour is referring here to textual 'inscription' more generally, but his point is, I would argue, particularly applicable to the complex epistemological work carried out by the list.

[29]   The introduction to Anthony Bale's recent translation of the *Book* provides a concise summary of its textual and linguistic multiplicity, as well as an up-to-date survey of recent and established scholarship on the *Book*. See 'Introduction', in *The Book of Marvels and Travels* trans. by Anthony Bale (Oxford: Oxford University Press, 2012) pp. ix-xxviii.

[30]   *The Egerton Version of Mandeville's Travels*, ed. by M. C. Seymour (Oxford: Oxford University Press, 2010), p. 7.

[31]   Seymour ed., *Mandeville's Travels*, p. 38.

[32]   Seymour ed., *Mandeville's Travels*, p. 155.

33   See Timothy Morton, *The Ecological Thought* (Cambridge, MA: Harvard University Press, 2010), esp. 'Thinking Big', pp. 20-58.

34   Rudd, *Greenery*, p. 50.

35   All references from *The Riverside Chaucer* 3rd edn, ed. by Larry D. Benson (Oxford: Oxford University Press, 2008).

36   Kiser, 'Chaucer & the Politics of Nature', pp. 48-50.

37   Isabelle Stengers, 'Wondering about Materialism', in *The Speculative Turn: Continental Materialism and Realism*, ed. by Levi Bryant, Nick Srnicek, and Graham Harman (Melbourne: re.press, 2011), p. 371.

38   Marion Turner 'Introduction', in *A Handbook of Middle English*, ed. by Marion Turner, pp. 1-11 (p. 3). Karl Steel's Derridean 'limitrophic' examination of the relationship between human and animal in medieval literary and documentary works in *How to Make a Human: Animals and Violence in the Middle Ages* (Columbus: Ohio State University Press, 2011) is an exemplary case of such work that has been important to my thinking throughout the current essay. Steel examines the constant fashioning and refashioning of the human through the subjugation of the animal, the 'compensatory violence' enacted by humans on animals as part of an impossible demand to live up to the 'ideal self', a way to bridge the gap between 'the subject and its human self-image' (p. 5).

39   'Introduction: Warbling Invaders' in *Ecocritical Shakespeare*, ed. by Lynne Bruckner and Daniel Brayton (Farnham: Ashgate Publishing, 2011), pp. 1-19 (p. 3). I agree with Jeffrey Jerome Cohen's suggestion that this 'articulation of ecocritical scope' should be expanded to include 'the agency of matter and nonlife forms' (see Jeffrey Jerome Cohen, 'Stories of Stone' (2013), note 5 <http://www.inthemedievalmiddle.com/2013/02/stories-of-stone-introduction.html> [accessed 21/02/13]).

40   Cohen, 'Stories of Stone', unpaginated.

41   See Morton, *The Ecological Thought*, pp. 8-9, and 'Don't Just Do Something, Sit There! Global Warming and Ideology' in *Rethink: Contemporary Art and Climate Change*, ed. by Anne Sophie Witzke (Copenhagen: Alexandra Institute, 2009), pp. 49-52.

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