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GROUND-WORK

English Renaissance Literature and Soil Science

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I

Compost/Composition

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Today, "how-to" pitches for composting tend to authorize it in part through a call back to the past, as for example, "the ancient and premodern means of returning living material to the ecological cycle,"[1] even as they also tout composting as "trending." The early modern period also advocated composting and its use in soil amendment as old and new. For example, Gervase Markham's *The Inrichment of the Weald of Kent*, a guide to "the true Ordering, Manuring, & Inriching of all the Grounds not only in Kent but in all of England," which went through numerous editions, argues that soil amendment using marl (or clay rich in calcium carbonate or lime) is "not now newly discovered, but was the ancient practice of our forefathers many yeares agoe." Nevertheless, the practice had fallen into disuse by the time that Markham wrote and so needed to be "newly born and revived, rather than restored," in part through treatises on composting and soil amendment, which proliferated in the seventeenth century.[2] Other contributions to this volume demonstrate that soil and soil amendment have a history and that, in a range of ways and across varied sites, early modern writers addressed the soil not as a given but as a work in progress, and the spur to and beneficiary of creativity. For gardeners and farmers hoping to increase their yields, the project of soil amendment, necessarily, favors art over nature, process over place. Those who write how-to guides assume that soil can be ameliorated,

and they set out to instruct their readers on how to do so. Markham, for instance, insists that whatever kind of soil the reader has, he or she can amend it so that more "fruitful[ly] placed neighbours" will not "exceede [the gardener] in any thing, more then in a little ease."[3] In other words, labor (as opposed to ease) is a fundamental ingredient in compost.

Compost's purpose is to be spread, yet it is also rooted in the ground, absorbing the waste products of a particular place and enabling a given locale to remain productive over time. A daily ritual and an improvisation, simultaneously domestic and unhoused, composting operates by what Albert Howard, sometimes called "the father of compost," calls "the law of return," by which one puts back into the soil what has been taken from it.[4] While this is sometimes touted as a closed system with "no external inputs," compost receives from the air and rain. Furthermore, what returns has been changed. Time seems to move differently for different components. Some things break down and become unrecognizable while others stubbornly persist, the peach pits of history. Whether a static pile or a turning barrel, the compost heap mucks up layers; its striations are not discernable. It is constantly mixed up.

Influential theorizations of temporality have turned from the timeline, measuring tape, or yardstick to figurations such as waves, spirals, and loops to describe the way time doesn't march on as much as it loiters and doubles back. Theorists who have influenced how early modernists think about the relationship between past and present have relied heavily on figuration to capture different models of that relationship, including the rhizome, the ghost, the time-knot, a crumpled handkerchief, a palimpsest, a shipwreck, and leftovers.[5] What all of these inventive proposals have in common is a commitment to describing time as nonlinear as well as a dependence on vivid images of copresence.[6]

To this catalog I would add the compost pile both as a figuration and as a material site that, in Pierre Nora's terms, "administer[s] the presence of the past within the present."[7] The compost pile welds together symbolic and functional, practical and ritual; it is rooted in a concrete space and dynamic. Like other sites of memory Nora discusses, this one has "a capacity for metamorphosis, an endless recycling of [its own] meaning and unpredictable proliferation of [its] ramifications" (19). But rather than trying to stop time, as some sites of memory do, it works time. Like many newly trending farming practices, composting poses a challenge to Nora's insistence on a rupture between premodern and modern, in particular "the irrevocable break marked by the disappearance of peasant culture, that quintessential repository of collective memory" (7); as a daily practice it also challenges Nora's distinction between history and memory. It is both "a perpetually actual phenomenon, a bond tying us to the eternal present" and "a representation of the past." As promoted in practical treatises both in the early modern period and today, the compost pile assembles and ripens the past's leftovers in the service of some future enrichment, even as it challenges many of the available models for thinking about how the present relates to the past by emphasizing simultaneously persistence and decay.

We can see both continuity and transformation in an ancient and familiar adage Robert Herrick repeats in his poem "The Country Life": "the best compost for the lands / Is the wise master's feet and hands."[8] This axiom can be found as early as Aristotle and Xenophon; biodynamic and "low intervention" farmers use it now. For instance, I have found "The best fertilizer is the farmer's footsteps" on a winery website.[9] It endures without necessarily alerting those who use or hear it to its pedigree; its provenance no longer visible, the aphorism, "composted" by time, proves fecund across changing terrains and conditions. In every version of this axiom, it emphasizes human occupation of and intervention in land. What Herrick names "compost" was more often called "dung," which meant not only manure but, more broadly, fertilizer. In choosing the word "compost" instead of "dung" or "manure," Herrick draws attention to the relationship between noun and verb, a substance to be added to soil to enhance its fertility and a process or series of actions. (In their essays here, both Keith Botelho and David Goldstein discuss the similar way in which "manure" can serve as both noun and verb.) Herrick also draws attention to the resonances of the word "compost." In its meaning of "a mixture of various ingredients for fertilizing or enriching land," "compost" shares its emphasis on collecting and combining ingredients with literary compendia and compositions, compounded rather

than simple drugs, and compotes or stews. Essays included here by Botelho, Goldstein, Hillary Eklund, and Randall Martin provide invaluable discussions of what Eklund calls "Renaissance soil science," as well as the motives, methods, politics, and even theology of early modern soil amendment. I focus on the relationships between composting and composition, while emphasizing throughout how figural and material, theoretical and practical, past and present intertwine in the compost pile and on the page.

Making compost generates composition in the literary sense, spurring authors to share their own experiences, encourage experimentation, and write and disseminate their proposals for how to enrich and improve the ground, starting with the practice of collecting and ripening compost. The fact that Markham's treatise on amendment was itself "painfully gathered" out of preexisting materials and then "revised, inlarged, and corrected" through collaboration suggests the parallel between composting and composition.[10] Jeffrey Knight points out that "one of the most common ways for a publisher to market a work in the period was to claim on its title page that it had been 'enlarged' or 'augmented,' 'annexed' to another text, or otherwise reconfigured" (6). Writers of practical advice were particularly unabashed augmenters.[11] Promoting composting in texts that were themselves assembled and ripened, the early modern writers on whom I focus participated robustly in an early modern culture of recycling, in which textual compiling took its place beside other kinds of repurposing and recombining.

Writers on composting address an English audience, with specific reference to contemporary English conditions and needs. As William Lawson explains, "I admire and praise Pliny, Aristotle, Virgil, Cicero, and many others, for wit and judgement in this kind, and leave them to their times, manner, and several Countries."[12] Yet despite this claim, composting and writing about it may have been as indebted to classical authorities as they were to personal observation and daily practice. For example, Columella's first-century argument that soil that had lost its fertility was not spent with age but, rather, starved of nutrients, and so could be revived, served as the conceptual foundation for projects of soil amendment in the sixteenth and seventeenth centuries. Joan Thirsk argues for the influence of "this one pregnant

sentence" in Columella's *De re rustica*, presented here in an eighteenth century translation:

> Nor am I ignorant, that there is a certain kind of land, and some places in the country, wherein neither cattle nor fowls can be kept; yet it is a sign of a slothful Husbandman, even in such a place as that, to be destitute of dung: for he may amass and put together any kind of leaves, and collections of any other things, out of thickets and highways; he may cut down ferns, without doing any injury to his neighbour; yea, he may even do him service by it, and mix them thoroughly with the dirt and sweepings of the court-yard; he may sink a pit...for laying up dung in, and gather into it, in one heap, ashes and dirt of the kennels, sinks, and common sewers, straw, and stubble, and the other things that are swept out of the house.[13]

Columella assumes that effort can counteract lack—of fertile land in the first place; then of farm animals and their droppings—and turn waste into resource. The word "dung" here shifts from manure, which not everyone has, to a compost one can make. In this translation, the verbs describing what the industrious rather than slothful husbandman will do include "amass" and "put together," "collect," "mix," "lay up" and "gather." This exhaustive yet judicious assembly of fragments links composting to commonplacing and composition.

Columella's provocative list of possible contributions to the dunghill—leaves, ferns, sweepings, sewage, ashes, straw—would generate ever more detailed lists of possibilities. Early modern composting began with what might at first appear to be the indiscriminate collection of materials. Gervase Markham's *Markhams Farewell to Husbandry; or, The Enriching of All Sorts of Barren and Sterile Grounds in Our Kingdome, to Be as Fruitfull in All Manner of Graine, Pulse and Grasse, as the Best Grounds Whatsoever*, lists not only rotting vegetable matter but also animal hair, malt-dust, "and other excrements of the malt"; fish carcasses, animal entrails, and offal; and even human and animal blood, urine, and feces (E8v). Markham disregards the logic that sometimes governs what goes in a compost heap—of separating animal waste from vegetable waste. He recommends shavings of horn from tanners, horners, and lantern makers. "Now if of these you cannot get sufficient to trim all your ground, you shall then deale with Butchers, Sowse women, Slaughter-men,

Scullions, and the like; and from these you shall get all the hoofes you can, either of Oxe, Cow, Bull, Calfe, Sheepe, Lambes, Deere, Goates, or any thing that cheweth the cud, and which indeed, if not for this use, are otherwise utterly cast away to the dung hill and despised" (E7v). He also includes the by-products of early forms of manufacture, including lint, rags, shreds, and "base peeces of woollen cloth whatsoever, which are only cast out, and fit for nothing but the dung-hill," as well as "the rubbish, sweepings, parings, and spitlings of [the reader's] house and yard, as also of shovelings up of the high-waies, back-lanes, and other such places, and especially if they be any thing clayie, or morish [damp or spongy], or sandy mixt with any other soile."[14] Many other writers join Markham in listing possibilities for the compost pile with Jonsonian copia and relish.[15] In the composting and soil amendment economy, there is no waste because everything has value.[16] What might be despised as "fit for nothing but the dunghill" finds new value and purpose there. Composting was, of necessity, associated with garbage, filth, and excrement, with that which is, proverbially, as plain as dirt and as poor as muck. Yet composting also partakes of magical transformation. In Samuel Hartlib's papers, for example, we find a secret for the ultimate "universal compost" confided on a deathbed as well as ideas for "quintessencing or exalting of ordinary compost."[17] Through time and transformation, waste becomes not something dangerous to be shunned but, rather, a form of wealth to be treasured and invested.

Some farmers simply spread these materials onto their ground or ploughed them in. Walter Blith, for instance, in his popular and compendious *The English Improver Improved*, a work that will soon become familiar to readers of this collection, concludes several chapters on soil amendments with the advisory that "Also Fearne, or Rushes, Thistles, or any coarse straw, or Trash whatever, flung, or cast into the Fothering-yards, among your Cribs under your Cattell, will be both good Litter to lay your Cattell dry and warme, and will make very good soyle, as all good husbands know."[18] Others piled their collections in heaps, allowing time and heat to transform the raw materials.

Several early modern writers advocate collecting compost in pits, positioned to collect run-off from stables and kitchens, rather than piles, which dry out and erode, or even in a moat or standing pool.[19] The contained compost is hotter and wetter; it breaks down or transforms more quickly. Like collecting the ingredients, containing and covering the compost had a history. Turning again to Columella, we find him advising,

> Let there be also two dunghills, one which may receive new offscourings and filth, and keep them a whole year; and a second, from which the old may be carried. But let both of them have their bottoms somewhat shelving, with a gentle descent, in the manner of ponds, both well built and paved, that they may not let the moisture pass through; for it is of great importance, that the dung retain its strength by the juice of it not being dried up; and that it be continualy soaked in liquor, that so, if there be any seeds of thorns or grasses thrown into it, with straw or chaff, they may perish, and, when carried out into the fields, not fill the corns with weeds.[20]

In this proposal for a covered compost pit, Columella sets out the basic principles of composting: an ongoing, wide-ranging, and open-minded process of collecting and contributing; a container to receive what has been gathered; and time to generate heat and decay. Only the "old" or cured is ready for use. Columella's emphasis on keeping the compost moist and hot suggests the conditions under which a pit or barrel can play a role parallel to that of animals' digestion; just as getting animals to forage and then excrete in fields transforms cover crops such as clover or turnips into manure that will fix nitrogen in the soil—which was central to the emerging practice of crop rotation—the compost pit breaks down its components, making their nutrients more available and prohibiting seed germination.

The pile, pit, and pool all emphasize the compos(t)er's agency in assembly as well as the crucial role of patient waiting. Time will erase the origins of the constituent parts, breaking them down so that they are unrecognizable, so that the assembled fragments constitute a new whole. John Evelyn, for example, distinguishes "well-digested Compost...without any Mixture of Garbage, odious Carrion, and other filthy Ordure, not half consum'd and ventilated...as it should be" (K2v–K3r) as the only kind that should be used to "impregnate and enrich" "Natural Mould."[21]

Whereas Columella first defends compost as a substitute for manure, compost can claim pride of place for those squeamish about the connection between food and excrement. As Evelyn explains, everyone

prefers food raised on "sweet Soil and Amendments, before that which is produc'd from the *Dunghil* only" (K3r). In John Webster's play *The Duchess of Malfi*, Bosola's attempt to reveal the Duchess's pregnancy depends both on the widespread use of manure and just such squeamishness about it. Bosola presents the Duchess with "the first [apricots] our spring yields" and takes her greedy consumption of them as evidence that she is pregnant. After she has gobbled up the apricots, he expresses regret that she did not peel them first because "the knave gardener, / Only to raise his profit by them the sooner, / Did ripen them in horse dung."[22] The Duchess then goes into labor. Interestingly, she does not refer to the horse dung as her cover story but, rather, claims that the fruit was underripe. My point here is that Webster's scenario reminds us of the practice of using dung—to achieve results that could be questioned as somehow unnatural or dishonest ("knavish")—and capitalizes on mixed feelings about that practice. Composting addressed such unease by offering an alternative to manure, what Evelyn might have called a "sweet amendment," and by obscuring its origins.

While various writers' lists of potential ingredients for the compost pile are capacious and informative, designed to open up rather than close down possibilities, they should not suggest that soil amendment was simply a matter of indiscriminate collecting and waiting. Instead, most writers depict the process of soil amendment as considerably more mindful and creative than that. Writers such as Markham and Evelyn elevate composting and soil amendment from collection to composition by adding artful human intervention to the sovereign effects of time and decay. Markham praises his reader as "Thou whom it hath pleased God to place upon a barren & hard soyle, whose bread must evermore be grounded with sweat and labour, that mayest nobly and victoriously boast the conquest of the Earth, having conquered Nature by altering Nature, and yet made Nature better then she was before."[23] As William Lawson asks in his guide to "the best way...to make any ground good, for a rich Orchard," "what is Art more than a provident and skilful Correctrix of the faults of Nature in particular works, apprehended by the Senses?"[24] The idea that "nature is made better by no mean / But nature makes that mean," as Polixenes puts it in *The Winter's Tale* (4.4.89–90), is, of course, a familiar one, rehearsed in defenses of rhetoric, cosmetics, grafting, and a host of other disputed

improvements of nature.[25] This particular site for this oft-rehearsed argument showcases the role of human skill in composing fertile earths. Evelyn, for instance, claims that he seeks "to incite the curious to essay artificial Compositions in defect of the natural Soil; to make new confections of Earths and Moulds."[26] Evelyn's emphasis on "compositions" and "confections" suggests how writers' descriptions of soil amendment as artful collection and assembly parallels their own composition processes.

Evelyn depicts soil amendment as a kind of matchmaking. As he explains, "Earths should be married together like Male and Female, as if they had *Sexes;* for being of so many several complexions, they should be well consider'd and match'd accordingly." The best match, by his logic, is that of complementary or corrective opposites.[27] Soil amendment more generally, and composting in particular, depended on the mixture of the local and what Evelyn calls "things promiscuous"—amendments to the soil brought in from elsewhere. Londoners were the most likely to be able to access all of the forms of waste that appear in the remarkable lists of ingredients for the composter's brew. What were called "foreign" composts were used infrequently not because of their foreignness but because it was expensive to transport them.[28] But all composters were mixers, "since all fertility is the result of mixture contrary in quality."[29] As Blith explains, "in all Soyles and sorts of Earth, there is a Combustible and Incombustible Nature; Each Wrestling with other, and the more you can occasion Quarrels and Contention by these, that is, the more you adde to that which is predominant, and so allay the distemper in the end, the more gaineth the Earth thereby; For I suppose there is a kinde of contrarietie in Nature, it was ever so from the Fall, and ever will till all be swallowed up againe in one."[30] The improving composter, then, must bring contraries together to promote productive contention. "Mingling of grounds is exceedingly advantageous," as Adolphus Speed advises in *Adam Out of Eden*.[31]

We find here, then, a site at which "mixture" is viewed positively. In his book *Exquisite Mixture*, Wolfram Schmidgen argues that "Across different fields of inquiry and political persuasions, early eighteenth-century Englishmen were increasingly assertive about mixture as the source of their nation's perfections, as the cause of its unity, power, and civility." For Schmidgen, this positive valuation of mixture made

it possible to imagine and embrace mixed government. While Schmidgen does not include agricultural treatises on his "semantic map of mixture in seventeenth-century culture," the compost pile was one early site at which the English explored the generative potential of mixture.[32]

We are familiar with early modern suspicion of matching persons and substances of "several complexions," because it was so often reiterated. As one anti-Catholic polemicist warned darkly, "beware of mixture."[33] Let me turn to two examples from the drama because the stage simultaneously depended on and disparaged mixture. While Sir Philip Sidney famously condemns "mingling kings and clowns" in plays, the stage offered hybrid genres, collaborations, multiple plots, and tonal dissonance to its heterogeneous audiences. The patchworks it purveyed registered both the inevitability of mixtures and the discomfort they conventionally occasioned, especially when it came to marriage. For example, in Chapman, Jonson, and Marston's play *Eastward Ho!* (1605), Mildred, the goldsmith Touchstone's daughter, disdains her sister's aspiration to marry a lord and herself ultimately weds her father's apprentice: "I judge them truly mad that yoke citizens and courtiers, tradesmen and soldiers, a goldsmith's daughter and a knight," she asserts. "I had rather make up the garment of my affections in some of the same piece, than, like a fool, wear gowns of two colours, or mix sackcloth with satin."[34] The patching together Mildred so conventionally rejects resembles the composter's matchmaking Evelyn extols (and, perhaps, the collaboration of three writers on the play itself). In Philip Massinger's *A New Way to Pay Old Debts* (1625), Lord Lovell chooses a wealthy widow, Lady Allworth, rather than the young daughter of the grasping Sir Giles Overeach, explaining

> I would not so adulterate my blood
> By marrying Margaret, and so leave my issue
> Made up of several pieces, one part scarlet,
> And the other London blue.[35]

London blue was the color of servants' liveries. Such passages document one of the things we think we know about early modern culture: sexual and social mixtures were routinely denigrated. Expressions of discomfort about mixture extended far beyond the drama. Patricia Parker points out that, in a wide range of early modern texts, "the language . . . of contaminating, sullying, or mixing is part of a series of distinctions already in place before *miscegenation* (literally 'mixing') became the historically later term for the adulterating or sullying of 'white.'"[36] Adulteration, mixture, and bastardization also provided the figural vocabulary for disparaging admixtures and contamination of various kinds, including that of wine, as I explore elsewhere. Beverages that mixed different kinds of wine or combined wine with sweeteners and other ingredients were routinely belittled as "bastard," a widely used term for a popular sweetened or mixed wine, and "balderdash." Both terms signal something spurious or deceptive in these mixtures, which were, regardless, widely consumed.[37] Disgust at mixture is not the whole story.

In the two examples I've just cited, a goldsmith's daughter and a lord uphold an ideal of the unmixed marriage. Yet, as Laurie Shannon argues, heterosexual marriage was itself a mixture that, however normative, "contradicts the likeness topos at the center of positive ideas about union" in the period. She continues, "Though heterosexual coupling—it goes without saying—is a *sine qua non* of social reproduction and so draws support from a range of other cultural imperatives, its merger of disparate, incommensurate kinds, especially in marital or celebratory forms, poses something of an intellectual problem."[38] What's more, these two characters, Mildred and Lord Lovell, draw their metaphors from the world of clothes making, assuming a decorum in which sackcloth and satin, blue and scarlet, do not mix. Yet the practical arts provide numerous examples of combining apparently disparate materials into valued assemblages. While "motley" was associated with fools, as Mildred suggests, fashionable people routinely pinned and laced together their clothes and could recombine the parts in new ways. The process of assembling a costume, for the stage or the street, was so complicated that one might require assistance. Indeed, as Natasha Korda demonstrates, the work of seamstresses and tirewomen was so essential to theatrical performance that plays both figured it in characters such as tirewomen and, ultimately, elided it.[39] Like players, everyone assembled their ensembles out of disparate pieces. While some of these might be new, others might well be old or used. As is now well known, early modern England had a culture of recycling, with flourishing markets in secondhand clothes, metals, ritual objects, building materials and architectural ornaments, and even

"broken victuals" or leftover foodstuffs.[40] Contemporaries themselves recognized the similarities between different ways of assembling new compositions out of existing fragments, as we have seen in the metaphors of mixed marriages as piece- or patchwork. Robert Burton links edible and wearable compounds when he describes "compound, artificial, made dishes, of which our cooks afford us a great variety, as tailors do fashions in our apparel."[41]

While Burton warns that such dishes "engender gross humors," compounding was central to cooking. There were numerous words for culinary mixtures: hash, pottage, ragout, gallimaufry, and stew, among others.[42] Such words sometimes accrued negative connotations over time, but at root they simply described the combination of preexisting ingredients into a new composite dish. The word "hash," for example, descends originally from the French word *hacher*, "to chop." The *Oxford English Dictionary* gives the earliest definition of the word "hash" as "something cut up into small pieces." Gallimaufry, which seems to have come into use in the sixteenth century, describes "a dish made by hashing up odds and ends of food; a hodge-podge, a ragout" and then, by extension, "a heterogeneous mixture, a confused jumble, a ridiculous medley." The dish compiler or cook depended on the creative assembly, preservation, and then recombination of available ingredients in new ways. "Mess" moves from meaning a serving of food to, in the nineteenth century, "an unappetizing, unpalatable, or disgusting dish or concoction; an ill-assorted mixture of any kind, a hotchpotch." While negative associations were available in the early modern period, they appear to have become more established later. My point here is that the most basic operations of feeding and dressing one's self often required mixture and that this mixture was both inventive and productive, on the one hand, and the source of unease, on the other. The composition always threatened to become a hodge-podge, jumble, or mess. Wendy Wall's work on manuscript recipe collections suggests the parallel between early modern dishes and the books, often the work of different hands over time, that taught readers how to prepare them.[43]

The recipe collection was not the only manuscript that resembled a cauldron or compost pit. Recent scholarship has revealed commonplace books as containers of a sort, in which readers recorded or pasted in and organized pieces of preexisting texts so as to constitute

a new text and to inspire or generate future texts and actions. Many early modern people relied on the process of writing or pasting things into notebooks or commonplace books to fix them in memory and later returned to these sites to prompt their remembrance.[44] Just as some medieval and early modern people seem to have organized their memories spatially, such books organized material under common places—which were also called "nests" in the period, that is, heads, topics, or keywords—rather than by source or in chronological order.[45] Some readers purchased books with printed headings at the top of blank pages to receive their notes and clippings. Others compiled fragments without regard to predetermined categories. For some, the goal was to store and retrieve information. For example, Thomas Harrison's indexing system, discussed by Noel Malcolm and Richard Yeo, was a cabinet or "Arca Studiorum" in which loose slips of paper were hung on hooks.[46] While the arc or cabinet bears a clear resemblance to the compost pit, the analogy between composting and commonplacing breaks down at retrieval, I confess, since the goal of composting is for each scrap to dissolve and become unrecognizable. I am thus interested in the kind of commonplacing that was less about retrieval than it was about submerging collected fragments into one's own composition.

While commonplacing is now well known and much discussed, the particular subset of commonplacing that relied on decomposition in the service of recomposition has only recently been drawn to our attention by historians of the book who are interested in a productive form of consumption that they identify as recycling. According to William Sherman, the commonplace book was one of the early modern reader's "most powerful and pervasive tools" in the project of "textual recycling."[47] Jeffrey Knight and Adam Smyth similarly refer to commonplacing as a form of recycling, emphasizing readers' active, even violent chopping up of texts into fragments and then the creative organization of those pieces into new assemblages. Knight refers to early modern England as a "compiling culture" in which "'compiling,' in fact, *was* production, strictly speaking, in the semantics of Renaissance literary activities. In early usage, the verb 'to compile' could mean 'to compose,' to produce an 'original work.'"[48] Smyth extends this idea of a compiling culture to the formation of an aggregative identity, patched together from scraps and fragments, and

affiliated with rather than distinguished from others.[49] Like Knight and Sherman, Smyth emphasizes commonplacing as "process as much as product," an ongoing, collaborative and unfinishable process extending across time and focused on usefulness, by which writing emerged out of reading, collecting, and mixing.[50] This kind of commonplacing was less about retrieval than it was about creative assembly.

If Roland Barthes proposes that we think of authors as "scriptors" and a text as "a tissue of quotations drawn from the innumerable centres of culture,"[51] that is, as a register or container of scraps from elsewhere, commonplace books expose the seams of that patchwork tissue and the role of the commonplacer or "notebooker" not as a channel for voices but rather as a self-aware and active mixologist. Deborah Harkness uses distillation as a figure for how "notebooking" worked in Elizabethan experimental science to promote "a cycle of collecting, copying, clarifying, and comparing" by which knowledge could be kept "in a constant state of circulation through the page and within [the] community," and by which "circulation and recirculation of matter led to the production of a new substance," but only very gradually.[52] Composting, I propose, might be another such figure that, like distillation, is not an "empty metaphor" but a reminder of the close connection between the material processes (in this case of decomposition) being described, the practical proposals being promoted (systematically collecting, ripening, and using compost), and the creation of texts to disseminate that advice.

The good housewife was one figure for the compiling composer. In his *Anatomy of Melancholy*, Robert Burton describes composition not only as theft (from others' dunghills) but as recombination—"we can say nothing but what hath been said, the composition and method is ours only"—and compares writers to "a good housewife" who "out of divers fleeces weaves one piece of cloth," and to "apothecaries," who "make new mixtures every day."[53] Texts in praise of exemplary women, which were often riddled with contradictions and undermined by ambivalence, also describe their subjects' creativity as depending on a distinctly housewifely mode of compilation. Margaret Cavendish, using a simile informed by agricultural experiments, famously insisted on her own self-sufficiency: "Yet I must say this in the behalf of my thoughts, that I never found them idle; for if the senses bring no work

in, they will work of themselves, like silk-worms that spins out of their own bowels."[54] Yet one of her contemporaries, Walter Charleton, recasts her proprietary singularity as a matter of skillful combination: "I find nothing which is not intirely *Your own*. Like good Housewives in the Countrey, you make a feast wholly of your own provisions: yes, even the Dressing, Sawces, and Garniture of the Dishes are *Your own*."[55] Charleton's praise not only domesticates and feminizes what Cavendish casts as fantastical and autochthonous but also raises the question of her "provisions." The housewife, making her feast, assembles it out of raw materials, leftovers, and other domestic products (sauces, garnishes, cheeses, preserves), some of which she made and some of which she purchased. The work Charleton praises is Cavendish's *Olio*. Olio is another word for a culinary mixture or stew; it was also used to describe a literary miscellany. Cavendish's *Olio* is her own because of the skillful way she has selected and organized various parts into a new composition. Thus even Cavendish, who might seem to offer a model opposed to the composting form of composition, is praised for creating her "own" out of what had already been provided, what is stocked up and on hand.

Similarly, a funeral sermon praises Lady Anne Clifford, well known as an early diarist and Vita Sackville West's ancestor, not as an author but as a collector or compiler who worked her chamber as a walk-in commonplace book:

> She was not ignorant of knowledg in any kind, which might make her Conversation not only *useful* and *grave*, but also *pleasant* and *delightful*, which that she might better do, she would frequently bring out of the rich Store-house of her Memory, *things new and old*, Sentences, or Sayings of remark, which she had read or learned out of Authors, and with these her Walls, her Bed, her Hangings, and Furniture must be adorned; causing her Servants to write them in Papers, and her Maids to pin them up, that she, or they, in the time of their dressing, or as occasion served, might remember, and make their descants on them. So that, though she had not many Books in her Chamber, yet it was dressed up with the flowers of a Library.[56]

The "Great Picture" Clifford commissioned, which has been much discussed, announces her erudition and supports her claim to her

contested inheritance by placing her in relation to books. Yet her eulogist here, Edward, Lord Bishop of Carlisle, insists that she "had not many" in her chamber. Although he emphasizes her achievements as a builder—constructing six great houses—he draws our attention not to the monuments she left behind but to a process that endures only in his account of it. By this account, Clifford did not use fragments of text to help her remember. Instead, she began with a well-stocked memory. Then, in a process similar to the "distributed cognition" Evelyn Tribble associates with the theater, Clifford offloaded the demands of memory onto the built environment.[57] According to this eulogy, she first broke down what she read into "sentences, or sayings of remark," then preserved them in her storehouse, then selected particular flowers from this storehouse, and finally dictated them to others to write out and pin up around their living space. The servants' task of writing them out fixed these posies in their own memories. The process is hierarchical—a mistress and her servants—yet it is also collaborative. Clifford's memories are common—to be shared—and firmly grounded in the place of her chamber. But they are also mobile as memory circulates among the female inhabitants of that chamber, who recycle what Clifford remembers, help to produce the flowers of her library out of a process of decomposition and distribution, and descant or elaborate on it—going off their texts. Their descants engage the flowers not as summations but as provocations. When we consider the compost pile and Clifford's storehouse of memory and dressed-up chamber as parallel sites of memory, we notice a temporal element to which Clifford's eulogizer does not attend: the collected fragments would ripen and wither with time, some falling off or ceasing to attract the eye as they grew familiar, others replacing them. Describing them as flowers is thus particularly apt. As a collaborative installation, Clifford's chamber, as remembered after her death, is also ephemeral, surviving as a memory of Clifford's virtue. Clifford's practice is one not of fixing but of fragmenting, mixing, scattering, and sharing. In her chamber, she is the origin of all the wisdom on display. The sources of her flowers seem irrelevant.

In a 1697 funeral sermon for a less famous woman, Mrs. Elizabeth Dunton, the author, Timothy Rogers, draws attention to his own role in assembling and combining materials, again described as plants, to compose a vivid picture of the deceased:

> I might, I say, have brought in a World of Authors to speak for the women, but in this Case I reckon 'tis with Books as with a Dinner; If I give my Friend a Sallet, 'tis not needful to tell him every Plant, or out of what Garden it came, if it be well mingled, and help his Stomach, 'tis enough; when-ever in the following Discourse I have occasion to speak in another Man's Words, I always usher it in thus; as one says, or observes. And this is all the Mark I give my Reader to know a Stranger by when he meets with him.[58]

Rogers's explanation of his method is typical of the commonplacer as Smyth describes one, neither emphasizing debts nor pretending not to have them. Rogers both acknowledges interest in what menus today call "sourcing"—of plants or quotations—and dismisses the idea that anyone really cares who grew her lettuce and where. In Rogers's example, the salad stands as the kind of dish I have already mentioned, defined by its skillful combination of ingredients into a "well mingled" whole. Just a few years later, John Evelyn published his *Acetaria: A Discourse of Sallets*, elevating this particular mixture to a composition: "We have said how necessary it is, that in the Composure of a *Sallet*, every Plant should come in to bear its part, without being over-power'd by some Herb of a stronger Taste, so as to endanger the native *Sapor* and Vertue of the rest; but fall into their places, like the *Notes* in *Music*, 'in which there should be nothing harsh or grating: And tho admitting some *Discords* (to distinguish and illustrate the rest) striking in the more sprightly, and sometimes gentler Notes, reconcile all Dissonancies, and melt them into an agreeable Composition."[59] Focusing on the salad maker's artistry, Evelyn quotes Milton's description of Eve's skill in knowing what to choose—from a paradisal array of plants more varied than any garden would yield after the Fall—and how to combine them so as "not to mix / Tastes not well join'd, inelegant."[60] Like Milton's narrator, Evelyn praises, then, a mixture that doesn't seem mixed up. Composting was not just metaphorically connected to this kind of compiling. Like assembling a hash or salad, lacing new sleeves onto a bodice, or cutting up and reassembling parts of different texts, composting was another cultural site of creative breakdown and reassembly. While the word was sometimes used interchangeably with "dung" to describe any soil amendment, when "compost" is the focus of husbandry advice it describes in its fullest manifestation the assiduous and inventive collection

of ingredients, careful storage and patient ripening, and judicious application.

In comparing composting, commonplacing and composition, amendment and expansion or revision, I join other contributors to this volume in addressing the importance of soil amendment in early modern English agriculture while also emphasizing the ways it generated writing and modeled what writing is in ways that remain useful. While all of the other essays here, despite their considerable variety, gain traction through a focus on one particular author or text, I have undertaken a composter's approach of collecting a wide variety of materials. My fragments of evidence gain significance through their participation in my assembly. The mixture of materials is simultaneously archive, method, and argument.

As all of the contributors here agree, the seventeenth century commands our attention as a period in which agricultural innovation was a trial, a venture, an experiment, and a hands-on practice for which there were dedicated sites (such as the dunghill, the notebook, the library, and the garden plot). Reading mingled promiscuously with doing,[61] old world with new, study with experimentation. Composting in particular was a topic of vigorous theorization and negotiation. As they argued for composting or debated different strategies for using texts, early moderns constantly reflected on their own relationship to the past. Since so many of us now have compost bins and barrels, and engage in the daily process of collecting what is compostable—balancing "green" and "brown," peering, prodding, and turning—considering this daily habit in historical context might provide an occasion to think about doing and writing, composting and composition, the present and the past. Composting yard and kitchen scraps, like composing texts, is necessarily collaborative and protracted; it troubles the distinction between the practical and the theoretical, waste and value, the historical and the daily, and, as I have emphasized, the material and the figural.

Engaging in a practice we share with early modern people, like composting, might give us access to one kind of knowledge about the past, as historical phenomenologists argue. But composting was not a practice lodged in the collective memory or bodily habits of early modern people; it had to be justified and advocated—that's why so many

people wrote about it, leaving their reflections for our contemplation. In those textual traces, we can spot a persistence from the Romans to the early moderns to us that is generative and workable, a memory and a discovery, and that depends as much on what has broken down beyond recognition as on what we think looks familiar.

28. We find this view amply supported by evidence from the period in a range of scholarly works, including Thomas, *Man and Natural World*; Ken Hiltner, *What Else Is Pastoral?: Renaissance Literature and the Environment* (Ithaca, NY: Cornell University Press, 2011); Simon C. Estok, *Ecocriticism and Shakespeare: Reading Ecophobia* (New York: Palgrave, 2011).

29. Estok, *Ecocriticism and Shakespeare*, 4.

30. Raber, *Animal Bodies, Renaissance Culture*, 81.

31. Ibid., 79.

32. Ibid., 27.

33. Bennett, *Vibrant Matter*, x.

34. Alaimo, *Bodily Natures*, 20.

35. Latour, *Never Been Modern*, 31–32; Timothy Morton, *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge, MA: Harvard University Press, 2007), 4.

36. The field of early modern ecocriticism has been broadly elaborated by Gabriel Egan's *Green Shakespeare: From Ecopolitics to Ecocriticism* (New York: Routledge, 2006); Robert M. Watson's *Back to Nature: The Green and the Real in the Late Renaissance* (Philadelphia: University of Pennsylvania Press, 2007); Ivo Kamps, Karen Raber, and Thomas Hallock, eds., *Early Modern Ecostudies from Florentine Codex to Shakespeare* (New York: Palgrave Macmillan, 2008); Estok, *Ecocriticism and Shakespeare*, and Lynne Bruckner and Daniel Brayton, eds., *Ecocritical Shakespeare: Literary and Scientific Cultures of Early Modernity* (Farnham, UK: Ashgate, 2011).

37. See Watson, *Back to Nature*, 77–107; Louise Noble, "'Bare and desolate now': Cultural Ecology and 'The Description of Cookham,'" 99–108, and Amy Tigner, "The Ecology of Eating in Jonson's 'To Penshurst,'" 109–19, both in *Ecological Approaches to Early Modern English Texts: A Field Guide to Reading and Teaching*, ed. Jennifer Munroe, Edward J. Geisweidt, and Lynne Bruckner (Aldershot, UK: Ashgate, 2015).

38. See Bushnell, *Green Desire*; Munroe, *Gender and the Garden*; Tigner, *Literature and Renaissance Garden*; and Charlotte Scott, *Shakespeare's Nature: From Cultivation to Culture* (Oxford: Oxford University Press, 2014)

39. Scott, *Shakespeare's Nature*, 17, 25.

40. Garrett A. Sullivan Jr., *The Drama of Landscape: Land, Property, and Social Relations on the Early Modern Stage* (Stanford, CA: Stanford University Press, 1998), 12.

41. Ursula K. Heise, *Sense of Place and Sense of Planet: The Environmental Imagination of the Global* (Oxford: Oxford University Press, 2008), 51–62.

42. Ibid., 56.

43. Alaimo, *Bodily Natures*, 16.

44. Morton, *Ecology without Nature*, 95.

45. Jonathan Gil Harris, *Untimely Matter in the Time of Shakespeare* (Philadelphia: University of Pennsylvania Press, 2008), 1–2.

46. Ibid., 3.

47. Ibid., 4–5.

48. Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, MA: Harvard University Press, 2011), 2.

49. Aravamudan, "Catachronism of Climate Change," 17–18.

50. Ibid., 25.

51. Ibid., 9.

52. Latour, *Never Been Modern*, 137.

Notes to Dolan, "Compost/Composition"

I am grateful to audiences at the Renaissance Society of America, the Modern Language Association of America, and Ohio State University for helpful questions and suggestions and to Tiffany Werth, Valerie Traub, Margaret Ferguson, Hillary Eklund, and the other contributors to this volume for inspiration and advice.

1. See this course description for "Vermiculture Furniture" at Ohio State University: http://artandtech.osu.edu/vermiculture_furniture.

2. Gervase Markham, *The Inrichment of the Weald of Kent* (London: Eliz. Purslow, 1649), sigs. B2v, B3.

3. Ibid., B2r. On this optimism, see the invaluable chapter on husbandry manuals in Andrew McRae, *God Speed the Plough: The Representation of Agrarian England, 1500–1660* (Cambridge: Cambridge University Press, 1996), 135–68, esp. 158–59. See also Wendy Wall, "Renaissance National Husbandry: Gervase Markham and the Publication of England," *Sixteenth Century Journal* 27, no. 3 (Autumn 1996): 767–85; and Hillary Eklund, *Literature and Moral Economy in the Early Modern Atlantic: Elegant Sufficiencies* (Burlington, VT: Ashgate, 2015).

4. Albert Howard, *The Soil and Health: A Study of Organic Agriculture* (1945) (University of Kentucky Press, 2010). Dan Barber calls Howard "the father of compost" in *The Third Plate: Field Notes on the Future of Food* (New York: Penguin, 2014), 88.

5. In *Mille plateauz: Capitalisme et schizophrenie* (Paris: Minuit, 1980), Gilles Deleuze and Felix Guattari propose the rhizome as a model for a nonlinear, nomadic process of extension that allows for violent ruptures or cuts as occasions of regeneration and accounts for growth that is not exactly progress: "A rhizome does not begin and does not come to an end, it is always in the middle, between things", according to the translation by Gayatri Chakravorty Spivak, "Why Study the Past?," *Modern Language Quarterly* 73, no. 1 (March 2012): 8–9.

Jacques Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning, and the New International*, trans. Peggy Kamuf (New York: Routledge, 1994), proposes a "hauntology"—an attention to, even a call to engagement with, the unbidden, baffling spectral presence of the past. For a helpful discussion of Derrida and Walter Benjamin's theorizations of how the past bears on the present, see Wendy Brown, *Politics Out of History* (Princeton, NJ: Princeton University Press, 2001), 138–73.

Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton, NJ: Princeton University Press, 2000), 112, argues that because our pasts never disappear, "we live in time-knots" in which multiple periods are contemporaneous. Michel Serres and Bruno Latour, *Conversations on Science, Culture, and Time*, trans. Roxanne Lapidus (Ann Arbor: University of Michigan Press, 1995), 60, 61, enlist the crumpled handkerchief as one way of visualizing how once-distant points in space/time can suddenly be superimposed on one another.

Jonathan Gil Harris, *Untimely Matter in the Time of Shakespeare* (Philadelphia: University of Pennsylvania Press, 2008), 16, proposes the palimpsest, holding two or more texts in tension, "compress[ing] different times in one surface," to describe an "anachronic affinity"—rather than identity—between past and present or between different times and places. Eve Keller also talks in terms of "affinities" between past and present in *Generating Bodies and Gendered Selves: The Rhetoric of Reproduction in Early Modern England* (Seattle: University of Washington Press, 2007), 15, 32. In *Shipwreck Modernity: Ecologies of Globalization, 1550–1719* (Minneapolis: University of Minnesota Press, 2015), Steve Mentz employs the trope of the shipwreck to "pluralize and therefore weaken . . . the familiar story of the once-and-for-all epistemological break known as 'early modernity'" (7). He also argues that "a new cultural imagination" emerges from "composting ancient discourses with newer ideas" (8). On the "problem of the leftover," see Catherine Gallagher and Stephen Greenblatt, *Practicing New Historicism* (Chicago: University of Chicago Press, 2000), 136–62, esp. 141.

6. The figuration that most informs my emphasis is a tad messier than some of the others: in *Afterlives of the Saints: Hagiography, Typology, and Renaissance Literature* (Stanford, CA: Stanford University Press, 1996), Julia Reinhard Lupton chooses "afterlife" to mean both "the half-life of radioactive decay, or the bacterial decomposition of dead matter" and a "'side effect,' the disturbing symptoms brought about by the work of cultural symbolization" to describe how "one layer [of sedimented time] can contaminate, wrinkle, or undermine a contiguous one. One era can obdurately survive into the period that has supposedly surpassed it" (xxxi, xxx). This aligns with Mentz's emphasis on "accumulation and composture" (9).

7. Pierre Nora, "Between Memory and History: *Les lieux de mémoire*," trans. Marc Roudebush, *Representations* 26 (1989): 20; hereafter cited in the text by page number.

8. Robert Herrick, "The Country Life," in *Seventeenth-Century British Poetry, 1603–1660*, ed. John P. Rumrich and Gregory Chaplin (New York: W. W. Norton, 2006), 210–12, lines 23–24. David Goldstein's essay in this volume uses these lines from Herrick as its epigraph.

9. For the origins of this expression in Aristotle and Xenophon and its status as "an axiom among English gentlemen in the sixteenth and seventeenth centuries," see Joan Thirsk, "Plough and Pen: Agricultural Writers in the Seventeenth Century," in *Social Relations and Ideas: Essays in Honour of R. H. Hilton*, ed. T. H. Aston, P. R. Coss, Christopher Dyer, and Joan Thirsk, 295–318 (Cambridge: Cambridge University Press, 1983), 298. See also the website of the Matthiasson winery, https://www.matthiasson.com/vineyards.

10. Markham, *Inrichment of the Weald of Kent*, title page. As Thirsk ("Plough and Pen," 303) points out, Markham does not claim to have written *The Inrichment of the Weald of Kent* but rather to have midwifed it into publication. Similarly, Thomas Tusser's *One Hundred Good Pointes of Husbandrie* (London, 1557) eventually expanded to *Fiue Hundreth Points of Good Husbandry* (London: Rychard Totell, 1573). I am grateful to Hillary Eklund for pointing this out. The title page of Markham's *Farewell to Husbandry* similarly describes it as "for the fourth time revised, amended, and corrected."

11. For ongoing reassessments of these writers, see Rebecca W. Bushnell, *Green Desire: Imagining Early Modern English Gardens* (Ithaca, NY: Cornell University Press, 2003), 161–68; Deborah E. Harkness, *The Jewel House: Elizabethan London and the Scientific Revolution* (New Haven, CT: Yale University Press, 2007); Wendy Wall, *Recipes for Thought: Knowledge and Taste in the Early Modern English Kitchen* (Philadelphia: University of Pennsylvania Press, 2015); Malcolm Thick, *Sir Hugh Plat: The Search for Useful Knowledge in Early Modern London* (Devon, UK: Prospect Books, 2010); and John Bowle, *John Evelyn and His World: A Biography* (London: Routledge and Kegan Paul, 1981).

12. William Lawson, *A New Orchard, and Garden: or, The Best Way for Planting, Graffing, and to Make Any Ground Good, for a Rich Orchard* (London, 1683), sigs. A3r-v. This text went through numerous editions.

13. Joan Thirsk, "Making a Fresh Start: Sixteenth-Century Agriculture and the Classical Inspiration," in *Culture and Cultivation in Early Modern England: Writing and the Land*, ed. Michael Leslie and Timothy Raylor, 15–34 (Leicester, UK: Leicester University Press, 1992), esp. 22. The quotation is from Lucius Junius Moderatus Columella, *Of Husbandry* (London 1745), book 2, chapter 15, "Of the several Kinds of Dung," 91.

14. Gervase Markham, *Markhams Farewell to Husbandry: or, The Enriching of All Sorts of Barren and Sterile Grounds in our Kingdome, to Be as Fruitfull in All Manner of Graine, Pulse and Grasse, as the Best Grounds Whatsoever* (London, 1649), sigs. E8v, E7v.

15. See, among many others, Adolphus Speed, *Adam Out of Eden: or, An Abstract of Divers Excellent Experiments Touching the Advancement of Husbandry* (London, 1659), sigs. I2r–I5r, concluding with the encouragement to include "whatsoever you shall think in your own judgement to be helpful and advantagious thereunto" (sig. I5r); and John Worlidge, *Systema Agriculturae: The Mystery of Husbandry Discovered* (London, 1669), sigs. N3r–O4r. On Sir Hugh Platt's expansive lists, see Ayesha Mukherjee, "'Manured with the Starres': Recovering an Early Modern Discourse of Sustainability," *Literature Compass* 11, no. 9 (September 2014): 602–14, esp. 608.

16. See David Cressy, "Saltpetre, State Security, and Vexation in Early Modern England," *Past and Present* 212 (August 2011): 73–111, on how saltpeter, a crucial ingredient in gunpowder, was "extracted at high cost from soil rich in dung and urine" (74–75), leading to proposals for a "command economy of excrement and urine, centrally mobilized for the kingdom's security.... At the heart of the matter lay the vitalizing power of urine and excrement, and the miracle of nitrous-rich soil" (105, 111). On saltpeter, see also Randall Martin's and David Goldstein's essays in this volume. According to Donald Woodward, "'Swords into Ploughshares': Recycling in Pre-Industrial England," *Economic History Review* n.s. 38, no. 2 (May 1985): 175–91, "Through the provision of night-soil, men, women, and children could join the ever-turning circle of production in agriculture which was so central to the life of pre-industrial society" (189).

17. The first appears in *Ephemerides*, (1657) which is variously described as Hartlib's unpublished diary or commonplace book (part 2, May 1657–December 1657) and the second in a letter from Sir Cheney Culpeper to Hartlib in 1656. Both can be found easily in the *Hartlib Papers* online, ed. Mark Greengrass, Michael Hannon, and Michael Leslie, HRI Online Publications, Sheffield, 2013, http://www.hrionline.ac.uk/hartlib. See also Mark Greengrass, Michael Leslie, and Timothy Raylor, eds., *Samuel Hartlib and Universal Reformation: Studies in Intellectual Communication* (Cambridge: Cambridge University Press, 1994).

18. Walter Blith, *The English Improver Improved: or, The Survey of Husbandry Surveyed Discovering the Improveableness of All Lands...* (London, 1652), 3rd impression, "much augmented," sig. V4r.

19. Hugh Plat insists bluntly that "muck heaps ought to be covered" and offers advice for how to keep them covered without too great expense in *The Jewel House of Art and Nature*, ed. Arnold de Boate (London: Elizabeth Alsop, 1653), sigs. O3v, R1r. Pits are recommended in John Shaw, *Certaine Helpes and Remedies vnder God to Prevent Dearth and Scarcitie* (London: B. Alsop, 1638), which includes a second title page, *Soli Gloria Deo: Certaine Rare and Newv Inventions for the Manuring and Improving of All Sorts of Ground* (London: Bernard Alsop and T. Fawcet, 1636); and in Richard Bradley, *Ten Practical Discourses: Concerning Earth and Water, Fire and Air, as They Relate to the Growth of Plants, with a Collection of New Discoveries for the Improvement of Land, Either in the Farm or Garden* (Westminster, UK: J. Cluer and A. Campbell, 1727).

20. Columella, *Of Husbandry*, book 1, chap. 6, 36–37.

21. John Evelyn, *Acetaria: A Discourse of Sallets* (London, 1699), sigs. K2v–K3r, K3r.

22. John Webster, *The Duchess of Malfi*, ed. Leah S. Marcus (London: Bloomsbury Arden, 2009), 2.1.77, 144–46.

23. *Markhams Farewell to Husbandry*, sig. B2v.

24. Lawson, *A New Orchard*, sig. A3r.

25. William Shakespeare, *The Norton Shakespeare: Based on the Oxford Edition*, ed. Stephen Greenblatt, Walter Cohen, Jean E. Howard, and Katharine Eisaman Maus (New York: W. W. Norton, 1997). In the scene from *The Duchess of Malfi* I cite above, attitudes toward grafting align with attitudes toward social mixture: the Duchess praises grafting as "a bettering of nature" (2.1.151), while Bosola expresses contempt for trying "To make a pippin grow upon a crab, / A damson on a blackthorn" (2.1.152–53).

26. John Evelyn, *A Philosophical Discourse of Earth, Relating to the Culture and Improvement of It for Vegetation, and the Propagation of Plants, &c. as It Was Presented to the Royal Society, April 29, 1675* (London, 1676), sig. C8v.

27. Ibid., sig. F8v.

28. Donald Woodward, "'An essay on manures': Changing Attitudes to Fertilization in England, 1500–1800," in *English Rural Society, 1500–1800: Essays in Honour of Joan Thirsk*, ed. John Chartres and David Hey, 251–78 (Cambridge: Cambridge University Press, 1990), 265.

29. Evelyn, *Philosophical Discourse*, sigs. G1v, E6v. In another moment of registering some unease about soil amendment, Evelyn explains that surface mold, "having never been violated by the Spade, or received any foreign mixture, we will call the *Virgin-Earth*" (sig. A7r).

30. Blith, *English Improver Improved*, sig. T3r.

31. Speed, *Adam Out of Eden*, sig. I3v. Composting follows the logic of Galenic medicine, by which opposites need to balance each other, rather than that of Paracelsian medicine, by which like cures like. I'm grateful to Sarah Neville for pointing this out.

32. Wolfram Schmidgen, *Exquisite Mixture: The Virtues of Impurity in Early Modern England* (Philadelphia: University of Pennsylvania Press, 2012), xi, xiii.

33. William Leigh, *Great Britaines, Great Deliverance, from the Great Danger of Popish Powder* (London: T. Creede, 1606), sig. E.

34. George Chapman, Ben Jonson, and John Marston, *Eastward Ho!*, in *English Drama 1580–1642*, ed. Charles Frederick Tucker Brooke and

Nathaniel Burton Paradise, 397–434 (Lexington, MA: D. C. Heath, 1933), 1.2.51–54, 2.1.71–74.

35. Philip Massinger, *A New Way to Pay Old Debts*, in Brooke and Paradise, *English Drama, 1580–1642*, 4.1.224–27. William N. West, "'But This Will Be a Mere Confusion': Real and Represented Confusions on the Elizabethan Stage," *Theatre Journal* 60, no. 2 (2008): 217–33, discusses John Lyly's prologue to *Midas*, describing the play as a gallimaufry, minglemangle, and hodgepodge. As West shows in the service of an argument that Elizabethan theater ran on confusion, Lyly describes plays as "confounding," "literally a mixing together of things" (219). On the English language itself as a hodgepodge, see Margaret W. Ferguson, "Thomas Nashe: Cornucopias and Gallimaufries of Prose," in *Teaching Early Modern Prose*, ed. Susannah Brietz-Monta and Margaret W. Ferguson, 199–213 (New York: Modern Language Association of America, 2010); Jenny C. Mann, *Outlaw Rhetoric: Figuring Vernacular Eloquence in Shakespeare's England* (Ithaca, NY: Cornell University Press, 2012); and Jeffrey Masten, *Queer Philologies: Sex, Language, and Affect in Shakespeare's Time* (Philadelphia: University of Pennsylvania Press, 2016).

36. Patricia Parker, *Shakespeare from the Margins: Language, Culture, Context* (Chicago: University of Chicago Press, 1996), 5; see also 276n12. On the early modern conceptualization of miscegenation, see also Margaret W. Ferguson, "News from the New World: Miscegenous Romance in Aphra Behn's *Oroonoko* and *Widow Ranter*," in *The Production of English Renaissance Culture*, ed. David Lee Miller, Sharon O'Dair, and Harold Weber, 151–89 (Ithaca, NY: Cornell University Press, 1994).

37. Barbara Sebek, "'More Natural to the Nation': Situating Shakespeare in the 'Querelle de Canary,'" *Shakespeare Studies* 42 (July 2014): 106–21, esp. 115.

38. Laurie Shannon, "Nature's Bias: Renaissance Homonormativity and Elizabethan Comic Likeness," *Modern Philology* 98, no. 2 (November 2000): 183–210, esp. 186; cf. Shannon, *Sovereign Amity: Figures of Friendship in Shakespearean Contexts* (Chicago: University of Chicago Press, 2002), 56.

39. Natasha Korda, *Labors Lost: Women's Work and the Early Modern English Stage* (Philadelphia: University of Pennsylvania Press, 2011); Ann Rosalind Jones and Peter Stallybrass, *Renaissance Clothing and the Materials of Memory* (Cambridge: Cambridge University Press, 2000); and Will Fisher, *Materializing Gender in Early Modern English Literature and Culture* (Cambridge: Cambridge University Press, 2006).

40. On an early modern economy of recycling, see Donald Woodward, "Recycling in Pre-Industrial England"; and Sara Pennell on "the recycling of foodstuffs and meals" (242) in "'Great Quantities of Gooseberry Pye and Baked Clod of Beef': Victualling and Eating Out in Early Modern London," in *Londinopolis, c. 1500–c. 1750: Essays in the Cultural and Social History of Early Modern London*, ed. Mark S. R. Jenner and Paul Griffiths, 228–49 (Manchester, UK: Manchester University Press, 2000).

41. Robert Burton, *The Anatomy of Melancholy*, ed. William H. Gass (New York: New York Review of Books, 2001), 1.2.2.1:225.

42. See Joan Thirsk, *Food in Early Modern England: Phases, Fads, Fashions, 1500–1760* (London: Hambledon/Continuum, 2006).

43. Wall, *Recipes for Thought*; see also David B. Goldstein, *Eating and Ethics in Shakespeare's England* (Cambridge: Cambridge University Press, 2013), esp. 139–70.

44. Scholars including Mary Carruthers and Ann Blair have discussed early modern memory practices. On the particular role of writing, breaking texts down, and memory, see Richard Yeo, "Notebooks as Memory Aids: Precepts and Practices in Early Modern England," *Memory Studies* 1, no. 1 (January 2008): 115–36; and Adam Smyth, *Autobiography in Early Modern England* (Cambridge: Cambridge University Press, 2010). Smyth describes commonplace books as "always unfinished, indeed unfinishable, texts—as manuscripts forever in the process of being made" (152). "To read a commonplace book today is to encounter a text which is not only unfinished, but which possesses a quality of existing, very vividly, in the present tense—awaiting the next pointing hand to be drawn in the margin. As a text that appears to be ongoing, the commonplace book collapses past, present, and future: the current reader continues the process of making, instigated by the former compiler, who recycled words from earlier texts" (154). Wall (*Recipes for Thought*, 198) describes some recipe compilations as "storage sites" where not only memories but also negotiations over what was worth remembering were recorded for posterity. On Bibles, books of hours, and childbirth books as sites for storing family histories, see William H. Sherman, *Used Books: Marking Readers in Renaissance England* (Philadelphia: University of Pennsylvania Press, 2007), 59–60. While Nora ("Between Memory and History," 18) refers to the "manuals, dictionaries, testaments, and memoranda drafted by heads of families in the early modern period for the edification of their descendants" as functional sites of memory, we might add to Nora's list the maternal legacies, recipe compilations, and annotations in family Bibles that women created and maintained as sites of collective memory. In contrast, Yeo ("Notebooks as Memory Aids," 117) argues that notebooks were not storage sites but, rather, "prompts for material that should be stored in memory. Moreover, they were regarded as tools for training and improving recall from memory."

45. The crucial roles of writing and placing in early modern memory practices worked the lived environment as a site of memory by, for instance, pasting printed tables condensing the wisdom of huge books onto the walls. See Tessa Watt, *Cheap Print and Popular Piety, 1550–1640* (Cambridge: Cambridge University Press, 1991), 217–53.

46. Richard Yeo, *Notebooks, English Virtuosi, and Early Modern Science* (Chicago: University of Chicago Press, 2014), 113–23.

47. Sherman, *Used Books*, 128.

48. Jeffrey Todd Knight, *Bound to Read: Compilations, Collections, and the Making of Renaissance Literature* (Philadelphia: University of Pennsylvania Press, 2013), 8, 13. Patricia Fumerton, "Remembering by Dismembering: Databases, Archiving, and the Recollection of Seventeenth-Century Broadside Ballads," in *Ballads and Broadsides in Britain*, ed. Fumerton and Anita Guerrini, 14–34 (Burlington, VT: Ashgate, 2010), argues that early modern consumers gathered "associational assemblages" around particular tunes, images, and topics (25). See also the essays in *The Renaissance Collage: Toward a New History of Reading*, ed. Juliet Fleming, William Sherman, and Adam Smyth, a special issue of *Journal of Medieval and Early Modern Studies* 45, no. 3 (2015).

49. Smyth, *Autobiography*. On identity as an assemblage, see also Drew Daniel, *The Melancholy Assemblage: Affect and Epistemology in the English Renaissance* (New York: Fordham University Press, 2013). Daniel describes Jacques in *As You Like It*, for instance, as presenting himself as "a hybrid construction formed out of disparate, found sources" (7). David Goldstein (*Eating and Ethics*, 11) likewise argues that "a human being is a mixed bag, a surfeit of scraps, comprising both inwardness and exteriority." In the idea of the self as an assemblage, we see the intersection between early modern scholarship on material culture and the history of the book and the work of Bruno Latour on "actor networks" and Gilles Deleuze on assemblages, among others. We also see the figural resonances and theoretical implications of early modern material practices of compiling and combining.

50. See Smyth's list (*Autobiography*, 128–29) of what commonplace culture can tell us about reading and writing practices. Smyth emphasizes "an interest in crumbling texts into parts, and in the production of new texts out of old parts" (128).

51. Roland Barthes, "The Death of the Author," in *Image, Music, Text: Essays Selected and Translated by Stephen Heath*, 142–48 (New York: Hill and Wang, 1977), 146.

52. Harkness, *Jewel House*, 196.

53. Burton, *Anatomy of Melancholy*, "Democritus to the Reader," 25, 115.

54. Margaret Cavendish, "A True Relation of My Birth, Breeding, and Life" (1656), in *Paper Bodies: A Margaret Cavendish Reader*, ed. Sylvia Bowerbank and Sara Mendelson (Peterborough, ON: Broadview, 2000), 59. Despite her claims to be "singular," recent scholarship on Cavendish documents her embeddedness in her cultural moment and the many sources from which she drew.

55. Ibid., 309.

56. Edward Rainbowe, Lord Bishop of Carlile, *A Sermon Preached at the Funeral of the Right Honorable Anne, Countess of Pembroke, Dorset, and Montgomery* (London, 1677), sig. E4r–v. Clifford died in 1676 at 86 years old. For how other women made their chambers into commonplace installations, see Frances E. Dolan, "Reading, Work, and Catholic Women's Biographies," *English Literary Renaissance* 33, no. 3 (Autumn 2003): 328–57.

57. Evelyn B. Tribble, *Cognition in the Globe: Attention and Memory in Shakespeare's Theatre* (New York: Palgrave Macmillan, 2011), uses this approach to understand how actors mastered their parts, but it is also useful for thinking about how Anne Clifford worked her closet.

58. Timothy Rogers, *The Character of a Good Woman, Both in a Single and Marry'd State... Occasion'd by the Decease of Mrs. Elizabeth Dunton... with an Account of Her Life and Death, and Part of the Diary Writ with Her Own Hand* (London, 1697), sig. e4r.

59. Evelyn, *Acetaria*, sig. G6r–v.

60. I quote Milton as Evelyn does. The passage is in *Paradise Lost*, book 5. See Goldstein's discussion in this volume of postlapsarian manuring in Milton's Eden as a spiritual practice that both acknowledges the fallenness of creation and works to correct it.

61. Harkness (*Jewel House*) and Thirsk ("Plough and Pen," 299) both emphasize the relationship between doing and writing for figures such as Plat.

Notes to Badcoe, "Richard Carew and the Matters of the Littoral"

1. Richard Carew, "The First Booke," in *The Survey of Cornwall* (London: S. Stafford for John Jaggard, 1602), sig. C2r. In this and in all subsequent quotations I have lightly modernized the text and removed italics.

2. Ibid., "Second Booke," sig. Qq3v.

3. Ibid., "To the Honourable, Sir Walter Raleigh *Knight, Lord Warden of the* Stannaries, Lieutenant Generall of Cornwall, &c.," sig. ¶3r.

4. Ibid., "First Booke," sig. Q2r. Here, Carew quotes a section of a poem that he says was shared with him by William Camden. Camden also includes the same extract, from John of Hauville's twelfth century poem *Architrenius*, which is presented with an alternative English translation in the English edition of Camden's *Britannia*. See William Camden, *Britain; or, A Chorographicall Description...*, trans. Philémon Holland (London: George Bishop and John Norton, 1610), sig. Q1v.

5. Carew, "First Booke," sig. B3r.

6. Ibid., "To the Reader," sig. ¶4r.

7. Wendy Wall, "Renaissance National Husbandry: Gervase Markham and the Publication of England," *Sixteenth Century Journal* 27, no. 3 (Autumn 1996): 770.