'Because the Error is Material':

Tracing Error in the Works of

Thomas Browne and Margaret Cavendish

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Abstract

This thesis examines how error is conceived and depicted in the works of Thomas Browne and Margaret Cavendish. Examining an area which has largely been neglected due to the modern scholarly tendency to privilege positivistic accounts of 'truth' and 'progress', I will consider the rhetoric of error which pervades early modern texts.

Identifying a commonly expressed and tightly linked nexus between error, errancy and the material book in the early modern period, this thesis uses close literary analysis to complicate common notions of how 'error' was imagined, encountered and experienced in the seventeenth century. Focusing on the natural philosophical writings of Browne and Cavendish (particularly the *Pseudodoxia Epidemica, Poems and Fancies*, and *Observations Upon Experimental Philosophy*) I show that the aesthetic and figurative depiction of error both influenced and reflected these authors' epistemological concerns.

My account traces a range of responses to error, suggesting that as well as causing anxiety, error was also a source of pleasure, aligned with creativity and inventiveness, and peculiarly generative. I highlight and analyse a semantic tendency to use spatial terms to depict the complex relations between error, truth and knowledge. Exploring the rhetoric of errant paths and erroneous obstructions in metaphorical landscapes of knowledge, as well as tracing the similar paths of errant reading promoted by the material book, I show that error was perceived of as a fundamental step towards knowledge, rather than a detraction from it. I draw on developments in the fields of the history of reading and cognitive science to indicate that the literary rhetoric that draws together error, errancy, cognitive process and the material book has more than just metaphorical significance to these writers, concluding that it perpetuates and constructs modes of knowing central to Browne and Cavendish's natural philosophy.

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Declaration

I hereby confirm that this work is my own, is original, and has not previously been published or submitted for examination at this institution or elsewhere.

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Introduction

'The scanning of error'

How else can one write but of those things which one doesn't know, or knows badly? We write only at the frontiers of our knowledge, at the border which separates our knowledge from our ignorance and transforms the one into the other.

- Gilles Deleuze, Difference and Repetition

Beauty Marks

'[A]s the greatest beauties are not without moles, so the best books are seldom without errors', writes Margaret Cavendish in the prefatory address to *Observations Upon Experimental Philosophy* (1666), the culminating thesis of her natural philosophy.¹ Her phrase echoes, and perhaps even plagiarises, a flattering account of her work by Mark Anthony Benoist, who remarked in a 1662 letter that 'what is commonly called Defect, here becomes comly, like some Moles in a beautiful Face'.² Notionally ugly and undesirable, errors are conceived of as an integral part of the beautiful (type)face of a well-written text. This metaphorical depiction of error is striking. Not only does Cavendish indicate the inevitability of errors – the preceding phrase warns that 'it is impossible that all things can be so exact, that they should not be subject to faults or imperfections' – she also explicitly argues for their rightful place in philosophical texts, framing her errors in the language of literary

¹ Margaret Cavendish, *Observations Upon Experimental Philosophy*, ed. Eileen O'Neill (Cambridge: Cambridge University Press, 2001), "To the Reader," 14. All references hereafter will be to this edition unless marked otherwise.

² Letters and Poems in Honour of the Incomparable Princess, Margaret, Dutchess of Newcastle (London: Thomas Newcombe, 1676), p.81 sig.Y[1r].

aesthetics.³ As part of her elaborate attire, Cavendish famously wore black velvet or silk patches on her face to disguise her blemishes; fashionable shapes at the time included stars and hearts.⁴ These artificial beauty marks and erroneous moles are provocatively similar: mirroring her comparison of textual errors to moles, Cavendish conceived of her patches in textual terms. While she describes the patches as '[l]ike wise sentences in a speech, [that] give grace and lustre',⁵ both Katie Whitaker and Samuel Pepys have noted that 'they also hid the pimples which had been bothering her'.⁶ These errors, then, are both constituent parts of beauty and in tension with it. Cavendish's parenthetical statement both conceals and reveals an ambivalent relationship with error.

Despite the evident concern with error during the early modern period, scholarship has paid relatively little attention to its many and varied manifestations. Where scholars have considered error, they have normally focused on the Fall and theological error, print error,⁷ or errors in 'matters of fact' (whether these be philosophical, theological or observational).⁸ These studies have generally been concerned with specific instances of error and their implications, rather than considering more broadly what Seth Lerer has called the 'poetics' of erratum in this period.⁹

³ Cavendish, Observations, "To the Reader," 14.

⁴ Katie Whitaker, *Mad Madge: Margaret Cavendish, Duchess of Newcastle, Royalist, Writer and Romantic* (London: Vintage, 2004), 297.

⁵ NUL MS Pw1 31, Portland Manuscripts, Department of Manuscripts and Special Collections, University of Nottingham, quoted in Whitaker, *Mad Madge*, 297.

⁶ Samuel Pepys documented Cavendish's 'many black patches because of pimples about her mouth,' *The Diary* of *Samuel Pepys* eds. Robert Latham and William Matthews, vol. 8: 1667 (London: G. Bell and Sons Ltd, 1974) 26 April 1667, 186.

⁷ See for example Adrian Johns, *The Nature of the Book: Print and Knowledge in the Making* (Chicago: Chicago University Press, 1998).

⁸ See for example Lorraine Daston, "Marvelous Facts and Miraculous Evidence in Early Modern Europe," *Critical Inquiry* 18, no. 1 (1991); Barbara J. Shapiro, *Probability and Certainty in Seventeenth-Century England* (Chicago: University of Chicago Press, 1994).

⁹ Seth Lerer, *Error and the Academic Self: The Scholarly Imagination, Medieval to Modern* (New York: Columbia University Press, 2002), 2.

This thesis will argue that an imaginative and playful but simultaneously sincere aesthetic of error is captured in the work of two of the seventeenth century's most erratic and elusive writers. Moving on the edges of Royal Society circles – constrained, respectively, by geography and gender – Thomas Browne and Margaret Cavendish stand at the fringes of the Scientific Revolution. Chiefly studied as literary writers, their work has, until recently, been positioned only in the margins of the history of science. A ramble through their texts will reveal the imaginative power and aesthetic of error, providing a useful case study of the many different ways in which error, print, and cognition were closely bound together in mid-seventeenth-century natural philosophy.

The importance of error as a stepping stone to truth has more often than not been skipped over. By examining the complex imagined spaces of early modern truth and error, this thesis hopes to gain a better understanding of both. This study pairs together the work of Browne and Cavendish in order to expose the variety of ways in which error was imagined and experienced as a cognitive process in natural philosophical discourse. Their work, often characterised as *sui generis*, provides compelling and concrete instances in which error is examined in a conceptual manner as well as in relation to matters of fact.

The Error of Grand Narratives

One major problem in the scholarship surrounding error has been the privileging of the positivistic 'progress' of science and knowledge towards 'truth' in scholarly accounts of the symptomatically named 'Scientific Revolution'. Not only do such grand narrative accounts tend to downplay pluralist and probabilist attitudes, which are more accepting of the

possibilities of error, they also emphasise successful results rather than the erroneous ideas which got left behind. Robert M. Wallace has argued:

[t]he continuity underlying the change of epoch [from Ancient to Modern is...] a continuity of problems rather than solutions, of questions rather than of answers. Instead of remaining forever fixated on "doctrines" or "ideas" as the stuff of our tradition, we need to learn to relate these to the human activity of inquiring, of questioning, which gives them relevance and concrete meaning.¹⁰

While authors including Hans Blumenberg have taken up this call, providing cogent accounts of the social and intellectual processes and conditions of knowing, no sustained or serious account of the significance of early modern error has yet been constructed.

When Michel de Montaigne suggests that the quest for knowledge or the process of reasoning that is often more attractive to the mind than truth itself, he does so in a context of an essay keenly alert to error. Fully engaged with error as both a productive and detrimental quality that directs thought not along straight roads but in the roundabout paths of digression, he argues that it is the means and not the ends of knowledge that we are attracted to:

I was even now plodding (as I often doe) upon this, what free and gadding instrument humane reason is. I ordinarily see, that men, in matters proposed them, doe more willingly ammuze and busie themselves in seeking out the reasons than in searching out the trueth of them.¹¹

Montaigne's 'free and gadding', even 'plodding' characterisation of reason participates in the rhetoric of errancy so frequently applied to characterisations of cognitive processes. The construction of knowledge as a mental landscape that must necessarily be navigated – often via errant paths – and thought as the movement across it, was common in the early

¹⁰ Robert M. Wallace, "Translator's Introduction," in Hans Blumenberg, *The Legitimacy of the Modern Age*, trans. Robert M. Wallace (Cambridge, Massachusetts: MIT Press, 1983), xviii.

¹¹ Michel de Montaigne, "Of the Lame or Crippel," in *Essays*, vol. 2, trans. John Florio (London: Nonesuch Press, 1931), 446.

modern period. The highly detailed yet digressive nature of both Browne and Cavendish's texts implicitly gesture to a similar enjoyment of cognitive and rational process. These lines of thought did not shy away from error. Francis Bacon, who famously proposed a catalogue of errors to progress the project of natural philosophy, 'liked to observe that truth more easily emerges from error than from confusion',¹² and Peter Harrison has attested that 'in the seventeenth century the standard pattern for positive proposals to advance knowledge was to begin with an analysis of the causes of error'.¹³ This trope, of moving through error to knowledge, which will be more fully examined in my second chapter, is repeatedly and consistently framed in terms of journeying, topography and errancy.

Nevertheless, error, still regarded as epistemologically undesirable, and so often depicted as a digressive detour discarded, defeated or overcome on the route to truth, has also been cast by the academic wayside as an obstacle cluttering up accounts of smooth progress. In modern scholarship, attitudes to error in the seventeenth century have largely been subordinated as explanatory notes in accounts of the construction of truth. What François Rigolot has called the 'Renaissance Fascination with Error' has received little theoretical attention, with accounts of knowledge overwhelmingly privileging methods of obtaining positive proof.¹⁴ Seth Lerer has documented this academic focus on eliminating material or factual errors rather than on error as a concept, noting a still-common

¹² Rhodri Lewis, "A Kind of Sagacity: Francis Bacon, the Ars Memoriae and the Pursuit of Natural Knowledge," *Intellectual History Review* 19, no. 2 (2009): 175. Francis Bacon recommends 'a kalendar of popular errors: I mean chiefly in natural history, such as pass in speech and conceit, and are nevertheless apparently detected and convicted of untruth, that man's knowledge be not weakened nor imbased by such dross and vanity.' Francis Bacon, *Of the Advancement of Learning*, in *Bacon's Advancement of Learning and New Atlantis* (Oxford: Oxford University Press, 1906) Book II.viii.5, 112.

¹³ Peter Harrison, "Original Sin and the Problem of Knowledge in Early Modern England," *Journal of the History of Ideas* 63, no. 2 (2002): 244.

¹⁴ François Rigolot, "The Renaissance Fascination with Error: Mannerism and Early Modern Poetry," *Renaissance Quarterly* 57, no. 4 (2004).

assumption that 'academic scholarship should be the search for truth and that our job should be to purge texts of corruptions and stop criticism of its errors'.¹⁵ Yet while Lerer argues for increased attention to error, his own approach stops short of exploring its full semantic range in the early modern era.

Julian Yates's promisingly titled *Error, Misuse, Failure* is less a study of conceptual error than a consideration of the 'thing-ness' revealed in moments of malfunction,¹⁶ and the chapter on natural philosophy in Barbara Shapiro's intellectual history, *Probability and Certainty in Seventeenth-Century England*, concentrates neither on attitudes to errors nor the style in which they are imagined or presented, despite a subsection titled 'The Style of Science and the Fallibility of Man'.¹⁷ Steven Shapin's otherwise magisterial *Social History of Truth* subordinates any attention to the diverse manifestations and meanings of error to his primary positivistic focus, and when he does consider error, he tends to do so chiefly in terms of ideas about common or vulgar error. While this was a major concern, it was far from the only way error was considered: as this thesis hopes to illustrate, voyages into error could generate as much discovery and adventure as crusades after truth.¹⁸

Before examining the complex status of error for Browne and Cavendish, however, I will begin by detailing how the figurative relationship between error and books was bookended by two of the most canonical literary texts of the early modern period.

¹⁵ Lerer, *Academic Self*, 14.

¹⁶ Julian Yates, *Error, Misuse, Failure: Object Lessons from the English Renaissance* (Minneapolis: University of Minnesota Press, 2003).

¹⁷ Shapiro, *Probability and Certainty*.

¹⁸ Steven Shapin, A Social History of Truth: Civility and Science in Seventeenth-Century England (Chicago: University of Chicago Press, 1994).

The Scanning of Error

In his famous defence of press freedom, *Areopagitica*, John Milton not only vindicates free speech, he also explicitly supports the printing of books containing errors, arguing that 'all opinions, yea errors, known, read, and collated, are of main service & assistance toward the speedy attainment of what is truest'. This is a radical stance; 'error' for Milton is morally and theologically significant. When Milton describes 'the knowledge and survay of vice in this world so necessary to the constituting of human vertue, and the scanning of error to the confirmation of truth', his parallelism equates 'error' with 'vice'. The wider context of the passage repeatedly invokes progress towards 'good', 'virtue', and 'truth' through or by the knowledge of their antitheses: 'evill', 'vice', and 'error'. In this semantic landscape, the morally corrupt and erroneous are elided, presented not only as innate properties of truth and goodness. The antagonistic qualities of good and evil, and by extension error and truth, are 'involv'd and interwoven', 'cleaving together' as 'two twins' from the same forbidden apple.¹⁹

These oppositional properties are more than mutually coexistent. While the verb 'cleaving' implies that good and evil, truth and error are bound together and separated in the same instant, Milton also theorises a chronological progression in human knowledge from error towards truth, and does so in terms explicitly entwined with reading practices. Referring to the practice of 'scanning', and citing a particular book, John Selden's *De Iure Naturali et Gentium Iuxta Disciplinam Ebraeorum* (1640), as proof of his assertion that 'errors known, read and collated' enable the quickest discovery of truth, Milton hints that

¹⁹ John Milton, Areopagitica and other Political Writings of John Milton (Indianapolis: Liberty Fund, 1999), 16-18.

encountering and overcoming error are particularly readerly activities.²⁰ This position is made explicit in a self-consciously subverted simile that tests our readerly attention by stressing 'difference' rather than similitude:

[b]ad meats will scarce breed good nourishment in the healthiest concoction; but herein the difference is of bad books, that they to a discreet and judicious Reader serve in many respects to discover, to confute, to forewarn and to illustrate.²¹

Given such language, it is unsurprising that Gordon Teskey has argued '[t]he fall is, among other things, a fall into reading' in *Areopagitica.*²² But reading is not only the dark and erroneous consequence of the Fall for Milton; it is also a safety net, preventing 'judicious Reader[s]' falling further into error and redirecting them onto paths of discovery.

Books become appropriate sites for encountering error because of their potential as simulated environments and avatars of the 'real' world: 'reading all manner of tractats' allows us to 'more safely, and with lesse danger scout into the regions of falsity and sin'.²³ We might be 'promiscuously read[ing]', but our sin is virtual, confined to the page, and more safely overcome than it might be in reality.²⁴ Books are a testing ground in which we can battle and conquer error, their pages a metaphorical landscape which map and explore error's boundaries.

Fittingly, Milton's recommended textual teacher of virtue is not Selden's dry Latin study of natural law, but the work of Edmund Spenser. Milton singles out the imaginative allegory of *The Faerie Queene*, in which a battle with the dragon Errour is a key early episode.

²⁰ The earliest meaning of the verb 'scan' was literary; from as early as 1398 it meant the metrical analysis of verse. This literary term had, by the late sixteenth century, come to mean a more broad form of testing for accuracy: 'To criticize; to test or estimate the correctness or value of; to judge *by* a certain rule or standard.' s.v. "scan, v.," *Oxford English Dictionary Online,* September 2014, Oxford University Press,

http://www.oed.com/ (accessed 1 November, 2014).

²¹ Milton, Areopagitica, 16.

²² Gordon Teskey, "From Allegory to Dialectic: Imagining Error in Spenser and Milton," *PMLA* 101, no. 1 (1986): 15.

²³ Milton, Areopagitica, 18.

²⁴ Milton, Areopagitica, 18.

Suitably, Milton's account of overcoming error stresses action. Avoiding the knowledge or taint of evil and corruption makes 'not a pure' but a 'blank vertue', devoid of meaning and, like the blank page, empty of text; a useless, protean book, whose story is yet to be written.²⁵ This terminology of the blank page repurposes the language of negation used in René Descartes' influential discussion of error. Antagonistically opposed to Descartes' error, which is born from a passive 'privation or lack of some knowledge' and cannot be an active faculty, Milton's virtue is founded on an active principle confronting error.²⁶

Vigorous verbal listing shows that virtue is reached in a persistent and dynamic challenge to evil or erroneous material: we must 'apprehend and consider vice[...], and yet abstain, and yet distinguish, and yet prefer that which is truly better'; we must 'cull [vice and error] out, and sort [it] asunder'.²⁷ We are 'purifie[d]' by putting the material of the world on 'triall'.²⁸ Milton argues compellingly that our virtue must not remain 'unexercis'd'; the true Christian must be a 'wayfaring' one, negotiating this moral landscape.²⁹ This is why Spenser is 'a better teacher than *Scotus* or *Aquinas'* – he tests his heroes' integrity, putting them through their paces 'that [they] might see and know, and yet abstain'.³⁰ Spenser allows us to encounter and reject the path of error.

Milton's appropriation of Spenser, however, is problematic: their conceptions and constructions of error differ wildly. Comparing *The Faerie Queene* to *Paradise Lost*, Teskey notes astutely that while 'Spenser is willing to attribute great moral latitude and complexity

²⁵ Milton, Areopagitica, 18.

²⁶ René Descartes, *Meditations and Other Metaphysical Writings*, trans. Desmond M. Clarke (London: Penguin, 2003), 45. Descartes describes this lack as arising from the critical gap between our 'limited and finite' faculty for knowing, and our capacity for free will, which is infinite, 47. See also Kathryn Schulz, who notes that a number of influential accounts 'conceived of error as arising from a gap: sometimes between words and things, sometimes between the present and the primeval, sometimes between the mortal and the divine – but in every case, and fundamentally, between our own mind and the rest of the world.' *Being Wrong: Adventures in the Margin of Error* (London: Portobello Books, 2011), 22.

²⁷ Milton, Areopagitica, 17.

²⁸ Milton, Areopagitica, 17.

²⁹ Milton, Areopagitica, 17.

³⁰ Milton, Areopagitica, 18.

to error, Milton forces the concept to either side of a distinction between good and evil³¹. Between these two representations we begin to grasp the complex and nebulous nature of error in the early modern period. Milton's suggestion that Spenser's narrative, in demanding action and the confrontation of error by its heroes, represents an ideal allegory for the virtuous Christian wayfarer, highlighting a fundamental disjunct between Milton's desire to clearly differentiate truth and error and the complex mechanisms by which error is both experienced and conquered.

This disjunct partly derives from the tradition of 'associat[ing] wandering with moral error' which seems to emerge from the etymology of the Latin root for 'error', *errare*, and stretches back to medieval romance poets. ³² With conjectured roots in Classical epics, this tradition continues among a range of early modern writers including Ludovico Ariosto and John Bunyan.³³ The still-common sense of 'error' as '[t]he condition of erring in opinion; the holding of mistaken notions or beliefs' dates back to at least the late medieval period and was well entrenched by the time compendiums of errors became fashionable in the seventeenth century.³⁴ Traced back to its Latin root, however, the primary meaning of *errare* is '[t]he action of roaming or wandering; hence a devious or winding course, a

³¹ Teskey, "Imagining Error," 9.

³² Teskey, "Imagining Error," 11. A whole series of terms etymologically conflate the spatial and the epistemological. Seth Lerer notes that 'Corrigere in Latin means to draw a straight line. And so the inquiries of rhetoric and philology possess themselves of metaphors of straightness and deviation, of fixity and error. Rhetorical manuals since Cicero have exposed the methodology of "method" itself in these terms. The greek *methodos* (literally, "about the way") became the Latin *via et ratio*, "the way and reason". Rhetorical enquiry became an ordered way or method toward a proper goal, and later writers were not loath to moralize this idiom. The metaphor of geographical direction became a form of moral directive. The Latin term for what we think of as an academic discipline, *ars*, was defined over and over again as a clear set of rules offering a clear method and leading to truth,' *Academic Self*, 11-12. See also George Lakoff and Mark Johnson's account of spatialised metaphors in *Metaphors We Live By* (Chicago: Chicago University Press, 2003), and Mary Baine Campbell on the links between epistemological discourse and metaphors of exploration and conquest in this period in *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca: Cornell University Press, 1984). ³³ John Bunyan describes how Christian would go 'walking in the Fields[...] reading in his Book, and greatly distressed in his mind', tying together the moral and meandering strands of errancy and reading at the start of *The Pilgrim's Progress*, ed. Roger Pooley (Harmondsworth: Penguin, 2008),12.

³⁴ s.v. "error, *n.*," OED online. For an account of early modern compendiums of errors, see Natalie Zemon Davis, "Proverbial Wisdom and Popular Errors," in *Society and Culture in Early Modern France* (Stanford: Stanford University Press, 1988), which is discussed further in the following chapter.

roving³⁵ As this morally-neutral, perambulatory sense of the word was used in early modern English and French alongside its epistemological counterpart, errancy and error developed broadly interchangeable semantic functions. This is particularly evident in the play on the spatial and moral dimensions of erring in vernacular translations of the Bible.³⁶

Wandering, or 'wayfaring', as an early modern hybrid of Latin poetic and medieval moral senses, is problematic. It exposes the hero, an avatar of the reader, to erroneous and potentially sinful behaviour, while simultaneously offering them the opportunity to illustrate and construct their virtue by overcoming these errors. The participation in error and its symbolic counterpart, errancy, is what enables its defeat, a paradox which at once plays into the Miltonic rhetoric of active combat against error while problematising his attempt to construct clear equivalences between truth and virtue, vice and error.

Milton's championing of Spenser is complicated by his failure to address *The Faerie Queene*'s most significant manifestation of error. In the first Canto, the Redcross Knight and Una get lost and 'wander too and fro in waies vnknowne' along '[s]o many pathes, so many turnings'.³⁷ They find themselves trapped in the 'labyrinth' of the dragon 'Errour':

This is the wandring wood, this is Errours den, A monster vile, whom God and man does hate: Therefore I read beware.³⁸

Spenser, playing on the double signification of error, exposes the symbolism that underpinned medieval romance. While the Redcross Knight errs geographically, he also

³⁷ Edmund Spenser, *The Faerie Qveene*, ed. A.C. Hamilton (Harlow: Pearson, 2007), I.i.10, 34.

³⁵ The term is marked 'Now only *poet[ical*],' s.v. "error, *n.*," OED online.

³⁶ s.v. "error, *n*.," OED online. The King James Version of the Book of Isaiah in particular features a large number of examples conflating the moral and mobile senses of 'err': 3:12: 'they which *lead* thee cause thee to err, and *destroy the way of thy paths*'; 28:7: 'the priest and the prophet have erred through strong drink[...] they are *out of the way* through strong drink; they err in vision, they *stumble* in judgment'; and 35:8: 'And an *highway* shall be there, and a way, and it shall be called *The way of holiness*; the unclean shall not pass over it; but it shall be for those: the *wayfaring* men, though fools, shall not err therein' (emphases my own). *The Bible: Authorized King James Version with Apoerypha* (Oxford: Oxford University Press, 2008): 768; 788; 796.

³⁸ Spenser, Faerie Qveene, I.i.13, 34.

allegorically fights moral error. The vile monster that greets him is reimagined for the early modern period in a distinctly literary guise: when Errour is finally defeated she produces 'vomit full of bookes and papers' and spawns '[d]eformed monsters, fowle and blacke as inke'.³⁹ The earlier call to 'read beware' and the assertion that '[s]uch vgly monstrous shapes elswhere may no man reed' exploit the various meanings of 'read' – to counsel, or to see – in order to invoke its better-known homonym.⁴⁰

For Spenser as for Milton error is bound up with the practice of making and reading books. But while for Milton bad books are not only digestible but potentially wholesome tools for containing and conquering error, Spenser figures them as error's self-proliferating and putrid products. The space of Milton's moral distinctions are more sharply demarcated, but in *The Faerie Queene* the allegorical 'region of indeterminate, incomplete, and approximate meanings is the region of error'.⁴¹ Though the Redcross Knight encounters and apparently defeats Errour, Spenser self-reflexively casts doubt on the pages in which he does so. Playing with the romantic trope of the knight's adventure, Spenser also indicates the attraction of wandering off the path of truth.

The Ingenuous Reader

This verbal nexus weaving together wandering, moral error, and literary activity, which is employed by Milton and Spenser has a long history central to the development of a stillcurrent scholarly rhetoric of right and wrong, fixity and digression.⁴² This introductory

³⁹ Spenser, Faerie Qveene, I.i.20, 36; I.i.22, 37.

⁴⁰ Spenser, *Faerie Qveene*, I.i.21, 36; for glosses of 'read' and 'reed' see 35.

⁴¹ Teskey, "Imagining Error," 17.

⁴² See Lerer, *Academic Self*, and Anne Cotterill, *Digressive Voices in Early Modern English Literature* (Oxford:

chapter utilises two of Browne and Cavendish's shared rhetorical figures – the 'ingenuous reader' and the labyrinth – to situate their work in a wider set of early modern discourses surrounding error, particularly in natural philosophical texts. By indicating the significance of the material book, spatialised knowledge and modes of cognition in accounts of error, I will construct a platform which can be used to more closely examine this verbal nexus of error, errancy and books in the following chapters.

As books ostensibly concerned with truth, Browne's and Cavendish's prefaces are littered with concerns about error. Like keys to maps, the paratexts of both authors use the rhetoric of error to prescribe methods of reading and navigating their texts. While Heidi Brayman Hackel has shown that paratexts, the 'parts of a book [which] preserve the most local evidence about prescriptive reading', indicate 'anxieties [about] the "great Variety" of readers',⁴³ Browne and Cavendish clearly also recognise the potential benefits of sharing the responsibility for error with their 'ingenuous reader[s]'. In an address prefacing *Observations*, Cavendish states:

I do not applaud myself so much, as to think that my works can be without errors, for nature is not a deity, but her parts are often irregular: and how is it possible that one particular creature can know all the obscure and hidden infinite varieties of nature?⁴⁴

As well as attempting to excuse her errors by synthesising them with her natural philosophy, Cavendish delegates responsibility for identifying and appropriately responding to error to her readers:

if my readers should spy any errors slipt into my writings for want of art of and learning, I hope they'll be so just as not to censure me too severely for them, but express their wisdom in preferring the kernel before the shells.⁴⁵

Oxford University Press, 2004).

⁴³ Heidi Brayman Hackel, Reading Material in Early Modern England: Print, Gender, and Literacy (Cambridge: Cambridge University Press), 2005, 70.

⁴⁴ Cavendish, Observations, "To the Reader," 13-14.

⁴⁵ Cavendish, Observations, "To the Reader," 12.

This idea is repeated across many of Cavendish's works; for example, the opening lines of Natures Pictures (1656) morph Cavendish's own 'Faults' into those of the reader, who enters into error by pronouncing them:

> READERS, my Works do not seem (in my Mind) So bad as you make them, if Faults you find: For if you find much Fault, you would not spare Your ridgid Censures, but their Faults declare.46

While Cavendish goes to considerable effort in Observations to clarify her terms and arguments for readers (arguing 'you must explain those hard words, and English them in the easiest manner you can'),⁴⁷ she also insists readers deliver their end of the bargain, requesting that a 'Courteous Reader', if they 'have a mind to understand my philosophical conceptions truly' or 'give an impartial judgment', will 'read it all, or else spare your censures', noting that 'when I read not a book thoroughly, from beginning to end, I cannot well understand the author's design, but may easily mistake his meaning'.⁴⁸ Cavendish, who explicitly 'entreat[s] the ingenuous reader to interpret them to the best sense', proposes a kind of contract between the author and reader in which, between them and in good faith, they will endeavour to make the best interpretation possible.⁴⁹

Cavendish's configuration of knowledge in Observations is achieved through roundabout and recurrent wanderings into error's den, with the line of her text constantly disrupted by her attempts to address her own errors. Sylvia Bowerbank has suggested Cavendish 'reject[ed] revision of her work as a task beneath her dignity and also unnatural

⁴⁶ Cavendish, Natures Pictures Drawn by Fancies Pencil to the Life (London: A. Maxwell, 1671), p.1, sig.B[1r]. Ironically, this verse is altered from the initial printing in 1656, where there is substantially more prefatory material addressed to the reader. The 1656 edition places less culpability for error on the reader: 'Readers, I find the Works which I have wrote, / Are not so bad, as you can find much fault; / For if you could, I doubt you would not spare / Me in your censures, but their faults declare,' Natures Pictures Drawn by Fancies Pencil to the Life (London: for J. Martin and J. Allestrye, 1656) p.1, sig.B[1r].

⁴⁷ Cavendish, *Observations*, "To the Reader," 12.
⁴⁸ Cavendish, *Observations*, "To the Reader," 13.

⁴⁹ Cavendish, Observations, "To the Reader," 14.

to her as a woman' and that she imitates Nature when 'she "scribbles" down whatever comes to her and lets the reader sort it out'.⁵⁰ This claim is contested by Line Cottegnies and Nancy Weitz, who stress Cavendish's tendency to self-correction and the 'extent of reading, absorbing, and reshaping behind her writing practice'.⁵¹ The reality, I suggest, lies somewhere between these two positions. While Cavendish accepts the mistakes that emerge from her over-hasty work as necessary and perhaps constituent parts of her writing, she is also concerned to clear any obstacles to understanding from the path of the reader, insisting on their cooperation in her combat against error. This is often achieved through revisiting and revising what she sees as previous mistakes.

A similar notion is put forward by Browne in the address prefacing *Religio Medici*, when he 'commit[s] the truth' of his work to the scrutiny and judgement of 'every ingenuous Reader', warning 'there are many things [in the text] to be taken in a soft and flexible sense' and 'all that is contained therein is a submission unto maturer discernments, and as I have declared shall no further father them then the best and learned judgements shall authorize them'.⁵² As influentially described by D. F. McKenzie, meaning is created through the interpretive faculties of reader, printer and author combined, and the 'author disperses into his collaborators, those who produced his texts and their meanings'.⁵³ Nevertheless, the anxiety that surrounded such notions, audible in these explicit paratextual protestations to readers, arose from the notion that in the transmission of information and ideas from author to reader, the potential for error bloomed.

⁵⁰ Sylvia Bowerbank, "The Spider's Delight: Margaret Cavendish and the 'Female' Imagination," *English Literary Renaissance* 14, no. 3 (1984): 395; 396.

⁵¹ Line Cottegnies and Nancy Weitz, "Introduction," in *Authorial Conquests: Essays on Genre in the Writings of Margaret Cavendish*, eds. Line Cottegnies and Nancy Weitz (Madison: Fairleigh Dickinson University Press, 2003), 9.

⁵² Thomas Browne, Religio Medici in The Works of Sir Thomas Browne, ed. Geoffrey Keynes, vol. 1 (London: Faber & Faber, 1964), "To the Reader," 10. All references hereafter will be to this edition unless marked otherwise.

⁵³ D. F. McKenzie, *Bibliography and the Sociology of Texts* (London: British Library, 1986), 18.

In the preface to *Certain Miscellany Tracts*, a posthumous publication of Browne's short and unpublished works, publisher Thomas Tenison remarked

If there be any such errours in the words, I'm sure the Press has not made them fewer; but I do not hold my self oblig'd to answer for That which I could not perfectly govern[...] such errours will not mislead a Learned Reader; and he who is not such in some competent degree, is not a fit Peruser of these LETTERS.⁵⁴

Though he sidesteps culpability for errors in the text with a conditional clause, Tenison's statement tacitly admits concern not only about their presence, but also their proliferation in the printing house. Tenison betrays his lack of autonomy over the technical process of printing, placing the responsibility for dealing with these errors back onto the reader, who, if in any way 'competent', will be able to identify, and presumably rectify, any errors, and 'will not [be] mislead'. Readers must be just as conscious of falling into error as authors, printers and publishers ought to be of leading them astray.

This appeal to the reader to read both well and graciously is a common trope in early modern prefaces, with paratexts often threatening to implicate the reader in culpability for errors. To control the multiplicity of possible interpretations, prefatory addresses developed a rhetoric of the 'gentle' or ideal reader, who is 'receptive [and] pleasant' and 'read[s] in a docile, friendly, uncritical manner' in contrast to the trope of Momus and Zoilus, the difficult and disruptive readers who deliberately derail the text.⁵⁵ Zoili operate with a 'more aggressive or resistant' reading practice; they are unjust, and inclined to deliberately misinterpret; they 'read too closely, myopically and maliciously finding false meaning in the text'.⁵⁶ But while Brayman Hackel's characterisation of ideal and unideal readers clearly aligns in important ways with those constructed by Browne and Cavendish,

⁵⁴ Thomas Tenison, "The Publisher to the Reader," in Thomas Browne, *Certain Miscellany Tracts* (London: for Charles Mearn, 1683), sigs.[A2v]-[A3r].

⁵⁵ Brayman Hackel, Reading Material, 117.

⁵⁶ Brayman Hackel, Reading Material, 117; 124.

natural philosophical texts construct a subtly different model of ideal reading to the passive one described by Brayman Hackel.⁵⁷ These stress, by contrast, the importance of a fair but also active and critically engaged readership. The complex relationship between author and reader in the transmission of knowledge and its mediation by the printed book was widely recognised in the seventeenth century.

Denise Tillery has noted that for the 'Royal Society plain stylists, the reader's subjective responses are sources of error and must be eliminated.⁵⁸ But concerns about readers producing error were articulated far earlier than the Plain Style debate. Francis Bacon was acutely aware of the potential for error to permeate the gap that opens up between the critical attitudes, methods, and understandings of the author and reader. He knew the reader not only had the power to identify error but could also be complicit in its creation:

as knowledges are now delivered, there is a kind of contract of error between the deliverer and the receiver: for he that delivereth knowledge, desireth to deliver it in such form as may be best believed, and not as may be best examined; and he that receiveth knowledge desireth rather present satisfaction than expectant inquiry; and so rather not to doubt than not to err[.]⁵⁹

For Bacon, between them the irresponsibly persuasive author and the credulous reader create the book as an intermediary object which both receives and propagates error through the processes of writing and reading. Yet while they are aware of such potential to generate error, Browne and Cavendish are more concerned with equipping their readers with the

⁵⁷ The importance of print in the proliferation and production of natural philosophical knowledge in the seventeenth century has also been stressed: Adrian Johns, in particular, has documented the threat that printing posed to the discipline, stressing the 'insecurity' which characterised 'the articulation and reception of natural knowledge in early modern England,' *Nature of the Book*, 49.

⁵⁸ Denise Tillery, "English Them in the Easiest Manner You Can': Margaret Cavendish on the Discourse and Practice of Natural Philosophy," *Rhetoric Review* 26, no. 3 (2007): 271.

⁵⁹ Bacon, Advancement of Learning, Book II.xvii.3, 150.

appropriate tools for reading rather than controlling the meanings of their texts, proposing good reading as a mode of overcoming error.⁶⁰

The book-as-object enables and embodies this proliferation and generation of error, in spite of, and perhaps because of, the best intentions of its makers and users. The 'contract of error' which Bacon describes as existing between the reader and the author collapses the material and textual forms in which error is manifested. But Browne and Cavendish also insist that the book and its readers enable errors to be overcome.

The Material Error

Texts encouraged readers to engage with them physically as well as intellectually. By the beginning of the sixteenth century errata sheets were commonplace in printed texts, and textual pleas to the educated reader frequently called for corrections to be made to the text where required.⁶¹ Print error, for Adrian Johns, obstructs the smooth dissemination and distribution of knowledge, rather than contributing to it; error and the instability of print are endemic, even 'epistemic', in natural philosophical texts.⁶² Johns stresses the individual variability, and thus potentially erroneous character, of books during this period, arguing that the modern assumption that 'printed texts are identical and reliable because that is simply what printing *is*' is 'substantially false' in relation to the seventeenth century.⁶³ Taking particular umbrage with Elizabeth Eisenstein's notion of print 'fixity', Johns argues that '[v]eracity in particular is[...] extrinsic to the press itself, and has had to be grafted onto

⁶⁰ Tillery suggests that '[r]ather than trying to control meaning, Cavendish is concerned with preventing the reader's potential confusion and discouragement when faced with texts that are needlessly complex', "English Them," 271.

⁶¹ See Lerer, Academic Self, 21; Brayman Hackel, Reading Material, 97.

⁶² Johns, Nature of the Book, 5.

⁶³ Johns, Nature of the Book, 2.

it⁶⁴ In many cases, the most common method of achieving this was through the addition of paratexts, either in the form of prefatory addresses or errata lists that positioned the author in a place of textual authority, validating their text through the tacit admission of error. Lerer has argued that through compiling and obeying errata lists '[s]elf-correction[...] becomes the impulse for the author and the reader'.⁶⁵ In spite of this corrective impulse, the proliferative force of error is everywhere in these texts.

The seventeenth-century anxiety about error was particularly rife in print, with hundreds of texts advertising debunked errors in their titles.⁶⁶ Philosophers' acute concerns about how to establish truth and what constituted a legitimate proof or fact were balanced by an equivalent concern with material inaccuracies, errors and distortions. D. F. McKenzie and Anthony Grafton have detailed the extensive stages of proof-reading and the cultures of correction in early modern print houses which developed to counter such problems.⁶⁷

Tangled up in discourses of authenticity, correction, and error were concerns about the morally as well as materially corrupt tendencies of commercial print. As Johns has noted, piracy and its correlate, plagiarism, represented a serious threat to early modern natural philosophy: 'unauthorized printing threatened to "unauthorize" authors themselves[...] it affected the structure and content of knowledge'.⁶⁸ Browne, who, as Reid

⁶⁴ Johns, Nature of the Book, 2.

⁶⁵ Lerer, Academic Self, 26.

⁶⁶ See for example: *Castigio Temporum, or, A Short View and Reprehesion of the Errours and Enormities of the Times* (London: 1660); *Hell Broke Loose: Or, A Catalogue of Many of the Spreading Errors, Heresies and Blasphemies of these Times* (London: for Thomas Underhil, 1647); George Atwell, *The Faithfull Surveyour Discovering Diverse Errours in Land Measuring* (London: 1658).

⁶⁷ D. F. McKenzie, "Printers of the Mind: Some Notes on Bibliographical Theories and Printing-House Practices" in *Making Meaning: "Printers of the Mind" and Other Essays*, eds. Peter D. McDonald and Michael F. Suarez (Boston, Massachusetts: University of Massachusetts Press, 2002); Anthony Grafton, *The Culture of Correction in Renaissance Europe* (London: British Library, 2011).

⁶⁸ Johns, *Nature of the Book*, 33. Johns also stresses that '[u]nauthorized translations, epitomes, imitations, and other varieties of "impropriety" were perceived as 'routine hazards', relating that abridgements were particularly commercially successful, 30.

Barbour tantalisingly relates may have fallen victim to sea pirates,⁶⁹ appears more pressingly concerned with intellectual piracy: *Religio Medici* was initially printed in an unauthorised form (1642), forcing an authorised edition (1643) to defend the 'reall lapses' in the text.⁷⁰ These emerged not only from a process in which the text was 'by transcription successively corrupted untill it arrived in a most depraved copy at the presse',⁷¹ but also from the discrepancies between the time of composition (the mid-1630s) and publication. Browne protests: '[i]t was set downe many yeares past, and was the sense of my conceptions at that time, not an immutable law unto my advancing judgement at all times'.⁷²

While the potentially political motivations of Browne's preface have been extensively discussed, Browne's grammatically conjectural admission of error is more than a simple denial of contentious beliefs during a period of extreme religious and political factionism.⁷³ Browne distances his apparently wiser, older self from the notions of his younger and academically ill-equipped counterpart, creating a notable gap between his 'present selfe' and his prior labour.⁷⁴ Such a chronological distancing attempts to excuse any errors – technical, theological or academic – as youthful folly, no longer validated by the

⁶⁹ Reid Barbour, Sir Thomas Browne: A Life (Oxford: Oxford University Press, 2013), 61; 67-68.

⁷⁰ Thomas Browne, *A True and Full Coppy of That Which was Most Imperfectly and Surreptitiously Printed Before Under the Name of Religio Medici* (London: for Andrew Crook, 1643), sig.A2[r]..Not only piracy but also false attribution was of real concern to Browne; his reputation was also threatened by *Nature's Cabinet Unlock'd* (London: for Edward Farnham, 1657). This clearly fraudulent text, which claimed Browne as its author on the title page, presumably to boost sales, was publicly denounced by Browne's printers in subsequent versions of his texts. See *Hydriotaphia, Urne-Buriall[...] Together with The Garden of Cyrus*, which explains: 'a Book was published not long since, Entituled, *Natures Cabinet Unlockt*, bearing the Name of this Author: If any man have been benefited thereby this Authour is not so ambitious as to challenge the honour thereof, as having no hand in that Work' (London: for Henry Brome, 1658), "The Stationer to the Reader," sig.[O6r]. ⁷¹ Browne, *Religio Medici*, "To the Reader," 10.

⁷² Browne, Religio Medici, "To the Reader," 10. Geoffrey Keynes and Reid Barbour suggest Religio Medici was likely composed during the early part of Browne's time in Halifax in 1634-37: Works ed. Keynes, vol. 1, "Editor's Preface," sig.B2; Barbour, Browne: A Life, 220; 237.

⁷³ On issues surrounding the politics of *Religio Medici*, see: Achsah Guibbory, *Ceremony and Community from Herbert to Milton: Literature, Religion, and Cultural Conflict in Seventeenth-Century England* (Cambridge: Cambridge University Press, 1998); Michael Wilding, in *Dragons Teeth: Literature in the English Revolution* (Oxford: Oxford University Press, 1987); and Daniela Havenstein, *Democratizing Sir Thomas Browne: Religio Medici and its Imitations* (Oxford: Oxford University Press, 1999).

⁷⁴ Browne, Religio Medici, "To the Reader," 10.

present author. Just as the material forms of text have the potential to shift and change, so do the author's opinions, generating errors after the fact. Browne's lapses might be apparent to the reader, but most crucially they are apparent to himself; he is astute enough to recognise his past error and react accordingly by acknowledging it. This allows Browne the dual freedom of being both wrong *and* right in the compressed time-space of the book.

Browne's prefatory rhetoric provides him with a shield of deniability, an acknowledgement that any ideas deemed offensive or wrong within the text might constitute these unidentified and ambiguous 'lapses' of youthful judgement. But simultaneously, by failing to specify which these lapses are, Browne leaves the identification of errors to his reader. A whole array of potentially contentious statements are left in play until the moment in which they are denounced as erroneous, heretical or wrong, and in that same moment they are also excused as juvenile mistakes. Browne can and does have it both ways; each statement has the potential for error, but his vague claims of self-correction establish him as a trustworthy and critical judge, able to discern error from truth. Identified both as times go on and as times change, as well as occurring in the passing of time, Browne's attempts to correct error in fact indicate that it is ineradicable.

Cavendish's books also display a chronology of correction. Whereas in *Religio Medici* this temporal distance opens up in the space between writing and publication, for Cavendish it can be traced in her self-corrections across a series of works. This is particularly evident in *Grounds of Natural Philosophy* (1668), in which Cavendish describes the errors arising in the first, and subsequently significantly altered version of the work, *Philosophical and Physical Opinions* (1655). She describes how in the earlier work, like a spoilt

child ruined by the 'error' of indulgent parenting, 'many Imperfections' arose.⁷⁵ She continues, however, to explain that in this second edition she has 'endeavoured[...] many Alterations and Additions[...] to correct them; whereby, I fear, my Faults are rather changed and encreased, then amended.⁷⁶ While time allows her to correct previous faults, it also results in their proliferation. No matter how far errors are combatted, they seem only to increase and multiply.

Mazie Error

The early modern interconnections of error, errancy and print, which are particularly prominent in books of natural philosophy, have barely been considered. As Daniel Selcer has shown, both the labyrinth and the material book were images commonly used in early modern philosophy to express and make sense of difficult or even impossible problems.⁷⁷ Playing on the dual sense of erring, the trope of digressing from the paths of knowledge was frequently invoked.⁷⁸

Turning on the first and fatal error of eating from the Tree of Knowledge, the narrative of Adamic error and the Fall has influenced Western thought for two millennia. It is thus unsurprising that the errant line, so aligned with error in our schemes of thought and language, should be theologically as well as epistemologically significant, functioning, for Browne, as a post-lapsarian trap. Satan's alluring movements are depicted in the errant terms of winding paths; he 'endeavours to entangle Truths', creates 'severall wayes of delusion', and using 'the subtilty of his circumvention' seeks 'to lead us farther into

⁷⁵ Margaret Cavendish, *Grounds of Natural Philosophy* (London: A. Maxwell, 1668), "To All the Universities in Europe," sig.[A2v].

⁷⁶ Cavendish, Grounds, "To All the Universities," sig.[A2v].

⁷⁷ Daniel Selcer, Philosophy and the Book: Early Modern Figures of Material Inscription (London: Continuum, 2010).

⁷⁸ See Johns, *Nature of the Book*.

darkness, and quite to lose us in this maze of error^{7,79} Though the moral, logical and spatial terms of error are conflated in Satan's traps, the maze of error is still seductive to Browne, who, in *Pseudodoxia Epidemica*, is not only fascinated by Satan as a source of error, but also by the realms of error he might draw us into. While both Cavendish and Browne express serious concern about theological errors, this thesis will focus on a less explored dimension of error in natural philosophical texts. Error does not only serve serious philosophical and theological ends, but is also at times a playful, pleasing, and exploratory act used to open up the world – and the text – to writers and their readers. If error is a dangerous maze, it is one in which Browne and Cavendish are content to spend plenty of time getting lost.

The difficulties of orienting oneself on the paths of knowledge are encapsulated by the slippery figure of the labyrinth, which has particular resonance in the works of Browne and Cavendish, but which was also important as a wider renaissance rhetorical trope. Anne Cotterill has argued most seventeenth-century writers encountered 'ancient and Christian models of heroic, labyrinthine wandering – models of life and of the human mind as a labyrinth, a journey full of unexpected turns and byways' in their schooling.⁸⁰ Both digression and the labyrinth were self-conscious modes of expression explicitly fitted to depicting modes of cognition and comprehension, a notion borne out as Cavendish and Browne describe the attempts of their texts to understand the natural world as like to making one's way through a labyrinth without a guide.

Browne's preface to *Pseudodoxia Epidemica* notes that 'we find no open tract, or constant manuduction in this Labyrinth; but are oft-times fain to wander in the America

⁷⁹ Thomas Browne, *Pseudodoxia Epidemica, or Enquiries into Very Many Received Tenents and Commonly Presumed Truths* in *The Works of Sir Thomas Browne*, ed. Geoffrey Keynes, vol. 2 (London: Faber & Faber, 1964), I.x.70; 63; 65; 69. All references hereafter will be to this edition unless marked otherwise.

⁸⁰ Cotterill, Digressive Voices, 6.

and untravelled parts of Truth⁸¹ The difficulty of gaining knowledge is not hidden here; as Jonathan Sawday has illustrated, the metaphor of America in natural philosophy 'became synonymous with the triumph of the human imagination as it strove to unravel passages which seemed to become ever more tortuous, ever more complex⁸² Similarly, Cavendish suggests in her *Philosophical Letters* that 'truly it is much easier to walk in a Labyrinth without a Guide, then to gain a certain knowledg in any one art or natural effect⁸³. But the multiple and varying uses of the labyrinth – in particular, the ambiguous elision of the labyrinth as the site of both hard-won truth and hopeless error – suggest that these knowledge projects are far from simple. The labyrinth is a figure of difficulty and contradiction, where progress can be made precisely through becoming lost, and which might trap the reader in its confines.

Browne and Cavendish's privileging of processes of discovery and wandering, of the journey itself, rather than the end result or destination, locates value in the process of *being within* the labyrinth. Marshall Brown suggests that the Kantian labyrinth 'is the dialectical moment in which error and truth, confusion and clarity, labor and delivery are inseparably mixed'.⁸⁴ This confusion is echoed by Cotterill, who describes the literary labyrinth as a space in which 'the reader might wander in delight yet become bewildered'.⁸⁵ The labyrinth functions as an accurate analogue of Browne and Cavendish's texts, suggesting that the errant wandering and uncertain winding which occurs in the labyrinth can offer progression towards a destination, even if it is obscured from us. For Cavendish,

⁸¹ Browne, *Pseudodoxia*, "To the Reader," 5.

⁸² Jonathan Sawday, *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture* (Abingdon: Routleage, 1995), 28.

⁸³ Margaret Cavendish, Philosophical Letters or, Modest Reflections upon Some Opinions in Natural Philosophy Maintained by Several Famous and Learned Authors of this Age, Expressed by way of Letters, (London: 1664), XIII, 284.

⁸⁴ Marshall Brown, "Errour's Endlesse Traine': On Turning Points and the Dialectical Imagination," *PMLA* 99, no. 1 (1984): 15.

⁸⁵ Cotterill, Digressive Voices, 11.

labyrinths are consistently figures of potential or actual error. In the *Blazing World* artificial logic is denounced as a 'labyrinth whence they'll never get out', and in *Observations* she describes the 'horrid confusion and labyrinth of ignorance' that results from wrongly ascribing causes in nature.⁸⁶ And yet, while the labyrinth is used as a symbol for intellectual entrapment, it also stands for those things we most desire to know and grasp; the imperial city of 'Paradise' in the Blazing World can be entered only through a labyrinthine passage.⁸⁷ While the labyrinth is presented as something that would be solved in an ideal, utopian world, Cavendish recognises that escape might be impossible.

Imagining books precisely as spaces in which 'error and truth, confusion and clarity, labor and delivery are inseparably mixed', Cavendish is acutely aware of the potentially labyrinthine qualities of language and natural philosophical texts.⁸⁸ In *The Worlds Olio*, discussing 'the Labyrinth of Fancy', Cavendish rails against 'obscure' and over-complex conceits. Contrasting these elaborate constructions with the 'smooth running stream' of clear verse, Cavendish argues that 'the best poetry is plain to the understanding[...] for verses are fine fancies'.⁸⁹ While Cavendish clearly delights in 'fancy', which is integral to her own writing and philosophical approach, she nevertheless privileges clarity as a characteristic of well-constructed verse and philosophy. Language, Cavendish proclaims, whether philosophical or poetical, should seek to demystify and map out the natural world of which it is a feature.

Cavendish stresses that, as with verse, we must be careful not to overcomplicate Nature's simplicity by constructing it as a labyrinth. In *Philosophical Letters*, Cavendish

⁸⁶ Margaret Cavendish, The Description of a New World Called The Blazing World in The Description of a New World Called The Blazing World and Other Writings, ed. Kate Lilley (London: William Pickering, 1992), 161; Observations, 239.

⁸⁷ Cavendish, *Blazing World*, 131.

⁸⁸ Brown, "Turning Points," 15.

⁸⁹ Margaret Cavendish, The Worlds Olio (London: for J. Martin and J. Allestrye, 1655); 10.

complains that 'most men make such cross, narrow, and intricate ways in Nature, with their over-nice distinctions, that Nature appears like a Labyrinth, whenas really she is as plain as an un-plowed, ditched, or hedged champion'.⁹⁰ A good text ought not to be a labyrinth so much as a guide to one, like the unfurling thread of Ariadne. Nature, imagined here as an unploughed field, is, much like the blank page, waiting for both author and reader shape it in the manner of a skilful spinner or a smooth-running stream.

While Browne's labyrinthine and mazy paths also seem to be invoked as spaces full of the dangerous potential of error, able to tangle, entrap and lead astray, any such easy interpretation is resisted by Browne's tendency to refer to labyrinths of truth rather than labyrinths of error. In a climactic passage of *The Garden of Cyrus*, Browne identifies two paths which might be followed in the pursuit of knowledge; the first chases weak and frail defences against error, the 'nauseating crambe verities' which are '[f]lat and flexible truths[...] beat out by every hammer'.⁹¹ To deliver 'mortal or dispatching blows unto errour' and make it out of the 'Labyrinth of Truth', Browne suggests, is a route that requires far more hard labour.⁹² Aligning himself with the burgeoning Baconian science, Browne proposes to defeat error by amassing large amounts of data through 'sense and ocular Observation', well aware that this will take an almost superhuman effort.⁹³ Employing the metaphor of Vulcan and his forge sweating to create Achilles' armour, Browne indicates that strenuous effort yields rewards. With Achilles' shield depicting the

⁹⁰ Cavendish, *Philosophical Letters*, XVIII, p.489, sig.Iiiii[1r].

⁹¹ Thomas Browne, The Garden of Cyrus in The Works of Sir Thomas Browne, ed. Geoffrey Keynes, vol. 1

⁽London: Faber & Faber, 1964), 225. All references hereafter will be to this edition unless marked otherwise.

⁹² Browne, Garden of Cyrus, 226.

⁹³ Browne, Garden of Cyrus, 226.

whole world on its surface,⁹⁴ Browne implies that a collective effort towards truth could illuminate not only a 'vegetable shop' of knowledge but 'the whole volume of nature'.⁹⁵

However, Achilles' shield, used as a metaphor for the world of knowledge to be opened up by scientific enquiry, is undone by the pervasive symbolism of its owner's heel, the invocation of which subtly but powerfully indicates our inability to defend entirely against the poisoned arrows of error. Browne's attempt towards a complete natural knowledge is, significantly, figured in the winding terms of errancy: though this 'seems[...] the surest path, to trace the labyrinth of truth', Browne speaks in duly wary terms of probabilism, knowing such a task to be ultimately impossible.⁹⁶

Moving Forward

As Peter Harrison has astutely suggested, '[u]nderstanding the history of error is a precondition for a history of truth'.⁹⁷ This is a rich history still waiting to be told. Rigolot notes the vast scope of error, 'the conflicting status of an important cognitive category that, in early modern times, triggers an ambiguous attitude, both of rejection and appropriation, condemnation and condonation, and prosecution and propriation' before narrowing his

⁹⁴ See *The Iliad of Homer*, trans. Richard Lattimore (Chicago: Chicago University Press, 2011), Book 18, ll. 478–608, pp.409-413. The passage details the microcosmic representation of the whole world on the shield, beginning with its depiction of nature: 'He made the earth upon it, and the sky, and the sea's water, / and the tireless sun, and the moon waxing in her fullness, / and on it all the constellations that festoon the heavens' (ll.485-88, p.409) before describing the human civilisations and scenes it depicts.

⁹⁵ Browne, Garden of Cyrus, 226.

⁹⁶ Browne, *Garden of Cyrus*, 226. On Cavendish's modes of philosophic probabilism and eclecticism, see Lisa T. Sarasohn, "*Leviathan* and the Lady: Cavendish's Critique of Hobbes in the *Philosophical Letters*," and Hero Chalmers, "Flattering Division': Margaret Cavendish's Poetics of Variety," both in *Authorial Conquests: Essays on Genre in the Writings of Margaret Cavendish*, eds. Line Cottegnies and Nancy Weitz (Madison: Fairleigh Dickinson University Press, 2003) and Stephen Clucas, "Variation, Irregularity and Probabilism: Margaret Cavendish and Natural Philosophy as Rhetoric" in *A Princely Brave Woman: Essays on Margaret Cavendish*, ed. Stephen Clucas (Aldershot: Ashgate, 2003).

⁹⁷ Harrison, "Original Sin," 259.

study to sixteenth-century love poetry, in which, he claims, '[to] err is no longer existentially "human"; it has become essentially a textual matter of aesthetics'.⁹⁸ Rigolot's focus on the aesthetic of error is rare, yet any discussion of error must have one. This thesis will argue that the aesthetic of error is not restricted to poetry, but forms an integral part of Browne and Cavendish's natural philosophical projects, where it is intertwined with their epistemological concerns and even contributes to the models of cognition, creation and reading which are central to their texts.

In this thesis I will trace some of the fertile cross-currents that occur as a result, and in the wake of, the early modern coexistence of perambulatory and epistemological meaning, exploring the many and varied responses to error and errancy that unfold in the texts of Cavendish and Browne. Campbell notes that 'the ostensible impulse of early modern [scientific] popularizing is to rationalize strangeness and correct error'.⁹⁹ I will suggest that the texts of Browne and Cavendish toy with such a notion only to complicate it. My next chapter examines one of the most popular and famous compendiums of error in the period, Browne's *Pseudodoxia Epidemica*, highlighting the significant, but often neglected, productive playfulness of error in the work. My third chapter traces the paths and landscapes that weave together errant prose mechanisms for both the author and reader. Drawing on cognitive science and Randall McLeod's suggestion that material texts can offer alternative non-textual narratives and suggest new modes of reading beyond the linear conventions of the page,¹⁰⁰ it will illustrate that linearity is not always desirable nor endorsed by the material text, and suggest that cognitive processes are bound up with the experience of errancy in metaphorical and physical environments as well as in the material

⁹⁸ Rigolot, "Renaissance Fascination," 1219; 1232.

⁹⁹ Campbell, Wonder and Science, 6.

¹⁰⁰ Random Cloud [Randall Macleod], "Where Angels Fear to read," in *Ma(r)king the Text*, eds. Joe Bray, Miriam Handley, and Anne C. Henry (Aldershot: Ashgate, 2000).

experience of navigating these texts. Finally, a conclusion will indicate that the verbal nexus connecting error, errancy, the material book and cognitive process is not only metaphorically but also epistemologically significant, contributing to the ways in which knowledge is constructed and experienced in Browne and Cavendish's texts as well as to how it is depicted. While this leaves much of the vast field of error still to be explored, I hope to illuminate the significance and complexity of error as both a poetical and philosophical construct, not only for Browne and Cavendish, but more widely for the early modern period.

Gilles Deleuze has argued that the 'classic image of thought' is one in which 'we designate error, nothing but error, as the enemy to be fought; and we suppose that the true concerns solutions – in other words propositions capable of serving as answers'.¹⁰¹ Yet in line with our early modern thinkers, Deleuze problematises this position, arguing for a knowledge based on not a binary notion of right and wrong but a more subtle sense of 'multiplicities'.¹⁰² Deleuze locates 'the frontiers of our knowledge' as the site at which writing must occur.¹⁰³ It is at these frontiers, in the middle ground between truth and error, that this essay will position itself, balanced on the precarious edge of Cavendish and Browne's multiplicitous figures of error.

¹⁰¹ Gilles Deleuze, *Difference and Repetition*, trans. Paul Patton (New York: Columbia University Press, 1994), "Preface to the English Edition," xvi.

¹⁰² Deleuze, *Difference and Repetition*, "Preface to the English Edition," xvi.

¹⁰³ Deleuze, Difference and Repetition, "Preface," xxi.

Chapter Two

'Adventures in knowledge': Vulgar Errors in Pseudodoxia Epidemica

LACTANT. Primus sapientiæ gradus est, falsa intelligere. FINIS.

- epigraph to Pseudodoxia Epidemica from Lactantius, Divinae Institutiones1

The First Step

Beginning at the end is not entirely illogical with Thomas Browne's *Pseudodoxia Epidemica*, which, from the 1650 second edition onwards, concluded with an epigraph from Lactantius, cited above. Translated, it reads: "The first step to wisdom is to know false things'.² Browne's epigraph at first appears to gesture onwards and outwards from the text, placing us at the end of the first step on a progressional route towards knowledge. Yet in a striking example of D. F. McKenzie's famous assertion that 'form effects sense', it also seems to send us back around to the start, with an instruction as much to be followed as it is already completed.³ We are recapitulated back into the potentially infinite task of knowing 'false things' both by the words of this epigraph and its position in the book. Even if we

¹ Thomas Browne, *Pseudodoxia Epidemica, or Enquiries into Very Many Received Tenents and Commonly Presumed Truths* in *The Works of Sir Thomas Browne*, ed. Geoffrey Keynes, vol. 2 (London: Faber & Faber, 1964), VII.xix.548. All references hereafter will be to this edition unless marked otherwise.

² Translation from William N. West, "Brownean Motion: Conversation in *Pseudodoxia Epidemica*'s 'Sober Circumference of Knowledge'," in *Sir Thomas Browne: The World Proposed* eds. Reid Barbour and Claire Preston (Oxford, Oxford University Press, 2008): 185.

³ D. F. McKenzie, Bibliography and the Sociology of Texts (London: British Library, 1986), 9.

presume to follow the text in a conventionally linear fashion, the next step takes us to the index, a signposting system redirecting us back to the false things we have just considered. This apparently circular 'first step' reminds us that we have only started our forays into the exhausting 'sober circumference of Knowledg', a circular landscape which will paradoxically always and never be both beginning and ending.⁴

One of the citations offered by the Oxford English Dictionary in support of their definition of error as '[t]he condition of erring in opinion; the holding of mistaken notions or beliefs' is the straightforward definition given by Browne in *Pseudodaxia*'s preface: '[e]rror, to speake strictly, is a firme assent unto falsity'.⁵ The simplicity of this definition is misleading. Browne gives the lie to the idea that there may be any single and straightforward early modern notion of what 'error' is in the first chapter of *Pseudodaxia*, which is dedicated to explaining the many guises and causes of error. Leading us through the many different forms that error can take, Browne suggests that error arises from individuality and also from communities; it can be derived from faulty sensory evidence or faulty reasoning; it can reside in language and our hermeneutical practices; it can result from credulity or over-reliance on ancient authority, despite classical citation being perhaps the most often used tool in Browne's arsenal against error. As Browne walks us through his contradictory categories, it becomes clear that errors Browne includes in his catalogue

⁴ Browne, Pseudodoxia, I.v.39.

⁵ The Oxford English Dictionary, s.v. "error 3a." Oxford English Dictionary online, accessed 7 August 2014, http://www.oed.com/ cites Browne's 1st edition of *Pseudodoxia Epidemica: or, Enquiries Into Very Many Received Tenents, And Commonly Presumed Truths* (London: Thomas Harper, 1646) I.iii.8. sig.[A4v]. The same wording is used in the 2nd edition (1650) but from the 3rd edition onward this definition is expanded to read '[f]or Error, to speake largely, is a false judgment of things, or, an assent unto falsity' (London: R.W., 1658), 6. The latter form is given in Keynes's edition: *Pseudodoxia*, I.iii.26.

have any 'unifying principle', it is 'less that something is merely and straightforwardly wrong' and more 'that error stems from interpretative practice'.⁶

The Strategy of Truth

Despite being one of Browne's most extensive and popular volumes, going through six editions in his lifetime, *Pseudodoxia* has often been treated as a historical artefact from which snippets of arcane early modern opinion about the diet of ostriches or the knees of elephants might be extracted. It's literary strategies however, have, until recently, received far less attention than its content. For example, Leonard Nathanson problematically wrote an entire book about Browne's 'Strategy of Truth' that almost entirely neglects *Pseudodoxia* in favour of Browne's more 'literary' works.⁷ Mentioned only on a handful of pages, *Pseudodoxia* serves the ancillary function of clarifying Browne's Baconian and Platonic approaches for use as a theoretical framework that can be applied *Religio Medici*, and is discussed only briefly in a chapter which attempts to argue that 'Browne's basic approach was that of a serious scientist'.⁸

Like Lactantius's epigraph, and most accounts of error in the early modern period, scholars of *Pseudodoxia* have often treated Browne's confusing conceptualisation of error as a springboard to the loftier concerns of truth rather than as a point of interest in its own right. In the 1930s Gordon Chalmers set the tone for much of the following scholarship, clearly and competently establishing the Baconian framework of error which underpins

⁶ Kevin Killeen, "Introduction" in *Thomas Browne*, ed. Kevin Killeen (Oxford: Oxford University Press, 2014): xxvi.

⁷ Leonard Nathanson, *The Strategy of Truth: A Study of Sir Thomas Browne* (Chicago: University of Chicago Press, 1967), 60.

⁸ Nathanson, Strategy, 163.

Browne's science in order to affirm his 'belie[f] in progress'.⁹ Chalmers privileges Browne's positivistic work towards truth, establishing his dealings in error as necessary but subservient to this purpose when he dubiously declares: '[i]n science [Browne's] whole desire was for truth', noting that '[b]etween the fancies and the facts he usually draws a definite boundary'.¹⁰ This chapter will put the focus back on error, attempting to explore how error functions and is depicted in *Pseudodoxia*, illustrating the flexible conceptions of what error can do and be in an early modern (con)text.

The trap that Lactantius's circuitous epigraphic path creates is alarming, and replicated in Browne's perilously kinetic prose. While William N. West has argued that *Pseudodoxia*'s 'wandering course' is designed to 'open a path towards knowledge', the reader often becomes trapped by the labyrinthine qualities of the error it describes.¹¹ West self-consciously situates himself amongst a raft of critics who have highlighted the 'mobility of Browne's distinctive style' and employed the rhetoric of wandering to describe Browne's prose;¹² Stanley Fish has provided a damning assessment of Browne's 'paradoxical movement';¹³ Morris Croll has argued that Browne's baroque style imitates 'the movements of a mind discovering truth as it goes';¹⁴ and Virginia Woolf has described the process of reading Browne as like 'rambling through one of the finest lumber rooms in the world'.¹⁵

⁹ Gordon Keith Chalmers, "Sir Thomas Browne, True Scientist," Osiris 2 (1936): 67.

¹⁰ Chalmers, "True Scientist," 72; 78.

¹¹ West, "Brownean Motion," 169-70.

¹² West, "Brownean Motion," 168.

¹³ Stanley E. Fish, *Self-Consuming Artifacts: The Experience of Seventeenth-Century Literature* (Berkeley: University of California Press, 1972), 359.

¹⁴ Morris W. Croll, "The Baroque Style in Prose," in *Style, Rhetoric, and Rhythm,* eds. J. Max Patrick et al. (Princeton: Princeton University Press, 1960): 221.

¹⁵ Virginia Woolf, *The Common Reader* in *The Essays of Virginia Woolf*, ed. Andrew McNeillie, vol. 4 (London: The Hogarth Press, 1994), "The Elizabethan Lumber Room," 59.

describing *Pseudodoxia*, a text in which cognitive processes of reasoning and thought are consistently depicted as occurring in and through landscapes.

Despite the prevalence of this journeying language, the paths that Browne constructs and depicts are far from clear, and the author often seems to be covering his own tracks as much as creating them. Browne's spatial metaphors invoke man's tendency to become mired and lost, an errant wanderer in the difficult territories of knowledge. Working his or her way through Browne's errors may have a similarly disorientating effect upon the reader, who could easily become trapped in the paradoxical paths of his prose. But if the path towards wisdom constantly sends us back to the start – and consequently back to the error of false things – the action of advancing towards truth must matter as much as reaching it.

Vulgar Errors

The problematic status of truth and error in Browne's famous catalogue is encapsulated by his title, which fails to properly hold truth and error distinct. *Pseudodoxia Epidemica: or, Enquiries into Very many received Tenents, And commonly presumed Truths* is the full title inscribed on all the editions produced in Browne's lifetime. The English half of the title proposes the volume as an open-ended interrogation of 'presumed Truths', neither proven false nor true. But the Greek half undoes this carefully poised neutrality, with 'pseudo-' making the otherwise epistemologically neutral beliefs or 'doxa' sham and disingenuous. Browne's

'presumed Truths' collapse into error, and his title pre-empts the conclusions of his enquiry.¹⁶

Foreshadowing the complicated rubric of 'error' in *Pseudodoxia*, in Browne's title, which anxiously avoids the word error, truths and errors negated and created through the subtle modification of qualifying prefixes. *Pseudodoxia*'s list of contents makes the focus of the publication more immediately clear. The work is structured around types of error, with subtitles declaring that the first chapter examines the '*Causes of Common Errors*', the second, third and fourth chapters explore '*Tenets*[...] *which examined, prove either false, or dubious*', and the fifth describes '*many things questionable*'.¹⁷

Pseudodoxia's popular nickname, *Vulgar Errors*, emphasises Browne's own evasions.¹⁸ Though never printed on the title page during Browne's lifetime, Claire Preston reports that Browne himself was using this unofficial moniker by the 1670s.¹⁹ The alternative name caught on and immediately stuck; in the year of *Pseudodoxia*'s publication, Edward Leigh remarked that 'Doctor *Browne* in his enquiries into vulgar errours doubts of it',²⁰ and today even Wikipedia, the twenty-first century's own encyclopedia of commonly presumed truths, opens its article on *Pseudodoxia* by explaining it is 'also known simply as *Pseudodoxia*

¹⁸ Across the 1650s a flurry of publications referred to *Pseudodoxia* as *Vulgar Errors*. See, for example a marginal note directing the reader to '[s]ee Doctor *Browne* in the second book of vulgar errors' in Jean Baptiste van Helmont's *Deliramenta Catarrhi* (also known as *The Errors of Physicians concerning Defluxions*), trans. Walter Charleton (London: E.G, 1650) p.73, sig.L[1r]; the references to Browne as the 'late' or 'learned Enquirer into vulgar errours' and 'the Refuter of vulgar Errours' in J.B., *Anthropometamorphosis* (London: William Hunt, 1653), 276; 467; 518; and Alexander Ross's critique of *Pseudodoxia* in *Arcana Microcosmi* [...] *With a refutation of*

¹⁶ West reports that 'doxa' is 'the Platonic term for unfounded common opinion, whether right or wrong, as distinct from knowledge, *epistēmē*', "Brownean Motion," 174-75.

¹⁷ Browne, *Pseudodoxia*, 7-15; 17; 78; 157; 269; 338.

Doctor Browns vulgar errors and the ancient opinions vindicated (London: Thomas Newcomb, 1651).

¹⁹ Claire Preston, *Thomas Browne and the Writing of Early Modern Science* (Cambridge: Cambridge University Press, 2005), 84.

²⁰ Edward Leigh, A treatise of divinity consisting of three bookes (London: E. Griffin, 1646), p.53, sig.Ggg3[r].

Epidemica or *Vulgar Errors*²¹ *Vulgar Errors*, however, is at best a loose translation of the original title, designating Browne's subject matter far more decisively than he is willing to.

This alternative title establishes Browne very explicitly in the early modern tradition of compendiums of error. The phrase 'vulgar errors', referring to errors of the general populace, came into common usage after the publication of Laurent Joubert's *Erreur Populaires* (1578), published in Latin as *De Vulgi Erroribus*.²² It was cemented in the common imagination by James Primerose's *De Vulgi in Medicina Erroribus* (1638), later translated into English by Robert Wittie as *Popular Errours or the Errours of the people in the matter of Physick* (1651).

Browne acknowledges *Pseudodoxia*'s place in this tradition with a reference to Primerose in his preface. Subsequent scholarship has made much of this, recognising Browne at his most explicitly Baconian, realising the calendar of errors Bacon merely proposed.²³ But as Mary Baine Campbell notes, *Pseudodoxia* might well be described as 'the wicked twin of Bacon's list of worthy objects of scientific pursuit: it is an anecdotal and copious (but not systematic) register[...] of what must be rejected by science' structured 'in imitation of the wonder books it is meant to refute'.²⁴ Browne appears to distance himself from these well-established collections of medical errors, pre-emptively defending himself against accusations of plagiarism when he reassures the reader: 'though not many years past, Dr. Primrose hath made a learned Discourse of vulgar Errors in Physick, yet have we

²¹ "Pseudodoxia Epidemica," *Wikipedia,* accessed July 18, 2014, http://en.wikipedia.org/wiki/ Pseudodoxia_Epidemica.

 ²² On the term 'vulgar' in relation to print audiences, see Heidi Brayman Hackel, Reading Material in Early Modern England: Print, Gender, and Literacy (Cambridge: Cambridge University Press, 2005), 71.
 ²³ See "Introduction: 'The scanning of error'' n.12.

²³ Peter Harrison, "Original Sin and the Problem of Knowledge in Early Modern England," *Journal of the History of Ideas* 63, no. 2 (2002): 244.

²⁴ Mary Baine Campbell, *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca, NY: Cornell University Press, 1999), 85-86.

discussed but two or three thereof.²⁵ Despite the endurance of the name, this is one of only two times the phrase 'vulgar errors' is used in *Pseudodoxia*.²⁶ Browne's refusal to directly adopt the terminology of Joubert and Primerose, and his evasive title, skirting the vernacular term 'error', the Latin 'erroribus', or even the Greek 'hamartia', signals a different approach to collecting and classifying errors.

Natalie Zemon Davis has shown that compendiums of error were often collected under disciplinary themes and designed to be (at least potentially) useful. Davis argues that collections of common errors like Joubert's and Primerose's had, if not a genuinely wide social impact, at least the intention of effecting one. 'Collectors of vulgar errors' she suggests, 'hoped to correct the beliefs and behaviour[...] of as wide a segment of the "people" as they could reach'.²⁷

Contemporary audiences clearly aligned Browne with this tradition of collecting popular errors, but Davis's account seems to fail in regards to *Pseudodoxia*. Though Browne was a medical doctor, *Pseudodoxia* has few similarities with the texts of Joubert and Primerose. As Davis herself notes in a glancing reference, Browne's remit, extended to the whole of natural philosophy, was far wider and his scope far less practical than the *Pseudodoxia*'s pseudo-namesakes.²⁸ Primerose's chapters include '*That the sexe, and being with childe cannot be discerned by Urine', 'Whether it be lawfull to fly in the time of Plague, or no'* and '*That the Husband cannot breed his Wives child*', a chapter mocking the belief that, through contagion,

²⁵ Browne, *Pseudodoxia*, "To the Reader," 5. Browne refers to James Primerose's *De Vulgi in Medicina Erroribus* (London: B.A. & T.F., 1638), which was published in an English translation by Robert Wittie as *Popular Errours or the Errours of the people in matter of Physick* (London: W. Wilson, 1651); in the following sentence Browne also refers to Laurent Joubert's work 'by the same title', *Erreurs Populaires au fait de la medicine et regime de santé* (Bourdeaux: S. Millanges, 1578), which was also published in Latin as *De Vulgi Erroribus*. Interestingly, Browne does not adopt this as the Latin title for his work instead of *Pseudodoxia Epidemica*.

²⁶ The only other use of the term appears when Browne describes a 'vulgar error rejected by Geminus', *Pseudodoxia*, IV.xiii.324.

²⁷ Natalie Zemon Davis, *Society and Culture in Early Modern France* (Stanford: Stanford University Press, 1988), 258.

²⁸ Davis, Society and Culture, 261-62.

a man might suffer the same symptoms as his pregnant wife.²⁹ Browne collects an astonishingly diverse range of errors about vegetables, minerals and animals, pictorial traditions and scriptural exegesis, ranging from the assumption that a badger's legs are shorter on one side, to the apparently poisonous qualities of glass, to the mistaken belief that Hannibal eroded the Alps using vinegar. Utility, *per se*, and particularly as it corresponds to the everyday welfare of the common people, is clearly not Browne's primary motive. In fact, Browne mentions hardly any errors of a medical nature, and offers very few with practical applications. While Primerose's collection is decidedly pedagogical, the vulgar errors of *Pseudodoxia* are different beasts entirely, comprising a veritable *Wunderkammer* of unicorns, mandrakes and religious relics.

In the dedicatory epistle of his translation of Primerose's *Popular Errours*, Robert Wittie writes 'In triviall matters an Errour is lesse dangerous; But in Physick, being a noble Science, conversant about such a noble subject as the body of man, Errours are more palpable, especially when they are growne vulgar and popular, tending to the generall harme of the Microcosme'.³⁰ For Wittie, the severity of an error falls on a relative scale, correlated to the physical and moral danger it poses. Primerose's work operates a moral and utilitarian hierarchy of errors, and the more dangerous they are, the more worthy they are of correction. Browne's collection, judged by such standards, ranges from urgent theological errors placing souls at stake to unimportant trivialities. The kind of practical and social 'control' that Davis notes at work in Joubert's compendium cannot be ascribed to Browne's observations that the pictures of dolphins mislead us into believing them 'crooked' when 'to speak strictly in their natural figure they are streight'.³¹ The inclusion of such miscellaneous and often trivial errors in Browne's

²⁹ Primerose, Popular Errours, 47; 105; 121.

³⁰ Wittie, "The Epistle Dedicatory," in Primrose, Popular Errours, sigs.[A3v-A4r].

³¹ Browne, Pseudodoxia, V.ii.340.

collection suggests a different motive to Joubert or Primrose. This may be prurience or pedantry, but in many instances it reads most convincingly as play.

The Comedy of Errors

Despite the serious philosophical frame of *Pseudodoxia* there is an unadulterated joy in many of the errors which Browne greedily hoards in his digressive prose. Anne Cotterill has suggested that the digressive form in literature is often associated with 'play and time out',³² and Paula Findlen, in her influential account of *lusus naturae* (jokes of nature), has shown that '[d]uring the sixteenth and seventeenth centuries natural history, and to a certain extent science in general, rediscovered its playfulness in the form of the scientific joke².³³ Browne participates in both of these traditions and puerile humour is surprisingly common in this ostentatiously scholastic work. One discussion of the lifespans of deer evolves into a faux-serious discussion of whether stags lose their penises annually in the same way they shed their horns.³⁴ Another chapter tackles the belief that a beaver would bite off its own testicles in order to escape a hunter. The initial foray into this tenet proceeds straight-faced, like most other of Browne's explorations. In attempting to explain why this odd belief may have arisen, Browne turns an observation about a set of glands commonly mistaken for beaver's testicles into a discussion of the potential limits for linguistic error:

If any therefore shall term these testicles, intending metaphorically, and in no strict acception; his language is tolerable and offends our ears no more then the Tropical names of plants: when we read in Herballs, of Dog's, Fox, and Goat-stones. But if he insistent thereon, and maintaineth a

³² Anne Cotterill, *Digressive Voices in Early Modern English Literature* (Oxford: Oxford University Press), 21. ³³ Paula Findlen, "Jokes of Nature and Jokes of Knowledge: The Playfulness of Scientific Discourse in Early Modern Europe," *Renaissance Quarterly* 43, no. 2 (1990): 292. Barbara C. Bowen has also described the significance of humour in humanist scholarship in *Humour and Humanism in the Renaissance* (Aldershot: Ashgate, 2004).

³⁴ Browne, *Pseudodoxia*, III.ix.185-86.

propriety in this language: our discourse hath overthrown his assertion, nor will Logick permit his illation; that is, from things alike, to conclude a thing the same, and from an accidentall convenience that is a similitude in place or figure, to infer a specifical congruity or substantial concurrence in Nature.³⁵

Browne submits this faulty observation to the same overriding conventions of error he has already laid out in relation to language. To talk of metaphorical testicles is perfectly acceptable, as long as the comparison is understood to be precisely that; a figural use not taken in a literal or 'proper' sense. If, however, we insist on this nomenclature in a literal way we are in danger of making a serious factual and logical error. Similitude, Browne argues, is not sameness, and linguistic elision has no 'substantiall' or material effects in nature. Browne uses a silly example to make a serious point. If we fail to interrogate our linguistic terms, then beaver's balls are on the line. But while Browne's conclusions are sincere, showing how easily we fall into believing bollocks, he also clearly delights in the farcical comedy of his example. His extensive discussion, which goes on to locate virtue in the man who would sacrifice his own testicles for the sake of the greater good, is clearly driven by a sly and playful humour.

The deadpan delivery only reinforces our caution around language and intention; one can imagine Browne scoffing gently at the over-eager reader who unquestioningly buys into such logic. Killeen has a point when he suggests that the book on animals in particular becomes 'a collection of errors so preposterous that their intricate disproof seems itself to be an act of mockery and spoof, but without ever revealing itself to be so.³⁶ Browne might present himself as a mythbuster, dressing up his reason in convoluted Latinate terms and classical references, but he also plays the prankster, gently testing our own credulity.

³⁵ Browne, *Pseudodoxia*, III.iv.170. Of course, there is an overriding irony here: Browne's *Garden of Cyrus* famously draws concurrences in nature from similitudes.

³⁶ Kevin Killeen, "Introduction," in *Thomas Browne*, xxix.

Browne's purpose here seems to be to entertain as much as to educate. However, play must not come at the cost of knowledge; Browne encourages play in the representational arts only so far as it serves an overriding moral purpose, observing that 'We shall tolerate flying Horses, black Swans, Hydra's, Centaurs, Harpies and Satyrs; for these are monstrosities, rarities, or else Poetical fancies, whose shadowed moralities requite their substantial falsities'.³⁷ But while the fabulous and mythical might be permitted for the sake of the moral they afford, in depicting 'the real works of Nature', the painter or writer 'must not vary from the verity of the example; or describe things otherwise than they truly are or have been. For hereby introducing false Idea's of things, it perverts and deforms the face and symmetry of truth'.³⁸ Fancy can create legitimate falsities capable of producing moral verities, but Browne sternly warns against constructing falsehoods which are too close to truths.

Perhaps the playful and fascinated spirit of *Pseudodoxia* is best compared to wonder, which has been theorized as a sensation of cognitively engaged play, abundance and collapsed boundaries. Campbell proposes wonder as a mode 'which embraces surprise [and] enjoys the excess and alteration which generate it';³⁹ Mary Thomas Crane has argued that wonder constitutes 'a wonderfully flexible space where seemingly opposed doctrines and concepts remain suspended in a kind of playful equilibrium';⁴⁰ and Lorraine Daston and

³⁷ Browne, *Pseudodoxia*, V.xix.379.

³⁸ Browne, *Pseudodoxia*, V.xix.379.

³⁹ Campbell, *Wonder and Science*, 3. Campbell notes that while uses of 'wonder' during this period 'tend to emphasize its associations with[...] incomplete understanding', wonder also tends to be described in terms of 'stasis' or 'paralysis', 4. The parallels, however, between error and wonder are startling: noting its 'function as epistemological drag', and the relative lack of theoretical considerations of error, Campbell suggests that '[t]he relation of wonder to knowledge is crucial but largely oppositional', and that 'the tension [between "science" or natural philosophy and wonder] was significant, and generative', 6.

⁴⁰ Mary Thomas Crane, "Marvell's Amazing Garden," in *Environment and Embodiment in Early Modern England*, eds. Mary Floyd-Wilson and Garrett A. Sullivan, Jr (Basingstoke: Palgrave Macmillan, 2007): 35. She describes the 'physiology of wonder' as linked to 'images of attempted escape, entrapment and enclosure', linking wonder to both amazement and the maze, 38. Crane compares Marvell in this poem to Browne, suggesting that both 'preferred wondering detachment to zealous engagement', 46.

Katherine Park have argued that for early modern intellectuals, wonder was 'a cognitive passion, as much about knowing as about feeling. To register wonder was to register a breached boundary, a classification subverted'.⁴¹ Any and all of these definitions correlate closely with Browne's ever-shifting and flexible depiction of error, which partakes in play and joy not only explicitly through content, but also through his capacious style.

This can clearly be seen in a virtuoso instance of Browne's digression: the chapter 'A Digression of the Wisdome of God in the site and motion of the Sun', which considers the revolving line of the orbit of the Sun, a 'visible Deity' in which God's wisdom can be traced. Working within a geocentric astrological model, Browne notes the perfect precision of the sun's orbit, which enables earth to be populated across all of its surfaces and is 'wonderfull in contriving the line of its revolution'.⁴² Browne corrects no error here; he simply gets caught up in his thoughts and the power of nature. While the sun stays divinely on track, bringing light to many thousands, the word 'digression', like 'error', etymologically conflates topographical and rhetorical terms, meaning a 'turning aside from a path or track; swerving, deviation' as well as a '[d]eparture or deviation from the subject or discourse in writing'.⁴³ While most of the chapters in *Pseudodoxia Epidemica* might be considered digressive in some way – Cotterill describes digression as 'prolong[ing] the delights of thought by moving not forward but laterally or obliquely' – this chapter, one of only two to be explicitly titled digressions seems to be digressive precisely because it paradoxically indicates no errors.⁴⁴ The errancy of this prose is ironically a movement away from 'error',

⁴¹ Lorraine Daston and Katharine Park, *Wonders and the Order of Nature: 1150—1750* (New York: Zone Books, 2001), 14.

⁴² Browne, *Pseudodoxia*, I.vi.420; 421.

⁴³ s.v. "digression, *n*.," OED online. The Latin root *digressio* comes from the Greek rhetorical term *parecbasis*, which means "to step or go aside or depart", Cotterill, *Digressive Voices*, 3.

⁴⁴ Cotterill, *Digressive Voices*, 21. The other section is 'A Digression concerning Blackness'. This chapter is set out as 'a short discovery of blackness', in which Browne proposes a 'progression' of argument, *Pseudodoxia*,

the proper subject of this book, but it is also a productive example of *Pseudodoxia*'s investment in erratic knowledge.

The Middle Ground - Amphibologies

Recent accounts of *Pseudodoxia* have been successful and nuanced in establishing the coterminous literary and scientific strategies of Browne's prose. Preston and West have both drawn attention to the collaborative or conversational structures invoked by the text, convincingly illustrating how Browne's rhetoric establishes *Pseudodoxia* as a site on and from which a socially constituted 'truth' might be constructed.⁴⁵ These arguments have been an important counterpoint to Fish's suggestions that Browne's prose (particularly in Religio Medici) is an essentially narcissistic game of empty style, failing to share the 'intentions' of devotional writers who 'have designs on' the readers, involving them in an often 'painful and exhausting process of self-examination and self-criticism'.46 But while Preston compares Browne's textual strategies to those of the Wunderkammer and West notes that the mobility and errancy of Browne's prose are essential in opening up the space for truth going forward, neither one reflects these observations back to consider what this tells us about the particularity of Browne's collection of errors. The link is almost tangible and yet remains tantalisingly unarticulated in West's study, which emphasises the kinetic, mobile and explicitly errant prose of the text only to shift its focus away from the invisible topic of error and onto the democratically open model of conversation which textual manifestations of errancy facilitate. West argues convincingly that *Pseudodoxia*:

VI.xii.475. Browne discusses the ways in which materials become black, again with little reference to common errors, in order to offer his own 'conjectures', 480.

 ⁴⁵ See Preston, Early Modern Science; West, "Brownean Motion," and Steven Shapin, A Social History of Truth: Civility and Science in Seventeenth-Century England (Chicago: University of Chicago Press, 1994).
 ⁴⁶ Fish, Self-Consuming Artifacts, 371.

welcomes addition, correction, or simply argument, if only because they prevent its writing from freezing in place. This errancy of thought is how science, as an active knowledge rather than as a static knowledge, can advance, which is to say, reveal its own always-unrealized tendency towards truth. *Pseudodoxia Epidemica* must not only expose error, then, but to some extent promote it as well, since error perpetuates the activity of thought.⁴⁷

Undoubtedly error and truth are closely linked in *Pseudodoxia*. To suggest that an account of one could exist without an account of the other would be untenable, and this thesis is undoubtedly guilty of such a shared focus. But these accounts, while identifying pluralistic and flexible attitudes towards truth, stop short of closely examining the complex range of ways and terms in which error, clearly an independent source of fascination in the early modern period, is depicted, imagined, experienced, and manifested in texts.

Error is not just a simple negation of truth; Browne discusses errors as objects worthy of serious consideration in their own right. Examining the apparently insignificant errors in the pictures of the nine worthies, such as the depiction of Alexander the Great riding an elephant, Browne appears to set up a clear binary between truth and error:

Now if any shall say that these are petty errors and minor lapses not considerably injurious unto truth, yet it is neither reasonable nor safe to contemn inferiour falsities; but rather as between falshood and truth, there is no medium, so should they be maintained in their distances, nor in the insinuation of the one, approach the sincerity of the other.⁴⁸

It does not matter, he suggests, that these are 'minor' or 'petty' mistakes or errors. True and false things are entirely antithetical, with no 'medium' ground between them, and therefore errors cannot be allowed to creep or in any way impinge on the territory of truth. Allowed to persist through mere carelessness, such errors are, for Browne, neither 'reasonable nor safe'. Disabling Wittie and Primrose's hierarchy of errors, these trivial errors are an

⁴⁷ West, "Brownean Motion," 175-76.

⁴⁸ Browne, Pseudodoxia, V.xiii.366-67.

'injurious' affront to the 'sincerity' of truth, and threaten the binary which keeps truth distinct from error.

Metaphorically speaking, truth and error are poles apart for Browne. But despite his attempt to starkly differentiate truth and error, the spatial language he employs admits the alarming tendency for one to encroach on the other. While Browne asserts that there is no 'medium' between truth and error, his phrasing indicates that human agency is necessary to 'maintain' this sharp distinction. Furthermore, by morphing this difference into 'distance', Browne tangibly locates the 'medium' space that he seeks to obliterate, creating a metaphorical landscape stretching between the two poles of truth and error. Browne's imperfect metaphor hints at the ways in which the distance between truth and error is not just something that must be maintained and constructed by both reader and author, but also a space that might be usefully traversed in the cognitive process. It is in this complex middle ground, I will argue, that much of Browne's philosophy is constructed.

This duplicitous multiplicity of error reaches its acme with Browne's discussions of figural language. One of the central tenets of Browne's thesis is that language and our interpretations of it are especially prone to the singularities of error, which is commonly caused by readings which are either too imprecise or too credulous. In a passage concerning exegetical reading, which has wider implications for Browne's theories of language and error, he argues that the understanding is:

> commonly confined unto the literal sense of the Text[...]. For not attaining the deuteroscopy, and second intention of the words, they are fain to omit their Superconsequencies, Coherencies, Figures or Tropologies; and are not sometime perswaded by fire beyond their literalities. And therefore also things invisible, but unto intellectual discernments, to humour the grossness of their comprehensions, have been degraded from their proper forms, and God himself dishonoured into manual expressions[...] A sin or folly not only derogatory unto God, but men, overthrowing their Reason, as well as his Divinity. In brief, a reciprocation, or rather an inversion of the Creation, making God one

way, as he made us another; that is, after our Image, as he made us after his $\mathrm{own.}^{49}$

By failing to account for the second meanings of things we cannot capture their 'proper forms'. In Browne's example, linguistic error becomes taxonomical error as the distinctions between the immaterial and material, the literal and the symbolic are elided. Deficient reading results in a blasphemous confusion in which god is made materially humanoid and man is idolatrously built in his image. As god, the embodiment of absolute truth, becomes dangerously close to the inherent fallibility of man, the most basic distinction of truth and error threatens to collapse.⁵⁰

Browne further compels us to travel beyond the literal meaning of things, and consider the deceptive aspects of language by describing errors which are derived 'from mistakes of the Word'.⁵¹ These include:

Equivocation and Amphibology which conclude from the ambiguity of some one word, or the ambiguous Syntaxis of many put together.[...] By this way many Errors crept in and perverted the Doctrin of Pythagoras, whilst men received his Precepts in a different sense from his intention; converting Metaphors into proprieties, and receiving as literal expressions, obscure and involved truths.⁵²

Such monstrous errors proceed from an ignorance of the multiple or hybrid meanings inferred by their names – amphibology and equivocation. Error is generated in reducing the power of the multivalent metaphor to a constrained 'literal expression' which disguises or constricts the plural 'truths' it actually signifies. It is the fixing of meaning rather than the potential confusion of polysemy that is the origin of this class of error; as readers we are reminded that any attempt to seek a 'real and rigid interpretation' in Browne's work might

⁴⁹ Browne, *Pseudodoxia*, I.iii.27.

⁵⁰ Browne notes 'filn brief, there is nothing infallible but GOD, who cannot possibly Erre', *Pseudodoxia*, I.i.21.

⁵¹ Browne, *Pseudodoxia*, I.iv.32.

⁵² Browne, *Pseudodoxia*, I.iv.32.

also run into difficulties.⁵³ This hybrid, allusive text in which words both engender error and gesture to truth traps us in Browne's 'unavoidable paradoxology'.⁵⁴ Kathryn Murphy has suggested that 'the anxiety of variety: the doubt that the human mind is capable of reducing the complexity of this teeming world to general and universal truths' is endemic in seventeenth-century prose and has distinct aesthetic implications.⁵⁵ Undoubtedly one such manifestation occurs in *Pseudodoxia*, which encourages the proliferation of polysemous readings in order to accommodate some level of this complexity at the same time as anxiously warning against them. While Murphy documents a turn towards experience as a strategy for coping with the challenges posed by the anxiety of variety, Browne seems to embrace the possibilities of language to hold plural truths.

Arts and Learning want this Expurgation

With such a broad sense of what an error might be, Browne's compendium seems unwieldy. Yet Browne unifies his entries under a rhetoric that is familiar to early modern discourses of error in general and catalogues of error in particular. He suggests that errors must be purged in order to advance the project of learning:

Nor can we conceive [this book] may be unwelcome unto those honoured Worthies, who endeavour the advancement of Learning: as being likely to find a clearer progression, when so many rubs are levelled, and many untruths taken off[...] And wise men cannot but know, that arts and learning want this expurgation: and if the course of truth be permitted unto its self, like that of time and uncorrected computations, it cannot escape many errors, which duration still enlargeth.⁵⁶

⁵³ Browne, *Pseudodoxia*, I.iv.34.

⁵⁴ Browne, *Pseudodoxia*, "To the Reader," 4.

⁵⁵ Kathryn Murphy, "The Anxiety of Variety: Knowledge and Experience in Montaigne, Burton and Bacon," in *Fictions of Knowledge: Fact, Evidence, Doubt* eds. Yota Batsaki, Subha Mukherji and Jan-Melissa Schram (Basingstoke: Palgrave Macmillan, 2011), 111.

⁵⁶ Browne, *Pseudodoxia* "To the Reader," 6.

⁵¹

Pseudodoxia is presented as levelling the playing field of knowledge. Browne's condensed metaphor of landscape suggests that the world we live in becomes more accessible to our perception if we cut down errors. This metaphor opens up the space of knowledge in a destructive and violent manner. The 'rubs' that are 'levelled' refer to stones used to sharpen scythes in East Anglian dialect. Unfurling the implied image, we might read the rub as sharpening a scythe which then cuts a path through the field of knowledge. Such a metaphor would play into a well-established rhetoric of cutting down errors to get to truth, but it is nonetheless unclear precisely where error is located; we cannot tell whether error is the scythe sharpener or 'rub' itself, whether it is the blunt scythe edge shaved off by the rub, or whether it is the crops from which the progressive path seems to be cut. This proliferation of potential interpretations makes the inferred metaphor difficult; the path and instruments of knowledge offering a 'clearer progression' are either sharpened by error or made by its erasure. Full of double negatives, long clauses and impedimentary wording, Browne's passage needs careful consideration before we can cut to the heart of it. Of course, the error might be within us; we may simply be misconstruing this metaphor and reading too far into the second intentions of these words.

Browne's suggestion that the identification and 'expurgation' of error will make the path of truth clearer plays into theoretical accounts of compendiums of error, which emphasise a desire to eviscerate the errors they collect. In both Davis's and Steven Mullaney's accounts, errors are collected and eliminated in order to reinforce the cultural hegemony.⁵⁷ Davis relates this in vicious terms, arguing that collections of errors launched a vigorous 'assault' intended to 'purge' or destroy what they gathered.⁵⁸ In an account which

⁵⁷ For Davis, collections of vulgar errors are used as 'a means of control over medical practice and over the people' and of 'safeguard[ing]' the medical establishment. *Society and Culture*, 260. ⁵⁸ Davis, *Society and Culture*, 259.

allots an (albeit brief) role in this process to curiosity and wonder, Mullaney has similarly proposed that Browne's opening premise in *Pseudodoxia*, that 'knowledge is made by oblivion, and to purchase a clear and warrantable body of Truth, we must forget and part with much we know',⁵⁹ performs a 'self-consuming' process of 'exhibition, followed by exclusion or effacement'.⁶⁰ Campbell has agreed that an 'impulse of expurgation as well as of expansion' characterized seventeenth-century natural philosophy (though she notes that *Pseudodoxia*'s 'exorcism of "vulgar errors" is 'a fond and fascinated' one)⁶¹ and Preston has described the 'laundering' exercise in which 'Browne is collecting and expunging, by his

While such accounts chime with Browne's explicit calls for the expurgation of errors, neither Davis nor Mullaney manages to account for the peculiar preservation that occurs in *Pseudodoxia*. Preston comes closer to the mark with her reference to 'laundering' rather than expunging; closer still comes Campbell's observation that 'the relaxed reader then as now, was likely to delectate the curios here rather than learning firmly to eschew them'.⁶³ These accounts, stressing elimination, erasure or expurgation, fail to consider the full and final implications of the paradox of error-gathering; that through the actions of the compiler, the destructive impulse is turned into a preservation and propagation in print. Just as the erasure occurring on the landscape simultaneously makes paths, so too 'oblivion', in Browne's turn of phrase, becomes materialised. Used to 'ma[k]e' knowledge or

⁵⁹ Browne, *Pseudodoxia*, "To the Reader," 3.

⁶⁰ Steven Mullaney, "Strange Things, Gross Terms, Curious Customs: The Rehearsal of Cultures in the Late Renaissance," in *Representing the English Renaissance* ed. Stephen Greenblatt (Berkeley: University of California Press, 1988): 77. Mullaney clearly refers to Stanley Fish's famous use of the term 'self-consuming' here. ⁶¹ Campbell, *Wonder and Science*, 24; 85.

⁶² Preston, Early Modern Science, 122.

⁶³ Campbell, *Wonder and Science*, 86. She remarks further 'One suspects [...] that Browne enjoyed his collection (and his Errors) as a "paradise," in Evelyn's terms, rather than as the rational torture chamber idealized by Bacon' and accuses Browne not of diminishing error but of propagating it: '[t]he contribution to vernacular literature of this (anti-)pseudodoxical genre and particularly Browne's work is the Error itself, the "Ironicall mistake" he catalogues so fully and faithfully in all its varieties[...] he even provides models for the construction of new Errors and wonders', 87; 100.

'purchase' truth, the error destined for oblivion is printed on the page and made both metaphorically and materially consumable. Loss and oblivion are countered in their very invocation as they are memorialised in the process of printing 'oblivion'. Errors in *Pseudodoxia* are not so much destroyed as refashioned into the tools and materials with which knowledge can be built or bought, perpetuated in print and transformed into steps on the way to knowledge.

This material proliferation of collected errors through the printed book exacerbates the concern surrounding error and the material book identified in my introduction. In an obscure chapter of *Pseudodoxia Epidemica*, Browne argues vociferously against the ancient belief that in the astrological period called the 'dog days[...] all medication or use of Physick is to be declined; and the cure committed unto nature'.⁶⁴ Browne suggests this error developed as 'that common opinion made that a cause, which was at first observed but as a sign'.⁶⁵ The rising and setting of certain stars, argues Browne, were initially used as a 'sign' to mark seasonal periods of ill health, but they were not their 'cause'. After an extensive and wide-ranging refutation, Browne, in the final paragraph of the chapter, remarks that this error is worthy of particular attention 'because the error is material, and concerns oft-times the life of a man'.⁶⁶ His word choice gestures towards the slipperiness of error, which is located both in conceptual and material realms.

Browne uses the word 'material' to indicate the significance of this error and its potentially fatal consequences. But while in this instance 'material' is used primarily for emphasis, it also resonates with the physical consequences of this error, which is 'worse

⁶⁴ Browne, *Pseudodoxia*, IV.xiii.324.

⁶⁵ Browne, *Pseudodoxia*, IV.xiii.324.

⁶⁶ Browne, *Pseudodoxia*, IV.xiii.337.

then some reputed Heresies; and of greater danger to the body, then they unto the soul'.⁶⁷ Further proliferating the sense that error comes in many forms, Browne's statement reminds us that error, in the early modern period as now, can be tangible as well as conceptual, and even born out of the material text.

Browne anticipates Joshua Calhoun's remark that '[t]exts tend toward corruption, and that corruption is due not only to human error but also to material conditions⁶⁸ when he notes that 'things evidently false are not onely printed, but many things of truth most falsly set forth'.⁶⁹ Even the 'things' of this sentence demonstrate the text's potential duplicity by chiefly describing ideas but simultaneously underlining the 'thing'-ness of the book itself, which can be corrupted, sent forth and disseminated as a commercial object. Seth Lerer has observed that 'proof' in its bibliographical sense does not necessarily contain the certitude or truth of ocular 'proof';⁷⁰ in fact, it normally describes a draft copy to be amended. The written word is slippery; when we read words with double meanings we have optical 'proof' of their correctness, but no 'proof' we are using them in the correct semantic sense. Errors which occur in and because of the material form of the text can evade the control of the author and occur independently of him, allowing the book to accrue an alarming agency of its own. Browne, however, wields the materiality of the book against its own propensity to error. The errata list of the first edition of *Pseudodoxia* implores the reader to 'rectifie' the errors which by 'reason of the obscurity of the Copy have most

⁶⁷ Browne, *Pseudodoxia*, IV.xiii.337.

⁶⁸ Joshua Calhoun, "The Word Made Flax: Cheap Bibles, Textual Corruption, and the Poetics of Paper," *PMLA* 126, no. 2 (2011): 331.

⁶⁹ Thomas Browne, *Religio Medici* in *The Works of Sir Thomas Browne*, ed. Geoffrey Keynes, vol. 1 (London: Faber & Faber, 1964), "To the Reader," 9. All references hereafter will be to this edition unless marked otherwise.

⁷⁰ Seth Lerer, *Error and the Academic Self: The Scholarly Imagination, Medieval to Modern* (New York: Columbia University Press, 2002), 51.

materially escaped' in an instance which both hints at the lack of fixity that print provides but also indicates its corrective power.⁷¹

Browne waged a particularly material war against both factual and physical errors across the many editions of *Pseudodoxia* printed in his lifetime. Reid Barbour has documented his 'active[...] reshaping' of *Pseudodoxia* during the 1640s and 1650s, suggesting the text was treated as a 'dynamic, changeable intervention' responding to contemporary intellectual culture.⁷² Browne's responses were not only to developments in thought, but also to those in reading technologies, making '[e]fforts[...] to produce a 1650 edition that would be typographically more attractive and more accessible to the reader.⁷⁷³ With the correction of a 'steady stream of errors - typos as well as matters of fact' and the navigational aid of further printed marginalia, Barbour reports that 'the apparatus of the 1650 edition encouraged an active readership.⁵⁷⁴ Furthermore, Browne used his correspondence to gather information for his revisions of *Pseudodoxia*, showing a sustained 'commitment to keeping the research for *Pseudodoxia* up-to-date', and editing the text right up until the 1672 edition that preceded his death.⁷⁵ Just as Browne's textual interactions were highly material, so were his readers', and the book elicited a great deal of comment, both in the print realm, and in the margins of private copies.⁷⁶

⁷¹ Browne, *Pseudodoxia Epidemica: or, Enquiries into Very Many Received Tenents, and Commonly Presumed Truths* (London: Thomas Harper, 1646), p.386, sig.[Bbb5v].

⁷² Reid Barbour, Sir Thomas Browne: A Life (Oxford: Oxford University Press, 2013), 336.

⁷³ Barbour, Browne: A Life, 336.

⁷⁴ Barbour, Browne: A Life, 336.

⁷⁵ Barbour, *Browne: A Life*, 334; 336.

⁷⁶ Discussing Christopher Wren, the Dean of Winchester's annotations of *Pseudodoxia*, Rosalie Colie has remarked on the mixture of personal and intellectual interjections and has indicated the extent to which Wren participated in the text, even adding a long note about porpoises, accompanied by a charming sketch of the animal. She also relates that Wren expanded Browne's already substantial definitions of error, supplementing his explanation of deuteroscopy with further examples of his own, "Dean Wren's Marginalia and Early Science at Oxford," *The Bodleian Library Record* 6, no. 4 (1960). Finding Wren similarly engaged in his annotations of *Religio Medici*, Reid Barbour remarks that 'Wren's efforts to reclaim *Religio Medici* from the error of its own ways are strenuous and pervasive' and that he 'appears to believe that Browne's work can be salvaged only if the reader aggressively intervenes with erasures, corrections, and rewritings', "Notes and

If Browne's text is supposed to be destroying the errors it collects it does a poor job, not only perpetuating them but also proliferating them in material form on the page. This residual paper record of the ideas he sought to erase still lingers on centuries later. As Achsah Guibbory has remarked, *Pseudodoxia* is a work that 'promises the advancement of learning, [but] actually teaches human fallibility and the impossibility of eliminating error.⁷⁷ It ensures that we remember what to forget, but fails to achieve a final erasure.

Practice makes Imperfect

In Michel de Certeau's account of walking in the city, the marks on maps 'refer, like words, to the absence of what has passed by[...]. The trace left behind is substituted for the practice.'⁷⁸ In *Pseudodoxia* it is hard not to trace the importance of the 'practice[s]' left embodied in the traces that survive them. Kevin Killeen, and, long before him, Alexander Ross, have very convincingly argued that 'Browne's apparent errors[...] arrive already corrected' and that he disingenuously "'performs" rather than "believes" them.⁷⁹ Killeen shows that Browne knowingly misconstrued his accounts of humanist and classical writers in order to present as current and unquestioned beliefs which had long since been corrected in the popular arena. Yet if Browne's report of these errors is disingenuous, his style, which reasons through each error afresh, lends his prose a sense of immediacy, as though he is

Documents: Dean Wren's Religio Medici: Reading in Civil War England," Huntington Library Quarterly 73, no. 2 (2010): 267; 268.

⁷⁷ Achsah Guibbory, "Sir Thomas Browne's *Pseudodoxia Epidemica* and the Circle of Knowledge." *Texas Studies in Literature and Language* 18, no. 3 (1976): 493.

⁷⁸ Michel de Certeau, *The Practice of Everyday Life*, trans. Steven F. Rendell (Berkeley: University of California Press, 1984), 97.

⁷⁹ Kevin Killeen, "'The Doctor Quarrels with Some Pictures': Exegesis and Animals in Thomas Browne's 'Pseudodoxia Epidemica'," *Early Science and Medicine* 12, no. 1 (2007): 12.

expertly leading his reader on an error-spotting hunt. This is a text in which attention, action and participation are prized and central activities.

The composition and aims of *Pseudodoxia* are described in terms which are inherently process-driven. If Browne is performing, or rehearsing, or joking, he leaves his tracks on the page for us to follow. The full paradox of oblivion becoming a materially creative force is borne out in the body of the book, in which making and writing become valued activities. Whether making errors or making arguments, Browne's compulsive writing habit is evidenced by the mind-boggling array of curiosity on display. The joy embedded in *Pseudodoxia*'s construction is evident in his whimsical additions, his lengthy digressions, and his descriptions of the work's composition, which involved Browne inhabiting and investigating the errors of *Pseudodoxia* within such 'snatches of time' as his medical work would permit.⁸⁰ Browne proclaims that 'surely in this work attempts will exceed performances', stressing the laborious and compulsive nature of his task: '[n]or have we let fall our Pen upon discouragement of Contradiction'.⁸¹ As with Browne's bewildering labyrinth of truth, it is not the end product or destination that is valued here so much as the process by which it is reached.

Browne is clearly invested in the writing of *Pseudodoxia*. His descriptions of writing and metaphors of knowledge are framed in similarly mobile, active terms, and Browne promotes *Pseudodoxia*'s dynamism by noting that 'a work of this nature is not to be performed upon one legg'.⁸² While Browne issues warnings about the perils of language, citing it as one of the key causes of error, it is to language Browne is bound in *Pseudodoxia*. It is perhaps unsurprising, considering his heightened awareness of language's potentially

⁸⁰ Browne, *Pseudodoxia*, "To the Reader," 4.

⁸¹ Browne, *Pseudodoxia*, "To the Reader," 4.

⁸² Browne, *Pseudodoxia*, "To the Reader," 4.

erroneous nature, that Browne self-consciously develops a language *for* error. This spatialised model of error frequently describes movement along the errant paths and landscapes of knowledge, which will be explored more fully in the next chapter. But following Browne on his long journey we return to the middle-ground of our 'adventures in knowledge' which ultimately demarcate Browne's problematic epistemology.⁸³

This chapter began with an epigraph from Lactantius: 'the first step to wisdom is to know false things.' We should have known better than to take this at face value; setting out his various categories of error, Browne claims that the 'mortallest enemy unto Knowledge' is an 'adhesion unto Authority'.⁸⁴ He describes the threat of antiquity as occurring because we perceive it to take place at a safe distance; thinking of it as 'far removed from our times', we ironically suspend our critical distance.⁸⁵ Classical authorities, Browne states, 'are now become out of the distance of Envies: and the farther removed from present times, are conceived to approach the nearer unto truth it self.⁸⁶ This constant refrain of distance and proximity, both to our selves and to truth, is deceptive. We falsely conflate spatial and temporal distance, and in doing so, once more mistake the poles of truth and error: 'hereby[...] we manifestly delude our selves, and widely walk out of the track of Truth', Browne concludes.⁸⁷ This error is simple errancy, a wandering off the track of truth. Yet Browne's language makes it unsurprising that errors occur so commonly; the paths of truth are not only difficult to find but frequently misleading or even non-existent. Movement, and walking in particular, is innately bound up with knowing for Browne, who argues vociferously against idleness in the pursuit of knowledge, explicitly condemning those who

⁸³ Browne, *Pseudodoxia*, VI.xii.481.

⁸⁴ Browne, *Pseudodoxia*, I.vi.40.

⁸⁵ Browne, *Pseudodoxia*, I.vi.40.

⁸⁶ Browne, *Pseudodoxia*, I.vi.41.

⁸⁷ Browne, *Pseudodoxia*, I.vi.41.

neglect its 'sedulous pursuit'.⁸⁸ Browne deliberately plays on the rhetoric of error and errancy by using images of metaphorical movement through a landscape to test how knowledge might be expressed and to test truth through his powers of reason, while simultaneously aligning such images to his process of writing.

In the face of this insurmountable task of knowing, Browne does present us with a glimmer of hope. Pseudodoxia's preface proposes the text (perhaps disingenuously) as a journey through a previously unexplored landscape, a meandering adventure through undiscovered knowledge: We hope it will not be unconsidered, that we find no open tract, or constant manuduction in this Labyrinth; but are oft-times fain to wander in the America and untravelled parts of Truth'.⁸⁹ While this is a claim for novel and original content, it also stresses the importance this texts places on cognitive process rather than any resulting facts. The reader and author ('we') will together forge a pathway through this untrammelled landscape of discovery. A sense of the creativity, hope and potential profit underpinning this venture is heightened by the reference to America, that 'new-found land' of discovery so productive and fertile in the seventeenth-century imagination. Browne offers us a new beginning, binding the text and the cognitive landscape together through the 'open tract' which playfully invokes this printed tract as track. The sense that the reader is complicit in the text breaking new ground is developed across this stretch of images, its inclusive address, and the assertion that there will be no external guide (no 'manuduction') as we progress through this landscape hand in hand with Browne. Errancy is not ultimately erroneous here: it is synonymous instead with an apparent path towards truth. In common with Lactantius's proposition that errors must be overcome in order to advance towards truth, Browne figures the terrain of 'truth' not as a straight and unimpeded path but as a

⁸⁸ Browne, *Pseudodoxia*, I.v.40.

⁸⁹ Browne, *Pseudodoxia*, "To the Reader," 5.

daunting wilderness, a labyrinthine space in which we must wander and err, in both senses of the word. But while indicating the difficulty of progressing towards knowledge, Browne also endows this quest with a romantic, heroic glamour. The landscape of truth is difficult terrain, but it presents an unparelleled potential for empirical conquest if we are able to navigate it safely.

Chapter Three

'For I did walke, and thinke, and breake my Braines': Disorienteering along lines of thought

To err is to wander, and wandering is the way we discover the world; [...] and, lost in thought, it is also the way we discover ourselves. Being right might be gratifying, but in the end it is static, a mere statement. Being wrong is hard and humbling, but in the end it is a journey, and a story.

- Kathryn Schulz, Being Wrong: Adventures in the Margin of Error

A Vagabondage of the Imagination

Early modern definitions of error frequently collapsed the epistemological and the spatial. Thomas Thomas's *Dictionarium Linguae Latinae et Anglicanae* (1587) defines 'Error' as 'a false opinion, a taking of a falsehood for truth: *a wandring*, a mistaking, deceit, ignorance: *a winding or turning: a turning out of the way*'.¹ John Florio's *A World of Words* (1598) translates 'Errore' as 'a fault, an ouersight, a *trespasse*, a mistaking, a *misse*', while Richard Perceval's *A Dictionary in Spanish and English* (1599) translates 'Error' as 'error, a wrong opinion, false doctrine, *going out of the way*, mistaking, a fault'.² Thomas Wilson's *A Christian Dictionary* (1612) distils these sentiments when he simply defines 'Error' as '[a] going from the right path, or straying out of the way.³³ This association of error with errancy was not exclusive to etymological works. When Morris Croll attempted to define baroque style, he posited 'ideas of motion' as its most important feature, and describes a shift occurring in the creative arts of all kinds from a measured symmetry toward 'contorted and aspiring' lines and 'restless and exciting'

¹ s.v. "error", Lexicons of Early Modern English (LEME), accessed September 24, 2014,

http://leme.library.utoronto.ca/. Emphases my own.

² s.v. "error", *LEME*, emphases my own.

³ s.v. "error", LEME, emphases my own.

modes of expression.⁴ This mobility is captured in the relentlessly self-propelling prose of Thomas Browne and Margaret Cavendish.

In this chapter I argue that the works of Browne and Cavendish aptly illustrate how the wandering nature of error facilitates both literary and intellectual invention. Kathryn Schulz reports that '[i]n the 1600s, France's *Larousse* dictionary defined error, rather beautifully, as "a vagabondage of the imagination, of the mind that is not subject to any rule."⁵ The use of the perambulatory term 'vagabondage', which plays on the etymology of *errare*, encapsulates the early modern conception of error as an exploratory and poetic act of imagination as well as potentially rogue or deviant. Mapped onto the middle ground between truth and error that we have already seen is a productive and liberating space in which poetics and philosophy also collide.⁶ Tracing diverse paths through this cognitive landscape will reveal the complex, contradictory, and surprisingly generative nature of error, a concept which is so often neglected, erased or invisible.

Rebecca Solnit suggests that '[t]o write is to carve a new path through the terrain of the imagination[...]. To read is to travel through that terrain with the author as guide - a guide one may not always agree with or trust, but who can at least be counted upon to take one somewhere.'⁷ Following these textual tracks and traces promises access to what Michel de Certeau has termed a 'second, poetic geography on top of the geography of the literal,

⁴ Morris W. Croll, "The Baroque Style in Prose," in *Style, Rhetoric, and Rhythm*, eds. J. Max Patrick et al. (Princeton: Princeton University Press, 1960), 208.

⁵ Kathryn Schulz, Being Wrong: Adventures in the Margin of Error (London: Portobello Books, 2010), 29.

⁶ Mary Baine Campbell extends the realm of the 'imaginary', repressed, in her account, by the "Scientific Revolution", to include 'elaborate Error', suggesting that this redefinition o the imaginary 'will alter the cultural field within which "worlds" are constructed, projected, described, imagined, invented, oppressed, collected, and consumed', *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca: Cornell University Press, 1984), 101.

⁷ Rebecca Solnit, Wanderlust: A History of Walking (London: Verso, 2001), 72.

forbidden or permitted meaning^{2,8} Reflecting on walking in the city, de Certeau suggests that 'walking [is] a space of enunciation' which 'affirms, suspects, tries out, transgresses, respects, etc., the trajectories that it "speaks"^{2,9} While de Certeau's account addresses actions occurring in the 'real' world, his assessment seems prescient as a method of drawing out the metaphorical acts of walking presented by these philosophical texts. De Certeau suggests more than just an etymological link between error and wandering: they are both processes which demand a working through, testing, progression and development of position, intellectual or physical. An exploration of metaphorical paths will enable us to more effectively map the complex ways in which error was perceived and experienced in early modern natural philosophy.

Taking Browne and Cavendish as our guides in the bewildering realm of natural philosophy, we might often be forced to question their direction. If we feel lost, abandoned, or confused in their strange and contradictory landscapes, we will be in good company. As gestured to by the mobile terms used to describe *Pseudodoxia*, critics have often resorted to the terms of difficult terrain, navigation and disorientation when responding to these digressive texts. Stephen Clucas calls the sense that Cavendish's work is 'difficult to locate, if not downright perverse' a major obstacle to her incorporation in the literary canon.¹⁰ As well as identifying Browne's 'rambling' style, Virginia Woolf famously described Cavendish's prose as an impenetrable and chaotic garden grown out of control, 'a vision of loneliness and riot[...] as if some giant cucumber had spread itself over all the

⁸ Michel de Certeau, "Walking in the City," in *The Practice of Everyday Life*, trans. Steven F. Rendell (Berkeley, Calif.: University of California Press, 1984), 105.

⁹ de Certeau, "Walking in the City", 98.

¹⁰ Stephen Clucas, "Variation, Irregularity and Probabilism: Margaret Cavendish and Natural Philosophy as Rhetoric," in *A Princely Brave Woman: Essays on Margaret Cavendish, Duchess of Newcastle*, ed. Stephen Clucas (Aldershot: Ashgate, 2003), 199.

roses and carnations in the garden and choked them to death'.¹¹ Kevin Killeen has remarked on Browne's 'wandering subject matter', calling the *Religio Medici* '[r]hetorically and perhaps philosophically[...] a full-scale lecture on indirection' with 'labyrinthine' prose and 'a perplexing terrain'.¹² Most vociferously, Stanley Fish has asserted that Browne's prose 'forestalls certainty in any direction', producing no progress but only a selfconsuming 'paradoxical movement'.¹³ But while the destination and direction of these texts might be obscure and obscured, it is often the journey that they privilege.

This chapter starts by unravelling the errant line of thought to the limits of knowledge, where it collapses into paradox, a fundamental error of reasoning which gestures ultimately to the fallibility of man and the unknowable truth of the divine. However, I intend to suggest that while the errant line fails to capture the divine, it is simultaneously a productive force, with a playful and creative power particularly relevant to literary creation. Extending this connection, I will finally build on the suggestion of my previous chapter that action is central to processes of knowing to highlight a connection between walking, writing and thinking which governs our perceptions of and interactions with error in both the metaphorical and real worlds. Drawing on models from cognitive science, I will suggest that the connection between walking, thinking, writing and the material book in these texts not only depicts but also constructs cognitive modes that are experienced both physically and conceptually by writers and readers. Tracing the metaphorically and materially errant paths of their books, I will suggest they produce a

¹¹ Virginia Woolf, *The Common Reader* in *The Essays of Virginia Woolf*, ed. Andrew McNeillie, vol 4 (London: The Hogarth Press, 1994), "The Elizabethan Lumber Room," 59; *A Room of One's Own* (Harmondsworth: Penguin, 2004), 71-2.

¹² Kevin Killeen, "When All Things Shall Confesse Their Ashes': Science and Soul in Thomas Browne" in *The Oxford Handbook of English Prose, 1500-1640* ed. Andrew Hadfield (Oxford: Oxford University Press, 2013), 670; 676; 685.

¹³ Stanley E. Fish, *Self-Consuming Artifacts: The Experience of Seventeenth-Century Literature* (Berkeley: University of California Press, 1972), 356; 363.

model of knowing which proceeds in a roundabout fashion, enjoying the erratic and wandering process that gradually walks us toward knowledge.

Lines of thought (or, walking in circles)

For Cavendish, as for Browne, the path to knowledge unfurls progressively. This journey often occurs combatively or against obstruction, mirroring Tim Ingold's description of life as lived along 'a line that advances[...] in an ongoing process of growth and development, or self-renewal'.¹⁴ The continual, ideal line that unfolds in the twinned processes of writing and thinking, is, for Cavendish, territory ripe for error. Her poem '*Similizing* Thoughts' suggests that the sequentially unfolding lines of thought and writing may quickly become blotted and nonsensical:

Thoughts as a *Pen* do write upon the *Braine*; The *Letters* which wise *Thoughts* do write, are plaine. *Fooles Scribble, Scrabble*, and make many a *Blot*, Which makes them *Non-sense* speak, they know not what.¹⁵

Through the simile of the pen, we come to consider the motions of Cavendish's thoughts and writing in tandem. The analogy suggests that writing, as well as thinking, occurs quickly and spontaneously, leading to blots and scribbles. Cavendish's own wildly running thoughts, both as depicted in and embodied by her writing, closely resemble the errant scribbling which results in obscuring blots rather than the 'plaine' and carefully considered letters of the wise.¹⁶

Cavendish is aware of the threat posed by the literal line of her writing. Despite her protestations about the foolishness of scribblers and their potential for error, the errant and

¹⁴ Tim Ingold, Being Alive: Essays on Movement, Knowledge and Description (London: Routledge, 2011), 150.

¹⁵ Margaret Cavendish, Poems, and Fancies (London: T.R., 1653), sig.[U1r].

¹⁶ Cavendish, Poems, and Fancies, sig.[U1r].

scribbling model is central to Cavendish's accounts of her own work. In 'The Motion of Thoughts', a poem from Cavendish's whimsical and maverick first volume, Poems, and Fancies, the lines of her 'wandering' thoughts are envisaged not only in terms of the voyager but also as the textile equivalent of the scribble or the errant line:

My *Feet* did walk without *Directions* Guide, My *Thonghts* did travell farre, and wander wide; [...] This *Motion* working, running severall waies, [...] Is like a *Skeine* of *Thread*, if't knotted bee. For some did go strait in an even *Line*, But some againe did crosse, and some did *twine*¹⁷

The metaphor of the tangled, knotted thread is not only visually reminiscent of the blot or the scribble. It represents a similar resistance to intellectual clarity or progress; it entraps and obstructs the reader or spinner. Yet Cavendish is unwilling to problematise the potentially erroneous motion of her thoughts. Instead, her depiction of tangled thoughts running freely and in several directions supports Clucas's assertion that Cavendish's 'championing of the infinite fecundity of natural wit or fancy rests on a thirst for liberty rather than truth'.¹⁸ Instead of showing concern about the knotted nature of her thoughts, she delights in their errant motion, proceeding to note, '*Life*, which *Motion* is, joyes in varietie'.¹⁹

Cavendish deems erroneous thoughts sources of pleasure and inherently natural. Encompassed in the divine scheme and woven into god's fabric, they become unobjectionable. Emphasising the generative and productive characteristics of thought by playing on their figuration as yarn and their actualisation as words, both artisanal materials woven together to create fabrics, nets or texts, Cavendish teases out the similarity between thoughts in motion and the primordial light and motion of Creation:

¹⁷ Cavendish, Poems, and Fancies, sig.[F4v].

¹⁸ Clucas, "Variation," 207.

¹⁹ Cavendish, Poems, and Fancies, sig.G[1r].

a *Point*, from whence all *Lines* do flow, Nought can diminish it, or make it grow. Tis *its* own *Center*, and *Circumference* round, Yet neither has a *Limit*, or a *Bound*. My *Thoughts* then wondring at what they did see, Found at the last* themselves the same to bee²⁰

Cavendish conjures the space of divine Creation as incomprehensible, both inviting and disabling our normal category of 'error'. This paradox, the circle whose centre is everywhere and circumference is nowhere, is also the attempt to express the divine that most 'pleaseth' Browne in *Religio Medici.*²¹ By using this particular image, Browne and Cavendish partake in a philosophical tradition which can be traced through a series of writers from Plato to Hermes Trismegistus, and later through writers from Rabelais to Pascal and Voltaire to Borges.²² Tangled up with the notion of the divine, 'wander[ing]' for Cavendish is homonymically collapsed into 'wond[e]ring' as her thoughts find themselves walking in circles. Imagining a circumnavigation of the world and its mysteries, Cavendish reminds us that even if we were able to 'measure all the *Planets*', 'number all the *Stars*', '*Circle* [...] all the *World* about' and 'all th'*Effects of Nature*[...] finde out', even the most wise and learned would not be able to know 'What's done in *Heaver*'.²³

Errancy pushes at the limits of what we can and can't know, a notion that lies at the heart of the link between seventeenth-century travel and curiosity, which were, as Giuliana

²⁰ Cavendish, Poems, and Fancies, sig.G[1r].

²¹ Thomas Browne, *Religio Medici* in *The Works of Sir Thomas Browne*, ed. Geoffrey Keynes, vol. 1 (London: Faber & Faber, 1964), I.x.19. All references hereafter will be to this edition unless marked otherwise. Browne refers to the 'allegorical description of *Hermes*.'

²² For a brief history of the trope see Paul Shorey, *Platonism: Ancient and Modern*, vol 14 (Berkeley: University of California Press, 1938), 54; and Jorges Luis Borges, "Pascal," in *Other Inquisitions: 1937-1952*, trans. Ruth L.C. Simms (London: Souvenir Press, 1973), 94. The claim is made specifically one of writerly expression in Borges's short story "The Aleph": 'here begins my despair as a writer. All language is a set of symbols whose use among its speakers assumes a shared past. How, then, can I translate into words the limitless Aleph, which my floundering mind can scarcely encompass? Mystics, faced with the same problem, fall back on symbols: to signify the godhead, one Persian speaks of a bird that is somehow all birds; Alanus de Insulis, of a sphere whose centre is everywhere and circumference is nowhere[...] Perhaps the gods might grant me a similar metaphor, but then this account would become contaminated by literature, by fiction.' *The Aleph and Other Stories: 1933-1969*, ed. and trans. Norman Thomas di Giovanni (London: Jonathan Cape, 1970), 26. ²³ Cavendish, *Poems, and Fancies*, sigs.G[1r]; [G1v].

Bruno has noted, 'encouraged constantly to move, expanding in different directions. Such cognitive desire[...] is not only implicated in the sensation of wonder, as is often noted, but in the experience of wander.²⁴ In '*The* Motion *of* Thoughts', wander turns to wonder as the figure of the divine collapses our powers of spatial comprehension. Cavendish's poem starts with the narration of a journey. As she muses and walks, what we presume to be a real landscape with a '*Gravell*' path morphs into an allegorical hill with a view of the divine light and depicts Creation as a point from which a plurality of lines 'grow' exponentially. The ulterior message of the poem, in which the movement of the thoughts is compared to the movement of Creation, is bathetically placed in a marginal note reading '**All things come from God Almight*'.²⁵

This unravelling and laterally mobile sequence captures the errant nature of *Poems*, *and Fancies*. While the text veers off in multiple and various directions, resisting any sense of containment or limitation, it is held together by its interests in divine providence and the variety and causes of nature, with each thought leading progressively to the next. The wandering, tangled lines of this poem also provide an analogue for Cavendish's oeuvre more broadly, in which works are both interconnected and diverse. As Solnit has noted, 'walking[...] inevitably leads into other subjects. Walking is a subject that is always straying.²²⁶ The metaphor of walking that Cavendish employs is particularly apt not only for depicting the motion of thoughts but also for depicting the straying line which runs through *Poems, and Fancies* as a whole, defiantly multi-generic and constantly shifting in interest.

²⁴ Giuliana Bruno, Atlas of Emotion: Journeys in Art, Architecture, and Film (New York: Verso, 2002), 156.

²⁵ Cavendish, Poems, and Fancies, sig.G[1r].

²⁶ Solnit, Wanderlust, 8.

Working with a similar paradox in the introductory chapters of *Pseudodoxia*, Browne presents his reader with a stark proposition: 'being now at greatest distance from the beginning of Error, [we] are almost lost in its dissemination, whose waies are boundless, and confess no circumscription.'²⁷ His description captures the omnipresence of error. Despite our temporal distance from its origin, we find ourselves spatially surrounded by it. Error is impossible to demarcate, follow, contain or circumscribe; the paths or 'waies' on which it occurs are 'boundless' not only in number, but also in the sense of being without boundaries – as Browne notes, they cannot be circumscribed. Browne's apparent paradoxical paths and this landscape of error unmake themselves: while a path physically demarcates itself and the ground it is on, and can be used as a boundary or to circumscribe space, Browne's 'waies' of error offer no such certainty.

Faced with Fish's 'self-consuming' paths, it is no wonder we are 'almost lost' within this landscape dominated by error; its very representation entices the reader into a fundamental error of comprehension.²⁸ Rosalie Colie notes that confronted by paradox '[t]he thinking process, examining for the "error" which brought it up sharp against paradox, turns back on itself to see how it got stuck'.²⁹ The 'self-referential activity' of the paradox, she argues, 'redirect[s] thoughtful attention to the faulty or limited structures of thought' and 'play[s] back and forth across terminal and categorical boundaries'.³⁰ Colie describes the cognitive process of the paradox in terms of a turning, errant movement which disrupts boundaries and understanding, and in which error seems simultaneously

²⁷ Browne, *Pseudodoxia*, I.ii.25.

²⁸ Fish, Self-Consuming Artifacts.

²⁹ Rosalie L. Colie, *Paradoxia Epidemica: The Renaissance Tradition of Paradox* (Princeton: Princeton University Press, 1966), 7.

³⁰ Colie, Paradoxia Epidemica, 7.

present and absent. As Browne indicates, its paths may be many but they are also notoriously hard to mark out.

Where Fish has argued that Browne's prose is static, comprised of immobilising 'objects, frozen into rhetorical patterns', and undemanding, 'never having[...] really pained or challenged' the reader, these paradoxical and self-consuming spaces encourage the reader to track the process of his or her thoughts.³¹ As Achsah Guibbory has noted, Browne's paradoxical tropes reveal 'man's attempt to fill up the infinite circle of his mind by continually enlarging the sphere of his knowledge' and thus 'bring the external world within his control'.³² Browne's depiction of man conceiving of his own cognitive process in the same terms as the Divine is repeated in Cavendish's analogy between the motion of human thoughts and the primordial light. For Marshall Brown, '[a]poria is a permanent element of dialectical discovery; it is a part of the revolution in thought and not what the revolution eliminates'.³³ Browne and Cavendish's paradoxes adeptly capture this aporia in their undefinable limits.

Moving away from error

³¹ Fish, Self-Consuming Artifacts, 372.

³² Achsah Guibbory, "Sir Thomas Browne's *Pseudodoxia Epidemica* and the Circle of Knowledge," *Texas Studies in Literature and Language* 18, no. 3 (1976): 486; 488.

³³ Marshall Brown, "Errours Endlesse Traine': On Turning Points and the Dialectical Imagination," *PMLA* 99, no. 1 (1984): 14.

While errancy is most clearly equated with the sinful movements of the devil for Browne, he positively encourages digressive wandering in his texts. At the end of one of only two chapters titled a 'Digression' in *Pseudodoxia*, Browne argues in favour of his errant style in terms which apply to the whole text: 'adventures in knowledge are laudable', he proclaims, arguing that 'although in this long journey we miss the intended end, yet are there many things of truth disclosed by the way; and the collaterall verity, may unto reasonable speculations some what requite the capitall indiscovery'.³⁴ While wandering in error and the territory of 'indiscovery', we might chance upon truth. Reaching a turning point, this initially fruitless path might lead us, through the powers of speculation, to 'collaterall verity'.

A constant movement through this landscape is essential if we are to make any progress, and Browne's language insistently stresses the manual and mobile effort that must be made if we are to have any chance of navigating our way out of error. Browne suggests that if our ancestors had made only 'sedentary' attempts toward knowledge, 'the face of truth had been obscure unto us, whose lustre in some part their industries have revealed'.³⁵ Instead he ascribes value to 'the sweat of their labours' and argues that 'they took delight in the dust of their endeavours. For questionless, in Knowledg there is no slender difficulty; and Truth, which wise men say doth lye in a Well, is not recoverable, but by exantlation'.³⁶ Here suggesting that the recovery of knowledge requires an effort comparable to drawing it from a well, Browne remarks that while some men's efforts have paid dividends, 'the Enquiries of most defected by the way, and tired within the sober circumference of

³⁴ Browne, *Pseudodoxia*, VI.xii.481.

³⁵ Browne, *Pseudodoxia*, I.v.38.

³⁶ Browne, *Pseudodoxia*, I.v.38.

Knowledg'.³⁷ This circular path is terrifying, endless and bound to repeat itself in futility - not only through Browne's works but also, we might presume, down the generations.

The sober circumference of knowledge is an arena of paradox, exhausting because it confronts boundaries in every direction. It is a claustrophobically confined space and also immeasurably large; the circumference is at once a path and a border; it is continual and leads nowhere. Cavendish and Browne's texts unfold and meander in precisely the shifting landscapes 'of indeterminate, incomplete, and approximate meanings' which Gordon Teskey designates the region of error.³⁸ While the spaces of error shift in shape and meaning, their motion reflects the status of error as an amorphous and ambiguous set of qualities impossible to precisely grasp. The wandering lines of Browne and Cavendish's texts represent an attempt to more firmly map out its confines and terrain.

The replacement of the narrative of Adamic error and the creation myth of Genesis with a playful and productive creative errancy of Cavendish's own devising is a feature of *Poems, and Fancies,* a text which, as the title suggests, suffuses its natural philosophy with a healthy serving of *Fancies*' and poetic license. In *'To Naturall Philosophers*', the preface to *Poems, and Fancies,* Cavendish defends the text which follows, claiming her relative ignorance of natural philosophy means she is likely to 'erre *grossely*', going on to argue that: 'If I do erre, it is no great matter, for my *Discourse* of them [atoms, figures, matter and motion] is not to be accounted *Authentick*.'³⁹ Arguing that poetry is more fitted to error than prose, Cavendish constructs a philosophy which is invested in the errant power of poetics. In '*Nature Calls a Councell, which was* Motion, Figure, matter *and* Life, *to advise about making the World*', the introductory poem in the volume, an alternative creation story is written as

³⁷ Browne, *Pseudodoxia*, I.v.39.

³⁸ Gordon Teskey, "From Allegory to Dialectic: Imagining Error in Spenser and Milton", *PMLA* 101, no. 1 (1986): 17.

³⁹ Cavendish, Poems, and Fancies, sig.[A6r].

Nature calls on her subordinates to assist her in the creation of the earth. Motion is appointed Nature's deputy, tasked with 'cloath[ing] the Minde' of man. Cavendish's natural philosophy bears the hallmark of Lucretius in her account of the motion of thoughts as well as her atomistic theory. Lucretius suggests that atoms move and swerve randomly, with their errant motion forming the physical basis of his theory of free will. This is a similarly important aspect of the cognitive process for Cavendish. Claiming that 'none knowes better how to do't then you', Nature commands Motion not only to equip the mind with the passions, but also '*free-will*'.⁴⁰ The embodied and mobile nature of thoughts is entirely within the remit of nature. What is more, in this poem, man and the world are made in tandem by motion, figure, matter and life; the eye, '*a Glassy Ball*', and 'a *Braine*' must be made before the sky, earth, air and sea, in order that light can be perceived and the Creation can be witnessed.⁴¹

Bodies of Thought

The abstract motions of thoughts are tracked in the parallel and corporeal actions of walking and writing for Browne and Cavendish. In discussing the link between walking and thinking, Solnit has remarked that 'the history of walking is the history of thinking made concrete – for the motions of the mind cannot be traced, but those of the feet can.'⁴² However, as we trace the motions of the mind moving through metaphorical landscapes, it will be helpful to consider Mary Floyd-Wilson and Garrett A. Sullivan Jr's suggestion, made in relation to Spenser's Bower of Bliss, that the textual rendition of thoughts in the

⁴⁰ Cavendish, Poems, and Fancies, sig.B2[v].

⁴¹ Cavendish, Poems, and Fancies, sig.[B1v].

⁴² Solnit, Wanderlust, 6.

language of landscapes is not 'a simple example of environmental determinism'; 'body and environment do not merely mirror one another[...]; they also interpenetrate'.⁴³

The early modern conflagration of epistemological and exploratory discourses is well evidenced. Mary Baine Campbell has argued that this figural trope in Bacon's *Advancement of Learning* is so prevalent that '[i]t is easy to read the entire work as an allegorical account of colonial exploration and conquest[...] even to wonder whether perhaps Cortés did not provide the model for the "Scientific Revolution".⁴⁴ Jonathan Sawday has suggested the mapping of the body by the renaissance anatomists 'equated scientific endeavour with the triumphant discoveries of the explorers, cartographers, navigators, and early colonialists', using Browne as an example of 'the construction of the natural philosopher as the heroic explorer.⁴⁵ Following in the metaphorical footsteps of Browne and Cavendish may enable us to better navigate the complex terrain of error in their texts. Examining Browne's discussion of the erroneous symbolism of impure feet and Cavendish's depictions of mobile thoughts, I will establish a link between the processes of writing, walking, and thinking. I will argue that the errancy of thoughts is depicted not only as potentially dangerous but also as natural, aesthetically generative, and indicative of both the limits and varieties of knowledge.

Both Browne and Cavendish push at the boundaries of knowledge, attempting to convert the unknown into either the known or knowable, while acutely aware of the difficulties of doing so. Their texts seek what Marshall Brown calls the dialectical 'turning

⁴³ Mary Floyd-Wilson and Garrett A. Sullivan, Jr, "Introduction: Inhabiting the Body, Inhabiting the World," in *Environment and Embodiment in Early Modern England*, eds. Mary Floyd-Wilson and Garrett A. Sullivan Jr (Basingstoke: Palgrave Macmillan, 2007): 1; 2.

⁴⁴ Campbell describes this figural character of Bacon's work as a key element of his attempt to 'alter not only the knowledge but, as prerequisites, the values and the mental categories of a culture', *Wonder and Science*, 74. ⁴⁵ Jonathan Sawday, *The Body Emblazoned: Dissection and the Human Body in Renaissance Culture* (Abingdon: Routledge, 1995), 24; 25.

point', 'the moment when falsehood begets knowledge and ignorance engenders insight'.⁴⁶ However, unlike Lactantius, Brown stresses that this is also a 'moment of disorientation' and 'openness to real possibility' in which 'knowledge yearns for a feeling of orientation.⁴⁷ Contemporaries of Browne and Cavendish suggested that a similarly dynamic spirit of change, movement and confusion drove the peculiar trajectories of their works.

In 1662, as we have already seen, Mark Anthony Benoist wrote a panegyric letter to Cavendish. His own prose style, mobile and shifting between antitheses, mimicked the unconventional and idiosyncratic nature he ascribes to Cavendish's writing. He writes that he can 'hardly stop [his] pen' from extolling the peculiarities of her prose, which

seemes strange at first, because it crosses the usual Methods of our Studies, [but] gives at last occasion of amazement, to see your Excellency go so far in the way of knowledge, which standing still, in a manner, and that others should run continually like Squerils in a Cage, without advancing forwards; which happens, I believe, because they dare not, or cannot go one step without Stilts, and your Excellence trusts to the goodness of your Legs.⁴⁸

For Benoist, Cavendish's transverse logic and prose style are subtly transformative as they zigzag across the normal path of knowledge, making what appears to be defective prose or even defective philosophy a startling and attractive feature. The conventional logic of philosophers is perceived to be like a frustrated squirrel in captivity, fruitlessly racing back and forth in a confined space. By contrast, Cavendish, with her liberated and wild-running thoughts makes bold strides forward. This interpretation strikes home the idea that errant paths and prose might make more efficient and effective progress than staid philosophy following the traditional path. Cavendish's writing, it seems, liked to go for a walk, requiring no artificial aids or 'Stilts'. What is more, this wandering, errant prose is seen as the root of

⁴⁶ Brown, "Turning Points," 12.

⁴⁷ Brown, "Turning Points," 21; 12.

⁴⁸ Letters and Poems in Honour of the Incomparable Princess, Margaret, Dutchess of Newcastle (London: Thomas Newcombe, 1676), p.81, sig.Y[1r].

her progress. Disorienteering toward knowledge, Cavendish courageously ventures forward, independent, and trusting to 'the goodness of [her] Legs.'

Writing-thinking-walking

In a characteristically self-conscious passage of *Pseudodoxia*, Browne considers the symbolism surrounding feet, which are traditionally washed before sacrifice. He associates feet with Achilles' heel, the bruised part of our souls, and the part of us most likely to fall into error. Identifying them as 'our inferiour parts and farthest removed from reason', Browne's prose spills over:

Thus Achilles, though dipped in the Styx, yet having his heel untouched by that water[...] he was slain in that part, and as only vulnerable in the inferiour and brutal part of man. This is that part of Eve and her posterity the divel still doth bruise, that is, the part of the soul which adhereth unto earth, and walkes in the paths thereof; and in this secondary and symbolical sense it may also be understood, when the Priests in the Law washed their feet before the sacrifice; when our Saviour washed the feet of his disciples[...] it is symbolically explainable, and implyeth purity and cleanness.⁴⁹

While our feet are symbols of our inherent fallibility, walking is what adheres us to the earth and makes us human. Our feet are our inferior parts, walking us into error, but they are also our point of contact with the earth around us, metaphorically and literally. If we insist on following the track of truth, we must do so cautiously, understanding that our feet may be dirtied on the way.

By focusing on symbolic modes of expression, Browne's wide-ranging discussion of impure feet elides the activities of walking, error and writing, suggesting a mode of

⁴⁹ Browne, *Pseudodoxia*, V.xxii.388.

understanding the world physically and metaphorically which had a wide cultural and expressive significance in both the seventeenth century and beyond.⁵⁰ There was not only a connection between walking and thinking, but also, as Andrew Cambers has shown, a 'connection between reading and walking'.⁵¹ For readers including Henry Newcombe, Anne and Margaret Clifford, and Mary Rich, reading was 'intimately connected with the landscape' while 'walking could be a bookish activity', explicitly as well as 'implicitly textual'.⁵²

Similarly, walking, thinking and writing are central to the work of Cavendish and intimately linked in her description of the composition of *Poems, and Fancies*. Cavendish's 1653 volume opens with a detailed explication of her atomistic theory in heroic couplets before moving swiftly through an astonishingly diverse array of subjects, from moral discourses to whimsical poetic conceits. In an early verse passage, Cavendish's movement and her free-running thoughts are aligned in a frantic coupling, with their energies played out in their transference from the brain to the page:

When I did write this *Booke*, I took great paines, For I did walke, and thinke, and breake my Braines. My *Thoughts* run out of *Breath*, then downe would lye, And panting with short wind, like those that dye. When *Time* had given *Ease*, and lent them *strength*, Then up would get, and run another *length*. [...]And by this course *new Fancies* they could breed. But I doe feare *they're* not so *Good* to please, But now *they're* out, my *Braine* is more at ease.⁵³

⁵⁰ On the significance of walking as a practice intimately linked with thinking and writing, and particularly philosophy see Solnit, *Wanderlust*, and Frédéric Gros, *A Philosophy of Walking* trans. John Howe (London: Verso, 2014).

⁵¹ Andrew Cambers, *Godly Reading: Print, Manuscript and Puritanism in England, 1580-1720* (Cambridge: Cambridge University Press, 2011), 34; 111.

⁵² Cambers, *Godly* Reading, 113; 114; 113.

⁵³ Cavendish, Poems, and Fancies, sig.[G4r].

A cathartic compulsion drives this expulsion of Cavendish's energetic thoughts. In order to be 'at ease' she physically purges her errant thoughts from running rapidly around her brain. Yet these unruly thoughts, like the errors of *Pseudodoxia* discussed in the previous chapter, are not ultimately obliterated. The internal, bodily purge takes the form of a textual recapitulation when the thoughts are transferred from Cavendish's brain to the page. Cavendish's verse depicts the 'porousness of an early modern body that takes the environment into itself or spills out of its own bounds (or both)', a quality which, as Floyd-Wilson and Sullivan recount, has been at the heart of recent critical analyses of the relationship between bodies and their environments.⁵⁴ In mediating the transition of thoughts to from the mind to the page through the writing hand, Cavendish flexibly positions early modern cognitive processes as crossing the divide between body and environment.

The pathways of these fleeting thoughts, captured with an incongruous permanence on the page, mark, map and make the cognitive trajectories of both the author and reader. Thoughts are made material in the physical imprint of the pen or printing press, which in turn stimulates cognitive activity for the reader. Cavendish makes this process explicit in *'The Reason why the* Thoughts *are onely in the* Head'. Here she argues that it is the large anatomical volume of the skull and brain not their symbolic design that makes them the area in which thoughts are held and to which sensory perceptions are delivered by the *'sinews'*, or nerves:

> if any one doth strike the *Heele*, The *Thought* of that, *Sense* in the *Braine* doth feele [...]had the *Heele* such *quantity* of *Braine*, Which doth the *Head*, and *Skull* therein containe; Then would such *Thoughts*, wich in the *Braine* dwell high, Descend downe low, and in the *Heele* would lye.[...]

⁵⁴ Floyd-Wilson and Sullivan, *Embodiment*, 2.

Had *Sinewes roome*, *Fancy* therein to breed, *Copies* of *Verses* might from the *Heele* proceed.⁵⁵

This surreal conjecture ostensibly serves to highlight how ridiculous an error we might commit in presuming the thoughts would reside in any other part of the anatomy. But Cavendish's playful and provocative verse imagines the possibility that were there only more room within them, poetry could emerge from our feet. As Sawday has noted, Cavendish countered 'the aggressive dynamic of "new science" by constructing 'the imaginative world of the human body.⁵⁶ The form of resistance she pulls from the imaginative human body is poetry. Poetry is imagined to proceed from the heel like a trail created by walking, punning on the likeness between the rhythms of walking and the metrical feet of poetry. Where the connection between walking and writing was previously implicit, located in analogies between walking and thinking, and thinking and writing, Cavendish explicitly grounds the link through the feet.

Ironically exploiting a piece of faulty reasoning by extrapolating from a knowingly erroneous anatomical conjecture, Cavendish construes the wandering, errant, and factually erroneous as a generative origin of poetry. This production of verse from error and errancy occurs both within the internal logic of *'The Reason why the* Thoughts *are onely in the* Head' and in the external or 'real' composition of this poem, which stems from a fascination with the link between the mobile body and mobile thoughts but proceeds by playfully unravelling knowingly erroneous logic to an extreme position. While Tim Ingold claims that 'the onset of modernity[...] conspired to lend practical and experiential weight to an imagined separation[...] between cognition and locomotion', the figurative registers of

⁵⁵ Cavendish, Poems, and Fancies, sig.[G1v].

⁵⁶ Sawday, Body Emblazoned, 251; 265.

Cavendish and Browne resist such separations.⁵⁷ Instead, they imagine the importance of knowledge occurring along the journey rather than at its destination, and show that physical and cognitive motion can be poetically as well as intellectually productive.

If walking and thinking are aligned, we must be aware that the paths laid out in Cavendish's natural philosophy do not necessarily reach towards any particular moral or epistemological destination. Figured neither in terms of truth or knowledge, they instead breed '*Fancies*' and 'verses' which are potentially rife with error. This notion is fortified by Cavendish's description in the prefatory prose addresses of her '*Thoughts* which run wildly about, and if by *chance* they light on *Truth*, they do not know it for a *Truth*'.⁵⁸ That these errant thoughts might fail to recognise truth, at least in an epistemological rather than a poetic sense, is perhaps only to be expected. Their uncontrolled and unplanned trajectories evoke error's traditional symbolic and mobile counterpart: errancy.

In its depiction of the thoughts inscribed onto the page, Cavendish's verse displays in literal fashion what cognitive theory has termed the 'thought-language-hand link'.⁵⁹ Evelyn Tribble and Nicholas Keene have adeptly used recent research from cognitive neuroscience on the link between gesture, thinking and terminology to illuminate the importance of gestural and performative practices in early modern religious processes of cognition. But, as Cavendish's poems make apparent, this conceptual link between movement, thinking and language is culturally relevant to a much wider range of seventeenth-century texts. These passages, in which wandering is revealed as both an aspect of thinking and an analogue of writing, encourage us to more explicitly extend the 'thoughthand-language' link to encompass the body more generally, including the feet, and open out

⁵⁷ Ingold, Being Alive, 37.

⁵⁸ Cavendish, Poems, and Fancies, sig.A4[r].

⁵⁹ Evelyn B. Tribble and Nicholas Keene, *Cognitive Ecologies and the History of Remembering: Religion, Education and Memory in Early Modern England* (Basingstoke: Palgrave Macmillan: 2011), 37.

cognition to include not only gestural movements but also geographical ones. Cavendish's poetry emphasises that less conventional forms of gesture such as walking might have their own poetics and (body) politics.

Embodying Error

It seems likely that Cavendish's metaphor is so effective not only because of its place in literary and cultural tradition, but also because it imitates the embodied and environmentally situated nature of cognition itself. Cavendish's natural philosophy encourages such a reading by endorsing a model of self-moving matter. Not only did Cavendish believe, like Boyle, Descartes and many others, that the world was made up of matter in motion, crucially, and unlike her counterparts, she believed that this mobile matter also contained innate cognitive power. As Lisa Sarasohn has detailed, Cavendish's 'moving matter was sentient, self-conscious, and self-moving'.⁶⁰ In the past two decades, theories of cognition have emphasised the importance of our environment to our methods of thinking and understanding. In *Cognition in the Wild*, Edwin Hutchins argues against the notion that '[t]he locus of knowledge was assumed to be inside the individual', instead 'locating cognitive activity in context.⁹⁶¹ His thesis suggests that the mind functions not as an isolated entity but as part of what Tribble and Keene term a 'cognitive ecology', in conjunction with the individuals and environment that surround it.⁶²

The recent and influential models drawn on by Tribble and Keene - in particular the 'Extended Mind' and 'Distributed Cognition' theories - have focused on the notion that

⁶⁰ Lisa T. Sarasohn, *The Natural Philosophy of Margaret Cavendish: Reason and Fancy during the Scientific Revolution* (Baltimore: John Hopkins University Press, 2010), 11.

⁶¹ Edwin Hutchins, Cognition in the Wild (Cambridge, Massachusetts: MIT Press, 1995), xii; xiii.

⁶² Tribble and Keene, *Cognitive Ecologies*, 12.

'the mind is both embedded in and extended into its worlds',⁶³ building a model of holistic bodily cognition akin to that espoused by neuroscientists including Antonio Damasio.⁶⁴ Thinking is not only cerebral, but also cultural and bodily, informed by our physical environment as well as transforming it. Cavendish's depiction of the thoughts as mentally interior but also projected into the world, and thus radically distributed across the 'inside' and 'outside' distinctions between the body and the environment, aligns with Floyd-Wilson and Sullivan's theorisation of early modern embodied thought.⁶⁵ This projection into the external world was not only natural but could also be cultural and technological: as John Sutton among others has observed, the early modern 'embodied brain constructed, used and leant on nonbiological supports'.⁶⁶ In this 'dynamical cognitive system[...] distributed across brain, body, culture, and environment' one of the key external supports was the book.⁶⁷

While Hutchins and other thinkers have stressed the importance of 'embodied' cognition, it seems striking that environmentally situated or embodied cognition as really experienced is replicated in the figurative terms used to describe cognition by Cavendish. Hutchins argues:

the environments of human thinking are not "natural" environments. They are artificial through and through. Humans create their cognitive powers by creating the environments in which they exercise those powers.⁶⁸

⁶³ Tribble and Keene, *Cognitive Ecologies*, 2. See also Floyd-Wilson and Sullivan's suggestion that the 'body is understood as embedded in a larger world with which it transacts', *Embodiment*, 2.

 ⁶⁴ Antonio R. Damasio, *Descartes' Error: Emotion*, Reason and the Human Brain (London: Macmillan, 1996).
 ⁶⁵ Floyd-Wilson and Sullivan, *Embodiment*, 3.

 ⁶⁶ John Sutton, "Spongy Brains and Material Memories," in *Environment and Embodiment in Early Modern England*, eds. Mary Floyd-Wilson and Garrett A. Sullivan Jr (Basingstoke: Palgrave Macmillan, 2007): 20.
 ⁶⁷ Sutton, "Spongy Brains", 21.

⁶⁸ Hutchins, Cognition in the Wild, xvi.

In their metaphorical paths and landscapes, but also their material books, Browne and Cavendish construct artificial environments which provoke, encourage and depict cognitive activity among both individuals and the culture at large.

These metaphorical and material environments, improbably coherent, are inextricably linked and simultaneously constructed. George Lakoff and Mark Johnson have convincingly stated that our metaphorical systems are 'rooted in physical and cultural experience', and play a key role in contributing to the ways in which we understand and act in the world.⁶⁹ They focus particularly on the class of 'spatialization metaphors' as an overarching system so ingrained in our methods of comprehension as to be practically invisible to us.⁷⁰ These spatialisation metaphors are clearly (if subconsciously) intrinsic to the texts of Cavendish and Browne, who frequently figure their intellectual and textual journeys in explicitly spatial terms rooted in movement, orientation and landscapes.

With spatial metaphors so significant not only in terms of expressing epistemological process but also creating and constructing it, it is no wonder that the language of errant movements, lines, shapes, space and landscape proliferate among descriptions of error, but also among our perceptions of handling the material book. By both depicting their texts as material manifestations of their thoughts, and representing cognition as a landscape within these texts, Browne and Cavendish construct cognitive ecologies on the page, situating the reader within a metaphorical environment in which cognition is both mobile and embodied. As well as enacting their more obvious etymological and symbolic links by seducing the reader into error, errant thoughts, paths

⁶⁹ George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: University of Chicago Press, 2003), 18.

⁷⁰ Lakoff and Johnson note that '[s]o-called purely intellectual concepts[...] are often - perhaps always - based on metaphors that have physical and/or cultural basis,' *Metaphors We Live By*, 18-19.

and lines become both creative and guiding forces, tasked with producing words on the page which make sense of the world and guide the reader safely and pleasurably through it.

Reading Around Error

It is almost impossible to trace the 'real' bodily processes of reading, thinking and writing that Browne and Cavendish's texts provoked as well as the metaphorical ones. But while the bodily movements of seventeenth century writers and readers are no longer available to us, the bodies of their texts still are, and offer some valuable hints that the errant nature of cognition depicted by the texts of Browne and Cavendish was supplemented, reflected and perhaps even experienced and constructed in the writing and reading processes they provoked.

Randall MacLeod has suggestively gestured to the non-linear narratives embodied in the physical form of the book,⁷¹ and Cambers has argued that 'early modern readers[...] read in an alarmingly non-linear fashion, flicking backwards and forwards for information which they might then extract and use elsewhere.⁷² Just as in the pursuit of knowledge the reader is encouraged towards labour, action and motion, so too an errant motion around the book is encouraged by nearly all navigational aids provided in the pursuit of eliminating error. Cavendish, for example, at the beginning of *Observations Upon Experimental Philosophy*, attempts to correct and clarify points in the text which she 'found after the perusal of this present book[...] might have been more perspicuously delivered'.⁷³ Cavendish loops back

⁷¹ Random Cloud [Randall MacLeod], "Where Angels Fear to read," in *Ma(r)king the Text*, eds. Joe Bray, Miriam Handley, and Anne C. Henry (Aldershot: Ashgate, 2000).

⁷² Cambers, Godly Reading, 30-31.

⁷³ Margaret Cavendish, *Observations Upon Experimental Philosophy*, ed. Eileen O'Neill (Cambridge: Cambridge University Press, 2001), "To the Reader," 14. All references hereafter will be to this edition unless marked otherwise.

on herself in a strange movement which brings the explanations of forthcoming chapters forward in order to be pre-emptively corrected at the front of the book, and which exemplifies, in material form the 'spiral movement' that Croll designates characteristic of the Baroque style.⁷⁴ In an attempt to clarify her terms, Cavendish attaches to her preface a painstaking and explanatory errata list of sorts, in which nearly every paragraph follows the format of 'When I say[...], I do not mean[...]', followed by often substantial explanations of not only her terms, but also the content of her philosophy.⁷⁵ This is not simply an errata list but a pre-emptive defence and justification of large proportions of her philosophy. Despite entreating the reader to persevere with the whole of her work in an effort to understand it, Cavendish's argument encourages the reader to approach this text in a nonlinear fashion by incorporating chapter and page references printed in the margins that show the passages her corrections refer to. Even reading the book from front to back disrupts a chronological reading of the text by indicating and explaining much of the text to follow. The reader's knowledge and experience of the text is coloured by the way they approach, read and handle it, and this structure helps the reader to experience the disorientation that Cavendish's metaphors describe. The physical, embodied process of reading the book in this laborious, circuitous way contributes to our understanding of what it was to wander in the ever-shifting realm of knowledge produced in these books.

The looping line of Cavendish's self-corrections occurred across texts as well as within the compilation of particular texts; Rebecca Bullard has shown that '[m]any of Cavendish's copies[...] show evidence of scribal correction and emendation',⁷⁶ and notes that though she was keen to correct faults encountered in the production of her books,

⁷⁴ Croll, Style, Rhetoric, and Rhythm, 219.

⁷⁵ Cavendish, Observations, "To the Reader," 14-20.

⁷⁶ Rebecca Bullard, "Gatherings in Exile: Interpreting the Bibliographical Structure of *Natures Pictures Drawn by Fancies Pencil to the Life* (1656)," *English Studies* 92, no. 3 (2011): 801.

though she nevertheless 'repeatedly represents herself as engaged in a losing battle with the intellectual and material forms of her texts.³⁷⁷ As books become not only cognitive scaffolding, but apparently sentient themselves, Bullard's essay perhaps overextends my argument in concluding that the material placement of the gatherings in *Natures Pictures* produce a result which is "'extravagant" in the etymological sense of "wandering" or "vagrant"[...] as though the leaves on which Cavendish's ideas are printed have wandered through time and space to converse with her earlier writings.²⁷⁸ Nevertheless, Bullard astutely notes that by presenting a 'wandering, vagrant' process of correction, the book might become 'a materialised analogue of a mind at work.²⁷⁹ Bullard further suggests that through her processes of revision Cavendish privileges ever-moving thought, presenting her books as the products of 'spontaneous thought in spite of their relatively fixed, printed form'.⁸⁰ Indeed corrections can themselves 'portray, not a thought, but a mind thinking[...] in brief, the moment in which the truth is still imagined', and in doing so, prompt a mirrored action by the reader.⁸¹

In a 1646 second edition copy of *Pseudodoxia Epidemica*, now held at Worcester College, Oxford, we can trace this spiral movement not only in the directions of the author, but also in the actions of a very human reader. The volume's deliberately wide margins are mostly blank apart from the sparse printed annotations of this early edition. But the pages are not pristine: they bear the marks of a diligent reader. Marked in the text in a manuscript hand are corrections showing pedantic attention to factual and grammatical detail. The number of Bishop Isidore of Seville's books is corrected, and the word 'deduce' is altered

⁷⁷ Bullard, "Gatherings in Exile," 802.

⁷⁸ Bullard, "Gatherings in Exile," 799.

⁷⁹ Bullard, "Gatherings in Exile," 800.

⁸⁰ Bullard, "Gatherings in Exile," 800.

⁸¹ Croll, Style, Rhetoric, and Rhythm, 209-210.

to 'induce'.⁸² Annihilation is worsened from a 'miserable' state to the 'miserablest condition of something'; it is the 'lines' not the 'lives' of the Roman poets which seem to foreshadow our times; and we have crucially not 'understood' but 'misunderstood' the aphorisms of Pythagoras by taking his words too literally. These alterations are not the work of a reader who believes they know better than the author. At the back of the volume is an errata list. The short text which precedes the listed corrections implores 'Some errors in interpunctions or poyntings the advertency of the Reader may correct: what others, by reason of the obscurity of the Copy have most materially escaped, wee desire him thus to rectifie.⁸³ It appears that this reader followed these instructions, at least as far as page 38. Having made these first six amends of the 37 listed they seem to have tired, and stopped marking in further corrections. The errata list itself serves as a consolidated visual record of this failure: having crossed through the errors so diligently marked in the main body of the text, the disjointed line erasing these errata draws to a halt barely a quarter of the way through the errata list. It is unclear whether this reader began at the back of the book, methodically and mechanically marking each error in turn as instructed with little or no reference to the text and specifically the context of the correction or whether correcting and reading were continuous activities for this reader. Certainly the rhetoric of the errata list encourages us to perceive them as such, asking us to 'reade' (rather than 'write', despite the pun that word would contain) one word in place of another. The irony of an errata list in a book which is a collection of errors is pertinent: it only goes to prove Browne's assertions that texts are corruptible, and language is inevitably prone to error.

⁸² Browne, *Pseudodoxia Epidemica: or Enquiries into Very many received Tenents, And Commonly Presumed Truths* (London: Thomas Harper, 1646). Copy held at Worcester College Library, University of Oxford. [P]osterity' becomes 'posteriority', 'understood' becomes 'misunderstood', 'lives' is altered to 'lines', '25' to '20', 'deduce' is altered 'to induce' and 'miserable' becomes 'miserablest': p.2, sig.[A1v]; p.14, sig.[B3v]; p.21, sig.[C3r]; p.33, sig.E[1r]; p.35, sig.E2[r]; p.38, sig.[E3v].

⁸³ Browne, *Pseudodoxia* (1646), p.386, sig.[Bbb5v].

Yet in righting the text according to the wishes of the author, our anonymous reader also rewrites it. As Helen Smith has noted, in the early modern period several features of the material book including 'the evidence of errata lists; prefatory invitations to correct any "faults escaped in the printing" or to inform the writer of mistakes and possible emendations[...] demonstrate that the book was deemed essentially incomplete as it left the printing press'. Smith argues that 'the text is both authorized and newly authored by its reader, who does not mark it but makes it.³⁴ In implementing the instructions of the errata list, it is the reader who has authorial power and marks their voyage through the text. Their navigational decisions influence the way in which they experience the text. They decide which (if any) of the corrections to inscribe, with the potential to determine, particularly for volumes such as *Pseudodoxia*, where errata lists appear at the back rather than the front of the volume, how other, subsequent readers, especially those who are less exacting or observant, experience the content of the text. This is true of any notational practice, but particularly pertinent in relation to errata. By integrating pre-printed errata into their copies, readers embody the author, not only taking on the role in an abstract sense by inscribing on and altering the text, but also carrying out their wishes - amending the printed text as the author has attempted to, participating in their favoured and roundabout cognitive model and travelling through the text as the author prescribes - at least as far as the printing press allows.

While we can't be sure how these books were written, edited and read, a body of evidence seems to support Cambers and MacLeod's assertions that books in the early modern period didn't necessarily function in a straightforward manner. Just as error was

⁸⁴ Helen Smith, "'More swete vnto the eare / than holsome for ye mynde': Embodying Early Modern Women's Reading," *Huntington Library Quarterly* 73, no. 3 (2010): 416.

endemic to the early modern book, so too were modes of errancy, opening up the mind, the codex and the world as spaces for wandering and wondering.

Conclusion

'A Vast Wilderness and Intricate Labyrinth'

Fallor ergo sum. I err, therefore I am.

- St. Augustine of Hippo (apocryphal)¹

It is easy to get diverted by error. Reading an early edition of *Religio Medici*, a reader might be struck by Browne's straightforward assertion that while he 'keeps the road' in theological affairs 'truth' in philosophy 'seemes double forced'. The image conjures up forked pathways, signing truth in many directions, and pinpoints the divergent tracks of philosophy as a point of disorientation as well as precipitous discovery. These pluralistic truths are also gestured to in the material manifestation of the metaphor. Appearing only in the initial unauthorised version of *Religio Medici*, the 'double forced' route of truth appears to be an error of transcription; a later textual variant, favoured by the authorised editions in Browne's lifetime as well as modern ones, describes philosophy as not 'double forced' but, like Janus, 'double-faced'.² Truth, across these two editions, truly does come double-faced and double-forced. While the sense of these textual variants doesn't differ substantially –

¹ Even this statement is an error. Apocryphally attributed to St Augustine, his words have actually been altered to echo Descartes' famous proclamation, *cogito ergo sum*, in a paraphrase of *De Civitate Dei*, XI.26: 'Quid, si falleris? Si enim fallor, sum. Nam qui non est, utique nec falli potest; ac per hoc sum, si fallor. Quiargo sum si fallor, quo modo esse me fallor, quando certum est me esse, si fallor', The Latin Library, accessed 1 December, 2014,

http://www.thelatinlibrary.com/augustine/civ11.shtml. The same passage in English reads 'What if you are mistaken? For if I am mistaken, I exist. He who does not exist, clearly cannot be mistaken; and so if I am mistaken, then, by the same token, I exist. And since, if I am mistaken, it is certain that I exist, how can I be mistaken in supposing that I exist?' Augustine, *The City of God Against the Pagans*, ed. and trans. R.W. Dyson (Cambridge: Cambridge University Press, 1998), Book XI.xxvii, 484.

² The unauthorised 1642 editions of *Religio Medici* read 'truth seemes double forced', (London: for Andrew Crooke, 1642), 10; but from the 1643 first authorised edition onward, including modern editions edited by Patrides, Killeen and Keynes, the text reads 'truth seemes double-faced' (London: for Andrew Crook, 1643), 11.

both point in two directions – their coexistence seems to undercut their sentiment. Error can threaten the direction of even the most loosely defined truths. The variants do however encapsulate some of the major findings of this thesis: considerations of error, errancy and the material text are innately bound up with theorisations of knowledge and cognitive experience in the early modern period.

A passage from *Sociable Letters*, in which Cavendish draws a connection between the clarity of the written word, and particularly the manuscript hand, and the ability of the reader to navigate the text, encapsulates the vivid range of adventure and anxiety that encounters with error could provoke. In meshing together the language and experience of writing, comprehension and travel so vividly, this extract exemplifies the verbal nexus of error, errancy and the material text which this thesis has consistently traced.

One of the two female correspondents, a thinly veiled analogue of Cavendish, agrees to send to the other what she claims is a series of poorly written books composed in her childhood. In a hyperbolic apology, she warns her confidante that in reading them

> the Letters are not only Unlegible[...] all the Lines of your Sight cannot Draw, or Bring them into Words, nay, they will sooner be Torn in pieces; besides, it will Weary your Eye-sight to Move from Letter to Letter, it will be almost as great a Journy for your Eyes, as it was for Coriat's Feet, that Travelled a Foot to Mogorr, I know not whether his Journy Lamed them, but certainly it Tired them: so will my Books do your Eyes, if they do not quite Blind them, I cannot say, in Reading them, but Endeavouring to Read Scribbles for Letters. Moreover, there are such huge Blots, as I may Similize them to Broad Seas, or Vast Mountains, which in a Similizing Line will Tire your Eyes to Spread to the Circumference, like as for the Feet to Walk to the Top of the Alps; Also there are Long, Hard Scratches, which will be as Bad for your Eyes, as Long, Stony Lanes would be to your Feet; [...] were there any Probability to Increase your Knowledge, or to Inrich your Understanding, you had some reason to Venture, but you will be so far from Increasing your Knowledge, as you will enter into a vast Wilderness, and Intricate Labyrinth, wherein you will Lose your Patience, [...]my Sixteen Books will be as Tedious, Troublesome, and Dangerous, to your Understanding, as the Dry, Deep, Sandy, Barren Deserts of Arabia to Travellers, and so thick a Mist of Nonsense, and Clouds of Ignorance will

fly in the face of your Understanding that it will not only Blind it, but be apt to Smother it[.]³

The obfuscated texts become hostile deserts in their lack of clarity. Like a sand storm, they disorientate the reader, propagating error by flying in the face of understanding. And yet these blank and 'barren' landscapes are exotically enticing; they invite exploration and even colonisation, challenging the reader to exercise their understanding in the face of hostility. Resistance to easy understanding dwells here both in nature and in the text, and yet they both beg to be created and explored in the imagination of the reader.

Cavendish extends this metaphor of reading-as-travel to suggest the physically and mentally engaged nature of reading, stressing the importance of the reader as an active agent in the reception of the text. The process of reading, which here involves bringing together the broken forms of the letters on the page, is not only imagined in the metaphorical terms of Coryat's long and exhausting travels by foot, but is experienced in a correspondingly embodied way.⁴ Reading takes a physically similar toll on the eyes as hard paths do on the feet, making them move along the tortuous path of the text, and if not 'Blind[ing]' them at least 'Weary[ing]' them in the process of 'Mov[ing] from Letter to Letter'.⁵ Physical and cognitive activity are experienced in tandem as a difficult and wearying journey requiring physical as well as mental exertion.

The material form of these books is made inseparable from their erroneous content. While Cavendish discusses the potential pitfalls of manuscript texts, particularly

³ Margaret Cavendish, *Sociable Letters*, ed. Jim Fitzmaurice (Toronto: Broadview Editions, 2004), Letter 131, 188-89.

⁴ See Thomas Coryate's account of his travels on foot across Europe, *Coryats crudities* (London: William Stansby, 1611).

⁵ For accounts of the corporeal effects of reading as perceived in the early modern period, see Adrian Johns on 'The Physiology of Reading' in *The Nature of the Book: Print and Knowledge in the Making* (Chicago: Chicago University Press, 1998) and Helen Smith, "'More swete vnto the eare / than holsome for ye mynde": Embodying Early Modern Women's Reading', *Huntington Library Quarterly* 73, no. 3 (2010).

palaeographical problems, the connection with print works is plain; her discussion of 'books' employs a terminology shared across the realms of print and manuscript.⁶ Cavendish's own manuscripts were notoriously hard for printers to decipher, leading to a number of errors in her printed works. The line of sense that Cavendish attempts to trace is disrupted by distinctly material errors, obstructed by the illegibility of the hand, with scratchy letters like 'Long, Stony Lanes' as hard to decipher as climbing the Alps, and blots becoming topographical obstacles, like 'Broad Seas, or Vast Mountains'.⁷ It is not only the literal form of the marks on the page that are obscured; the meaning, too, labelled as 'Dangerous[...] to [the] Understanding', is clearly found wanting. The continuous 'line' of the text is invoked both in terms of its material manifestation in the hand on the page, and in terms of the sense and meaning that it carries. In this passage 'scribbling' implies not only a hastiness in the physical form of the letters, but also in the words which they construct, which similarly threaten incoherence.⁸ Cavendish connects the clarity of the written word, in both the immediate sense of its legibility and in its epistemological sense, with the ability of the reader to usefully navigate the text. In a compelling, satirically overblown passage, the complex journey which constitutes reading and textual comprehension becomes an analogy for the difficulties Cavendish faces in trying to make sense of the infinite variety of nature.

⁶ Scholars have sought to reduce the distinction made between manuscript and print texts, noting deliberate visual similarities in their features, and the coexistence of composite texts as well as interchangeable terminologies for print and manuscript works during the early modern period; terms such as 'scribble', 'print', and 'publish' were applied indiscriminately to both types of practice. See Heidi Brayman Hackel, *Reading Material in Early Modern England: Print, Gender, and Literacy*.(Cambridge: Cambridge University Press, 2005), 26-30; Seth Lerer, *Error and the Academic Self: The Scholarly Imagination, Medieval to Modern* (New York: Columbia University Press, 2002), 16.

⁷ The connection between errors and blots, and print and manuscript errors, has a longstanding connection: as Seth Lerer has observed, the word primarily used by Erasmus to designate a textual mistake is *mendum*, 'meaning literally a blot, a smudge, a bad mark on the text, and clearly a holdover from its classical, Latin uses in the manuscript tradition', *Academic Self*, 35.

⁸ Exemplifying the common conflagration of error and scribbling, James Yonge's *Medicaster Medicatus* (London: for Gabriel Kunholt, 1682) is subtitled '[a] remedy for the itch of scribling', targeting John Brown's 'vain plagiary' and 'many thefts, contradictions, absurdities, gross errors, ignorance, and mistakes[...] and divers vulgar errors'.

While reading such a text has the potential to make the reader not only 'lose' their way in this landscape of error, but also '[l]ose' their patience, and '[s]mother' and '[c]hoak' their understanding, these travelscapes demand to be conquered. They invite the reader to trace its paths and map out the sense of the landscape as best they can. While errors such as 'Clouds, or Hills of Sand' rise up and disrupt this landscape, they are at the same time essential and defining features of it. The seas and mountains of blots and scratches become the beautiful features that dominate the atlas of our comprehension.

Kathryn Schulz has argued that 'errors do not lead us away from the truth. Instead, they edge us incrementally toward it.'⁹ Her modified version of Lactantius's statement usefully reflects the notion that error and truth are not poles apart in the early modern imagination. Error was not always the antithesis of truth, but often accepted as a necessary movement towards it. The middle ground we have traversed, and in which natural philosophy, for Browne and Cavendish, largely occurs, is one in which error and errancy come in many guises and do many things. Sometimes their purpose is aligned, and sometimes it is not. Sometimes they allow us to progress, while at other times they threaten to entrap us. This errant movement could be a source of anxiety or pleasure, play or serious labour. Errors could be generative or destructive. But the one constant in which we must not err, is in underestimating the power of error in the early modern imagination.

The aesthetic of error is essential not only to deciphering how Browne and Cavendish thought about error. It is also an essential and constitutive part of how they experienced and constructed processes of knowing and not knowing. Their depictions of encountering and exploring error on the road to truth perpetuate and are perpetuated by their proliferative, dynamic and digressive texts and ever-mobile modes of cognition. The

⁹ Kathryn Schulz, Being Wrong: Adventures in the Margin of Error (London: Portobello Books, 2010), 32.

rhetoric and imagination of error and errancy was not merely a poetic trope used by Browne and Cavendish to add a literary flourish to their natural philosophy. As Elizabeth Spiller has related, 'early modern science is practiced as an art and, at the same time[...] imaginative literature provides a form for producing knowledge.'¹⁰ Browne and Cavendish's figurative imagination of error and errancy binds together the material text, the physical world and cognitive process. In doing so, their texts illustrate that a closer examination of the rhetoric of natural philosophy might subtly reveal the complex experience of knowing – and not knowing – in the early modern period. In the course of this thesis we have been duly warned that reading too literally or too loosely can easily cast a reader into error. But having followed Browne and Cavendish's erroneous and errant trails into vast wildernesses and intricate labyrinths, it is apparent that these exploratory wanderings are almost as significant and infinitely more productive than any elusive 'truth' we claim to seek. Going off the beaten track of truth with Browne and Cavendish, it often seems better to travel than to arrive.

¹⁰ Elizabeth Spiller, *Science, Reading and Renaissance Literature: The Art of Making Knowledge, 1580-1670* (Cambridge: Cambridge University Press, 2007), 2.

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