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### Publication Date

2016

Peer reviewed|Thesis/dissertation

Probable Histories:  
Novel Recoveries of the Past

By Margaret Kolb

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

English

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Ian Duncan, Chair  
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Summer 2016



Abstract

Probable Histories: Novel Recoveries of the Past

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The eighteenth and nineteenth centuries witnessed the simultaneous rise of two discourses that promised to explain the past and predict the future: probability and the novel. The two were not merely historically coincident. In dialogue from the start, “Probable Histories” argues that probability and the novel were also mutually constitutive. Drawing on standard histories of each, I summarize their respective “rises” in the eighteenth century and analyze their interdependence. I then turn to a series of case studies, investigating the novels of Henry Fielding, Charlotte Lennox, Walter Scott, George Eliot, Charles Dickens, and Thomas Hardy as points of intersection between the concerns of probability and those of the novel. The project reveals how these two modes of temporal projection extend and inform one another as modes of prediction. In so doing, “Probable Histories” offers a new account of the novel’s shared role in conceptualizing causation.

## Table of Contents

Acknowledgements.....	i
Introduction.....	1
Chapter 1.....	6
Chapter 2 .....	23
Chapter 3.....	43
Chapter 4 .....	61
Chapter 5 .....	76

## Acknowledgements

Thanks to the Mabelle McLeod Lewis Foundation, the UC Berkeley English Department, and the Hart Summer Grant for providing financial support. Thanks also to the Thomas Hardy Association, Harper's Magazine, the British Library, and the Victoria and Albert Museum for permission to reproduce images. A version of Chapter 5 was published in *Victorian Studies*, where suggestions from Ivan Kreilkamp and anonymous readers greatly improved the essay.

"Probable Histories" began with a reading of *Daniel Deronda* in Ian Duncan's course. The project would not have begun without him; nor could it have been completed. It took root entirely thanks to his encouragement, good humor, and intellectual generosity. Paolo Mancosu—who gave me precious time during a busy semester—taught me how to read the philosophy and history of mathematics. A perpetual model for scholarship and pedagogy, Kevis Goodman applied her transformative intellectual rigor to my work with unfailing kindness. Cathy Gallagher offered wise advice at the right times. Her comments continue to guide the project as they unfold.

Wendy Xin kept deadlines, and kept me in the program. Laura Kolb and Jocelyn Rodal have been sounding boards and sympathetic readers. Serena Le hummed out the tune of my thoughts whenever I lost hold of it. Daniel Kolb, Eisha Matsubara, and Joe Tuman taught me that reflection and running go hand in hand, and Reinhard Stoewe reminded me that this holds true even when it happens to be hot outside. Nick Halpern, my most loyal reader, helped me mail my graduate school applications long ago. He has been part of every adventure since.

## Introduction

A traveler, long expected home, has not returned. Who might begin a story in this way? Not Homer or Defoe, Dickens or Hardy, but a mathematician. In illustrations of the probability computations in the final section of his seminal *Ars Conjectandi* (1713), Jacob Bernoulli joins a lofty literary company by offering an account of a traveler's extended absence. Probability, Bernoulli explains, can help us uncover "causes that are entirely hidden," even those as inscrutable as the traveler's whereabouts (327). In predicting what has befallen him, Bernoulli advises, we should attend "not only to those arguments that serve to prove a thing, but also to all those that can be adduced for the contrary" (319). As Bernoulli models them, such arguments consist of a series of stories. "Perhaps he was taken captive by barbarians so that he could not write," Bernoulli offers, transporting the traveler to "the ends of India," before considering the homeward draw an expected inheritance might exert. As these speculations draw to a close, we're reminded that "we know that many who have been away longer have returned uninjured in the end," a truth derived as much from the fictional traveler's penchant for return, as his historical counterpart's. In closing his example, Bernoulli reflects that "[a]nyone, from daily life, could formulate for himself many more axioms of this kind" (321). Briefly, this argument anticipates *Robinson Crusoe* (1719), rather than what actually follows it: the law of large numbers.

After this tale comes one of the more strange and wonderful tricks in *Ars Conjectandi*. Bernoulli returns to the classic example of an urn, filled with black and white tokens in unknown quantities. He will go on to prove a weak form of the law of large numbers—demonstrating that the proportion of the two colors can be obtained within the bounds of any pre-specified accuracy, in a certain number of draws. In other words, we can understand what's inside the urn, even if we empty it only partially. Before his proof, Bernoulli first performs an important transubstantiation: he asks us to think about *bodies* as urns, holding within them "diseases just as an urn contains tokens" (329). Given enough observation, we could compute how many chances at plague lurk inside us, how many chances at dropsy, how many at fever. We can think of the urn as we calculate one individual's particular chance of dying of plague, or use it equally feasibly to contemplate a population's rate of disease. Through this metaphor and others like it, Part IV of *Ars Conjectandi* articulates probability as a technique that can explain a past, look inside the body, and knit together a nation.<sup>1</sup> In the applications that proliferated after Ian Hacking's hotly contested, yet heuristically useful, originary "moment" of the 1660s, probabilistic computations promised to mitigate uncertainties of all kinds: they could document public health, price annuities and insurance, consider murder cases, quantify the value of religious belief, evaluate financial ventures, and parametrize uncertainty in judicial cases. Given these massive ambitions, occasional frustration was inevitable. "The concern is to discover the truths of practice & in the usage of civil society," probabilist Pierre Rémond de Montmort wrote of probability logic in a letter to Bernoulli's nephew Nicolas in 1711, admitting that he could only uncover "trifles" (322).

The eighteenth-century novel was also concerned with travelers' whereabouts, the truths of civil society, daily life, who killed whom, and—though perhaps without Montmort's chagrin—trifles. Probability and the novel shared eerily similar "rises" over the eighteenth and nineteenth centuries. The publication of *Ars Conjectandi* marked a radical expansion of the

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<sup>1</sup> For the mathematical and philosophical implications of this metaphor for chance, see Lorraine Daston, "The Probability of Causes," section 5.2, esp. p. 245-46.

bounds of probability logic, which trickled from gambling and mathematical circles into public discourse, solidifying in the 1740s when it was ushered into the drawing room with the publication of Edmund Hoyle's pamphlet on whist. Standard accounts of the novel trace a similar chronology, with solidification of the genre taking place in the 1740s. Historians of both fields often point to the same epistemic shifts as chief historical drivers: secularism, a broadening world, a turn from textual authority towards empirical methods of knowledge acquisition, and receptivity to provisional—or fictional—narrative.

Catherine Gallagher has brilliantly argued that fictionality—a growing recognition in the eighteenth century of fiction as a category—depended on “(1) a conceptual category of fiction, and (2) believable stories that did not solicit belief” (340). Crucial to (2) is a *measure* for credit, a social faculty whose growing prominence derives, for Gallagher, from the broadening economic sphere. Necessary to “the kind of cognitive provisionality one practices in reading fiction” (347) was the concept that stories could be more or less likely, and a language for designating them as such. The novel is consistently theorized in terms of probability, albeit with varying engagement with the discipline. John Alcock boasts of “an air of Probability” in his novel *The Life of Miss Fanny Brown* (1760), which he claims to achieve via the use of “several well-known Christian, as well as Sur-names” (xxx). Others, like Henry Fielding, offer more nuanced reflections on literary likelihood, contemplating, for example, the problem of describing “a single Instance” of a rare character, when “we are writing to thousands who never heard of such a person, nor of any Thing like him” (404). By mid-nineteenth century, probability was the key feature of narrative fiction to be defended. Charles Dickens prefaces *Bleak House* (1852-53) with justifications for two central features of the novel—the length and cost of legal proceedings in Chancery, and spontaneous combustion—declaring “I shall not abandon the facts until there shall have been a considerable spontaneous Combustion of the testimony on which human occurrences are usually received” (4). Almost every one of Dickens’s prefaces similarly defends the likelihood of the novel that follows. While Bernoulli’s lost traveler suggests that fictionality was a constitutive feature of probability theory, Dickens’s probability-laden prefaces indicate just how embedded probability was in discussions about the novel.

Beginning with their rises to popularity in the 1740s, the novel and probability were in a frequent (if often unwitting) exchange. “Probable Histories” analyzes five instantiations of this exchange. Chapter One, “The Romance of Probability: Relation of Cause and Effect,” shows how probability discourse crept into criticism of the novel, by focusing on one word—easy. Its usage increased in both literary-critical and mathematical discourse at the same time, with crucial effects for both disciplines. The dissertation’s second and third chapters explore what Michael McKeon calls “the tension between individual life and overarching pattern” inherent in both fictional narrative and probabilistic pursuits in the late eighteenth century (91). My second chapter, “The Improbable Preservation of the Orphan Plot,” considers an oft-told unlikely story—orphan plots in which orphans retrieve long-lost pasts—and the ways in which this story side-stepped the probabilities detailed for non-fictional orphans by period statistics. Chapter Three, “In Search of Lost Causes: Narrating Revolution,” links the orphan plot to a question plaguing mathematicians at the turn of the nineteenth century: how could revolution be predicted? Repeatedly, Walter Scott’s orphan plots buttress explanations of the causes underlying political and social upheaval. In *Old Mortality* (1816), orphan Henry Morton’s efforts to honor his sharply divided political heritage afford redemptive possibilities at the scale of the 1679 Covenanters’ rebellion. For mathematicians like Adolph Quetelet, revolution was the key statistical irregularity to be explained and understood; as he put it, the “measure of civilization of



a nation can be found in the way in which it makes revolutions.” Historical novels ranging from *Waverley* (1814) to *Tale of Two Cities* (1859) contribute to this project of “measurement” by bridging the gap between character and nation, singularity and pattern. I argue that Scott’s revolutionary histories inherit mathematicians’ interest in revolution and shape subsequent mathematical approaches, which follow Scott in focalizing collective histories through the individual (often “average”) man.

Chapter Four, “Prophecy and Probability in George Eliot’s Novels,” registers mounting discord between the two fields as both sought to define and defend disciplinary boundaries. Adolph Quetelet went so far as to predict that statistical data and probabilistic prediction would reconstitute artistic representation. On the other hand, critiques of mathematical thinking within the novel became increasingly prominent and technical. This happened overtly, as in *Hard Times* (1854), and covertly, as in George Eliot’s novels, which routinely problematize probability. I show that Eliot’s near-polemical treatment of gambling in *Daniel Deronda* (1876) parallels meticulously detailed responses to grounding assumptions of mathematical prediction, which are themselves embedded in the novel’s structure and treatment of time. Though we might expect the conversation to fizzle out with the hardening disciplinary boundaries of the late nineteenth century, I argue in my final chapter that developments in probability logic continue to condition literary representations of causation. Chapter Five, “Plot Circles: Hardy’s Drunkards and their Walks” argues that formal patterns in Thomas Hardy’s novels reflect late-nineteenth century mathematical models for motion and choice. However resistant literary practice and probability theory might become to one another, Hardy’s plot circles suggest that their shared concerns render mutual influence not merely probable, but inevitable.

These case studies are connected by a particular sort of speculative history by which a lost past is recovered. I call it a “probable history.” The stories Bernoulli tells about his lost traveler suggests that mathematicians hoped that probability could explain—even uncover—the past. As the discipline grew in ambition, so too did this particular interest, which leads probability studies most directly into fictional narrative—and at the same time, into making fundamental assumptions about history. Condorcet computed the likelihood of wrongful conviction by a jury, while Adolph Quetelet prophesied new readings of the past that probability methods could deliver. Pseudo-scientists like Henry Thomas Buckle grew to believe that history itself could be mapped, filled in via probabilistic reasoning. The novel often exhibits similar ambitions, I argue in Chapter One. As I chart the novel’s rise, from Fielding to Eliot, I show the way in which novelists theorize “probable histories” as a constitutive feature of narrative practice. How to tell a probable history—how to fill in the blanks of the past—becomes an ethical project within the novel that demonstrates its historical stakes and political scope.

The rises of the novel and of probability are sketched so often that the various characters we have assigned them have grown familiar, if not agreed upon. The plot that unfolds between the two, however, remains surprising, and we have only just begun to explore it, with studies by Leland Monk, Robert Newsom, Douglas Lane Patey, Thomas Kavanagh, Jesse Molesworth, Rüdiger Campe, and Audrey Jaffe sketching out particular intersections by one discipline from the other. These studies can be divided, on the one hand, by period (eighteenth or nineteenth century), and on the other, by treatment of mathematical history. Patey, Molesworth, Kavanagh, and Campe read literary and mathematical texts together, while Monk and Newsom bypass mathematical history to focus on the philosophical questions raised by concepts like chance, likelihood, and variance. Thomas Kavanagh points out that the latter method assumes that concepts like chance and probability are transhistorical, uninformed by developments in

mathematics (xi-xiii). While I share this objection, it's worth acknowledging that these studies establish literary-philosophical problems that are the foundation of any discussion of likelihood and literature. I am particularly indebted to Robert Newsom's groundbreaking "antinomy of probability." How, Newsom asks, can we use one fictional event to argue for or against the likelihood of another fictional event? Identifying particular narrative moments as probable or improbable, as necessary or coincidental, leads to tenuous distinctions between some fictions and others, and between necessity and chance. As a result, critical use of words like improbable, chance, and coincidence tends to be problematic. (When we do make such judgments—as I do in Chapter Two, in discussing the orphan plot—we should be clear about how and why we do so.) Leland Monk continues to mine this paradox, opening his monograph with an ingenious reading of "Chance is the fool's name for fate," the line that Edward Everett Horton repeats with such delightful vapidness in *The Gay Divorcee*. I depart from Newsom and Monk in taking seriously claims about likelihood and the novel as part of a network of forces defining probability in the period. These claims give us access to the changing shape of literary standards for likelihood, and indicate—as I argue in Chapter One—the extent of mathematical influence on literary conceptions of probability. Acknowledging that each discussion of literary probability bears similar features, I still contend that objections to *Tess* as improbable are quite different from eighteenth-century objections to *Pamela* as improbable, and that intervening mathematical theory has something to do with this difference. Each chapter serves as a temporal index of the ways in which probability was deployed as a critical term. It would seem unnecessary to make this point, if not for the prevalent sense that probability constitutes a sufficiently vague catch-all term as to be transhistorical.

"Probable Histories" is more often in conversation with criticism which reads mathematical and literary histories together. Thomas Kavanagh's study of chance in French literature and probability paved the way for subsequent work in the British context by Jesse Molesworth, Audrey Jaffe, and (though he attends to a broad array of languages and contexts) Rüdiger Campe. At its best, this strand of criticism relates fictions with mathematical concepts in ways that shed new light on both—Campe, for example, reveals powerfully the ways in which games function as metaphorical spaces for modeling a broader, messier reality (98). These studies often limit themselves, however, by focusing exclusively on probabilistic narrative content. Gambling is an obvious moment in which the narratives of probabilists coincide with those of novelists. But the ever-assumed link between the mathematics of gambling and its narrative representation remains unarticulated. Molesworth, for example, claims that gambles themselves are narrative; hinging on novelistic and readerly desires, gambling turns "story into plot, sequence into causal chain" (92). Granting the assumption that lottery ticket-buyers are motivated by the fictional futures they narrate for themselves (and not simply by their purchase into an event of unknown outcome), Molesworth's equivalence ignores crucial aspects of the novel. Catherine Gallagher points out that novels offer readers a chance to sympathize with nobody in particular. In other words, we don't buy lottery tickets for strangers (let alone non-existent strangers), but we do purchase and read novels about them. I avoid focusing on gambling, odds, and wagers, reasoning that if narrative and probability intersect in important ways, this intersection occupies not simply the topics novelists choose to represent, but also the structures which their narratives trace. *Journal of a Plague Year*, on which so many writers discussing literary-mathematical intersections, is surely a topical intersection between narrative and statistics—but perhaps the predictions of Roxana or Moll Flanders, not to mention the

predictive structures that these novels build for readers, are more interesting—and more influential.

Campe writes that “the history of probability [is] the gradual translation of game calculation proper into a more generally applicable doctrine” (73). My project illustrates how fictional narrative contributes to this translation, and analyzes how this translation reconfigures the novel. In each chapter, I focus on mathematical and literary form, and the joint conceptions of history that these cultural artifacts produce. By form, I mean the patterning of parts, wholes, and their relationships within texts. It is something of a tradition in New Formalist criticism to lay claim to historicist and formal methods at once—a method variously termed “strategic formalism” by Caroline Levine or “activist formalism” by Susan Wolfson. Perhaps therefore it goes without saying that though this attention to form tends to be a generalizing critical strategy, it is not ahistorical. The grounding assumption of the project is that the forms through which we predict tend to be pervasive, with particular political and ethical ramifications at particular times. Literary texts are one site where these ramifications become apparent, and (on occasion) interrogated and reoriented. The approaches taken are otherwise piecemeal. Three chapters dwell on a single novelist’s trajectory (Scott, Eliot, Hardy), while two chapters situate multiple novels and authors within a single issue. Throughout, I depend on Lorraine Daston and Ian Hacking’s masterful histories of probability, and Stephen Stigler and Theodore Porter’s work on nineteenth-century statistics.

This project aligns two disparate cultural formations to tell the story of their cross-pollination, dialogue, and mutual transformation. It thus constructs a probable history of its own. This history is often likely, but not certain. By aligning probability and the novel, the shape of an exchange emerges—in the circles threading through *Mayor of Casterbridge*, in the likelihood-laden criticism of *Tom Jones*, and in the various predictions with which Daniel Deronda wrestles. Each individual exchange is merely probable. It is certain, though, that we inherit from this period a climate of prediction rooted in—though not always particularly well informed by—the history of probability. And as novels so often remind us, the fictions we read shape our every prediction. Together, the two fields did no less than construct a way of thinking about causal relations. George Eliot, poor house records, board games, and Thomas Hardy all suggest in different ways the inevitability of probability paradigms percolating through our every thought, decision, and gamble; at the same time, these texts and their contexts reveal the difficulty and the importance of recognizing the systems of exchange determining our predictions and our objects of prediction. This recognition must take place from multiple vantage points. It is one such vantage point that “Probable Histories” seeks to imagine.

## Chapter 1: The Romance of Probability: Relation of Cause and Effect

As we utterly disbelieve a fiction, it is never probable. It ought, however, to be always plausible; that is to say, it ought to resemble a probable history. Every event should be preceded by a sufficient cause.

Nassau Senior, *Essays on Fiction* (272)

It was said by Fletcher of Saltoun, 'Let me make the ballads of a nation, and I care not who makes the laws.' Might it not be said with as much propriety, 'Let me make the novels of a country, and let who will make the systems?'

Anna Barbauld, *The British Novelists* (1.62)

### Introduction

Mathematical calculations of likelihood inherited a freighted name: probability. From the Latin term “probabilis,” meaning “approvable,” probability came to mean “degree of certainty” to Jacob Bernoulli and other mathematicians, designating a growing sub-field of mathematics in the eighteenth century (*Ars Conjectandi* (1713) 315).<sup>2</sup> Samuel Johnson’s examples in *A Dictionary of the English Language* (1755) register this divided meaning: the first equates probability with “publick approbation,” while the second refers to evidentiary argument (1574). The word was further loaded with literary associations, due in part to its far-reaching use in translations of Aristotle’s *Poetics* (c. 350 BCE) and Horace’s *Ars Poetica* (c. 19 BCE), whose treatment of drama and epic—particularly Aristotle’s dictum that poetry represent the probable—offered a stable approach to the ever-shifting shape of the novel.<sup>3</sup> Critics, readers, and novelists referred to these two foundational texts as they justified praise, censure, and strategy in novels ranging from *Clarissa* (1748) to *Castle of Otranto* (1764).

In the seventeenth and eighteenth centuries, probability was conceptually central to both the novel and mathematics. As literary critics, we have been wont to dwell on this word and its direct associations as signals of literary-mathematical intersections. Discussions tend to start with Daniel Defoe’s *A Journal of the Plague Year* (1722) or Robinson Crusoe’s frequent laying of odds.<sup>4</sup> But discussion needn’t end when fiction fails to depict scenes of gambling, body counts, and wagers. This chapter and those that follow will argue that this verbal coincidence was accompanied by important conceptual and structural intersections, each reflecting a particular culture of prediction. By way of introductory example, this chapter points out another verbal coincidence. It is a simple one, of just one more word: “easy.” Beginning in the late seventeenth century, mathematicians used the word in suspiciously circular attempts to define probability as an estimate of how easily, or with what facility, events might take place. Plotters and their critics

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<sup>2</sup> As Ian Hacking points out, the word would retain its original Latin meaning for some time—in Defoe’s *Roxana* (1724), the eponymous heroine refers to desirable lodgings as “probable,” a word she employs elsewhere to denote likelihood (43, 569).

<sup>3</sup> Both texts had been in vernacular circulation since the seventeenth century, with Ben Jonson’s translation of *Ars Poetica*, and André Dacier’s 1692 translation of Aristotle’s *Poetics* into French (English translations from Dacier’s followed).

<sup>4</sup> See Molesworth, “Defoe and the Statistical (Il)logic of the Novel” (97-129); Campe, “Defoe’s *Robinson Crusoe*, or, The Improbability of Survival” (172-191).

used it, too. English translations of Aristotle's *Poetics* in the late 1780s reveal a new emphasis for literary probability on the link between cause and effect and, in particular, an interest in how "easily" events come about within the novel. This small borrowing had profound effects: through readings of *Tom Jones* (1749) and *The Female Quixote* (1752), I show that the word oriented the stakes of the novel and the grounds for its criticism in the later eighteenth century. I argue that "ease" as a standard for aesthetic probability encouraged novelists and their readers to approach the novel as the *relation* (in both senses) of cause and effect.

## Mathematical Ease

It's a commonplace that probability theory is grounded in gambling. The discipline's origins are often traced to Pascal and Fermat's correspondence over the problem of points, in which the two discuss how to divide stakes in an unfinished game.<sup>5</sup> But the projects that probabilists conceived often exceeded gambling. When they did, mathematicians tended to stray into fictional narrative, telling stories of forged documents, lost travelers, and murder suspects. In exploring further applications for probability, Antoine Arnauld describes a notarized document, which "if we know no other particulars about a contract" we ought to accept as "not ante-dated" (*Port Royal Logic* (1662) 355). But if

these notaries were notorious for being without honour and conscience, and that they might have had considerable interest in that falsification; this, though it may not lead me to conclude that the contract is ante-dated, will, nevertheless, diminish the weight which, without this, the signature of the two notaries would have had on my mind to induce me to believe that it is not so. And if, beyond this, I am able to discover other positive proofs of this ante-dating, either by witnesses, or very strong arguments, such as would be the inability of a man to lend twenty thousand crowns, from the fact of his not having a hundred when he engaged to do so, I should then be determined to believe that there was falsity in the contract. (356)

Our beliefs about a particular contract depend upon the links we forge between the facts we recover. The discovery of a few missing details fundamentally changes the contract's probable history.<sup>6</sup>

Carefully connected stories like this one are fundamental to Arnauld's conception of probability. Before making his groundbreaking distinction between internal and external evidence,<sup>7</sup> Arnauld explains:

It is necessary to unite [...] circumstances, and not to separate them, since it often happens that a fact which is scarcely probable in connection with a single circumstance,

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<sup>5</sup> An exact point of origin is contested (Garber and Zabell's counter-argument, "On the Emergence of Probability" and Hacking's 2006 introduction, "The archaeology of probable reasoning"). It is generally agreed that in the 1660s "a lot of people independently hit on the basic probability ideas" (Hacking *Emergence* 11). For descriptions of the problem of points and the problem's influence on probability studies, see Ian Hacking (*Emergence* 11-12) and Lorraine Daston (15-48).

<sup>6</sup> See also Laplace, "A Philosophical Essay on Probabilities." Laplace writes that "Present events are connected with preceding ones by a tie based upon the evident principle that a thing cannot occur without a cause that produces it" (3).

<sup>7</sup> For a summary of this distinction, see Hacking's *Emergence of Probability*, Ch. 4, "Evidence" (31-38).

which is commonly a mark of falsehood, must be reckoned certain in connection with other circumstances, and that, on the contrary, a fact which may appear to us true in connection with a given circumstance which is commonly a mark of truth, ought to be judged false in connection with others, which destroy this. (354)

All circumstances in a given case ought to be “united,” reckoned with respect to every other: the likelihood of each circumstance is contingent on its narrative context. Bernoulli retreads these examples in *Ars Conjectandi*, repeating Arnauld’s point: predictive confidence increases with connected detail; the more intimately connected, the better.<sup>8</sup> We’ll want to know as much as we can about Peter and Paul, Bernoulli points out by way of example, if we’re going to bet on who lives the longest. And we must search out not only the concrete causes of health, taking note of Peter’s pallor and sickliness, but also any arguments that “can be adduced to the contrary” (319). “[W]hen we make conjectures about individuals,” Bernoulli explains, “we also need, if they are at all available, arguments that are closer and more particular to those individuals” (319). Again in *Ars Conjectandi*, Bernoulli attempts to assess an alleged murderer’s guilt based on a set of apparently inconclusive, yet telling, details. Gracchus, black-cloaked and red-headed, “turns pale under questioning” (322). The scope of such arguments’ availability often outpaced computational capacity: Bernoulli neglects, among other things, to admit his inability to catalog exhaustively the reasons potentially causing Gracchus to grow pale.

Bernoulli and Arnauld’s notarized documents, murder cases, and health bets differ importantly from the coin tosses and card games occupying the bulk of early probability studies. This difference matters for mathematical history. Narratives like Bernoulli’s reimaged the scope of the field, while postulating an equivalence between mathematical probability and common sense.<sup>9</sup> For literary critics, such examples hint at an interdisciplinary engagement grounded not so much in verbal coincidence as in the conventions of fictional narrative. This connection suggests that our focus on thematic intersections (scenes of gambling and laying odds) may be over-simplistic. It’s worth stepping beyond these intersections, if only because gambling is so restricted a narrative event. Given the question of whether a coin has come up heads or tails, mathematicians might weight the cases equally (Hume does so off-handedly with a thousand-sided die in *An Enquiry* (37)), or conduct an experiment (Laplace believed in doing both, arguing that observation could correct flawed a priori assumptions). Few mathematicians or story tellers seek to describe the gap *between* toss and outcome. “This is the very nature of chance,” Hume writes, “to render all the particular events, comprehended in it, entirely equal”—and, crucially, beyond the realm of narrative (*Enquiry* 38).

In other words, gambles represent chance reduced or leveled so dramatically that few narratives bother to intervene to explain their processes at length. Accordingly, many intermediary moments of gambling in the novel are not narrated. Nor are supremely unlikely outcomes of gambles deemed praiseworthy or objectionable by critics who are otherwise quick to discuss the probability of a narrative event. Nonetheless, recent literary studies linking probability and the novel have used gambling scenes as a route into the connection. Jesse

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<sup>8</sup> This contention only works in one direction. Behavioral economists have demonstrated that we tend to credit stories that have more detail as more likely than stories with less information—a logical fallacy. See Kahneman, “Linda: Less is More,” p. 156-165.

<sup>9</sup> This link became a touchstone for probabilists, variously asserted by the Condorcet, Laplace, Mary Somerville, and others. For a discussion of this link, see Lorraine Daston’s account of classical probability in *Classical Probability in the Enlightenment*, esp. Ch. 2, “Expectation and the Reasonable Man” (49-108).

Molesworth, to give one example of many, quotes *Roderick Random* (1748) to support his claim that gambling and narrative are intimately related; the quotation he selects actually abbreviates the gambling play-by-plays to “many vicissitudes” and an outcome—a gain of 150 guineas (133). The vicissitudes themselves are absented from the novel, not narrated because they are simply not narratable. A “mere matter of chance,” Richard Hey contends in *A Dissertation on the Pernicious Effects of Gaming* (1783), which Thomas Twining was reading as he completed his translation of the *Poetics*, “can neither gratify his natural appetites, please his imagination, nor exercise his ingenuity” (2).

And this is where legal documents and lost travelers come in: figures subject to literary logic, as well as probabilistic. The new frontiers such figures offer probability logic inspire probabilists to envision circumstances ever more united, ever more like a story. Introducing *The Doctrine of Chances* (1718) Abraham de Moivre likens probabilistic reasoning to “a long train of consequences” (ii). This long train is often comprised of physical events (the turn of a card, the flip of a coin); yet de Moivre also makes forays into the unobservable (the colors of tokens hidden inside an urn, the chances at disease lurking inside a body). The further abroad the metaphors of cards and dice carry probabilists, the more dramatically the mathematically neat world encapsulated by Pascal and Fermat’s gambling questions—in which possibilities might be meted out into equally likely cases—spirals into a world of competing narratives. Counterfactualized particulars proliferate uncontrollably. Hume recognized this difficulty, worrying that a quest for ever-more-refined causal chains might destabilize thinking altogether. “Nothing is more requisite” he insists, “than to restrain the intemperate desire of searching into causes, and having establish’d any doctrine upon a sufficient number of experiments, rest contented with that” (*Treatise* (1738) 60).

Bernoulli and Arnauld often rest all too contented. They do so by leaning heavily on the word “ease.” Ease repeatedly stands in for likelihood in probabalists’ explanations of their calculations. Leibniz explains in a letter to Louis Bourguet that “the art of conjecture is founded on what is more or less easy, or to put it better, more or less feasible” (qtd. Hacking *Emergence* 127). This definition is so obviously circular that the persistence of words like ease, facility, and propensity in explaining probability is somewhat surprising.<sup>10</sup> Perhaps their survival had to do with their use. Bernoulli takes ease as synonymous with likelihood; when *a* and *b* happen with equal ease—flipping heads or tails of a coin, let’s say—Bernoulli takes as axiomatic that they are equally likely (133). “Ease” proves especially helpful for him when quantification comes up short. Plague kills “more easily” than dropsy, dropsy “more easily” than fever, even though Bernoulli cannot say “how much more easily” (327). The word bears increasing weight when brought to bear on the stories in *Ars Conjectandi*. Lost histories—like that of the traveler who hasn’t returned, or of the notarized document, or of the suspected murderer who turns pale under questioning—must be broken down into possible cases, each of which “can happen with equal ease.” Where this dubious assumption fails, we need only weight cases that happen “more easily” more heavily (322). The word’s convenient vagueness veils the difficulty of such partitioning and weighting. For Bernoulli, “ease” serves as a gateway from predicting the outcomes of gambles, into predictions about the past.

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<sup>10</sup> See Hacking’s *The Emergence of Probability*, “Equipossibility” (122-33), for the variety of circular definitions of probability.

## Literary Ease

For novelists and their critics, “ease” worked contrariwise, as a critical term that slipped from vague social evaluations into technical-sounding discussions of narrative probability. Literary discussions of probability were frequent. In what follows, I detail the tensions within discussions of literary probability, and argue that the word “ease”—used in translations of Aristotle’s *Poetics*—simultaneously encapsulates these tensions, and demonstrates a connection between mathematical and literary notions of probability. As “the press groaned under the weight of Novels, which sprung up like Mushrooms every year” (Reeve *Works* 2.7), magazines, letters, and novels groaned with complaints about improbability. “Had the story been kept within the utmost verge of probability, the effect had been preserved,” Clara Reeve objects of *The Castle of Otranto* in her preface to *The Old English Baron* (1778) (3). Henry James Pye complains that “those cried-up works, *Clarissa* and *Sir Charles Grandison*” offer neither “the probability of real life, nor the attractive surprise of fiction” (*Commentary* 200). Like Pye, critics routinely declared a novel’s failure by showing the ways in which it had breached “the bounds of probability.”

These complaints refer—often explicitly—to the *Poetics*. Calling poetry “a more philosophical and a higher thing than history,” Aristotle contends that “the poet’s function is not to report things that have happened, but rather to tell of such things as might happen, things that are possibilities by virtue of being in themselves inevitable or probable” (1451b). Often translated as “probability,” Aristotle uses the Greek “eikos,” which he defines in *The Prior Analytics* as “a generally approved proposition: what men know to happen or not to happen, to be or not to be, for the most part thus and thus” (1357a). Adding that most generally approved propositions happen for the most part, Aristotle implies that our approval of such propositions is tied to the frequency with which they hold true.<sup>11</sup> Both dimensions of Hacking’s “Janus-faced” probability—the aleatory (statistical frequencies) and the epistemic (degrees of belief)—are nascent in Aristotle’s definition. Fiction should not truck in *actual* history, but in *probable* history. That could mean representing inevitabilities, or generally approved possibilities, or, as Samuel Johnson and Anna Barbauld insisted, in possibilities so morally beneficial that they *ought* to be generally approved. Even on its own terms, Aristotle’s standard for fiction spirals into multitudes of potentially distinct probabilities: probability as that which warrants belief, probability as descriptive of what generally happens, probability as what inevitably happens, probability as that which warrants approval.

Translations of the *Poetics* into English indicate that this already-complicated term was still in motion. Two translations appeared in the late 1780s, *Aristotle’s Treatise on Poetry* and *A commentary illustrating the Poetic of Aristotle*. The first, by Thomas Twining (grandson of the tea merchant), appeared in 1789. Twining complained that until he’d begun his translation, “no English translation [...] could be read with patience by any one competently acquainted either with the Greek language, or with his own” (v). The second, by Henry James Pye (then Poet Laureate), first published in 1788, was republished in 1792 with a prefatory essay and extended commentary. Both translations provide extensive notes and examples, drawing as often from Smollett as from Euripides. Given their attention to contemporary literature, these notes offer an index to the intervention of mathematical probability on its literary counterpart.

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<sup>11</sup> For an extended analysis of Aristotle’s use of the term “probability,” see Ian Hacking’s *The Emergence of Probability* (18-20) and Robert Newsom’s “Aristotle” (19-33).



In his translation, Twining grapples conceptually with likelihood at a variety of levels, both as a literary-critical category, and as a tool in his role as translator. He wonders what Aristotle “probably” meant, often making arguments based on how common or uncommon words in question were in Greek and in texts contemporary to the *Poetics*. Pointing out mismatches between Dacier’s notes and his translation, he speculates as to Dacier’s most likely meaning. Though Twining remarks that “[o]ne of my chief objects was, to illustrate Aristotle, wherever I could, from himself” (xi), his illustrations stretch much further. Frequently, Twining pauses prochronistically, to wonder how Aristotle would respond to recent publications. Lamenting “the rarity of those dramatic fables, for which the Poet has trusted entirely to his own invention, without recourse to history, or novels” (34), Twining casts Aristotle as both prophet and dunce, fumbling to describe whole genres before their very existence. In his note to Aristotle’s oft-quoted explanation of the poet Agathon’s lines (“it is probable, in general, that many things should happen contrary to probability” (102), Twining translates), Twining turns to apply Aristotle’s precept to the novel.

This general, and if I may call it so, *possible* sort of *probability*, may be termed, *the probability of romance*; and these lines of Agotho furnish a good apologetical motto for the novel writer. It might be prefixed, without impropriety, even to the best productions of the kind—to a *Clarissa*, or to a *Cecelia*. Nothing is so complained of in such works, as their *improbability*; and often, no doubt, the complaint is well founded; often, however, the criticisms mean nothing more than the events were *uncommon*, and prove nothing more than the want of fancy, an extended human life, in the reader. If the events were *not* uncommon, where would the book find readers? (407)

Twining’s “probability of romance” coincides neatly with Jesse Molesworth’s recent thesis that the novel celebrates the improbable event, often foregrounding an extreme dependence upon the unlikely. (Think of *Tom Jones* and *Tristram Shandy* (1759-67), novels which thematize their unpredictability, even as they reference classical aesthetics.) But Twining’s note is more vexed than a simple celebration of improbability in the novel. The word persists in Twining’s references to the novels he examines, and it remains a damning one. Twining’s note redefines literary probability: a novel may dwell upon *uncommon* events, and such events need only be deemed *improbable* when they prove otherwise objectionable.

Twining neglects to explain how we might distinguish between the uncommon and the improbable, but luckily, he isn’t finished with *Clarissa*. While he praises the novel as one of “the best productions of the kind” and rails against the charges of improbability so often brought against it, his criticisms (and, he imagines, Aristotle’s) persist. At his most bitter, Twining denounces Richardson for tainting readerly pleasure with moral outrage. “We think he ought not to make such a representation of things,” Twining vents, recalling Aristotle’s assertion that though “[h]istory must represent things as they are,” fiction need not do so (304). “What reader of *Clarissa*,” Twining demands, “does not find the pity, the *pleasurable* pity, at least, which it is the object of such a work to excite, frequently counteracted, and diminished, to say no more, by some indignant feelings of this kind?” For *Clarissa*, as for Frances Sheridan’s *Sidney Biddulph* (1761), “[t]he mind of a reader is harassed and revolted throughout by the most improbable and *determined* perverseness of unfortunate combinations” (304). Both novels’ events engender such shock at misery “neither deserved, nor likely” that even the pleasure of sympathetic engagement disappears—most obviously driven by recognition of a (somehow unjust) authorial

determination of plot. Twining begins his *Clarissa* readings by arguing for the text's probable, albeit uncommon plot, but his readings progress through a series of affective responses that conclude with proclamation of the text's willful and perverse violation of probability.

Impossibilities, Twining argues, would be preferable, glossing Aristotle's directive that the poet "prefer *impossibilities*, which appear *probable*, to *possibilities*, which appear *improbable*" with a note endorsing "machinery, ghosts, witches, enchantments," rather than the jolting improbability of a Lovelace:

Such a being as Caliban, for example, is *impossible*. Yet Shakespeare has made the character *appear probable*; not, certainly, to reason, but to *imagination*: that is, *we make no difficulty about the possibility* of it, in *reading*. Is not the *Lovelace* of Richardson, in this view, more out of nature, more improbable, than the *Caliban* of Shakespeare? The latter is, at least, consistent. I can imagine such a monster as Caliban: I never could imagine such a man as Lovelace. (119-20)

Twining extends his claim that Lovelace's behavior induces unpleasant shock of moral outrage, to argue that Lovelace cannot even be imagined—though Twining does not explain why. (In a similar but terser fit of grumbling in his *Commentary*, Pye complains that "Sir Charles Grandison is a much more improbable character than Caliban," (523).) Citing Caliban as a model of self-consistency, Twining claims that readers "of a play, or novel" accept a set of causes hypothetically, and then grant the effects based on standards of the natural or the probable, which in turn "steals" from our view "the impossibility of the cause" (350).<sup>12</sup> Twining's extended comment postulates another type of literary probability: internal consistency. This category seems beset with consistency troubles of its own, given Twining's example. Caliban, a host of fascinating contradictions (enmeshed in bestial desires, yet transcendently eloquent), proves more consistent than Lovelace (whose chief fault, Robert Newsom points out, is his inability to reform—that is, his consistency).<sup>13</sup>

Though Twining makes clear that his standard has to do with the relationship between causes and effects, rather than with the initial possibility of causes, the grounds for his objection to Lovelace remain obscure: Twining neglects to say *why* we "make difficulty" about imagining Lovelace. Twining's discussions reveal that the term probability bears multiple and often contradictory meanings. Twining distinguishes between the improbable and the uncommon or statistically infrequent, though the distinction between the two is unclear. Impossibility can morph into poetic probability, given internal consistency. Meanwhile, probabilities like Lovelace's villainy are objectionable for mysterious reasons: are Lovelace's abilities to charm and to destroy too far at odds, or is Lovelace all too consistent in his capacity for dashing villainy? Like Caliban, these usages are consistent only in the tensions lurking within them. From Pye's statistical gloss of Agathon, to Twining's demand that causes and effects be connected carefully (regardless of any impossibility that underwrites the cause), critical accounts of literary probability lean heavily on a fascinatingly messy classical standard. In what follows, I argue that

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<sup>12</sup> Twining's equivalent use of the natural and the probable, gestures towards the push and pull between probability (mathematical and literary alike) as normative and as descriptive, a tension which Lorraine Daston has discussed at great length. Paraphrasing Richard Whately in a review of Jane Austen in the *Quarterly Review*, Nassau Senior marks the distinction between "improbability as denoting the occurrence of an event against a great preponderance of chances, and unnaturalness as denoting the violation of the principles of human nature" (152).

<sup>13</sup> See Robert Newsom, "The Antinomy of Fictional Probability" (90-104).

this standard only grew messier, as a new influence—the mathematics of probability—reoriented literary conceptions of likelihood.

The shift in literary probability manifests most clearly in critical accounts of narrative time, to which Pye and Twining devote many pages, despite their recognition that “the rule receives not the least support from Aristotle’s authority” (Twining 226).<sup>14</sup> Modern the principle may be, Pye concedes, but “there is a unity of time marked by nature, the breach of which destroys the probability of every fictitious tale whatever, either narrative or dramatic” (131). Pye demonstrates this principle’s necessity by pointing out its “uniform adoption” by novel-writers “good and bad” (183). Fiction, Pye contends, should connect causes intimately; more than any other, this task becomes the key distinction between history and fiction. “[L]et any person compare different parts of English history, whose chronology he has never examined,” Pye explains,

and he will be surprised to find the different impression detail of event has made on his imagination as to duration of time. If much of this detail intervenes between any two interesting events, without that detail being very minutely connected with both, the effect of their dependence on each other will be greatly weakened. (463)

Fiction, by contrast, can reveal (Pye quotes Diderot) “an apparent and sensible connexion” between events by showing how cause and effect are “minutely connected” (192). When the novel fails to offer such a demonstration, as *Clarissa* does for both Pye and Twining, it becomes “perfectly unnatural.” (*Clarissa*’s defenders also invoke this standard, pointing to the “uninterrupted succession” of events that allowed the reader to track the story from start to finish in a seamless flow of “minute particulars” (Williams 132).) As explained by Twining and Pye, unity of time depends not on the amount of time represented (Twining and Pye agree that any specific requirement would be a misreading of Aristotle), or on the match-up between temporalities of audience and stage (which Dacier recommends), but instead on the degree to which a novel renders causal connection palpable for readers. Grounded though it is on a reading of Aristotle, this demand constitutes a new and increasingly dominant standard by which the novel might be written and judged.

The demand is widespread. John Hawkesworth, founder of *The Adventurer*, writes that the facts of a narrative “should appear to be produced in a regular and connected series, that they should follow in quick succession” (*The Adventurer* 4 (1752)). If narrative accounts fail to exhibit “a necessary and apparent connexion,” then “the ideas which they excite obliterate each other.”<sup>15</sup> “The mind is satisfied,” Hawkesworth observes of his beloved supernatural romances, “if every event appears to have an adequate cause; and when the agency of Genii and Fairies is once admitted, no event which is deemed possible to such agents is rejected as incredible or absurd.” Other critics responding to the novel similarly emphasize the virtues of connection, regularity, and speed, referring to these attributes as hallmarks of probability. For Anna Barbauld, development in the novel could *only* proceed from ever-greater causal linkage; in a

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<sup>14</sup> Aristotle vacillates on dramatic time, eventually declaring, “[i]f the length is sufficient to permit a change from bad fortune to good or from good fortune to bad to come about in an inevitable or probable sequence of events, this is a satisfactory limit of magnitude.” The plot must be large enough to be beautiful (“an extremely minute creature could not be beautiful”) but not so large that it “escape[s] our field of vision” (1450b34-1451a2).

<sup>15</sup> Hawkesworth prefers Arabian romance to the novel (which he finds tiresome); nonetheless, the fact that he couches his criticism entirely in terms of causal relations evidences the new narrative aesthetics I’m describing.

letter to her brother, she observes that “the only chance we have for novelty [in literature] is by a more accurate observation of the works of Nature” (*Letters* 15).

Though James Beattie concludes his reflections on the form with a warning against novels because they distract from other, more important narratives (“a habit of reading them breeds a dislike to history, and all the substantial parts of knowledge; withdraws the attention from nature, and truth” (574)), some hoped that the novel could train the otherwise unscientific. John Moore concludes “A view of the Commencement and progress of Romance” (1797) (in which he praises the “minuteness” of causes within Richardson’s fiction) with a hopeful equation between instruction and entertaining narrative. Clara Reeve toys with the idea that the novel might offer “rational entertainment” (*Progress* 2.10). In his popular *Elements of Criticism* (1762), Lord Kames suggests that literary exposition of cause and effect could serve as the missing link in education, standing between basic education and the lofty abstractions of mathematics and philosophy, disciplines that threatened to derail students with “a sort of hobgoblin terror, seldom if ever subdued” (8). Kames stresses how “gradually” we can proceed “from the simpler to the more involved cases”—the comfort of close, stable causal connections would eventually liberate readers to contemplate less obvious relations fearlessly. John Dennis goes a step further, comparing connected narrative to an elegant logical argument. “[E]very part of that Action ought to be a gradual progress in the proof;” he writes, and “consequently all the Parts of it ought to be as dependent on one another, as the Propositions are of a Syllogism” (57-58).

Ease sits at the heart of this demand for connection. Kames’s *Elements* deploys the word in two related ways, tying mental ease to easy connections between cause and effect. “[W]e are framed by nature to relish order and connection,” Kames writes (25). Encountering an object “introduced by a proper connection,” Kames explains, “we are conscious of a certain pleasure arising from that circumstance. Among objects of equal rank, the pleasure is proportioned to the degree of connection” (66). Criticizing Virgil and Horace for the paucity of links in the *Georgics* and the *Odes*, Kames prefers narratives consisting of minute links “according to the order of nature” (102). Such a “chain of imagined incidents” finds “easy admittance into the mind; and a lively narrative of such incidents, occasions complete images, or in other words ideal presence” (102). Our pleasure has in such narratives has everything to do with mental ease: the mind glides “sweetly and easily through related objects” (66). Though relations “make no capital figure in the mind, the bulk of them being transitory, and some extremely trivial” they are the links that build our perceptions of the world. If a moment is to prove constituent to the plot’s “principal action,” Kames suggests that the “connection ought to be still more intimate” (29). Even in description, “connection ought to be carefully studied” (30); “however slight, [a circumstance] cannot be described too minutely” (614). We ourselves grow easy through easy connections. “Whatever be the cause,” Kames writes, “the fact is certain, that a man never finds himself more at ease, than when his perceptions succeed each other with a certain degree, not only of velocity, but also of variety” (222). We read more eagerly, and more quickly: “an epic poem, a play, or any story connected in all its parts, may be perused in a shorter time, than a book of maxims or apothegms, of which a quick succession creates both confusion and fatigue” (308-9). On the other hand, slight relations “can never be relished” (30), and inscrutable relations prove profoundly unsettling. In discussing historical narrative, Adam Smith similarly explains that “[w]e should never leave any chasm or gap in the thread of the narration even though there are no remarkable events to fill up that space. The very notion of a gap makes us uneasy for what should have happened in that time” (*Lectures* 100). Chasms and gaps become literal obstacles;

Kames writes that they slow us down, because loosely related connections require “time to make an impression” (308-09). Without the luxury of closely ordered connections, even our actions grow muddled: “without [order and connection] our conduct would be fluctuating and desultory; and we should be hurried from thought to thought, and from action to action, entirely at the mercy of chance” (32). We cannot traverse a text without easy connections. Ease underwrites narrative worlds, and produces ease in their readers.

Ease as a measure of narrative connection was consistently deployed in discussions of literary probability. “[T]he stile should be easy and familiar,” explains the writer of “An Essay on the New Species of Writing founded by Mr. Fielding” (1751) (19). James Beattie praises *Tom Jones*, writing that amidst the wonderful diversity of its characters, “the circumstances are all so natural, and rise so easily from one another, and co-operate with so much regularity in bringing on, even while they seem to retard, the catastrophe,” proclaiming himself amazed that “in such variety of fiction there should be so great probability” (573). In Clara Reeve’s *Progress of Romance* (1785), Frances Sheridan’s *Memoirs of Miss Sidney Biddulph* (1761) is praised for language “so easy and natural, that everything seems real in it” (2.24). Repeatedly linking the easy to the real, Reeve underscores the importance of an “easy” flow of scene to scene, contending that the novel must “represent every scene, in so easy and natural a manner” that each appears “so probable, as to deceive us into a persuasion (at least while we are reading) that all is real” (1.111). This standard, derived not so much from the *Poetics*, as from a rereading and rewriting of it, stuck.<sup>16</sup> Twining and Pye contend that the novel must bring a bounded procession of cause and effect into view, with such granularity that analysis of the *relation* (again, in both senses) can take place.

Outside of mathematical texts, the word enjoyed a dizzying array of meanings. In *Moll Flanders* (1722), Moll describes deductions (some are more obvious than others), lodging, style, and finances as “easy.” Critical usage plays on the boundaries and interstices of these disparate meanings—Richardson, writing to Aaron Hill, imagined that *Pamela* (1740), “if written in an easy and natural manner” might “introduce a new species of writing” (qtd. in Watt 208). Edmund Burke talks about the “easy gradation” of beautiful things in describing Milton’s sonic qualities in *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and the Beautiful* (1757) (112). In William Hogarth’s *Analysis of Beauty* (1753), lines are easy, and so too are conceptions, gestures, and behavior. The fluidity between ease as social grace and as narrative value was not lost on Richard Steele, who observed in the *Guardian* that “[a]s there is an easie Mien, an easie Dress, so there is an easie sort of Poetry” (60-1). Writing “easily” yields writing so apparently “natural and unlaboured,” Steele observes, that unknowing readers might imagine such writings not only easily read, but easily written, and attempt their own. Again, notions of stylistic ease slip into social ease, as Steele discusses all the “little circumstances” that populate good writing—so small as to escape all but the most refined readers (62).

Ease had become a stamp of approval: a word signaling at once proper deportment and logical relation. It was a new weapon in the arsenal of critical tools for assessing literary

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<sup>16</sup> The demand held traction not only for the novel, but for literary history, too. Critics like Beattie and Reeve see the story that they’re telling about the novel as itself problematically populated with unconnected events. Clara Reeve’s stated motivation for writing her 1785 “Progress of Romance” is “[t]o fill up this chasm in the history of Romance” (v), and thereby “to mark the distinguishing Characters of Romance and the Novel” (vi). James Beattie begins his own reflection on the romance with a long and involved history of tribal peoples preceding Romance languages. After a long account through the crusades of knight errantry, Beattie casually mentions the romance, which had gone missing—and, in spite of the length and depth of his history, mourns that “To investigate all the causes that brought about the revival of letters, is now impossible” (551.)

probability—and a new way to slip, all too easily, between description and evaluation in criticism of the novel. Evaluated in terms of probability and ease, the novel faced a curious set of demands: to showcase “minuteness” without being too dull, and to close narrative gaps and chasms with comforting firmness, while allowing for readerly suspense. “Ease” spanned these tension-ridden demands. The word sky-rocketed in the period, and though its meaning is all over the Moll Flanders map, one particular usage seems new and growing. By Twining’s account, the novel constitutes an exercise in explanation so careful and precise that it appears overwhelmingly probable. Crucially, readerly credit for such events depends on the illusion of a circumstantial, even circumstantially exhaustive, narrative.

### Consequences for the Novel

Critical privileging of ease had repercussions for the novel. In closing, I show how two novels—*The Female Quixote* and *Tom Jones*—render this critical demand a formal principle. *The Female Quixote* follows the inability of its central character, romance-addled Arabella, to distinguish between an easy and an uneasy narrative. Arabella differs from her fictional predecessor, Don Quixote, in that she makes causal, rather than visual mistakes. She recognizes fiction as revealing “the little Springs and Motives” of conduct (266), but her failure to spot the wobbly workings of these springs in her reading selections renders her all too eager to rewrite the world around her based on her reading—and therefore, unable to participate in the marriage market. (It would take at least twenty years, Arabella tallies with her cousin Charlotte, not to mention numerous trials and tribulations, for a lover to win her hand in marriage.) Perpetually “uneasy about things that were never likely to happen” (155), Arabella detects ravishers and armed men lurking behind every tree, supplying comically elaborate explanations for daily happenings in a frantic effort to fit her reading to the banality of daily life.<sup>17</sup> Her increasingly absurd narratives structure the novel, which closes abruptly when she recognizes her errors. A few sentences close the novel and record her marriage to her cousin Granville. The causal plot—by which Arabella learns the distinction between easy and uneasy relations—all but eclipses the marriage plot.

Arabella sustains the truth of her romances through her “most happy Faculty in accommodating every Incident to her own Wishes and Conceptions” (25), by which she can relate any circumstance to her master narrative: a nightmarish version of Bernoulli’s causal narratives, by which cause and effect are never so closely bound as to escape repurposing for support of Arabella’s version of events. Edward the gardener must be captivated by her beauty, she reasons, but she can find no evidence of it. She knows precisely what evidence ought to look like, wondering “that she did not find her Name carved on the Trees, with some mysterious Expressions of Love; that he was never discovered lying along the Side of one of the little Rivulets, increasing the Stream with his Tears; nor, for three Months that he had lived there, had ever been sick of a Fever caused by his Grief, and the Constraint he put upon himself in not declaring his Passion” (23). Instead of reconsidering Edward’s supposed love for her, she explains why no evidence could exist to substantiate his feelings, reflecting that “his Fear of being discovered kept him from amusing himself with making the Trees bear the Records of his

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<sup>17</sup> I’m indebted here to Catherine Gallagher’s reading of Arabella’s motivation for concocting such stories as an attempt to close the gap between text and world; as Gallagher puts it, Arabella’s story “begins with the irreparable gap that reading itself has made between existence (solitary reading) and its representation (a crowd of suitors)” (NS 185).

secret Thoughts, or of indulging his Melancholy in any Manner expressive of the Condition of his Soul; and, as for his not being sick, his Youth, and the Strength of his Constitution, might, even for a longer time, bear him up against the Assaults of a Fever” (23). Capable of explaining anything, Arabella repeatedly tells a “History” of woe caused by her beauty, which she observes, “has produced very deplorable Effects” in those around her (175)—even when the effects reside in their very absence. Arabella’s causal reasoning threatens Twining and Pye’s literary-critical standards, as it does Bernoulli’s expanded range for probability logic: if any cause can be linked to any effect, then the possibility of judging one narrative as easier than another—as *better* than another—disappears.

Ironically, credit for the volume(s) of her delusion is due in part to her intelligence, which the novel never misses an opportunity to praise. Some of Arabella’s explanations directly draw on probability logic. At the novel’s opening, Arabella repeats basic lessons from the *Port Royal Logic* almost word for word. A man shouldn’t proclaim his feelings for her, she explains, because someone “so unwise as to hazard a certain Happiness for a very improbable Hope, deserves to be punished, as well for his Folly as Presumption; and, upon both these Accounts, Banishment is not too rigorous a Sentence” (148). Precisely because Arabella has memorized vast volumes of formulaic literature, she can corroborate her story (and it is really only one story) with copious data, threatening her audience with “an hundred other Heroes I could name” (150) as she earnestly discusses the merits of heroic battles waged over ideal hair color. Ruth Mack would have it that Arabella is “every bit the empiricist, reasoning from her senses” (195), replacing eighteenth-century English society with “the classical historical settings of seventeenth-century French romances rather than from eighteenth-century English society” (195). And Mack is right, if only in part: Arabella gives due weight to frequency of occurrence, and even to ratios of events occurring or failing to occur in similar situations. But Arabella fails as an empiricist in her inability to switch plots—to contemplate various causes for the effects she sees around her. Instead of using her reasoning to adduce and evaluate multiple possibilities, giving weight to both textual and personal testimony, Arabella mobilizes her imaginative abilities to rewrite the smallest circumstance as belonging to her. Edward the gardener is a noble in disguise, and *therefore* must be in disguise in order to “have an Opportunity of declaring a Passion to her” (23). All the stories she might tell, she explains to her uncle, are “so connected with the other Accidents of my Life, that ‘tis necessary you should be acquainted with my whole History, in order to comprehend it” (62), later asserting that readers of her “History” deserve full access to “the smallest Circumstance that relates to me” (122). If the novel is a tale of effects, Arabella reads herself as the ultimate cause, bound up in every happening around her. “I was the Cause of their Quarrel” (160), she bravely owns up. (And, we must observe in passing, this thinking makes it so; the narrative is propelled entirely by the effects of her interpretations, ending once her interpretive strategies change.)

Lennox sets Arabella’s inventive (and monotonous) story alongside the novel’s varied explanations for events. Glanville falls ill, and we read of his extreme fever which mounts and subsides, leading to his recovery. Alongside this account, we see Arabella’s interpretation of her cousin’s illness, which she knows must have come about because of her, and can only abate through her intervention. Chiding Glanville for his failure to recover once she has granted him permission to do so, Arabella insists that his sufferings “ought to have ceased, when the Cause of them did; and when I was no longer rigorous, you ought no longer to have suffered” (136). Despite Glanville’s inexplicable delay in returning to health, Arabella eagerly attributes his eventual recovery to her “easiness” with him. Her story shifts, but it does so minimally; her

causal explanation does not change. The novel thus pits easy narratives—its own, and those characteristic to the genre—against those of its heroine and of romance, which sacrifice ease to the strictures of plot, producing profound unease in each of the novel's characters. Granville bravely faces “what to him appeared an Herculean Labour” (49) (reading Arabella's books), and again and again experiences “perpetual Uneasiness” watching Arabella stoutly defending her version of events (120). This process, by which Arabella's uneasy narratives generate unease, threaten to prolong the novel indefinitely. Arabella's “Adventures” cannot be “at an End for the future” (138) until she experiences a fundamental reorientation toward causal narrative. She must grasp fictionality,<sup>18</sup> but she must also learn the difference between “good” and “bad” fiction, between easy stories and uneasy ones.

How can she be cured? Or, to put it another way, how can the novel end? Once concocted, Arabella's explanations are unshakeable, not to be tempered by the testimony of others, even those whom she most admires. The doctor who finally shakes Arabella's unshakeable belief in romances begins by introducing her to the distinction between textual and empirical evidence and between the imaginary and the real. These distinctions only serve to solidify Arabella's sense that “the Difference is not in Favour of the present World” (380). Only when he describes the *consequences* of her reading does Arabella announce that she has “hitherto trifled away [her] time” (381). Her romance-inspired explanations for events have approached “the Crime of encouraging Violence and Revenge,” she realizes. How she narrates her “History,” she comes to understand, has causal efficacy. Once more, Arabella recognizes herself as a central cause. But when she recognizes that alternative narratives are available, some less damaging than others—less uneasy than others—she becomes newly responsible for her effects.

As for Arabella, so too for the novel. *The Female Quixote* is a novel about novels, about their procedures and the ways in which they might be critiqued and judged. Clara Reeve saw Lennox's return to romance as belated, but Reeve ignores the way in which *The Female Quixote* is itself a progress of romance, delineating divergence and genetic relation simultaneously (2.6). In so doing, Lennox makes a powerful case for the novel as a historically embedded form, uneasily skewed by the unrealistic frequencies of its ancestor. By depicting fiction as the realm of precedents for action (“Remember I require no more of you, than *Parisatis* did of *Lysimachus*, in a more cruel and insupportable Misfortune” (193), Arabella writes to Sir George), Lennox doesn't so much decry Arabella's use of such precedence, as openly invite the novel to acknowledge—and correct—its own causal efficacy. Celebrating the recovery of lost causes, Arabella glorifies romance as the ultimate union of cause and effect, arguing passionately that “But for the famous Scudery, we had not known the true Cause of that Action of Clelia's, for which the Senate decreed her a Statue; namely, Her casting herself, with an unparalleled Courage, into the Tyber, a deep and rapid River, as you must certainly know, and swimming to the other Side” (62). *The Female Quixote* teaches Arabella—and us—to evaluate “true Cause[s]” comparatively—and with an eye to their effects. In sketching the absurdity of Arabella's errors, Lennox points to tightly knit causal relations as not simply fundamental to the novel as a form, but as endowing that form with political and social responsibility: else we people a nation with Arabellas.

A traditional romance plot demands artificial constraints—since, as Glanville explains, “all that can be said, either of Beauty, or of Love, may be comprised in a very few Words” (149). As the abrupt ending of the novel suggests, love is a subject “quickly and easily discussed” (149), while errant reasoning inspires and requires lengthy pedagogy. With *The Female Quixote*, Lennox

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<sup>18</sup> See Gallagher, “Nobody's Credit,” in *Nobody's Story*, esp. p. 175-180.



makes painfully clear the extent to which the novel, a form from which critics demand *easy* relations, depends instead upon making easy relations uneasy, before rendering them easy once more. Lennox's examination of unease—of causal relations, and of persons—charts a way for the novel as a form to generate plot and expose causal relations at once. A novel might be a comedy of errors (the misinterpretations that send Glanville “racking his Brain to find out the Meaning of those [Arabella's] mysterious Words” (170)), an epic of difficulty (Glanville's quest to cure Arabella), a mystery novel (“he immediately concluded, there was some Mystery, which it concerned him to find out” (100)), or an ethnography. Rather than the artificial constraints or material obstructions of romance, the novel demands mistakes, accidents, and—best of all—uneasiness to give it shape, by relating uneasy premise to an easy conclusion.

*The Female Quixote* stakes a marriage plot to the romance of cause and effect, ease and unease. *Tom Jones* similarly renders a marriage plot contingent on causal recovery—the cause of Tom Jones himself. *Tom Jones* is Pye's favorite example, which he praises for its careful exposition of causation. (Twining was also reading the novel as he translated Aristotle, though he only mentions the novel once, as an example of epic form.) Pye's praise is hardly surprising. Announcing that fiction is the domain of “what really exists” (322), Fielding positions his novel's aesthetic project in relation to classical probability. Because there exist “no publick Notoriety, no concurrent Testimony, no Records to support and corroborate what we deliver” Fielding writes, it's best for narrative “to keep within the Limits not only of Possibility, but of Probability too” (402). Fielding frames his novel as the perfect test-case for Pye and Twining: a novel announcing its own attention to the “limits” of probability. Like Pye, many critics regarded *Tom Jones* as special in its treatment of cause and effect. In “An Essay on the New Species of Writing founded by Mr. Fielding” (1751), William Owen marvels at the “gradual Narration of Facts” in *Tom Jones* (Williams 154). Calling previous novels, “[p]rose run mad” where “[p]robability was not required,” Owen praises the novel for being “entertaining in the smallest Particulars” (151, 153). Indeed, Fielding presents the novel as the scrutiny of minutia:

In reality, there are many little circumstances too often omitted by injudicious historians, from which events of the utmost importance arise. The world may indeed be considered as a vast machine, in which the great wheels are originally set in motion by those which are very minute, and almost imperceptible to any but the strongest eyes. (225)

On Fielding's terms, his novel offers a view of the relations underlying the great wheels of the world, affording readers an extreme close-up of the otherwise imperceptible causes that set these wheels spinning. Nevertheless, Pye worries that the novel may contain crucial moments where Fielding's zoom function breaks down, fretting in particular that Sophia's over-speedy consent to Tom, given “the behaviour of Sophia on her meeting with Jones, her obstinate refusal of him” seems “perfectly unnatural” (464). Fielding even announces his neglect of Sophia, describing her state of mind “by not attempting to describe it, from despair of success” (208). This aside underscores how curious a selection *Tom Jones* is for Pye to have made. The novel declares its procedures all too loudly—its absurdly careful attention to imperceptible causes, and its frequent paucity of basic explanations. These two procedures are in fact related: I'll argue here that Fielding turns gradual causal explanation *into* the stuff of plot. Narrative in *Tom Jones* depends upon the temporary unmooring of effects from their causes; the mistakes permitted by this unmooring structure and propel the novel.

The central causeless effect is infant Tom Jones, found lying in Squire Allworthy's bed. Gossip circles assign young Tom parents, but Fielding explicitly denies us full information, allowing readers to believe (along with the town) that Jenny Jones is his mother, while refusing to confirm that Partridge is Tom's father. "Whether he was innocent or not," Fielding temporizes, "will perhaps appear hereafter; but if the Historic-Muse hath entrusted me with any Secrets, I will by no means be guilty of discovering them till she shall give me leave" (101). When Bridget Allworthy (who is actually Tom's mother) accepts young Tom as a charge, Fielding underscores her uncharacteristic generosity, only to explain it away, "lest the virtuous Reader may condemn her for shewing too great Regard to a base-born Infant, to which all Charity is condemned by Law as irreligious." Providing a speculative (and false) chain of reasoning, Fielding concludes that Bridget accepts Tom out of a commendable sense of sisterly responsibility. Unwilling to stop at this deceit, the narrator pauses to point out how *helpful* he has been in explaining Bridget's inscrutable behavior, boasting, "As this is one of those deep Observations which very few Readers can be supposed capable of making themselves, I have thought proper to lend them my Assistance; but this is a Favour rarely to be expected in the Course of my Work" (47).

Some such "assistance" is slightly more benign. Beginning Book III by telling us of a "blank" in the novel's chronology, Fielding offers the reader "at all such Seasons an Opportunity of employing that wonderful Sagacity, of which he is Master, by filling up these vacant Spaces of Time with his own Conjectures; for which Purpose, we have taken care to qualify him in the preceding Pages" (116). This blank (much like the stars in the last two installments of *Tristram Shandy*) poses only empty space, which we can fill at will. But most readerly conjectures that Fielding incites in *Tom Jones* are minefields for faulty reasoning. Offering us competing explanations for events (we don't know, for example, why Partridge freezes when his wife attacks Jenny Jones with a knife "whether Surprise had rendered him motionless, or Fear (which is full as probable)" (84)), the text repeatedly foregrounds readerly interpretation, even as it thematizes the woefully bad readings perpetrated by characters and readers alike. (Mrs. Partridge, for example, becomes jealous, dismisses her jealousy, and takes up the sentiment again, all given minimal stimulus, over the course of a few pages (88).) Trained not so much in causal relations as in the poverty and fallibility of all such connection, readers of *Tom Jones* are invited to refine their predictions through time, to maintain competing explanations for unexplained events, and to evaluate and question their own expectations. If prudence is the lesson of the novel, as Martin C. Battestin contends, then Fielding's warning that "the best Things are liable to be misunderstood and misinterpreted" (640) is the paramount prudential lesson.

And yet prediction of a sort might be possible within the novel, or so some readers have claimed. "The peculiar beauty of the plot," Anna Barbauld observes, "consists in this; that though the author's secret is impenetrable, the discovery is artfully prepared by a number of circumstances, not attended to at the time, and by obscure hints thrown out, which, when the reader looks back upon them, are found to agree exactly with the concealed event" ("Fielding" xx). Fielding embeds this demand for rereading in his asides, often boasting of the elaborate causal chain he has constructed for our examination, which we can only fully grasp by frequently returning to previous pages. "If the Reader will please to refresh his Memory," Fielding directs us,

by turning to the Scene at *Upton* in the Ninth Book, he will be apt to admire the many strange Accidents which unfortunately prevented any Interview between *Partridge* and Mrs. *Waters*, when she spent a whole Day there with Mr. *Jones*. Instances of this Kind we may frequently observe in Life, where the greatest Events are produced by a nice Train of little Circumstances; and more than one Example of this may be discovered by the accurate Eye, in this our History. (916)

Fielding claims that his finely crafted circumstantial train echoes the causal events of life outside the novel. The novel offers a space in which we may pause, re-read, and reevaluate temporal sequence, anticipating the “greatest events” of the plot to come. What Barbauld calls the “peculiar beauty” of the plot—its juxtaposition of apparent unpredictability and obscure hints—allows for retrospective prediction, a prediction available primarily in rereading the past as a condition for the present. The writer of *An essay on the new species of writing founded by Mr. Fielding: with a word or two upon the modern state of criticism* goes even further, claiming that “at the beginning of the last Book of *Tom Jones*, the Reader is apt to think it an equal chance whether he is to be hanged or married” (23). Though Barbauld differs (nothing is more predictable, she writes, than Tom’s recovery of his origins, and his ensuing marriage to Sophia), the two could agree that local unpredictability drives the plot. In *Tom Jones*, we can already hear Tristram Shandy’s near-violent refusal to be predicted, if only at a whisper. “[I]f I thought you was able to form the least judgment or probable conjecture to yourself, of what was to come in the next page,” Tristram threatens “—I would tear it out of my book” (61).

*Tom Jones* doesn’t go quite so far. Despite the occasional “blanks” left forever open for readerly speculation, *Tom Jones*’s most prominent temporal gaps promise historical recovery—recovery that Fielding presents as the novel’s ultimate end, and the pinnacle of readerly pleasure. Matthew Wickman points out that the obfuscation of circumstances by characters, author, and accident leads to “an oddly romantic conclusion in which Tom gets the girl, wins the estate, and learns of his partly aristocratic (if ignoble) parentage” (68). Crucially, marriage and historical recovery happen at once: the very structure of marriage plot depends upon wedding cause to effect in a happy union that ends the novel, restoring the world to a realm beyond narration, because no relevant cause has been left unexamined, and no effect left unexplained. All else, as Fielding would have it, is blank in the lottery of time.

## Conclusion: The Romance of Cause and Effect

In *The History of Jack Connor* (1752), William Chaigneau mocks mathematicians’ attempts at probable histories, observing, “ ’tis a question would puzzle Monsieur de Moivre, whether most intrigues began, or were discovered, by the eyes?” (131). De Moivre might lack the relevant data, but the novelist could take either side, by carefully portraying either cause as intimately related to its effect. Novels in the period theorize this power, and its limitations. *The Female Quixote* underscores the potency of any given narrative practice knitting cause and effect together, and offers standards for discriminating between causal narratives as more or less easy. In both *The Female Quixote* and *Tom Jones*, exposition of causal relation therefore becomes a condition for—even a replacement of—the marriage plot. Twining and Pye’s accounts of the novel condition us to care not so much that Tom wed Sophia, but that Tom’s recovery of his origins constitute and justify his present in a continuous chain of logic that brings him smoothly up-to-date. (Sophia’s motivations, we may complain with Pye, are set aside as comparatively

unimportant.) Likewise, we take Glanville's marriage to Arabella as a given, wondering only at how her cure might be enacted. Tom Jones's missing origins allow readers to speculate, Bernoulli-like, over his probable histories. By contrast, the improbable histories Arabella concocts allow readers to judge easy and uneasy relations side by side, judging causal narratives for their ease and their consequences at the same time. Both novels conclude with a splendid relation of sundered causes, and in so doing, redefine the novel as the romance of cause and effect.

## Chapter 2: The Improbable Preservation of the Orphan Plot

No orphan, nor without a friend art thou –  
I am thy father; here's thy mother; there  
Thy uncle—this thy first cousin, and those  
Are all your near relations!

Richard Sheridan, *The Critic* (1779)

I would strongly advise you, Mr. Worthing, to try and acquire some relations as soon as possible, and to make a definite effort to produce at any rate one parent, of either sex, before the season is quite over.

Oscar Wilde, *The Importance of Being Earnest* (1895)

### Introduction

*Tom Jones* ends when Tom “acquires” relations. Tom’s acquisition reconciles his present to his past, his aspirations to his identity. Nowhere is the eighteenth-century romance between cause and effect more apparent than in the tendency of the fictional orphan to recover past and parents. For Kames and Hume, familial connection exemplifies causal relation: Kames explains that “the connection between a man and his children” is “fundamentally that of cause and effect” (71). Kames echoes Hume; describing causation before dismantling it, Hume observes that “all the relations of blood depend upon cause and effect, and are esteemed near or remote, according to the number of connecting causes interpos’d betwixt the persons” (*A Treatise* (1738) 59). In this light, *Tom Jones* performs the ultimate causal demonstration: while tracking Tom from infancy into adulthood, readers are afforded the luxury of guessing—and eventually recovering—the train of events that brought Tom into being in the first place. Orphan plots like Tom’s are as old as Moses. With precedents in Greek drama, the novel inherited orphan plots from the early modern stage, and from English and French medieval romance. As in *Oedipus Rex* (c. 429 BC), one tear in the social fabric—familial displacement—often paralleled another—incest. (King Arthur, for example, grows up unaware of his origins; his incestuous dalliance with his half-sister breeds—literally—his demise: Mordred.) The novel adopts such plots with gusto. With clock-like regularity, hosts of orphans stumble upon their pasts, the eponymous heroes of *Moll Flanders* (1722), *Oliver Twist* (1837), and *Daniel Deronda* among them. By 1895, Wilde’s Lady Bracknell could blithely maintain that an orphan might retrieve a parent as easily as a missing hat—or manuscript—from the cloak room at Victoria Station.

For novels like *Tom Jones*, such recovery has clear benefits. Centering the novel on the orphan plot, Fielding renders his narrative one long causal demonstration, perfectly fulfilling the critical demand for easy and intimate connection of cause and effect. Connecting narrative past and present, Tom Jones’s (or Earnest Worthing’s, or Oliver Twist’s, or Esther Summerson’s) recoveries afford readers (if not characters) pleasures of prediction pre-recovery, and a palpable experience of narrative symmetry following revelation. They provide narrative, as well as personal, closure. “The best form of recognition is that which is accompanied by a reversal,” Aristotle decrees; orphan plots tend to conclude with a splendid coincidence of the two (*Poetics* 11, 56). The plot epitomizes unity, yet can also bear almost unlimited complication. In novels from *Moll Flanders* to *Redgauntlet* (1824), an orphan’s presence might signal a restoration and

resolution to come, but slow, wrong-headed, and even disastrous encounters with a half-understood past precede its full disclosure. The elaborate intricacy of Tom Jones's history, for example, depends on his *gradual* recovery of his past. "Fortune will never have done with me till she hath driven me to distraction," moans Tom (915-16), having slept with Jenny Jones, widely supposed to be his mother. Tom joins a host of modern fictional orphans who, much like their classical forebears, experience awkward, "step by step" brushes with their origins (Freud 85). Always, the potential of a tragic reversal defers the grand finale promised by full recognition.

Tempting plotting possibilities, to be sure! Nevertheless, the plot's apparent fixity is strange, given probability's rise as a synonym for critical approbation of narrative in the late eighteenth century, and the reciprocal outcry against narrative improbabilities. In *A Likely Story* (1988), Robert Newsom charts the "rise in dignity" for the discourse of probability in eighteenth-century criticism: a probable fiction became praise-worthy not only for its self-consistency, but also for its fidelity to real world statistical frequencies (79). So why does the orphan plot survive? The plot bears rich textual histories and narrative symmetries, but—given the critical turn towards the probable, the natural, and the frequent—uncritical acceptance of such restoration remains surprising. The plot's persistence corroborates Jesse Molesworth's argument that the eighteenth-century novel celebrates and foregrounds the improbable (the lottery winner, rather than the typical ticket buyer), and calls into question Thomas Kavanagh's contention that the novel acted as a participant in "the Enlightenment's evacuation of chance" (Molesworth 19-39; Kavanagh 113-14). The radical difference between these two critical accounts of probability underscores the tug-of-war taking place over standards for likelihood as the early novel took shape. The novel retained and celebrated only certain kinds of chance events, and indeed, only certain aspects of the orphan plot. This chapter revisits Kavanagh and Molesworth's questions, by charting changes in the function of orphan plots over time. Rather than asking whether improbable plots persisted in the novel, I examine one kind that did, and suggest why it might have done so.

Recent scholarship has recognized the improbability of the fictional orphan plot, but has not explained its longevity. The tasks to which the orphan plot is put as it grows up, I suggest, explain its surprising persistence. In what follows, I document the tension between fictional and non-fictional orphan narratives, and survey current accounts of this tension. I argue that Walter Scott's novels expose and explore potentialities in the orphan plot already latent in *Tom Jones*: Scott transforms the orphan's acquisition of lost personal identity into a recovery of lost national identity. Borrowing from Scott, Charles Dickens takes the plot a step further, deploying orphan narratives as models for historical change. With Dickens's *Bleak House*, the orphan comes at once to embody the ills of 1830s London, and the possibility of reform: Esther Summerson begins the novel severed from the past, *therefore* better able to depart from it, even after she retrieves and recounts it. For both Scott and Dickens, orphan plots encapsulate a particular mode of historical relation, as orphans embody histories both lost and remembered, political pasts and futures, and private and public domains. The reunion between these often-severed entities comes about through the figure of the parentless, pastless, abandoned child. And so the shape of the orphan plot becomes a formal pathway for the novel into unlikely recoveries of the past.

## **The Real Tendencies of Things**

To many readers, Tom's recovery fell little short of miraculous. Several contemporary

critics recalled their experience of perfect suspense, breathlessly exclaiming that “the Reader is apt to think it an equal chance whether he is to be hanged or married” as the novel draws to a close (*An Essay* 23). Such critics echo the narrator’s insistence, that if Tom cannot

find some natural means of fairly extricating himself from all his distresses, we will do no violence to the truth and dignity of history for his sake; for we had rather relate that he was hanged at Tyburn (which may very probably be the case) than forfeit our integrity, or shock the faith of our reader. (17.1)

Stressing the bleakness of Tom’s probable future, Fielding declares that the novel will be, if nothing else, *natural* and *fair* in its conclusions. On Fielding’s terms, one unpleasant surprise—the prospect of Tom’s hanging—forestalls another: readerly recognition of Fielding’s all-too-visible hand, shaping Tom’s way.<sup>19</sup>

More astutely, other readers claimed scarcely to consider such possibilities, let alone entertain them as likely. *Tom Jones* must end happily, and Anna Barbauld contended that it could do so in only one way. As Barbauld explains, no reader could doubt “but that, in spite of his irregularities and distresses, his history will come to an agreeable termination. He has no doubt but that his parents will be discovered in due time” (56). Assured a revelation of Tom’s origins, readers can expect this revelation to pave the way for “an agreeable termination” to his history, by filling in its early blanks. Outside of fictional narrative, Barbauld observes, her security in an ending that knits Tom’s past to his present would be wildly misplaced. The reader “would often guess wrong if he were considering the real course of nature” (56), Barbauld explains. When we foresee Tom’s recovery, we do so “[n]ot from the real tendencies of things, but from what [we have] discovered of the author’s intentions. But what would have been the probability in real life? Why, that the parents would either never have been found, or have proved to be persons of no consequence” (56). Either the past would remain undiscovered, or it would offer no bearing on Tom’s hopes for Sophia and his relation to Allworthy.<sup>20</sup>

Long before threatening to hang Tom, *Tom Jones* hints at other events threatening his survival. “[W]hy should your Worship provide for what the Parish is obliged to maintain?” Mrs. Deborah demands of Allworthy, upon Allworthy’s discovery of the infant Tom nestled between his sheets (40). Legal recourse flits to the fore, as Mrs. Deborah advocates a “warrant to take up the hussy its mother” (40), and remarks of young Tom, “I would have it put in a basket, and sent out and laid at the churchwarden’s door. It is a good night, only a little rainy and windy; and if it was well wrapt up, and put in a warm basket, it is two to one but it lives till it is found in the morning” (41). Tom’s nonfictional counterparts, the novel briefly admits, were more likely to be hanged than married, to be farmed out to the Parish than adopted, and, if stranded, only slightly more likely to survive than to die. Though scarcely revelatory of societal woes, Fielding’s novel

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<sup>19</sup> This juxtaposition of shock and likelihood foretells Hardy’s strategies in justifying Tess’s hanging in *Tess of the D’Urbervilles* (1891). Both novelists play rhetorically with a counter-intuitive link between likelihood and shock.

<sup>20</sup> In predicting whether Tom is to be hanged or married, readers truck in what Robert Newsom calls the antinomy of fictional probability. When we predict about fiction, Newsom observes, we deploy a curious mix of real and fictional frequencies. We confuse matters further by employing fictional narrative as evidence for, or against, itself. For Barbauld, the solution to Tom’s “irregularities and distresses” appears all too likely, presaged by every detail of the preceding pages. On the other hand, Fielding and many in his audience suggest, Tom’s recovery is a probable marvel: surely it is far more likely that a convicted thief be hanged, than married. Both arguments depend on truncated readings of *Tom Jones* that herald modern statistical back-testing: stepping back on the fictional time-line, critics forecast the plot, comparing their own results with Fielding’s.

reminds us several times that, given the “real tendencies of things,” eighteenth-century orphans were guaranteed only one inheritance: Poor Law, and the work house.

Early modern Poor Law extended medieval vagrancy laws to systematize aid for the poor, parish by parish. In the eighteenth century, it was modified several times, including formalization of the workhouse system in 1723. Prominent constituents of workhouse populations, orphans were central to discussions about Poor Law modifications. (In such discussions, the word “orphan” signified parental instability, as well as loss.<sup>21</sup> When reformers like Jonas Hanway suggested that the London Foundling Hospital might be re-named the Orphan’s Hospital, the new name was intended to designate not only children for whom one parent was missing or dead, but also children whose parents who had relinquished their rights (who were, as Hanway puts it, “dead to the child”) (*A Candid Historical Account of the Hospital for the Reception of Exposed and Deserted Young Children* (1759) 92.) Of populations covered by the Poor Law, orphans were also the most vulnerable. Hanway’s chart (fig. 1) yields a dumbfounding mortality rate, with 49 percent of infants dying in their first year.

Figure 1, Jonas Hanway’s examination of records of the London Foundling Hospital (80).

[ 80 ]

**CALCULATION TABLE, and ESTIMATE OF MORTALITY, and NATIONAL EXPENCE AND GAIN, on 2600 Infants supposed received by the Hospital from the Parishes within the Bills of Mortality, for twenty years; the mortality being agreeable to the real mortality of the Hospital, and the real expence, as nearly as can be computed.**

	No of living from year to year.	Months.	Cost each per ann. 6l. 10s.	Amount of Expence.
			l. s. d.	l. s.
Received the 1st year	2600	6	3 5 0	8450 0
At the end of 6 months are found alive but	1700	2	1 1 6	1827 10
At the end of the year (being 49 per cent. mortality) remain	1326	4	2 3 4	2873 0
				13,150 10
2d year, 7 per cent. on 2600, remain 1144; but I calculate the charge on a medium of	1050	12	6 10 0	6825 0
3d year, 5 per cent. on d <sup>o</sup> [Note. The estimate of the above mortality of 49 and 7, (i. e. 56 per cent. for the two first years) is made on a continuance of circulation, which includes some very young children, and consequently adds to the mortality of the gross number, and therefore I call it 5 per cent. more.] remain	1014	12	6 10 0	6500 0
4th year, 8 per cent. on 1014, remain	933	12	6 10 0	6064 10
5th year, 6 per cent. on 933, remain	878	12	6 10 0	5707 0
6th year, 5 per cent. on 878, remain	835	12	6 10 0	5427 10
7th } years. 10 per cent. on 835, remain	752	48	26 0 0	19552 0
8th }				
9th }				
10th }				
Alive, being 29 per cent.				63,226 10

<sup>21</sup> Losing one parent would be enough for Charles Darnay’s daughter to be considered an orphan in *A Tale of Two Cities* (1859). With a dark echo of Psalm 109, Madame Defarge experiences a “sacred glow” as she contemplates making Darnay’s wife “a widow and her child an orphan” (311).



Even more stunningly, Hanway records that only 29 percent of children admitted to the London Foundling Hospital reached the age of ten. Elsewhere, Hanway approximates the extent to which orphan deaths contribute to the bills of mortality (73). At a time when hospital records and bills of mortality, both readily available, had yet to be examined for the pricing of annuities or insurance, Hanway’s analyses are relatively sophisticated: they track orphans by age, geography, and circumstances of admission and care.<sup>22</sup>

Partly in response to Hanway’s advocacy, the 1762 Act “for the keeping regular, uniform and annual Registers of all Parish Poor Infants under a certain Age, within the Bills of Mortality” required Metropolitan parishes to maintain detailed records of the children admitted into their workhouses (*Earnest Appeal* 10).

Figure 2, “St Clement Danes, Annual register of parish poor children,” 1767-1786. Westminster Archives Centre, Ms B1257, LL ref: WCCDRC365000037 & 38.

The image shows two pages from a historical register. The left page is titled "Annual Register of the Parish Poor Children" and contains a table with columns for name, age, sex, and date of admission. The right page is titled "APPRENTICED" and contains a table with columns for name, date, and other details. Both pages are filled with handwritten entries.

St. Clement’s table (fig. 2) fulfils the requirements of the 1762 Act, entering orphans by name, designating the dates and circumstances of their arrivals, and recording details of their expenses and departures. Records like these facilitated computations that Hanway hoped might support reform—the relationship between nursing and mortality rates, for example. They also included tabulations of the costs accrued by caring for each child, reflecting mounting discontent over the costs of administering the Poor Law.

These tallies recall us to realities we might forget in perusing *Tom Jones* today: the extraordinarily long odds in British populations against the survival of orphans like Tom, and

<sup>22</sup> For a history of the usage of probability and statistics in annuities and insurance pricing, see Ian Hacking, “Annuities,” p. 111-121 and Lorraine Daston “The Theory and Practice of Risk,” p. 112-182. Numerical data were not applied to these computations until the nineteenth century (Daston 170, 182).

their frequent representation in political, as well as fictional, discourse. Such figures were regular features of daily life. Though precise population data are lacking, historical studies have suggested that in pre-industrial communities, one child in five was orphaned (Laslett "Parental" 14). Because orphans went underreported in public records, this is almost surely an underestimate (Holman 43). Calculations based on parish records and bills of mortality suggest that half of British children were deprived of one or both parents before turning 21 (Nixon 49-50; Laslett 162-69). Legal recourses for orphaned children were various, and class-dependent: guardianship for wealthy orphans (like Scott's Darsie Latimer), informal adoption in middle class cases (as for Esther Summerson), and the Poor Law in all other cases (as Mrs. Deborah advocates for Tom).

While the frequency of fictional orphans might faithfully represent an unhappy reality of the British population, their experiences are remarkably unrepresentative. Orphan narratives in eighteenth-century fiction have little to do with the numerical trends that were increasingly measured and discussed. Cheryl L. Nixon shows that while the majority of orphans were cared for under the auspices of the Poor Law in 1750, remarkably few orphan narratives even mention the Poor Law (53-54). (Most that do, like *Tom Jones*, quickly remove the orphan from its dominion.) And while it is hard to quantify the regularity of parental recovery, St. Clement Danes' 1770 records record only two out of 22 children leaving to reside with parents (who were likely already known to their children). Other years are much grimmer. What data we have suggest that factual foundling narratives tended to mirror Heathcliff's experience, rather than Tom's: like Heathcliff, orphans might be objects of lingering suspicion, but few certainties. Yet despite the obvious improbability of their recovery, and despite the increasing statistical attention paid to orphans as the Poor Law was reformulated and critiqued, fictional narratives of lost children scarcely changed in the century that followed the publication of *Tom Jones*. With startling regularity, children's identities were lost and found in novels from Defoe's, to Fielding's, to Scott's, to Dickens's, to Eliot's. Literary orphans are therefore striking embodiments of an early and ongoing tension between probabilities in the novel and what Barbauld calls "the real tendencies of things."

Nonfictional writings, including works by Henry Fielding and Daniel Defoe, further illustrate this tension. As a local magistrate, Henry Fielding administered the Poor Law, studied its history, and proposed his own reforms. His work *An Enquiry into the Causes of the Late Increase of Robbers* (1751) outlines the state of the Poor Law ("The Overseers may compel Children to be Apprentices, and may bind them when they shall see convenient; till the Man-child shall attain the Age of 24" (53), Fielding quotes), and proposes amendments to it, including changes in enforcement ("so very faulty and remiss hath been the Execution of these Laws, that an incredulous Reader may almost doubt whether there are any such existing" (85)). John Fielding, Henry Fielding's half-brother, published detailed plans for an orphan hospital, *A Plan of Asylum, or, House of Refuge for Orphans and Other Deserted Girls* (1757), and subsequently penned *A Plan for a Preservatory and Reformatory for the Benefit of Deserted Girls, and Penitent Prostitutes* (1758), in which he at once decries the state of abandoned children on London streets, and refers to them as "objects" of charity, who, if unattended, will become "objects" of public justice (3). Henry Fielding's own plan for a workhouse, *A Proposal for Making an Effectual Provision for the Poor* (1753), reveals hangings, not weddings, at the forefront of his imagination. For all his sympathy with "the young, unprotected" children covered under his plan (6), Fielding casts today's orphan as tomorrow's criminal, even proposing that persons of "low degree" carry a pass while traveling, or risk being sent to a house of correction (25). His sketch for a work house exemplifies the

same attention to detail (fig. 3) that many readers detected in *Tom Jones*, four years earlier (fig 4).

Figure 3, Henry Fielding, *A Proposal for making an Effectual Provision for the Poor* (8).

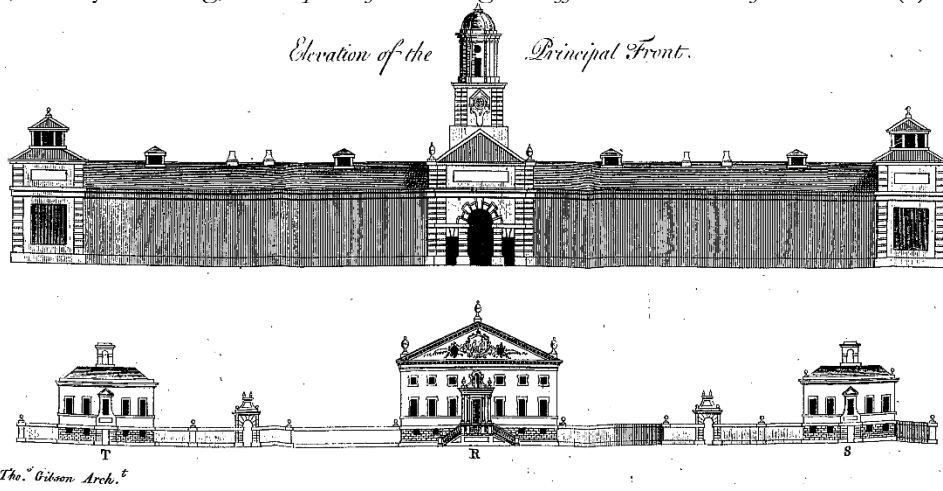
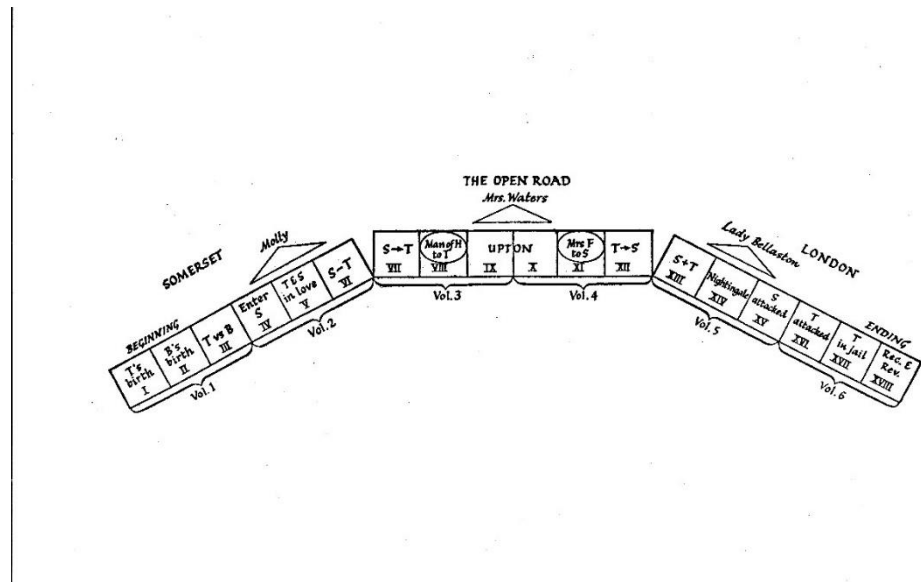


Figure 4, Frederick Hilles, “Art and Artifice in *Tom Jones*” (786). Following Dorothy van Ghent’s likening of Fielding’s novel to a Palladian mansion (80), Hilles diagrams the plot of *Tom Jones* on Ralph Allen’s home (Prior Park) to illustrate the point.<sup>23</sup>



Fielding’s fictional and factual plans promise, like Mr. Allworthy’s house, to be “as commodious within, as venerable without” (42). The visual coincidence of these two structures highlights the differences between the futures of the children Fielding imagines within them. While Tom

<sup>23</sup> Wolfram Schmidgen points out that critical focus on Allen’s home has obscured the fact that Allworthy’s home is Gothic, not Palladian: “Fielding’s archetypal English manor is not crowned by a neoroman villa, but by a Gothic mansion” (150), Schmidgen writes.

Jones's every meander leads him toward wealth and familial connection, his factual counterparts might hope at best to become honest laborers, continually confronted with overwhelming suspicion of criminality. (The London Foundling Hospital's charter hoped to find "useful hands" in the foundlings who might otherwise be "bred up" into "idleness, beggary, or stealing" (qtd. in Hanway 18).)

The fact that Fielding's novel tells a different story is symptomatic of the general tendencies of narrative fiction. Below, a sample of fictional orphans from 1748 (*Tom Jones*) to 1853 (*Bleak House*) illustrates the trend (Table 1).

Table 1, A century of fictional orphans, 1748-1853.<sup>24</sup>

	<b>A know-nothing, start to finish</b>	<b>Recovers crucial piece of family history</b>	<b>Stable &amp; working knowledge of family history</b>
<b>Lot improves</b>	Harriet Smith (1815) Heathcliff* (1847)	<b>Tom Jones*</b> (1748) Humphry Clinker* (1771) George Dennison (1771) Emmeline Montreville (1788) Emily St. Aubert (1794) Harry Bertram* (1815) William Lovel* (1816) Henry Morton* (1818) Roland Graeme* (1820) <b>Oliver Twist*</b> (1837) Catherine Linton (1847) <b>Esther Summerson</b> (1853)	Jane Eyre (1847) Hareton Earnshaw (1847) <b>Charlotte, Emma &amp; Tom Neckett</b> (1853)
<b>Lot stable</b>		Darsie Latimer* (1824) Lilias Redgauntlet* (1824)	Becky Sharp* (1851) Prince Charles Edward Stewart* (1824)
<b>Lot worsens</b>	Caleb Williams* (1794) <b>Jo*</b> (1853)		<b>Betty Barnes</b> (1753) Cecelia Beverley (1782) <b>Richard Carstone</b> (1853) <b>Ada Clare</b> (1853)

Key: \* indicates suspicions of criminal behavior  
shading marks likely experiences for factual orphans

<sup>24</sup> Novels included: *Tom Jones*, *The History of Betty Barnes*, *Humphry Clinker*, *Cecelia*, *The Mysteries of Udolpho*, *Caleb Williams*, *Emma*, *Guy Mannering*, *The Antiquary*, *The Abbot*, *Redgauntlet*, *Oliver Twist*, *Jane Eyre*, *Wuthering Heights*, *Vanity Fair*, and *Bleak House*.

**bold** indicates mention of the Poor Law

Certain placements might be contested. Is Catherine Linton's discovery of her cousin's existence really the kind of recovery this chapter considers? Might a newfound will constitute an important piece of family history for Richard Carstone? Does placing Heathcliff under "lot improved" invite a Krookian combustion for us all? But I imagine the point will hold: fictional orphans enjoy great(er) expectations. Not least among these expectations is material gain (note the population-heavy top row).

Cheryl L. Nixon's *The Orphan in Eighteenth-Century Law and Literature* (2011) surveys this divergence between factual and fictional orphans and argues that narratives about orphans, both factual and fictional, tend to fixate on questions of value. While in non-fictional writing, Nixon observes, writers focus on institutional reform, fiction tends to ignore institutions (note how few names are bolded), and instead represents sudden windfalls, private aid, and hefty inheritances. As Nixon argues, fictional orphan narratives chart material acquisition; most reside in the top row of the chart, "lot improved." Nina Auerbach similarly observes a "flashing mutability of being" deriving from orphanhood for Moll Flanders and Becky Sharp. Becky and Moll, Auerbach writes, see "money and position as the only real determinants of identity" (408), since all other forms of identity seem lacking. (Not coincidentally, counterfeit abounds in these narratives. Moll, Pip, and Becky are all keenly aware of their own ability to pass in different circumstances for different things, unfettered—or, at least, less fettered—by a stable past.)

Though these accounts demonstrate the tendency of fiction to focus on economic circumstance and social value in orphan narratives, neither asks why orphans are at the center of so many novels, and why their plots inspire so little critical attention to their obvious improbability (very few orphans populate the blue zones of the chart, where most factual counterparts would reside). Answers to these questions, I suggest, lie in the orphan's age-old tendency toward a second improbable acquisition: a past. In what follows, I argue that orphan plots<sup>25</sup> persist in fiction in order to do much more than consider questions of economic value. Rather, orphan plots survive and prosper because their recoveries—of parents and familial connections, and perhaps of wealth too—offer a near-magical trapdoor into unknown historical pasts.

If, as Nixon remarks, the child becomes a nexus of "social, moral, and economic challenges" in both factual and fictional narratives (41), then orphans provided a single point of departure for conversations about legal reform and economic possibility. The orphan could figure flexibly as both an individual case and a symptom of a widespread social pressure, as private subject and public ward. From the beginning of the eighteenth century, orphans embodied a link between citizen and nation, lost and living histories, personal and national identity. Parentless children encapsulated the enigma of a discontinuous, partially unknown past: effects, whose causes had become poignantly inaccessible, whose history had become, as Fielding might put it, a "blank" in the "grand Lottery of Time" (*Tom Jones* 76). Only fiction, aided by the conventions of romance plotting, could begin to fill in these blanks.

## Scott's Orphans

"They have one title to indulgent compassion," Scott wrote to Maria Edgeworth, "which

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<sup>25</sup> I use "orphan plot" to refer to fictions in which orphans make significant recoveries of previously undisclosed relations or property.

is, that they are a sort of orphans” (17). Scott was referring to his “attempts in poetry,” but he might more accurately have been describing his novels. In their early years, only the tag-line “by the Author of *Waverley*” assured their sibling status. Eager fans raced to reunite novels and novelist by searching out the author. As in many fictional orphan plots, this quest was comically easy; authorship was an open secret long before Scott’s public acknowledgment of it in 1827 (*Guy Mannering* xxxv). With satisfying symmetry, the novels routinely draw on the narrative tradition of orphans’ acquisitions. Often, as in *Tom Jones*, a newly-discovered past stabilizes wobbly finances and resolves marriage plots—Roland Graeme and Harry Bertram, for example, marry and receive inheritances on the strength of their newfound histories (*The Abbot* 452; *Guy Mannering* 353). But Scott’s orphan plots wear their rue with a difference: improbable familial recoveries persist, though their focus has shifted. Allies and uncles replace the incest threat posed by sisters and mothers for Darsie Latimer, Edward Waverley, Henry Morton, and other Scott protagonists, who find themselves at risk of violating their origins politically rather than sexually. Routinely, a recovered political identity complicates the orphan’s relation to the prevailing political order, sunders him from previous connections and ambitions, and connects him directly to radical, often revolutionary politics. This plot structure, I argue, re-forms the improbable journey traced by orphans from Oedipus on down to Tom Jones. Scott’s plots replace ruptures (and taboo sutures) in the family—patricide and incest—with tears in the fabric of the nation—revolution.

Nowhere is this shift more striking than in *Redgauntlet*, in which Scott contemplates ruptures of both kinds. Following *Waverley*’s (1814) depiction of the 1745 Jacobite rebellion, *Redgauntlet* tells the counterfactual history of an attempt to raise a third rebellion, taking place in 1765 and fronted by a middle-aged Bonnie Prince Charlie. Darsie Latimer, the novel’s protagonist, is the epitome of Nixon’s wealthy fictional orphan. Comfortably independent, he has enjoyed an excellent education, and expects a “large fortune” upon turning 25 (13). The novel opens on Darsie’s twenty-first birthday, as he quits the secure hospitality of the Fairford family and the companionship of his best friend Alan Fairford, setting out in search of adventure.

Darsie’s letters to Alan alert us immediately that he is not merely an orphan, but a properly fictional one: he has no knowledge of his past, a loss he declares (and bemoans) as soon as he puts pen to paper. “I am a solitary individual,” Darsie laments, “having only one kind heart to throb in unison with my own” (16). That one heart, Alan Fairford, is an elective affinity, but Darsie reconstitutes it as patriarchal, telling Alan “before I knew thee, I knew nothing” (14). Crediting Alan with his very creation, Darsie gushes that Alan has “made me an historian, a metaphysician” and “almost made an advocate of me” (14, 15). Only a few mysterious hints remain of Darsie’s actual relations: he has fragmented recollections of his mother, is assured that he is English, and has received a mysterious warning that he must refrain from going to England until he turns 25. “[I]t is recommended,” Darsie reminds Alan, that “I shall forbear all enquiries concerning my family, and so forth, for the present” (14). Darsie ignores this vague recommendation, and thinks about little else. We learn that Darsie has long spent his leisure time reading novels and contemplating his unknown origins—activities the novel posits as related, perhaps even equivalent. He could be anyone, he ruminates. “I might think of myself the son of some Indian director,” he muses, “or rich citizen who had more wealth than grace, and a handful of hypocrisy to boot, and who was breeding up privately, and obscurely enriching, one of whose existence he had some reason to be ashamed” (14).

Alan has heard this story rehearsed often—perhaps rather *too* often. “I repeat the little

history now, as I have a hundred times done before,” Darsie apologizes, “merely because I would wring some sense out of it” (17). The only sure link Darsie finds between past and present rather self-servingly connects his present indeterminacy to his patchy history. Mr. Fairford’s complaints that Darsie has “little solidity” and is “unstable as water” reflect Darsie’s own contention that he can accomplish little, given his limited sense of identity (21). Mr. Fairford worries particularly over Darsie’s predilection for fiction—his habit of reading “idle trash,” Mr. Fairford remarks, “at least twenty times over”—including, as Alan recalls, *Tom Jones* (21). As Mr. Fairford sees it, Darsie has chosen fiction over law, and therefore over history (law, for Mr. Fairford, *is* history—Scottish law dates back to “the ancient code of the Roman Empire” (22).) Darsie remains only “almost” an advocate: the strategies he deploys as he narrates his own past disclose the influence of his all-too-frequent rereading. Larding his “little history” with conjectures (“the faint, yet not improbable belief often has come across me,” he muses, “that your father knows something more about my birth and natural condition” (16)), Darsie recounts what little he knows for the umpteenth time, attempting to “wring some sense out of it,” as if slight variations in the retelling might yield a connection that previously slipped by, unnoticed, or, to put it another way, as if he believes that a story’s very telling might summon its missing parts.

Darsie’s suspicion that Alan’s father knows more than he tells might be extended to almost every other adult in the novel. Peter Peebles, Nanty Ewart, Wandering Willie, Mr. Herries of Birrenswork: each could easily fill in the gaps of Darsie’s story. Arriving in Dumfries, Darsie bounds into a quicksand so charged with his identity that a good deal of it comes sloshing back to Edinburgh shortly thereafter. Mr. Herries of Birrenswork (Darsie’s uncle, Edward Hugh Redgauntlet) and “She of the Green Mantle” (Darsie’s sister, Lillas) hurry north, on the one hand to confirm Darsie’s identity, and on the other, to warn Darsie of the threat his identity might pose (85). Unknowingly inside his uncle’s house, Darsie carefully examines a flagon displaying his own “armorial bearings” (38); later, he speculates at length on “the character of Mr. Herries” without the least suspicion that his musing might bear significantly on his own pressing questions (206). Even Darsie’s most stodgy dinner invitations—so devoid of promise that he neglects them—come from family: Provost Crosbie’s wife is the Laird of Redgauntlet’s cousin (230). Other characters, stunned by Darsie’s inability to grasp who and where he is, refer to him as blind, deaf, suicidal, and crazy (34, 126).

To some readers, the ending of Darsie’s romance seemed abrupt. The *British Critic* complained that “the love affair, very promising in prospect, is nipt in the bud by the discovery of the near relationship of both parties” (186). The novel certainly dispels the prospect rapidly. Darsie’s “fever-fit of love”

departed like a morning’s dream, and left nothing behind but a painful sense of shame, and a resolution to be more cautious ere he again indulged in such romantic visions. His station in society was changed from that of a wandering, unowned youth, in whom none appeared to take an interest, excepting the strangers by whom he had been educated, to the heir of a noble house, possessed of such influence and such property, that it seemed as if the progress or arrest of important political events were likely to depend upon his resolution. (334)

Scott replaces the worn-out improbability that Darsie and his Dulcinea might be “ower sibb”



(*The Antiquary* 316) with the prevailing worry that Darsie might betray his newfound identity politically. The language in which Scott couches Darsie's discovery echoes the oft-traversed passage of *Waverley* when Edward Waverley "felt himself entitled to say firmly, though perhaps with a sigh, that the romance of his life was ended, and that its real history had now commenced" (283). Like Waverley's sigh, Darsie's discovery announces at once a shift in the hero's reading strategies and in the novel's attention. For this novel, and for those that follow, private blunders like the incest motif persist only as a feverish shadow of the plot's new direction: the progress of influence and property, and the resolution of "important political events." Darsie's feelings are indulgent and romantic, fever-fits and day-dreams; his mistaken affection precedes the plot, but fails to determine it. Darsie's immediate desire for his sister signals little more than the sad realization that he is ill-equipped to cope with the world he has inherited, of which Lilius comprises only a part. Influence, property, political events, and the pressing demand that he employ all three toward *resolution* (a word Scott repeats insistently) eclipse her. One unlikely plot gives way to another.

Darsie awakens from his (and the novel's) "fever-fit" of love to face an apparent choice between the "progress or arrest" of the political destiny he has inherited. If he acts at all, Darsie cleaves to a particular familial past: on the one hand, to his father and uncle's Jacobite allegiance, or on the other, to his mother's resistance to the politics of the Redgauntlets and the violent confrontation that Hugh Redgauntlet assures him will ensue. In either case, he risks not only his own death, but responsibility for a violence that far exceeds him. Contrary to his expectations, his acquisition of relations only confirms his "watery nature," and Darsie declines to act at all. Though Redgauntlet insists that his nephew's actions belong to a monumental, national scale ("thine own fate—that of thy house—that of Britain herself, are at this moment in the scales"), Darsie weighs in with only the most pitiful interventions, observing the futility of the Jacobite cause in his journal (366).<sup>26</sup>

For Scott's critics, Darsie's indecision established the novel as a sorry younger sibling of *Waverley*. The *Caledonian Mercury* observed that the "hero is as usual, an absolute ninny, drifted about by every wind that blows" (641). Similarly, *The Westminster Review* declared Latimer "a true son of the Waverley family, infirm of purpose, pliant, and the creature of circumstances" (191). Readers contended that the novel promised a supremely active denouement, pointing to the apparently unnecessary convergence of characters at the novel's end. Lady Louisa Stuart "felt disappointed [...] at Wandering Willie's not coming forward more effectually after that very interesting scene of using old tunes as a sort of telegraph. I thought he was to be a prime agent and then I heard no more of him" (203). As Senior put it, the novel seemed to intend that Darsie's "striking exertions of ability and determination" and Wandering Willie's intrepid fiddling unite in a fantastic escape. As Ian Duncan puts it, "[e]veryone in the novel turns up, but *in order* that their diverse agencies not converge into a unified narrative engine. Bathos and confusion reign" (*Scott's Shadow* 263, italics mine). The Jacobite "cause" crumbles, alongside the more obvious causal logic of kinship relations, which are reconstituted, for Duncan, only in sentimental terms. A series of apparent narrative promises—of armed rebellion, fantastic rescue, meaningful discovery of kinship—follow the incest plot in their untimely demise.

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<sup>26</sup> This remarkable passivity twins Darsie with that other orphan of the novel, the Pretender, who waits and watches as his splendid return fizzles out. But similarities end quickly. Darsie, who has grown up reading and re-reading *Tom Jones* while speculating on his own past, cannot match Charles Edward's "rash and inflexible" insistence that his followers' loyalty is "due to me as my birthright" (8, 379). The Pretender's all-too-certain familial past—and the future this past demands for him—contrast Darsie's lingering uncertainties.

With this demise, Darsie “is saved,” as Nassau Senior complains “not only from having to act, but even from having to make up his mind” (154). An early letter from Alan to Darsie anticipates Senior’s rebuke, chiding Darsie for his apparent expectation that “[t]he chance that the mystery, as you call it, which at present overclouds your birth and connexions, will clear up into something inexpressibly and inconceivably brilliant; and this without any effort or exertion of your own” (24). Alan’s mocking account proves prophetic. Darsie’s mere entry in the regions of the Solway summons a threatening cloud of “birth and connexions,” which eventually clears to reveal a romantic history and an open future. All this, with no “effort or exertion.” Stuck in the orphan plot, Darsie enacts that plot’s transformation, even as the plot fails to transform him.

Scott was concerned with readerly expectations as he wrote, worrying to James Ballantyne that the novel’s title might “[induce] people to think the work is a tale of Chivalry—and disappointment is a bad thing” (v). Many readers did feel disappointed by the novel, if not by its title. Complaints dwell instead on the expectations evoked by the conventional forms and plots interwoven through the novel: from its epistolary opening to the diary entries, tales, and ballads interwoven within it. As one reviewer put it, “in course of his work, the author appears to have changed the plan on which he originally set out, and to have adopted another” (*The Edinburgh Magazine* 641). Literary conventions in *Redgauntlet* always seem, like Darsie, to be at once passive and on the move. In the orphan plot’s all-too quick fulfillment, Scott opens new possibilities for the historical novel, and forecloses its incestuous traditions. Just as *Redgauntlet* differs from the other *Waverley* novels by offering a counterfactual history—a story of possibility, rather than of actualization—so too does the orphan plot which structures the novel mark a new direction for narrative form: the orphan marks a gateway from a private drama to a public present to a public past.

To put all this another way, Darsie Latimer’s experience in *Redgauntlet* underscores a shift in plot that Scott’s novels had forged ten years since. The historical novel, as Scott frames it, depends on the repurposed orphan plot. For M.M. Bakhtin, the “major task of the modern historical novel” has been to “find an historical aspect of private life” relating “individual life-sequences” to “the life of the nation, the state, mankind” (217). Scott’s use of the topos is one solution to this problem, bringing about an inevitable intersection of public and private spheres. As Scott’s orphans encounter their origins, they draw the novel into national pasts that displace and dispel the family romance. Each orphan confronts the perturbations of a suddenly-arisen past, laboring to situate it in an already-formed personal and national present. (Darsie’s temporizing is by no means a universal solution—Edward Waverley, Roland Graeme, and Henry Morton wind up bearing arms in battles over which they are, to put it mildly, confused.) In each case, a bourgeois property plot and elective affiliations supersede pressing familial demands. But the necessity of genetic relation as an entry way into historical relation remains. Darsie recovers his family, and it turns out not to matter: his newfound relations do not facilitate a good marriage, shape his aims and projects, or cohere his vexed sense of self. Scott evokes each of these possibilities, and lets each slide by, unrealized. Instead, Darsie’s longed-for recovery serves *only* as a gateway for Scott’s readers into national history. The passivity of Darsie’s recognition echoes readerly experience—unknowingly attached to the pasts that Scott depicts, we watch as they come into being, ever awaiting a resolution that, Scott tells us, we can only experience in the guise of the passive witness. *Redgauntlet*, Scott’s “most astute self-commentary” (Chandler 221), “an elaborate study of [Scott’s] own methods as historian and romancer” (Kerr 102), lays bare the fundamental necessity of the pastless child for Scott’s historical project.

## The Pattern of *Bleak House*

For Scott, orphan figures plot the connection between public pasts and presents. Dickens's orphans rarely theorize the relation between past and present: little Oliver Twist's familial acquisitions recall Defoe and Fielding's orphan plots, rather than Scott's. Few of Dickens's subsequent orphans—Smike of *Nicholas Nickleby*, little Johnny of *Our Mutual Friend*, or Mary Graham of *Martin Chuzzlewit*, among others—approach Scott's orphan plot so nearly. Symptomatic of Dickens's "remarkable preoccupation with fractured families" (Waters 29), most Dickens orphans do not retrieve biological ties. Instead, adoptive families grow up around them; they become members of what Helena Michie calls Dickens's "contingent communities" (134), or, as Holly Furneaux puts it, part of "Dickens's many adoptive and fostering households" (154). In these formulations, Dickens's orphans trace alternative social configurations and elective family formations, more often than they recover pasts that redefine the present. It's all the more interesting, then, that Dickens turns to the orphan plot in *Bleak House*. *Bleak House*, that most littered of novels, bursts with lost pasts, and—not coincidentally, I'll argue—with orphans. Each of the many orphans in *Bleak House* embodies a particular relation to a private past, ranging from Jo (rendered oblivious to his immediate context by grinding poverty) to Esther (whose longing for her parents presages her discovery of them). Reading Esther and Jo as two poles of Dickens's updated orphan plot, I argue that Dickens's orphan figures literalize a break from the pernicious cycles that the novel represents—a break that offers the faint, if improbable, possibility of a new kind of deliberative relation to the past.

*Bleak House* depicts orphans of all kinds. There are very poor orphans: little Charlotte, Emma, and Tom Neckett. There are Ada Clare and Richard Carstone, middle-class orphans whose only connection to their families, a stake in Jarndyce and Jarndyce, renders their lives a "heap of uncertainty" (151). There is the orphan in literary representation—the song of the peasant boy, which "always made [Skimpole] cry" (386). There are de facto orphans: George Rouncewell, who has willfully lost touch with mother and brother, and the Jellyby children, who lead lives remarkably lacking in parental guidance. Mr. Jellyby considers them "Indians," so that "best thing that could happen to them was, their being all Tomahawked together" (369). The youngest Jellyby, the "self-named" (39) Peepy, doesn't just name himself with an epithet underscoring his neglect, but as John Jordan points out, enters the novel by staging his own birth *alone* (Jordan 10). (Esther Summerson finds him stuck between "two iron railings" and oversees his extraction, head first (36).) It is hard to believe that the Skimpole children face any greater level of guidance. Even responsible John Jarndyce cannot bother to count them. "Half-a-dozen. More! Nearer a dozen, I should think," he exclaims, before remarking, "[b]ut he has never looked after them. How could he? He wanted somebody to look after him" (64).

At the heart of the novel are two orphans, each constituting an axis of connection for the diffuse plots, places, and narrative strategies that make up *Bleak House*. The first of these is Jo, who in (some of) Mr. Chadband's words, is "[d]evoid of parents, devoid of relations" (320). His very name signals privation—two spare letters, painfully sounding out emptiness. Though Mrs. Snagsby believes that he is her husband's illegitimate son, the novel presents this belief (and along with it, the belief that Jo might belong to any of its characters) as darkly comic. Jo dies "devoid of relations," but not devoid of connections, a word which the novel contemplates as a potent substitute for familial obligation.

What connexion can there be, between the place in Lincolnshire, the house in town, the

Mercury in powder, and the whereabouts of Jo the outlaw with the broom, who had that distant ray of light upon him when he swept the churchyard step? What connexion can there have been between many people in the innumerable histories of this world, who, from opposite sides of great gulfs, have, nevertheless, been very curiously brought together? (197)

This passage has “moved on” through almost every critical discussion of the novel. Crucially, Jo is “unconscious of the link, if any link there be”; he insists repeatedly that he knows “nothink” (197). Because Jo—and readers—have no access to knowledge to Jo’s world beyond its immediate muddy workings, the connection remains simply the “whereabout of Jo,” at the heart of the passage. Driven by the vague imperative to “move on,” Jo’s journeys string the novel together. Shedding “the light of Terewth,” as Mr. Chadband would put it, wherever he goes, he identifies Lady Dedlock as the bejeweled woman in search of Nemo’s grave, links Hortense, Lady Dedlock, and Esther (“is there THREE of ‘em, then?”), befriends Nemo, Mr. Snagsby, Allan Woodcourt, and George Rouncewell, and knits the spaces and places of the novel (churchyard, house in Lincolnshire, and so on) together. And he infects Esther with the smallpox that malignantly literalizes “connection” for the novel, re-figuring Esther’s face, thereby severing her only visible tie to her mother. Yet like the London mud, Jo is “made of nobody knows what, and collects about us nobody knows whence or how” (123). Jo knows no past, and the novel recovers none for him. He dies while repeating the Lord’s prayer (presumably for the first time) after Allan Woodcourt, unaware of its meaning and origins. The poignant inaccessibility to Jo of context renders him always an unwitting axis of connection, unable to grasp the richly complex plot charted by his movement.

Opposing Jo’s experience of a radically decontextualized flurry of objects and persons, we have Esther Summerson’s slow progress toward a legible familial history. Esther is named, the novel reminds us, after the Biblical orphan whose queenly interventions restore political power and purpose to her scattered people. Married to Woodcourt and settled in a Bleak House of her own, Esther pens one of the novel’s two narrative threads. Laura Peters has argued that Victorian fiction figures orphans as chronic outsiders, “scapegoats” necessary to reinforcing family norms (18-19). Esther is certainly set apart. “You are different from other children,” Miss Barbary, her godmother, explains to her: “You are set apart” (19). Contrary to Peters’s claim, Esther’s difference marks her not so much as scapegoat or outsider, but as a site of possibility—for Calvinist election, in Miss Barbary’s view—as well as for Jarndyce, as a little girl “in need of a protector,” and for readers, as an orphan whose interest in her past suggests that its recovery may well plot the novel. Esther’s narrative opens as she recalls her childhood as an orphan, longing for origins and identity, a longing that cycles through the novel. This recovery seems all the more likely, given the novel’s emphasis on Miss Barbary’s extreme efforts to eclipse Esther’s identity. In conversation with Esther, Jarndyce recalls Miss Barbary’s letter, telling him

of a child, an orphan girl then twelve years old, in some such cruel words as those which live in your remembrance. It told me that the writer had bred her in secrecy from her birth, had blotted out all trace of her existence, and that if the writer were to die before the child became a woman, she would be left entirely friendless, nameless, and unknown. It asked me to consider if I would, in that case, finish what the writer had begun? (213)

Esther’s (and her readers’) first revelation of her identity takes place only through Jarndyce’s

spoken account of Miss Barbary's written declaration of its lack. Her past has been "blotted out," as if written on paper. Even the paper detailing this absence has disappeared. Traceless, nearly nameless, almost entirely unknown, Esther exists only by word of mouth. In a novel partly brought into being by Esther's writing, depicting a world overflowing with written documents, Miss Barbary has nearly managed to un-write her, to blot her out.

Through her narrative, Esther rewrites her identity, recounting her progress toward friends, name, and recognition. She also charts her discovery of parents—a record not so much of recovery, but of newfound loss. Esther's father, we find, is a sailor, "reported drowned" (747). Like all lost sailors worth their salt, he has come back. Though Esther passes his door at Krook's, her knowledge of him comes too late, a belated recognition rendered all the more painful by Esther's perseverance in telling her story from the perspective of her past self. He dies "with no more track behind him, that any one can trace, than a deserted infant" (131)—yet another orphan, of sorts. Esther does meet her mother, the "[b]eautiful, elegant, accomplished, and powerful" (349) Lady Honoria Dedlock, who looks so like Esther that Esther immediately recalls "the lonely days at my godmother's; yes, away even to the days when I had stood on tiptoe to dress myself at my little glass, after dressing my doll" (224). Esther sees her past (rather than future) self, exclaiming "And yet *I—I*, little Esther Summerson, the child who lived a life apart, and on whose birthday there was no rejoicing—seemed to arise before my own eyes, evoked out of the past by some power in this fashionable lady" (225). Tellingly, Esther's recognition evokes her long privation of identity, rather than her recovery of it. Esther's subsequent loss of her mother echoes this dissatisfying recognition: Lady Dedlock insists that they "never could associate, never could communicate, never probably from that time forth could interchange another word on earth" (450), an insistence that becomes all too real with Lady Dedlock's death. Esther's orphan plot only literalizes her orphanhood.

In conclusion, I borrow terms from Edward Said's essay "Secular Criticism" to suggest that Dickens uses Esther's orphan plot to explore the possibility of replacing filiative relations "by birth, nationality, profession" with affiliative connections "by social and political conviction, economic and historical circumstances, voluntary and willful deliberation" (25). For Said, modernity charts the replacement of filiation with affiliation, a movement from nature to culture. The "[c]hildless couples, orphaned children, aborted childbirths, and unregenerately celibate men and women" of high modernism reveal "the difficulties of filiation" (17), laying bare the reality that "few things are as problematic and as universally fraught as what we might have supposed to be the mere natural continuity between one generation and the next" (16). In Said's explanation, celibacy and orphanhood short circuit filiation, replacing it with consciously and voluntarily selected affiliations. Stuffed as it is with characters who have lost their parents, *Bleak House* offers a series of test-cases for Said's point. The novel's children inhabit the world variously without filiation (Jo), reactively rejecting it (Caddy of early days), and longing to recover it (Esther). Yet each recovery Esther records reflects a new loss: she encounters her mother, only to be disavowed by her; she walks by her father's door, unaware of his identity. Though her oppressively stoic narrative strategies only hint at the depths of this experience, she is orphaned not once, but twice. Esther therefore learns to experience even familial relations affiliatively, relations she achieves through narrative process, rather than through biological inheritance. The orphan, like Said's critic, "enables, indeed transacts, the transfer of legitimacy from filiation to affiliation" (24). Esther goes even further, overwriting even her genetic history as itself a chosen affiliation that she avows through narrative.

Unlike Jo, Esther is the epitome of the fictional orphan: she has lost her parents, and the novel finds them for her. But her recovery is different from Tom Jones's, Darsie Latimer's and Oliver Twist's. Though Esther mourns the blank space of her past, the world of the novel—so full of unnecessary scrawl—seems rather to cherish it. It does so because it is a novel in search of a new kind of relation to histories, from the familial to the far-reaching and public. Esther can be neither a duplicate of her mother, nor a resentful reactionary, because she grows up in the shadow of her mother's absence. In a novel peopled with parents like Mr. Turveydrop, Mrs. Jellyby, and Horace Skimpole, orphans like Esther signal at once public failure, and blessed relief from the miserable cycle of familial neglect and reactionary departure. The novel abhors mindless duplication: from the French terror redeployed on English soil in Hortense, to copied legal documents, unthinking self-perpetuation is the villain of the novel. Yet there is one kind of duplication endorsed by Bucket (a good sign) and George Rouncewell (perhaps even better). "You're a pattern, you know, that's what you are" Mr. Bucket tells Esther admiringly (704). George Rouncewell agrees, independently calling Esther "a pattern young lady" (747). Patterning suggests a deliberation that unwitting duplication lacks. And this is how Esther's narrative differs from Jo's. Statistically, Jo is the typical orphan, reflecting the frequencies Nixon documents so carefully. By contrast, Esther's growing awareness of the connections her plot traces her render her once more a child set apart, fully cognizant of the past that's brought her into not one, but two Bleak Houses (the first of which serves as a pattern for the second). The novel itself is built from a pattern. It is the Book of Esther (or half of it is). Like its Biblical predecessor, the book offers a fictionalized orphan narrative, built on the scaffolding of a moment of turmoil. *Bleak House* cross-pollinates this structure with newer orphan plots—with *Jane Eyre* (1847), whose heroine Esther briefly matches as an elder sage in a boarding school, and with narratives from Defoe's to Fielding's to Dickens's own.

If we read the novel as a reflection on patterns, then Dickens's curious ending—Esther's supposition of the return of her "old looks," an uncomfortably self-trivializing reflection—begins to make a new kind of sense. "You're a pattern, you know, that's what you are" Mr. Bucket tells Esther admiringly (704). Esther learns to see her mother as a pattern—first as one she does not know but longs to retrieve; after encountering Lady Dedlock, as a physical pattern that she has inherited; finally, as a past irretrievably lost through her mother's death and her own illness. Esther's physical link to her mother matters *not* because it affirms her beauty, but because it is the way in which Esther experiences her orphanhood directly. The very possibility of the return of her "old looks" stages on Esther's face the traumatic loss, recovery, and newfound loss her narrative has traced. Accustomed to the past's absence, and longing for its return, Dickens imagines the orphan as the site of a connection between past and present as yet untraced. The curious return of Esther's features (her mother's features) at the novel's close suggests that Esther can at once inhabit the pattern she has inherited, and redirect it. The orphan plot becomes for Dickens the transition from filiation to affiliation, from relations recovered to the network of connections and commitments that Esther arranges so carefully. Dickens retrofits the orphan plot into a pattern for change (though only of the domestic sphere): a way in which we might imagine the past as worth our recovering and mourning, even in the very act of departure from it. "What connection can there be?" remains, finally, a question—a deliberative choice over how to bring the past to bear on the present. It's a choice, Jo reminds us, dependent on the luxury of literacy—or of being the main orphan in a novel. Bleak indeed.

## Conclusion: Of Heathcliff and Harriet

Shortly before Darsie plunged into the Solway, another fictional orphan was urged take her lost past seriously. Early in Jane Austen's *Emma* (1815), we discover that Emma Woodhouse's protégée, Harriet Smith, "was the natural daughter of somebody." Austen summons and squashes the expectation that Harriet's "somebody" might be anybody of importance.

Somebody had placed her, several years back, at Mrs. Goddard's school, and somebody had lately raised her from the condition of scholar to that of parlour-boarder. This was all that was generally known of her history. She had no visible friends but what had been acquired at Highbury, and was now just returned from a long visit in the country to some young ladies who had been at school there with her. (19)

Readers like Darsie, schooled by over-reading *Tom Jones*, might expect these disavowals to be disingenuous: surely Harriet's "somebody" cannot persist undetected through the novel. Such readers perhaps share Emma's evident disappointment that Harriet's "somebody" might as well be nobody. Adopting Harriet as a pet project, Emma's

first attempts at usefulness were in an endeavour to find out who were the parents, but Harriet could not tell. She was ready to tell every thing in her power, but on this subject questions were vain. Emma was obliged to fancy what she liked—but she could never believe that in the same situation she should not have discovered the truth. Harriet had no penetration. She had been satisfied to hear and believe just what Mrs. Goddard chose to tell her; and looked no farther. (21-22)

Austen quietly opens Bakhtin's adventure time, and just as deftly closes it (152). The wild coincidences that take place in *Emma* must be confined to Emma's mind. Dickens would echo Austen in describing the intensely underground Miss Wade, in *Our Mutual Friend*. "She is somebody's child—anybody's—nobody's," Pancks explains, speculating,

Put her in a room in London here with any six people old enough to be her parents, and her parents may be there for anything she knows. They may be in any house she sees, they may be in any churchyard she passes, she may run against 'em in the street, she may make chance acquaintances of 'em at any time; and never know it. She knows nothing about 'em. She knows nothing about any relative whatever. Never did. Never will. (540)

Novels from *Caleb Williams* to *Wuthering Heights* to *Emma* to *Our Mutual Friend* leave orphan pasts unexplored. It is worth remarking, in closing, on the path not taken by the novels of this chapter—on novels that, like *Our Mutual Friend*, foreground other possibilities for lost children.

Take Emily Brontë's Heathcliff of *Wuthering Heights* (1847), an orphan so opposed to little Tom Jones that we might forget how similarly the two began. Heathcliff is a foundling. (Or

so claims Mr. Earnshaw, who brings him home.<sup>27</sup>) Unlike *Oliver Twist*, who enjoys the luxury of two “invented” names, Heathcliff only gets one, and it’s barely a name. Characters themselves remain throughout the novel befuddled by just who and what he might be. “[I]s he a devil?” Isabella muses, wonderingly (120). In an attempt to engage Nelly Dean as storyteller, Lockwood observes of Heathcliff, “He must have had some ups and downs in life to make him such a churl. Do you know anything of his history?” (29). “It’s a cuckoo’s, sir—I know all about it; except where he was born, and who were his parents, and how he got his money, at first” (30), Nelly replies. In a novel that seems to offer a sort of combinatorial genetics of identity, Nelly cannot explain the “surly wrinkles” and “thick brows” for which Heathcliff is repeatedly chastised (let “a good heart [...] help you to a bonny face” (50), Nelly urges him). But it’s Nelly, too, who attempts to leverage Heathcliff’s blank past as a way of validating an open future. Echoing Darsie’s opening reflections in *Redgauntlet*, Nelly encourages Heathcliff to speculate over a magical, adventurous past:

Who knows, but your father was Emperor of China, and your mother an Indian queen, each of them able to buy up, with one week’s income, Wuthering Heights and Thrushcross Grange together? And you were kidnapped by wicked sailors, and brought to England. Were I in your place, I would frame high notions of my birth; and the thoughts of what I was should give me courage and dignity to support the oppressions of a little farmer! (50)

We never discover how seriously Heathcliff takes Nelly’s encouragement. And if Heathcliff, like Darsie Latimer, journeys into his past when he quits Wuthering Heights, we never hear of it. Just like Harriet’s, Heathcliff’s unknown origins remain undisclosed, with major consequences.

Orphans, Austen and Bronte and Dickens remind us, need not recover anything. The fact that these writers could set out immensely plausible alternatives to the Moll Flanders and *Oliver Twists* of the novel makes such characters’ persistence all the more surprising. Recoveries continue at a rate that scarcely varies with publication date: not just Moll Flanders and Tom Jones, but almost every Scott orphan, and some of Dickens’s and many of Eliot’s, run headlong into their pasts. Why Scott continues this pattern, and why novelists following him choose to retain it, says a good deal about the capacity of novelistic plot for talking about the past. When orphans recover their histories, readers can fixate on the recovered past as a condition for, an explanation of, and even a solution to, the present. Scott harnesses this possibility as a way of talking about national histories through the lens of individual characters. Dickens figures the orphan as the embodiment of social rupture, but also as a point of departure—at once a pattern (or copy) of the past, and a pattern (or model) for change. In the following chapter, I will argue that Scott and Dickens use this improbable plot to explore a question often framed as a statistical one: how does revolution come about?

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<sup>27</sup> The pattern of bringing people without history back to the Heights recurs. “What she was,” Nelly tells Lockwood of Hindley’s new wife, “and where she was born, he [Hindley] never informed us; probably, she had neither money nor name to recommend her, or he would scarcely have kept the union from his father” (39).



### Chapter 3: Literary Revolutions: In Search of Lost Causes

It may seem, at first sight, a strange and even absurd proposal to suggest the composition of a History according to the idea of how the course of the world is to proceed, if it is to be conformable to certain rational laws. It may well appear that only a novel could be produced from such an intention.

Immanuel Kant, "An Idea Towards a Universal History in a Cosmopolitan Sense," 1784

#### Introduction

The "greatest entertainment" of all, Kames writes, would be "the history of a single event, supposing it interesting." Retold in such detail as to become palpably real, readers could experience "great mental enjoyment in our progress from the beginning to the end." Kames imagines historical narration as a series of "facts and circumstances [...] connected by the strongest of all relations, that of cause and effect," or "a number of facts that give birth to each other form a delightful train": that is, with rigorous exposition, historical relation might approach genetic relation (*Elements of Criticism* (1762) 670). To put it another way, Kames envisions cause and effect as so minutely connected that no single detail could be, as it were, orphaned. Though Kames does not say so explicitly, his logic suggests that when we learn to regard the events of the past as richly connected, we in turn become connected to them. However remote the history we encounter, we receive it as a lost inheritance.

The pleasures afforded readers by such a train of events are the more intense, when history's plots are so oft-traversed as to be well known. "The mind," observes Kames, "hath a propensity to go forward in the chain of history: it keeps always in view the expected event; and when the incidents or under-parts are connected by their relation to the event, the mind runs sweetly and easily along them" (671). Our absorption therefore depends on the degree of relation between "incidents or under-parts." Recalling the famous battle of Zama (202 BCE), Kames admits it is "long past."

But let it be spread out in a lively and beautiful description, I am insensibly transformed into a spectator: I perceive these two heroes in act to engage: I perceive them brandishing their swords, and chearing their troops; and in that manner I attend them through the battle, every incident of which appears to be passing in my sight. (92-3)

"[L]ively and beautiful description" transports Kames into a battle of world-historical importance. He sees every incident; indeed, he sees more than he might have seen as an actual witness, watching Hannibal and Scipio with equal attention. David Hume similarly imagines historical narrative to be entertaining in proportion to detail; the inaugural volume of *The History of England* (1754) a "full narration for those times, when the truth is both so well ascertained and so complete as to promise entertainment and instruction for the reader" (4). Adam Smith exacts similar requirements in *Lectures on Rhetoric and Belles Lettres* (1762-63), charging historians with preserving a unity that recalls Aristotle's requirements for drama in the *Poetics*. Though Kames, Smith, and Hume do not endorse historical fiction as such (and Smith openly derides novels), it

is hard to imagine any other form satisfying these demands. History written like a novel—or, perhaps, a novel written like history.

Kames's easy transition between narratives of genetic relation and those of world-historical events unwittingly prophesies a shift in the novel's attentions, most obvious in the novels of Walter Scott. This possibility was latent from the beginning: novels like *Tom Jones* and *The Female Quixote* spin plots from the recovery of past relations (in Tom's case, genetic; in Arabella's, causal). The orphan narrative epitomizes this kind of recovery, with its slow exposition of the ultimate causal relation: parentage. In the wake of extreme social change, the novel's capacity for exploring and exposing cause and effect could be easily repurposed. If novels could recover the origins of nobodies like Tom Jones and Moll Flanders, perhaps they might also uncover the origins of social order and disorder, identifying the movements underlying major historical change. Scott innovates by doing both at once, linking the one to the other. The novel could trace the orphan's recovery of origins, setting into motion an explanation of the lost causes of years gone by. Through this link, I argue, Scott moves from an entirely fictional recovery to one of historical and national importance. An improbable plot, inherited from romance and the early modern stage, becomes Scott's engine for historical narrative.

Though Scott's historical turn felt unprecedented to some early readers, he inherited diverse attempts to *relate* (in both senses) revolutionary history. Among these attempts were those of mathematics, a field that—despite a growing wealth of interdisciplinary accounts of the Romantic preoccupation with revolution—has been largely overlooked.<sup>28</sup> Long before the publication of *Waverley* (1814), mathematicians sought, like Scott, to map out what David Hume called “the most instructive and interesting” history of all: the “convulsions of a civilized state” (*History* 3). By the turn of the nineteenth century, the Marquis de Condorcet and Pierre-Simon Laplace had come to regard revolution as the most important social irregularity to be understood by means of probability logic. As Adolph Quetelet would later put it, the “measure of civilization of a nation can be found in the way in which it makes revolutions” (113). Condorcet, Laplace, and Quetelet attempted to use mathematics to explain historical happenings in carefully connected detail. The representational problems and the provisional solutions for mathematics are strikingly related to those of the novel. Both sought to define their new narrative strategies as successors of superstition, divination, and astrology; both ran into challenges in navigating between individuals and groups, and interposing historical fact with historical likelihood. In this chapter, I align Scott's novels with the then-emergent mathematics of history: the novels rely, I argue, on reasoning between likenesses, incorporating logics both probabilistic and antiquated to stage an examination of evidentiary paradigms. While mathematicians hoped to theorize social mechanics, I show that Scott's novels insist on the importance of the unpredictable, even within what might seem most predictable of domains: history. For Scott, reasoning about the past remains always speculative, forever generative of further speculation.

Scott's novels, then, are skeptical of Condorcet and Laplace's dream of a mathematics that might explain revolution. But mathematicians following Scott are nevertheless indebted to him. Ann Rigney credits Scott with creating “a highly portable form of memory” (1), “an

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<sup>28</sup> Literary critics have traced the relationship between revolutionary preoccupations in Romantic literature and related concerns in other fields—including history, gardening (Stephen Bending explores the merging of aesthetic and political discourses in histories and representations of the garden in the late eighteenth-century) and climatology (with Alan Bewell's recent demonstration that, for Percy Bysshe Shelly, revolution was always also “ecological reclamation”) (219).

imaginative template for articulating values and defining identities” (6). Following Rigney’s call for the study of the “multiple appropriations of Scott’s work in a whole range of cultural practices” (12), I track Scott’s formal solution to the problems of historical representation through the social mathematics that follows his novels. At the turn of the century, Laplace and Condorcet envisioned a mathematical explanation of social change, but could not construct it. In the decade following Scott’s death, with tools and data available to Laplace (indeed, in many cases either invented or popularized by him), British statistical societies produced ever-more-precise mathematical descriptions of the nation and its history. This progress was possible partly because of Adolph Quetelet’s ingenious construction of an average man as a representative of national character. Quetelet’s creation must have felt gratifyingly familiar to a public nursed on Scott’s novels, which tend to figure the social body through the single body of a fictional and (in many ways) “average” man: the eager acceptance that met Quetelet’s ideas drew on the language used to describe Scott’s heroes more often than on a detailed grasp of error curves. And the possibility of articulating a nation and its history through one man—a man of mediocre character, divided affiliations and wavering inclinations—depended on fictionality, the novel, and Scott.

## Fictional Histories

Writing a novel ought to be like describing a revolution. Or so claims Fielding in *Tom Jones*. “We intend,” the narrator declares, “rather to pursue the method of those writers who profess to disclose the revolutions of countries, than to imitate the painful and voluminous historian, who, to preserve the regularity of his series, thinking himself obliged to fill up as much paper with the detail of months and years in which nothing remarkable happened, as he employs upon those notable eras when the greatest scenes have been transacted on the human stage” (75). Patching classical poetics and historiography together, Fielding promises to disclose only the remarkable. Though he describes the method of historians rather than their object of study, a revolution of sorts threads through *Tom Jones*. So meticulously planned that some readers suspected Fielding of referring to an almanac in its writing, the novel unfolds during the Jacobite rebellion of 1745.<sup>29</sup> And yet Fielding hardly discloses that notable era’s remarkable events.<sup>30</sup> In *Tom Jones*, as in *Wilhelm Meister’s Apprenticeship* (1795), “revolutions and social upheavals do exist,” but “they are relegated to the background of the action” (Boes 276). When Tom quits Paradise Hall, he enters a countryside beset by national crisis, falling into step with two companies of soldiers marching north to fight the Jacobites. But in a novel in which Partridge’s Jacobitism is mere comic errancy, directly linked to his belief in demons, Tom’s insistence that his “chief End and Desire” is “a glorious Death in the Service of my King and Country” carries little

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<sup>29</sup> Suggested by F.S. Dickson (see Cross, *Henry Fielding* II, p. 189-93). Fredson Bowers challenges Dickson’s theory, noting that it would necessitate moon light long past the moon’s setting, Sophia’s theater attendance on a Sunday, and Tom and Sophia’s (unmentioned) marriage date, Christmas Eve (435-36).

<sup>30</sup> Several critics read the novel as political allegory. See Peter J. Carlton, who argues that Fielding “endows his characters with many politically significant traits” (361), Anthony Kearney, who reads Blifil as a fictional analogue to the young Pretender, and Martin C. Battestin, who reads Tom’s encounter with a “Company of *Egyptians*” as a parable of the values and dangers of absolutism.

consequence (439).<sup>31</sup> *Tom Jones* is a novel about the past and its recovery, but the individuals, rather than populations, absorb the narrative’s attention.

An orphan is at the heart of *Tom Jones*, and the national turmoil happening around him slips to the wayside. By contrast, Scott’s novels from *Guy Mannering* (1815) to *Redgauntlet* (1824) link national and personal disclosure as related representational possibilities (Table 1).

Table 1, Scott’s Orphan Heroes

Novel	Publication	Orphan	Backdrop
<i>Guy Mannering</i>	1815	Vanbeest Brown (Harry Bertram)	British empire's first military engagement in India
<i>The Antiquary</i>	1816	William Lovel (Lord Geraldin, Earl of Glenallan)	Falsely reported French invasion; French Revolution
<i>The Tale of Old Mortality</i>	1816	Henry Morton	Battles of Drumclog and Bothwell Bridge/Covenanter insurgency
<i>The Abbot</i>	1820	Roland Graeme (Roland Avenel)	Queen Mary's imprisonment & defeat
<i>Redgauntlet</i>	1824	Darsie Latimer (Sir Arthur Redgauntlet)	Fictional reprisal of the Jacobite rebellion

Prototypical orphan plots render these heroes intensely engaged in the social shifts occurring in their midst. In *Guy Mannering*, Harry Bertram secures his lost identity, Julia Mannering as a bride, and Ellangowan, his family estate. As a result, the fortunes of empire come home to roost: Guy Mannering plans his bungalow next door, ballasted with “Sicca rupees” (354). In *Redgauntlet*, Darsie Latimer recovers sister and uncle, along with a conflicting set of political commitments. These parallels between national and private contexts generate a new dimension of the narrative symmetry inherent in the orphan plot. In addition to private identities, orphan protagonists recover conflicted public selves, through which they come to embody the historical and national rifts surrounding them.

This plot structures only five of Scott’s twenty-four novels explicitly; in other words, Scott’s plots do not require orphans. Edward Waverley, Scott’s first and most famous fictional hero, is well acquainted with both his pro-Hanoverian father and his Jacobite-leaning uncle. He nevertheless undergoes social dislocation so temporally extended that one wonders if Scott had not yet hit on the supreme convenience of the orphan figure as a gateway into the tangled relations between past and present. In *Old Mortality*, Scott can land Henry Morton in the middle of revolutionary intrigue in pages. Waverley, by contrast, fumbles his way into a “rash engagement” in the ’45 through a concatenation of familial divisions and associations, cattle theft, an unfortunate romance, and postal machinations (241). If orphans are not necessary plot

<sup>31</sup> Various explanations are on offer for Fielding’s apparent reluctance to engage directly with the Jacobite cause. For Matthew Wickman, this neglect represents a generic choice, “restrain[ing] Jones from taking supposedly needless flight into Burney's peripheral ‘regions of Romance’” (69).

features for Scott, unstable parentage (especially patrimony) is; familial divisions mirror the public fault-lines that preoccupy the novels. The convenience of the orphan plot—its instant establishment of the instability on which Scott's mode of historical relation depends—remains striking.

However convoluted the chain of events by which Waverley lands in the middle of the '45, Scott's public felt newly transported into revolutionary history.<sup>32</sup> The *British Critic* deemed the novel “an early and awful warning” that should “inspire the nation with a jealous vigilance against the very first symptoms of [revolution's] recurrence” (Hayden 68). Looking back over Scott's entire body of work, Nassau Senior enthused that Scott “paints the passions which arm sect against sect, party against party, and nation against nation. He relates, either episodically or as the main object of his narrative, the success or failure of attempts which permanently affect the happiness of states; conspiracies and rebellions, civil war and religious persecution, the overthrow of dynasties and changes of belief” (3). For Senior, this “minuteness of detail” makes apparent how private and public “act and re-act on one another” (5-6). Critics agreed that this precision depended on fictional rendering. The *Monthly Review* gushed that “[t]he frame of the picture is fiction: but the delineation itself is as correct, minute, and spirited a copy of nature as ever came from the hands of an artist” (275). “[W]hen we study the history of rebellion in Waverley,” Senior writes, “we feel convinced that though the details presented to us never existed, yet they must resemble what really happened” (8). *Waverley* was, by these accounts, a thorough representation of the '45—so detailed that it could only be fictional.

A far cry from Fielding's depiction of Tom's brush with the '45! In Ian Duncan's words, *Tom Jones* treats public history as “a conspicuous irrelevance” (55); the plot is “less with or against than to one side of the current of public affairs, in the rural backwaters of an eternal squirearchy” (55-6). Setting Scott's novels by *Tom Jones* in this way marks a shift in the attentions of the novel, and critics have marked this contrast early and often. Robert Louis Stevenson credits Scott's “renewed and vivified history,” to the fact that “Scott took an interest in many things in which Fielding took none; and for this reason, and no other, he introduced them into his romances” (“Scott in Literary History” (1874)). “What, for instance,” Georg Lukács observes, “was only latent in Fielding, becomes with Scott the driving spirit of literary portrayal” (63). Lurking offstage in Fielding, revolution moves to the center of Scott's novels to become, as Marilyn Butler puts it, “more genuinely [Scott's] subject than Scotland is” (110). Crucially, as the *Critical Review* concedes in an otherwise disparaging review of the novel, Scott treats historical events “novel-wise.” By all accounts, Fielding wrote revolution into the chronology his novel, but bypassed examining the minute movements that set “the great state wheels” spinning (273). Scott turned back, and took a look. In so doing, he extended the novel's capacity for causal revelation—exemplified by the familial discoveries typical to the orphan plot—to the scrutiny of historical events.

## Mathematical Histories

Thomas Macaulay grumbles in “The Romance of History” (1828) that novelists and historians too often liken revolutions to “supernatural inflictions” coming about “without

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<sup>32</sup> Just how far the novels transport readers into the throes of revolution remains subject to critical debate. In “Bloodless Revolution and the Form of the Novel,” for example, Anthony Jarrells points out just how carefully Scott skirts bloodshed.

warning or cause” (92). Revolutions are instead “almost always the consequences of moral changes, which have gradually passed on the mass of the community, and which ordinarily proceed far, before their progress is indicated by any public measure” (92). In Reinhart Kosselleck’s words, revolution “indicates upheaval or civil war as well as the gradual, long-term change, events, and structures that reach deep into our daily life” (43). For Macaulay, Scott’s novels consistently relate the gradual and the sudden, laying bare the slow shifts underlying rapid change. Before Scott dispelled the supernatural metaphors plaguing historical accounts, Laplace and Condorcet thought extensively about mapping revolution’s gradual occurrence through probability mathematics. In what follows, I lay out accounts of revolution attempted by these mathematicians in order to analyze how Scott’s fiction inherits their mathematical theorization of history.

Condorcet offers his most substantive applications of probability in *Essai sur l’application de l’analyse à la probabilité des décisions rendues à la pluralité des voix* (1785), which contains groundbreaking results on voting and jury composition. Correctly deployed, probability could determine the likelihood of wrongful conviction by a jury and ascertain optimal jury count. Condorcet provides quantitative approaches to these questions, beginning a line of mathematical reasoning subsequently developed by Laplace, Siméon Denis Poisson, and Quetelet.<sup>33</sup> Later, Condorcet tried to establish similar methods for exploring the patterns of history. “We might even be nearing the time,” he muses a few years later, “when, in several branches of the political sciences, everything that reason alone can do will be at an end, and the application of calculus will be the sole means of progressing further” (“Rapport” [(1792-93) 113]). This application depends on “classifying observed facts,” and then “grasping easily the relationships between them” to determine “what the theory of combinations is to hypothetical facts” (“Rapport” 113-14). In the months of captivity in Paris leading up to his capture and death, Condorcet traced a poignantly optimistic history of the human intellect (*Esquisse d’un tableau historique des progrès de l’esprit humain* (1794)). In it, he predicts that probability would one day lend precision to historical analysis. The “application of the arithmetic of combinations and probabilities to [political] sciences,” he writes, “promises an improvement by so much the more considerable, as it is the only means of giving to their results an almost mathematical precision, and of appreciating their degree of certainty or probability” (275). Probability would offer a new way of studying history, explaining what had happened and why with a universally accepted degree of certainty. Condorcet’s optimism carries Leibniz’s jovial invitation (“Let us calculate, without further ado, and see who is right” (51)) to new domains.

Recognizing that applications of probability logic to history were in their “first rudiments” (276), Condorcet confines himself to vague hypotheses. He speculates, for example, that the American Revolution might have rendered the French Revolution possible, but fails to quantify this possibility. His explicit calculations are all the more interesting, offering some indication of Condorcet’s imagined strategy—and its limitations. In the sixth part of *Memoire sur le Calcul des Probabilités* (1784-87), Condorcet extends Voltaire’s effort to pin down precise dates in Roman history given basic actuarial assumptions about longevity and age at election. In the same work, Condorcet deploys probability to ascertain the accuracy and veracity of historical testimony of several unusual natural observations by Roman historians (an oft-discussed topic following Hume’s controversial “Of Miracles” (1748)), concluding via Bayes theorem that unlikely, long-dated historical testimony ought to be hugely discounted. The patchiness of these

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<sup>33</sup> For a detailed account of these developments, see Stephen Stigler’s *The History of Statistics* (186-195).

calculations confirms Condorcet's contention that the work of fitting probability logic to history was just beginning.

Laplace also believed that probability would one day explain the past. Pointing out an uncanny regularity in human affairs in his seminal treatise on probability, *Essai Philosophique sur les Probabilités* (1814), Laplace marvels that "[t]he ratio of annual births to the population, and that of marriages to births, show only small variations; at Paris the number of annual births is almost the same, and I have heard it said at the post-office in ordinary seasons the number of letters thrown aside on account of defective addresses changes little each year; this has likewise been observed at London" (62). This regularity ought eventually to render past and future predictable: "in a series of events indefinitely prolonged, the action of regular and constant causes ought to prevail in the long run over that of irregular causes" (62). If constant causes "establish and maintain societies," constant causes must also underlie their dissolution (62). History contemplated "from the point of view of the influence of constant causes would unite to the interest of curiosity that of offering to man most useful lessons" (63). We can learn that one nation's governance by another cannot last when "a vast sea or a great distance separates them"; distance must eventually render a state "sufficiently strong" to seek "natural independence" or instead "to unite it to a powerful state which may be contiguous" (63-4). Laplace anticipates that the regular forces governing social coherence and dissolution could be precisely predicted. Probability, "which commenced with the consideration of games of chance" would become one "of the most important subjects of human knowledge" (18).

Laplace made little progress. Acknowledging that all too often "the possibilities of simple events are unknown," he notes regretfully that "we are forced to search in past events for the indices which can guide us in our conjectures about the causes upon which they depend" (64). The unpredictability of the future sends us scouring the past's records for signs to guide our conjectures. Always, quantification remains elusive: "[i]t is almost always impossible to submit to calculus the probability of the results obtained by these various means; this is true likewise for historical facts. But the totality of the phenomena explained, or of the testimonies, is sometimes such that without being able to appreciate the probability we cannot reasonably permit ourselves any doubt in regard to them" (184). By way of conclusion, Laplace concedes that although some things "cannot be submitted to calculus," probability "gives the surest hints which can guide us in our judgments" (196). This abrupt concession is somewhat surprising. All the pieces were in place for mathematical analysis of historical trends now familiar to us. Together, the method of least squares (published by Adrien-Marie Legendre in 1805), the theory of errors (Roger Cotes, published posthumously in 1722), methods for combination of observations (Laplace, 1774), and the central limit theorem (Abraham de Moivre, 1733; later popularized by Laplace) could map social regularities and allow for analysis of variation from those regularities. Laplace had published summaries of each of these results.<sup>34</sup>

Instead of synthesizing his observations about social regularity with the mathematics of error and combination, Laplace retreats to the examples of early probability theory. Tellingly, Laplace translates Hume's argument in "Of Miracles" into a classical probability problem. Comparing historical testimony to recording the color of a ball drawn from an urn, Laplace points out that predictions about the urn's interior must be based only on the balls already

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<sup>34</sup> For analysis of why techniques of combining observations and probability mathematics, (what Stigler calls the "Gauss-Laplace synthesis" (*History* 158)) were not applied to social phenomena more quickly, see Stigler, "The Struggle to Extend a Calculus of Probabilities to the Social Sciences" (*History* 161-361).

drawn out—or the scraps of history that have been retained. Even these scraps are subject to doubt: perhaps those recording colors were in error, confused, or lying. Laplace’s ensuing calculations confirm Hume’s thesis: the force of historical narrative necessarily lessens with time. This rather dull result suggests that despite Laplace’s growing awareness of the possibility of analyzing history through mathematical analysis, he had not found a metaphor adequate for linking mathematics to social patterns. His chosen comparison reflects curious and perhaps unintended assumptions about history: draws from an urn are independent and (presumably) finite in coloration. These immediate limitations underscore how difficult a mathematical treatment of social pattern was conceptually. Both Laplace and Condorcet approach historical problems by searching out ways in which a few simple assumptions could transform a complicated question into one analogous to problems involving coins, balls drawn from an urn, or cards drawn from a deck. The examples they found were profoundly limited: jury reliability, the trustworthiness of testimony to an event, or the life-spans of a few men. Probability might be “at bottom only common sense reduced to calculus,” as Laplace famously contended, “supplement[ing] most happily the ignorance and the weakness of the human mind” (196), but quantified common sense had few novel revelations to offer about history.

Still, the two mathematicians held firm to one prophecy: probability would be the antidote to the kind of supernatural explanations derided by Macaulay, the new way forward for understanding the causes underlying social shifts. Condorcet predicts that mathematics would deal superstition “its last and fatal blow” (ii), and bolster the constant vigilance necessary to fend off the “seeds of superstition and tyranny” (327). Laplace calls magic and astrology the “errors inculcated in infancy, adopted without examination,” which attain “universal credence,” because they “have maintained themselves during a very long time” (9). Reason would one day reign supreme: “the progress of science has destroyed them in the minds of enlightened men” (9). Gradually, explanations dependent on probability would displace reliance on the supernatural, however slow such explanations were in materializing. Until then, “[w]hat indulgence,” Laplace allows, “ought we not then to have for opinions different from ours, when this difference often depends only upon the various points of view where circumstances have placed us! Let us enlighten those whom we judge insufficiently instructed; but first let us examine critically our own opinions and weigh with impartiality their respective probabilities” (9). Careful attention to probability could liberate the instructed and uninstructed alike from the vagaries of circumstance.

## Literary Histories

Scott closes the first chapter of *Waverley* by declaring the continuity of human nature. “It is from the great book of nature,” Scott proclaims, “the same through a thousand editions, whether of black letter or wire-wove and hot-pressed, that I have venturously essayed to read a chapter to the public” (5). Law-like and supremely regular, nature persists unchanging, regardless of the printing styles in vogue with its readers. But just how readers engage this “great book” largely depends, as Scott shows in *Letters on Demonology and Witchcraft* (1830), on fonts and formatting: on where readers stand in time, and on the kinds of credence circulating in contemporary reading cultures. In *Letters*, Scott guides readers through the “twilight regions of superstitious disquisitions” with long-gathered materials showcasing “the credulity of our ancestors” (10). Scott underscores that more than costume, dialect, or geography, “historical colouring” depends on the way readers respond to *evidence*. As *Waverley*’s opening pages indicate,



novels constitute their own evidentiary paradigms, so well-developed that minute signals evoke castles and aged butlers, while slightly different hints promise “a few anecdotes of scandal thinly veiled” (3-4). And so too are the standards Scott’s readers carry with them from outside the novel—predictive modes inherited from romance and Shakespearean drama, legal forms of evidence both historical and current, and the rapidly developing discourse of probability. In what follows, I compare the evidentiary paradigm in *Letters* to those represented in Scott’s novels. Following Laplace and Condorcet, *Letters* depends on one mode of prediction—probability logic—superseding all others, as Scott rationalizes ghost sightings and elven machinations one case at a time. By contrast, Scott’s novels tend to entangle multiple predictive modes. I argue that by erecting conflicting paradigms and exploding or troubling both, Scott relativizes our ability to respond to the past with a single predictive standard.

In *Letters*, resemblance spurs our imagining of a causal connection: we dream of the death of a loved one; it comes to pass; the death corroborates the dream. As Scott puts it, “That which is undeniably certain becomes, in a manner, a warrant for the reality of the appearance to which doubt would have been otherwise attached” (13). Gradually, systems of resemblance flexibly explain even the strangest occurrence. As Ian Hacking would do nearly two hundred years later, Scott identifies a shift in methods of reading similarity in the seventeenth century. Slowly, Scott observes, “[t]he pursuers of exact science to its coy retreats” recognized “that the most remarkable phenomena in Nature are regulated by certain fixed laws, and cannot rationally be referred to supernatural agency, the sufficing cause to which superstition attributes all that is beyond her own narrow power of explanation” (100). Like Hacking, Scott locates the beginning of this shift in the approach of Paracelsus and others. Instead of routinely regarding similarities as related, Paracelsus began to employ increasingly sophisticated standards for evidence—making arguments based on the frequency by which one phenomenon might signal another. As Scott suggests, the explanatory power of these arguments would eventually render witches and divining rods obsolete. And Scott’s *Letters* does just that, dispelling each specter with detailed explanation.

Certain moments in Scott’s novels echo this practice of rational explanation. One strand of *The Antiquary* (1816) charts a German swindler’s efforts to convince moneyed antiquaries that astrology, a divining rod, and ready cash can recover lost treasure of historical importance. Like Jonathan Oldbuck, readers might recognize such methods as a “tide of nonsense” (165). But when the village beggar, fool, and master-of-revels, Edie Ochiltree, guides Sir Arthur Wardour and Oldbuck to a chest brimming with silver, romantic possibilities arise. Ochiltree has previously proved more knowledgeable of local geographies and antiquities than the Antiquary: perhaps, as Oldbuck says, he is “a sort of Brownie [...] who watched over hidden treasures” (360). The novel briefly allows readers to imagine that the village mendicant unraveled and guarded a forgotten past—that is, until the chest turns out to be a phony, planted by the novel’s hero to save his beloved’s father from financial ruin. This plot strand contains layered predictive strategies—superstitious, romantic, and skeptical-empirical. When a practical explanation emerges to dispel our delusions, these strategies constellate themselves in ranked order. Buried chests of treasure—in this novel at least—are plants, recoverable only for Edie Ochiltree because “they that hide ken best where to find” (211). Though we may be disappointed, we are perhaps relieved to discover that there exists a firm evidentiary standard for evaluating and understanding claims about the past.

Such relief is all the more palpable because it is rare in Scott’s novels, where few evidentiary paradigms collapse so neatly. Rather, we are often seriously and confusingly seduced

by an over-abundance of tools for reading—and predicting from—evidence. Take *Guy Mannering* (1815), wherein nesting astrological predictions justify and underwrite each other through a complicated system of likenesses. Meg Merilees's and Guy Mannering's predictions about the young Henry Bertram commence the novel's telling of his future. Beginning with Guy Mannering's astrological prediction, and ending when Guy Mannering abandons the science ("Here ends THE ASTROLOGER" [355], Mannering announces in closing), Scott figures the novel as structurally dependent on ancient predictive modes: the act of forecasting unscientifically becomes in this novel the very condition for narrative. In the 1829 introduction, Merilees's and Mannering's predictions are preceded by yet another foretelling, that of the novel's plot by its preface, in which Scott recounts a markedly similar (and supposedly true) anecdote in abbreviated form. This anecdote sets up a second coincidence: just as Mannering and Merilees's predictions chime, so too do the predictions of the preface mirror those of the novel itself.

All three predictions testify to one another, reinforce one another. And they do so in a distinctly modern way. Jacob Bernoulli and Laplace saw coincident testimony as amplifying probability, and sought to quantify the extent of this amplification. By contrast, Laplace saw astrology as the ultimate pre-modern narrative form, swiftly dispelled by the rise of probability logic. Scott voices similar derision in *Letters*, denouncing astrology as the occult science "most seductive to human credulity" (276), with its flattering promise that the very spheres explain and anticipate our smallest lived experiences. But in *Guy Mannering*, Scott renders the two apparently antithetical forms—probability logic and astrology—mutually dependent, and mutually constitutive of narrative. In a particularly curious form of argument in his 1829 introduction to the novel, Scott insists that such eerily coincident (and accurate) predictions must be possible, since without such coincidences, narrative would be all too predictable.

The fact, if truly reported, is one of those singular coincidences which occasionally appear, differing so widely from ordinary calculation, yet without which irregularities human life would not present to mortals, looking into futurity, the abyss of impenetrable darkness which it is the pleasure of the Creator it should offer to them. Were everything to happen in the ordinary train of events, the future would be subject to the rules of arithmetic, like the chances of gaming. But extraordinary events and wonderful runs of luck defy the calculations of mankind and throw impenetrable darkness on future contingencies.

Updating Aristotle's contention that improbable things must happen on occasion, Scott draws us into a veritable entanglement of evidentiary paradigms. Scott perversely harnesses the three coincident predictions of the novel to the general *unpredictability* of the future, insisting upon a startlingly paradoxical improbability. Events in life are unpredictable, Scott claims, and ought to be in novels, too. So readers ought to embrace the possibility that events might be predicted perfectly, twice in a row.

This layering is just the beginning of the nested predictive modes on offer in the novel. Astrological predictions might seem absurdly over-determined, but at the very center of these predictions we find ignorance: neither Merilees nor Mannering can determine what will happen at two crucial turning points of infant Harry Bertram's life. Within these blank spaces, the novel erects further predictive strategies: the pseudo-historical evidence on offer from the novel's preface, footnotes, and asides; the romance trope of the lost heir who recovers estate and

origins; historical spheres filled with well-known Edinburgh luminaries, and existing legal codes and traditions. All of these exist alongside the predictions available from the host of already-settled narratives to which the novel and its characters so frequently allude. We can never tell if the full plot of *Othello* will be mapped onto the novel, or just onto a part of it; we cannot tell which Shakespearean comedy referenced will suit by the end; perhaps we know that Mannering's predictions will come true; perhaps we can assume the Bertram heir will turn up; we might guess that legal, personal, and national history at work in the novel will intertwine to allow for his recovery, but despite our firm predictive grasp of the novel's major events, we cannot tell by what standard our predictions will be come true. Astrological predictions prove accurate, but perhaps only coincidentally. Lost heir tropes are fulfilled, but they depend upon digressions into Edinburgh intellectual spheres, mixed plot lines, and a radical generic indecisiveness between tragedy and comedy. In short, predictive spaces intersect and contradict one another in a host of tangles, from which we cannot hope to extricate ourselves, but on which, Scott suggests, the novel depends. These intersections render the narrative all too predictable and yet also entirely beyond prediction.

*Guy Mannering* stages the coincidence of empty predictions. Their extreme similarity sends us scouring the novel's likenesses for meaning, an activity that is by no means limited to this particular Scott novel. Just as we are unsure how to read astrological accuracy in *Guy Mannering*—a freak of chance, a condition for readerly pleasure, or evidence of astrology's occasional efficacy—so too do Scott's self-ironizing footnotes, endnotes, and prefaces destabilize readings of the fictional narratives to come (a point Robert Mayer has made in an insightful discussion of Scott's paratext). In *The Tale of Old Mortality* (1816), historical footnotes link the novel to the events it depicts, tie narrative moments together, and underscore the similarity between historical anecdote and fiction. Yet this patchwork history—repeatedly offered as justification of and reference for the fictional narrative—mirrors one of the most derided practices in the novel: the Covenanters' habit of proffering lines of scripture in complacent, radically decontextualized self-justification. Unable to discount historical anecdotes entirely, but equally unable to parse fully their import in fictional narrative, readers are left to navigate a series of historic and generic echoes without recourse to a dominant predictive mode. Scott offers us a system of similitudes between fiction and history, historical moments and generic forms, but no clear signal of how we are to forge internal connections, and by what evidence we might view such connections as real. Like Paracelsus reading the book of nature, we are stuck looking at coincidences that might be meaningful or meaningless—planted chests or long-lost treasure.

This scouring of likenesses is exactly how reason ought to work, Laplace explains in his *Essai*. As Laplace sees it, we reason by analogy between similarities; from our analogies, we use induction to formulate hypothetical laws, which we can then test. For thinkers stretching from Paracelsus to Laplace, the “great book of nature” grows legible through similarities juxtaposed. Yet Scott's repeated line-up of possibly meaningful similarities turns us loose on systems of echoes whose chimes might always be more reflective of emptiness than plenitude. The prophecies that begin *Guy Mannering* nudge us to reason, but also to question our reasoning. The texts that follow become all-too-predictable, because already predicted. We are witnesses to prophecy, and the prophecy becomes no longer interesting. Scott refocuses our understanding of history from the content of narrative to the question of how this content might become narratable. We find ourselves in the midst of a fictional divination of history, watching our

favorite German swindler weaving his way through ruins, uncovering the planted chests that lie beneath. Their treasures turn out to be beside the point.

The young advocate in the introduction to *The Heart of Midlothian* (1818) observes that novels have become dully obvious in their events; if readers really want to be surprised, he offers, they must turn to “the real records of human vagaries” (20-1). Scott’s novels insist on our ability to be surprised by history, even when that history is foretold by the text itself. Instead of rendering events unpredictable, Scott renders the very process of history’s re-telling unpredictable, by allowing multiple chronologies of prediction to coexist, to mix, and to remain entangled. The novel—or, as Scott might say, “that internal sorcery by which past or imaginary events are presented in action” (17)—participates in multiple predictive modes: present-day likelihoods blended with antiquated prophecy. Scott points to this juxtaposition as the condition for fiction that seriously contemplates history and its writing—whether black-letter or wire-woven and hot pressed. Though Macauley credits Scott’s historical narrative as exemplary, this credit in many ways glosses over the strangeness of Scott’s novels. Scott represents a world in which dogmatic faith per se is gone; only an informed and pragmatic skepticism remains. Readers are rendered relativists of credit, forced to accept old and new evidentiary paradigms at once, unable to be smug or settled in predictions about even the most predictable of occurrences: those of history. If history becomes an aesthetic object in Scott, safely and strangely severed from the present in its juxtaposition with it, I would add that it becomes an aesthetic object about which judgment is forever complicated, and about which predictions are rich, surprising, and perpetually unstable. John Wilson Croker, writing in the *Quarterly Review*, accused *Waverley* of “unsettling all accurate recollections of past transactions” (Hayden 377). A century later, we may prefer to read this once-scathing criticism as praise.

## A Literary Mathematics

If “Scott’s achievement was to define the relation between private and public meaning as the moral and formal crux that constituted these forms” (Duncan 51), so massive a definition could scarcely remain confined to literary domains. The relation between persons and populations was quickly bridged by mathematicians in the decades following Scott’s death, beginning with Adolph Quetelet’s synthesis of data and method in his applications of error law to social data. Somewhat surprisingly, this approach required only mathematical theories available to—or invented by—Laplace. In what follows, I argue that Quetelet’s “average man”—an invention which facilitated the statistical mapping of history in the nineteenth century—was made possible by Scott.

Like Laplace and Condorcet, Quetelet’s experience of revolution informed his mathematical interests. He grew up “amid the stirring scenes which marked the fall of the old regime and the rise of the empire of the brilliant and ambitious Napoleon” (Hankins 452). The revolution of 1830 by which Belgium gained independence dramatically limited Quetelet’s prospects, representing “for Quetelet a great professional setback, and not merely an abstract threat to social order of the sort that troubled so many contemporary European thinkers” (Porter 58). Quetelet grew fascinated on the one hand by the regularity of human behaviors and on the other, by the seeming inexplicability of the sudden changes around him. Perhaps the “perturbing forces” of man might be mapped numerically, Quetelet wrote in 1831 (qtd. Donnelly 127), like the revolutions of the planets (Quetelet was trained as an astronomer). “In a moment when passions were acutely excited by political events,” he later reflects, “I sought, in

order to distract myself, to establish analogies between the principles of modern mechanics and what was taking place in front of me” (*Social* 104).

Though he spent his life teaching in Belgium, Quetelet proved hugely influential in the nascent British statistical community. He gave public lectures on a wide range of mathematical topics; these were translated into English and widely read. He was a delegate to, and later an elected member of, the British Association for the Advancement of Science, and it was partly at his recommendation to Charles Babbage that the Statistical Society of London was founded (Hankins 29). As a tutor to the Belgian king’s nephew Albert (who was to marry Queen Victoria in 1840), Quetelet corresponded on probability with the future Prince Consort until Albert’s death in 1861, explaining in an early letter that probability is the tool necessary for “reading the statistics of the past” (v). Echoing his instructor, Albert writes wistfully to Quetelet of his wish

to see the application of the calculus of probability to social and natural phenomena. These phenomena are always regarded too superficially, and even if they resolve themselves into a system, ordinarily they lack firm and incontestably true bases. The calculus, on the contrary, presents things in their universality, exactly as they occur in nature, without being altered by individual opinion. (281)

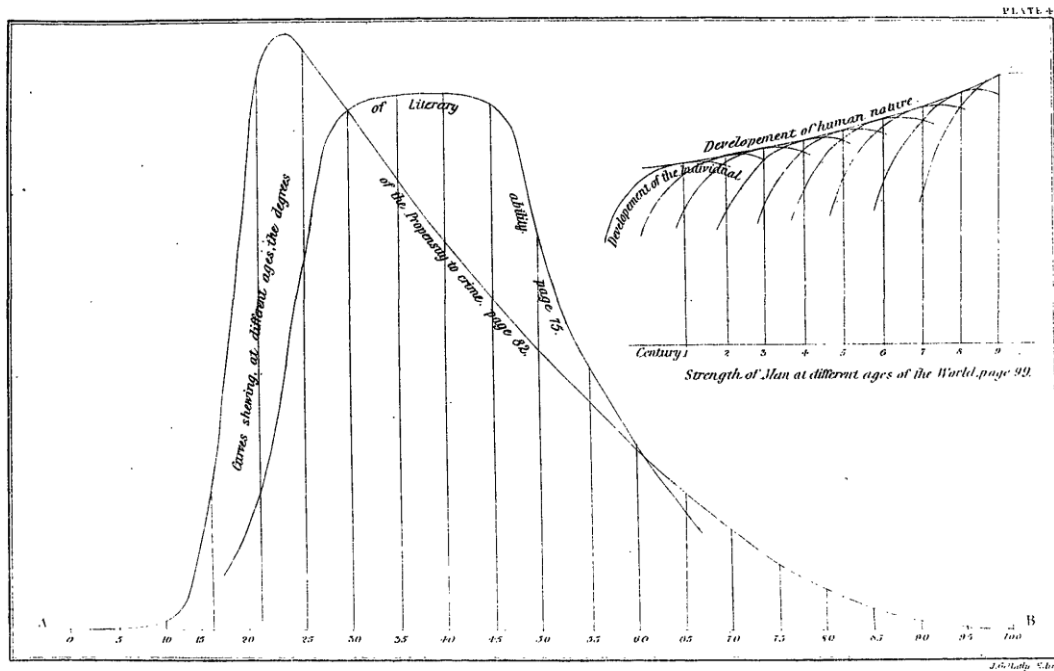
Albert’s letter reflects the legacy of what Lorraine Daston terms classical probability: the idea that probability logic could be a “firm and incontestably true” basis for reason. Albert wrote to Quetelet on February 24, 1848, the day that Louis Philippe abdicated. “The social system is very much upset at this moment and the ‘accidental causes’ play a large role,” Albert observed, lamenting that “the law which governs them has not yet been discovered up to the present moment. The interests of science and of the welfare of the world are opposed in this respect for the first requires that the proofs be sufficiently prolonged to recognize the law, while the other demands an end to these upheavals” (286). Society and social science were fundamentally at odds. Would there ever be sufficient data to predict a revolution? How much data would be necessary to fit probability’s frameworks (governing the split of gambling winnings, the interplay of billiards balls, and the logic of jury size) to questions about history?

Like Laplace, Quetelet enthused that apparently unpredictable social anomalies (like the dead letter rate, or suicide by hanging) were regular (*Social* 301). Identifying this scale as the proper one to social analysis, Quetelet views any smaller scale as “examining too nearly a small portion of a very large circle”; observers see only “points, grouped in a more or less irregular manner” (*A Treatise on Man* (1842) 5). Given sufficient data, these occurrences could be understood, predicted, and even prevented. Revolution might similarly be understood—perhaps related to tracking wealth, prices, and “the moral anatomy of man”—a category that Quetelet follows Condorcet in describing mathematically (*Treatise* viii). Following Scott in contending that “[h]uman nature is modified by necessities of time and place” (99), Quetelet replaces speculative philosophy’s accounts of human nature with representations depending solely on measurable attributes: crime, marriage, and death rates; weights, heights, and chest-spans. Some such data already existed: the French government released crime statistics in 1827 (Ariew 74), while (with Quetelet’s encouragement), British statistical societies embarked on a project of ever-widening data collection.

Quetelet facilitated massive data collection across Europe’s learned societies, but perhaps his greatest influence was his strategy for *reading* data, offering a method that—in Mary Poovey’s

words—“heralded the advent of an entirely new epistemological paradigm, which now dominates the late twentieth-century world” (317).

Figure 1, Appendix Plate 4, *A Treatise on Man*. Curves showing at different ages, the degrees of literary ability and of the propensity to crime.



Quetelet’s graphs exemplify this new strategy (fig. 1). Plotting literary ability and criminal propensities against time, Quetelet’s somewhat dubious calculations show literary ability peaking near middle age, criminal propensities in late adolescence. Quetelet’s curves relate human proclivities to a well-understood probability model: Laplace’s normal distribution, which had previously been used to understand errors in astronomical measurements. This relation links the error laws of astronomy to the study of social bodies in a synthesis that had eluded Laplace in his search for a means of large-scale analysis of social regularity.

The chart invites us to read the curves as if they depicted a single individual’s movement through time, expressing “the degree of propensity to crime [...] according to age” (93). Interpreting each measurement as if it “had been modeled from the same type, from the same individual,—an ideal one if you will, but whose proportions we ascertain by a sufficiently long trial” (*Letters* 93), Quetelet’s “homme moyen,” or average man, stands in for an entire population. A nation’s height, weight, criminality, moral and intellectual attributes could suddenly be represented in one figure, so simple as to be legible to every reader. At the same time, Quetelet’s underlying theoretical explanations quelled sophisticated mathematical concerns over how to aggregate disparate data sets, legitimizing new analysis and comparisons.<sup>35</sup> The

<sup>35</sup> Mathematical historians have argued that the conceptual difficulty for social scientists of the nineteenth century was “the isolation of social data into homogeneous classes or categories” (Stigler *History* 221). Regional differences in mortality rates, for example, might mask underlying differences in climate, wealth, or genetic makeup. Quetelet’s logic

project promised results that explained national difference, as well as an explanation of humanity writ large—explaining “in what particulars man is a stationary, and in what a perfectible, being” (*Atheneum* 658). As Francis Galton would later explain, Quetelet’s averages presume that “the differences, say in stature, between men of the same race might theoretically be treated as if they were Errors made by Nature in her attempt to mould individual men” (xi). In Quetelet’s lights, the average man embodies both a representative “fraction of the species” (*Treatise* 5), and the Aristotelian mean in a given context and society, “equally distant from excesses and defects of every kind” (2.287). He is, in Audrey Jaffe’s words, the “least common denominator in relation to whom [...] societies are constructed” (10).

The average man proved only heuristically useful mathematically, but useful he was.<sup>36</sup> In a recent biography, Kevin Donnelly pronounces Quetelet “one of the more important enablers of scientific *practice* of the nineteenth century” (7). Regarding differences—deviations from the mean, Quetelet would say—as random reshaped methods for aggregating and interpreting data,<sup>37</sup> Quetelet’s construction allowed for a paradigmatic shift in how probability might be used. Daston writes that with Quetelet, “[t]he calculus of probabilities no longer described the reasonableness of individuals but rather the hidden regularities of whole societies” (369). Observational data about historical frequencies eclipsed long-beloved probabilistic metaphors like urns and coin tosses. In other words, broad patterns replaced local likeness: recorded history could no longer be treated as resembling balls drawn from an urn. In scientific communities, this change was greeted with an enthusiasm reminiscent of that expressed by Scott’s early readers. The *Atheneum* introduced readers to *Sur L’Homme* (1836) (published in English as *A Treatise on Man, and the Development of His Faculties* (1842)) with an uncharacteristically exhaustive review announcing Quetelet’s work as “forming an epoch in the literary history of civilization” (661). William Cooke Taylor glowingly summarizes *Sur L’Homme* in *The Foreign Quarterly Review*. “[A]ll men,” Taylor writes, “establish in their own minds a standard of human nature, that is, an abstract idea of average man, by which they measure not merely physical development, but also moral and intellectual power. We have names for almost every deviation from this conventional standard” (13). For Taylor, Quetelet quantifies a long familiar concept.

As Daston observes, in Quetelet’s work “the emphasis shifted from the measure of expectation to the study of distributions” (108): this shift allowed for the analysis that Laplace imagined would spin historical regularities into quantitative predictions. Though Quetelet did not develop statistically robust methods of analyzing variance—deviation from the mean—as either significant or random, his attempts to do so marked out the path that modern statistics would eventually take. Quetelet’s striking fit of data to curve offered a new framework through which data might be read and interpreted, epitomized by the average man. As Steven Stigler writes, “it could be instantly grasped as personifying and making tangible diverse populations,” while “its methodological usefulness was due to its direct underpinning in Laplacian probability” (“Statistics and Social Science” 59-60). This usefulness translated both into the concept’s

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licensed statisticians to treat many variations as random, while others (particularly national and racial differences) could be considered meaningful.

<sup>36</sup> The formulation pre-dates Quetelet: George-Louis Leclerc, Comte de Buffon uses it in *Histoire Naturelle* (1777) to propose a definition of moral certainty (like Quetelet, Buffon italicizes). As Stigler points out, Buffon’s man is rather different: he is not so much a representative, as a heuristic used in the absence of more detailed information (“The Average Man” (60)).

<sup>37</sup> For a technical account of the ways in which Quetelet’s methodology allowed for data aggregation, see Stigler (*History of Statistics* 170-71).

popularity and its far-reaching applications. “I applied this same law to mental faculties,” Galton writes of Quetelet’s methods in introducing *Hereditary Genius* (1892) (xii).<sup>38</sup> Applications even reached literary domains. Audrey Jaffe uncovers Quetelet’s influence on social configurations within the Victorian novel, arguing that George Eliot’s Dorothea conceptualizes her social role by carefully distinguishing her own character from a perceived average.

This connection would have been of little surprise to Quetelet, who expected statistical depictions of human nature to become the basis for every endeavor, even art. Though the *Athenaeum* was skeptical (“we doubt whether statistics will add materially to the resources of the Wilkies and the Walter Scotts” (660)), Quetelet imagined that “the man of literature, and the savant, will afterwards choose from these materials those which are best suited to the subject of their studies, as the painter borrows from optics the few principles bearing on his art” (98). Statistics might not eclipse literature in Quetelet’s formulation, but literature was soon to become one of statistics’ many dependents, informing writers “more precisely of things they now know but vaguely” (97). In order to do so, statistics might have to forego being interesting, Quetelet realized, just as the geometry of perspective might not itself prove picturesque (97). Following Quetelet, statisticians insisted that statistics were not to be literature; they were to enrich and inform it on their way to performing what Quetelet deemed “the most important service to the science of man and the social system” (96). And they were on no account to attempt to be interesting. Writing to Florence Nightingale in 1861, William Farr urged that “Statistics should be the dryest of all reading” (quod Porter 36 and Diamond 70).

But Quetelet’s reading and writing were not always so dry. In 1815, Quetelet joined the local chapter of La Société Anglaise (Donnelly 45); into the 1830s, he was involved in a variety of literary societies in Brussels, circulated among a bohemian set of friends, wrote letters seriously analyzing literature from Horace to de Stael, and composed and published poems, translations, operas, epic poems, and essays. Together with his friend Germinal Pierre Dandelin, he composed an opera on “John the Second, or Charles the Fifth of Ghent,” which played twice in the theater of Ghent in 1816. In 1823, Quetelet traveled to Paris where he met several prominent mathematical theorists (Laplace, Fourier, and Poisson). The same year he finished his dissertation, he also published a progress of romance, which refers to *The Vicar of Wakefield* (1766) and discusses Byron (27). As late as 1826, Quetelet engaged seriously in literary endeavors: he had poems published, composed an opera libretto, and read widely in French, English, Italian, and Spanish. He struck up a friendship with Goethe.

It is no surprise, then, that Quetelet’s major innovation in statistics is the invention of a fictional character. “The social man, whom I here consider,” Quetelet writes, “is a fictitious being, for whom every thing proceeds conformably to the medium results obtained for society in general” (8). Such a person had, in fact, already been invented, conceptualized, and popularized, and for precisely the same reason: as a way of mapping historical pattern onto a legible subject. Scott describes his heroes as a group of “very amiable and very insipid sort of young men” (Hayden 115). Just as the *Athenaeum* described Quetelet’s fiction as a “mediocre personage” (661), in Lukacs’s words, Scott’s heroes were, “always more or less mediocre,

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<sup>38</sup> Further accounts of Quetelet’s far-reaching influence in scientific and social spheres include Silvan S. Schweber’s argument that Charles Darwin’s reading of the *Athenaeum* review of *Sur L’Homme* introduced Darwin to Malthus, and reinforced for him the importance of chance variation (“The Origin of the *Origin* Revisited” (1971)) and Diamond and Stone’s account of Quetelet’s influence on Florence Nightingale (1981).



average English gentleman” (33), “typically human” (35). With this hero, Scott had hit upon the “perfect instrument for [...] presenting the totality of certain transitional stages of history” (35).

Quetelet was 18 when *Waverley* appeared in 1814, 36 when Scott died. This period was, Charles Augustin Saint-Beuve wrote in 1828, “an epoch in which the imitation of Walter Scott was almost a necessary contagion, even for the highest of talents” (qtd Maxwell 12). Quetelet’s generation “worshipped Scott, mocked him, or did both at the same time” (Maxwell 22). According to William St. Clair, Scott was the “dominant author of the period,” selling “more novels than all the novelists of the time put together” (221). In France, “where history happened” in the nineteenth century, Scott’s novels were greeted with enthusiastic praise from Alexander Dumas and Honore de Balzac, who “not only knew Scott’s novels and poems well but expected their readers to do so” (Maxwell 13). “To have been alive and literate in the nineteenth century,” John Henry Raleigh writes, “was to have been affected in some way by the *Waverley* novels” (49). And Quetelet was not only alive, but exceptionally literate. Quetelet’s average man—a fictional representation of the nation, a mediocre, middling subject—represents another of Scott’s many legacies: the “perfect instrument” for totalizing a social body and its history.

### **Conclusion: Resemblance**

Scott’s heroes resemble Quetelet’s average man. Following Quetelet (and Paracelsus, Scott, and Laplace) this chapter has sketched an analogy between similitudes to argue that Quetelet’s ground-breaking relationship between modern mechanics and human nature depended on a fictional type lifted from Scott’s novels. Wavering hero became average man. I have also argued that Scott’s novels call exactly this form of reasoning into question: historical narrative *requires* reasoning from similitudes to render pattern legible, and this form of reasoning remains chronically inconclusive. Scott’s “renewed and vivified history” depends on romance, Robert Louis Stevenson remarks (*Cornhill Magazine* (1874), Hayden 477). “For art precedes philosophy and even science,” he continues.

People must have noticed things and interested themselves in them before they begin to debate upon their causes or influence. And it is in this way that art is the pioneer of knowledge; those predilections of the artist he knows not why, those irrational acceptations and recognitions, reclaim, out of the world that we have not yet realised, ever another and another corner; and after the facts have been thus vividly brought before us and have had time to settle and arrange themselves in our minds, some day there will be found the man of science to stand up and give the explanation.

Scott constructed and resolved formal problems inhering in the detailed narration of history. The novels lay out a structure by which fiction might mediate settled history, and by which the wavering course of a single character might plausibly stand in for the conflicted fealties and scattered movements of many. Quetelet followed Scott with an almost identical fiction: a single man, who could render an otherwise unassimilable multitude legible—and quantifiable. This creation set a whole new mode of thinking into motion. Just how Quetelet constructed this potent fiction is perhaps a lost cause. In a Europe awash in Scott’s novels, the resemblance can hardly be accidental. But questions linger. Did Quetelet meet Scott (then president of the Edinburgh Royal Society) on his 1827 tour of English and Scottish societies of science and

learning? Did he discuss Scott with Goethe, or with his young society of English speakers back in Belgium? We cannot even quantify our uncertainty over such singular events, as Quetelet—ever the pedagogue—would be swift to explain. They remain speculations. But as Scott's novels remind us, speculation about history may afford us no little pleasure.

## Chapter 4: George Eliot's Probable Histories

“Among all forms of mistake, prophecy is the most gratuitous.”  
George Eliot, *Middlemarch* (84)

“You foretell the conduct of individuals, in whose case oscillations may take place within limits so large, that it would be contrary to all principles of the theory of probabilities to take them for types of calculations, or to found upon them the most petty inferences. Be more consistent with yourselves.”

Adolph Quetelet, *A Treatise on Man, and the Development of His Faculties* (vii-viii)

### Introduction

Eliot's first hero, Adam Bede, “was not an average man” (*Adam Bede* (1859) 208).<sup>39</sup> “[S]uch men as he,” we're told,

are reared here and there in every generation of our peasant artisans—with an inheritance of affections nurtured by a simple family life of common need and common industry, and an inheritance of faculties trained in skillful courageous labour: they make their way upwards, rarely as geniuses, most commonly as painstaking honest men, with the skill and conscience to do well the tasks that lie before them. Their lives have no discernible echo beyond the neighbourhood where they dwelt, but you are almost sure to find there some good piece of road, some building, some application of mineral produce, some improvement in farming practice, some reform of parish abuses, with which their names are associated by one or two generations after them. (208-9)

Bede is *not* average, the narrator observes, directly recalling Quetelet's famous expression. Yet like Quetelet's average man, Bede embodies both a type and a standard: he lives a rare life that is nonetheless so very unexceptional as to be exemplary for all. He is not Quetelet's average man in another important sense: absent from the records, laws, and constants of social statistics, Bede's existence is discernible only through careful scrutiny of the landscape. Or through fictional narrative—a point so obvious that perhaps Eliot did not feel the need to make it.

Eliot invokes a common statistical notion—the average man—only to redirect it, moving toward narrative (rather than averages) as the chief arbiter “sur l'homme.” This practice of invocation of statistical ideas, followed by a reconfiguration of them, becomes a minor pattern in *Adam Bede*. “And if there were such a thing as taking averages of feeling,” Eliot muses, “it would certainly be found that in the hunting and shooting seasons regret, self-reproach, and mortified pride weigh lighter on country gentlemen than in late spring and summer” (299). The question of how feelings might be quantified—one which occupied Quetelet—occupies the

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<sup>39</sup> Audrey jaffe argues that identity formation for characters in *Middlemarch* happens in relation to perceived social norms, determined in part by concepts like Quetelet's average man. The phrase also recurs in in “Brother Jacob” (1864), in precisely the sense Jaffe brings up in discussing Dorothea: David Faux “was sure there was nothing average about him” (48). Though Jaffe mentions neither moment, these instances suggest that Jaffe's point about character self-determination might be expanded: Eliot's narrator, as well as her characters, figures characters in relation Quetelet's notion.

novel's characters, too. "Nay, Mother," Bede guffaws, "the figures tell us a fine deal, and we couldn't go far without 'em, but they don't tell us about folks's feelings. It's a nicer job to calculate THEM" (142). Feelings are the quintessential example of the limitations Quetelet encountered in sketching the "moral and intellectual qualities of man." *Adam Bede* and its eponymous hero suggest that feelings are inconstant, ungovernable, and beyond calculation.

It's surprising, then, that Eliot uses mathematics to characterize Bede, a strategy that she again deploys in depicting Maggie Tulliver, John Lydgate, and Daniel Deronda. Schoolmaster Bartle Massey pronounces Bede "the only scholar [...] in this stupid country that ever had the will or the head-piece for mathematics" (397). This ability proves meaningful for Bede himself, who often moralizes mathematically. "It's the same with the notions in religion as it is with math'matics," he says, observing, "a man may be able to work problems straight offin's head as he sits by the fire and smokes his pipe, but if he has to make a machine or a building, he must have a will and a resolution and love something better than his own ease" (179). After his father's burial, Adam likens human and mathematical error, musing, "It's well we should feel as life's a reckoning we can't make twice over; there's no real making amends in this world, any more nor you can mend a wrong subtraction by doing your addition right" (198). Behaving well is like reckoning well; we must do both sequentially, with unstinting effort and attention.<sup>40</sup> It is hard to believe that readers are not expected to agree with the saintly Bede, who—though we only hear tell of his excellent reckoning—demonstrates his stamina, steadiness, and care for his work at every turn of the page.

Bede is good at math. He is also good. The novel links these two qualities. Nevertheless, he is terrible at prediction, though he has many chances to practice. Whose hair did he see in Hetty Sorel's locket? When Hetty (supposedly on a visit to Dinah) disappears, where has she gone? It turns out she has left in search of Arthur, her child's father, and that she has given birth to a child later found dead. What happened? These are questions about the past: answers exist, however difficult they might be to ascertain. Bartle Massey certainly views them in this way. "If a man had got no feelings," Massey reports regretfully to Bede of Hetty's trial for child-murder, "it'd be as good as a demonstration to listen to what goes on in court" (406). Filling in the blanks of the past would be just like mathematical reasoning, if not for the hopeless bog of feelings surrounding Hetty's predicament. Whereas Scott complicates his historical fiction by relativizing predictive standards, Eliot frames predictions—from prophecy to probability—as ethically fraught, laden with emotions all too easily disguised by the language of prediction.

When Adam waches Hetty's locket clatter to the floor, he concocts a story explaining why she has a secret and expensive locket. He sleeps easily, "having woven himself an ingenious web of probabilities—the surest screen a wise man can place between himself and the truth" (278). Eliot represents probabilities as fictions of a particular kind: they are false in a way that fictions need not be, concocted *in order* to shut out reality. Paradoxically, they are also ingenious—emerging from a wise man's reflection. Across the novels, the seeming objectivity of probabilistic prediction blends silently into prejudices stemming from superstition and desire, producing a language through which these superstitions and desires go unexamined. In what follows, I detail Eliot's probable histories: fashioned by characters, by readers, and by the novels themselves. Eliot does so not much object to the actual methods and practices of probability mathematics, I argue, but instead aims her critique at the language that the burgeoning

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<sup>40</sup> The simile cuts both ways for Bede, who finds fault with Mr. Ryde (the pastor replacing Bede's beloved Mr. Irwine) by pointing to his ignorance of mathematics (179). One who reckons poorly, Bede hints, is unlikely to behave well.

mathematical field provides for skirting feelings, and—in so doing—denying them. We are often left to conclude, as Mr. Brooke does of woman, that historical conjecture is “a problem which [...] could be hardly less complicated than the revolution of an irregular solid” (42). Leaving a complicated problem entirely unconsidered befits Mr. Brooke, but perhaps not his author. In conclusion, I argue that Eliot’s final novel, *Daniel Deronda*, radically reimagines how the past might be predicted.

### ***Romola*: Tito’s calculation**

The plot of *Romola* stems from one prediction. Newly arrived in Florence, Tito Melema has just escaped from pirates at sea. His benefactor, Baldassarre Calvo, was also captured, and Tito has promised to raise money in Florence to seek out and ransom Baldassare. Deeming the success of such a project profoundly unlikely, Tito wonders if he ought to set out at all. “Before I quit everything, and incur again all the risks of which I am even now weary,” Tito reflects, “I must at least have a reasonable hope” (100). After all, he reasons, it is unlikely that Baldassare, an old man, could survive a lengthy enslavement at sea. In the improbable event of Baldassare’s survival, finding him would also be extremely unlikely. “[I]f I were certain that Baldassarre Calvo was alive, and that I could free him, by whatever exertions or perils,” he tells himself, “I would go now” (98). But Tito, that “hanger-on of the dicers” (26), is certain of neither proposition; instead, he recognizes how uncertain both are, and—acknowledging this double uncertainty—decides against leaving Florence. So begins *Romola*—a parable of probabilistic reckoning.

Tito’s calculation recalls Antoine Arnauld’s anecdotal models of probability in daily use. We should not be afraid of thunder, Arnauld argues, since “there is scarcely any violent death which is less common”: we should apportion feelings to frequencies and so become “more reasonable in our hopes and fears” (361). Tito’s reasoning might easily be one more example. It is unlikely that an old man could survive the perils of sea; given his survival, it is unlikely that Tito could track him down. Combined, these two likelihoods result in an even lower likelihood of Baldassare’s rescue. Moreover, Tito’s search, if fruitless, might go on without end: if he does not take Baldassare’s age and fragility into account, how long *ought* he to search for him? Just as Arnauld advises, Tito focuses on likelihood and life expectancy rather than feelings, not considering “that his gratitude had failed,” but instead arguing that “it was not certain that Baldassarre was in slavery, not certain that he was living” (100). Tito calculates correctly, and with logic that post-dates the novel’s setting. Though Machiavelli, Tito’s nonfictional contemporary in Florence (and a minor character in the novel), discusses the importance of likelihood for decision-making in *The Prince* (1532), he does so by analyzing trade-offs between fortune and skill, concepts antithetical to probability computations.<sup>41</sup> Without paying attention to such categories, Tito’s reckoning stands out alongside Machiavelli’s as distinctly modern.

In *On the Connexion of the Physical Sciences* (which Eliot read in 1840) Mary Somerville echoed a host of classical probabilists by calling probability “a happy supplement to the ignorance of the human mind” (115). In the novel, though, Tito’s careful weighting of probabilities has surprising consequences; “the choice had,” we’re told, “landed him in unexpected positions” (224). Practically, Tito realizes that his decision must remain private. Aware that he is morally and socially obliged to attempt a search, he leads his new patrons Bardi and Bernardo to believe that his benefactor had drowned; if these two “had known the whole

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<sup>41</sup> See Machiavelli, pages 74 and 161.

truth he was aware there would have been no alternative for him but to go in search of his benefactor” (98). Somewhat surprisingly, Tito’s calculation renders him wary of even the smallest ties connecting past and present. “I should like to dip her a little in the soft waters of forgetfulness” (281), he remarks of Romola. He begins to “dislike recognition, which was a claim from the past” (140), and so he sells his ring, an onyx given him by Baldassarre. Just before his death, Tito eagerly plans to abandon his old identity completely, to “strip himself of the past, as of rehearsal clothing, and throw away the old bundle, to robe himself for the real scene” (477).

Tito’s apparently rational calculation of the likelihood of Baldassarre’s demise swiftly transforms into an overpowering wish. “When, the next morning, Tito put this determination into act he had chosen his colour in the game,” Eliot tells us, “and had given an inevitable bent to his wishes. He had made it impossible that he should not from henceforth desire it to be the truth that his father was dead” (100). Calculation becomes a bet, and a bet slips into a wish, without so much as a conscious choice. Tito’s reasoning stems from a series of stories that seem more likely than the event of Baldassarre’s rescue: Baldassarre has probably died, or been left to die; he must at the very least be sick and likely to worsen. Once told, Tito cannot help but wish one of the *likely* stories he has told to be the *true* story. Tito’s transition suggests that, as Eliot puts it, “conjecture is constantly guided by feeling” (352), always already a bet—or a wish. And this calculation turns into a wish not only for Baldassarre’s death, but for other deaths, too. Fearing that Fra Luca will divulge Baldassarre’s survival to others, Tito cannot help but exclaim: “If he were only dead at Fiesole at that moment!” This wish “inevitably thrust itself before every other thought” (126), and renders Tito delighted and relieved when news reaches him that it has come true. This slippage proves impossible for Tito’s wife Romola, who (confronted with the risk of running into Tito on an errand to which he would object) “could not weigh probabilities; she must discharge her heart” (452).

Of course, Baldassarre turns up. (Tito is perhaps unaware that he is in a novel, a form in which those lost at sea show up with almost dreary regularity.) With Baldassarre’s return, Tito moves from wishing for Baldassarre’s death, to attempting to bring it about. On their first meeting, Tito finds himself unable to acknowledge him and to ask his forgiveness—a course which, the narrator points out, might deflate the conflict that Tito foresees and subsequently seeks out. Baldassarre, in contrast to Tito, is plagued by his *loss* of memory, “the vague aching of an unremembered past” (267). He, too, sells his jewels—the amulet given him by his mother—but he does so in a desperate effort to rid himself of the “blank in his mind—that past which fell away continually” (272). Instead of acknowledging Baldassarre, Tito denies him, and with this denial, fear (which Tito, wearing chain mail, has taken to carrying about with him (241)) overwhelms his politics (he has become influential in Florence) and private life; he thinks only of Baldassarre and the ruin he might bring about. His initial calculation, observing the likelihood of Baldassarre’s death, shifts from passive wish to all-consuming mission.

Tito makes what appears to be a simple computation. This computation about the likely past affects his every action in the present. Reading *Romola* as a probability parable yields a controversial position: Eliot seems to think that whether we’re casting lots or scrutinizing life expectancy tables, tallies mask our sympathies. And the very act of choosing to calculate changes how we respond to past and present. Tito, who is by no means a gambler, begins to view the world as if he were one: “life was taking more and more decidedly for him the aspect of a game in which there was an agreeable mingling of skill and chance” (312). Gambling in Eliot is always a mindset, as well as a particular activity. And though Tito turns out to be good at prediction—

and gambling— so much so as to seem prochronistically informed, his chilling accuracy leads directly to his eventual destruction. Hence the parable-like nature of *Romola*: Tito drowns in attempting to escape the consequences of his initial calculation.

## Mathematical Histories

Tito Melema's accurate reckoning reveals an ugly wish, but also his intelligence: once more, Eliot characterizes using mathematics. This method of characterization lines up with Victorian political, intellectual, and economic spheres, where mathematical ability was increasingly regarded as a proxy for intelligence of all kinds.<sup>42</sup> Eliot's letters indicate her own belief in the powers of mathematical study. In 1849, she records taking "a dose of mathematics every day to prevent my brain from becoming quite soft" and writes of attending lectures on experimental physics (67, 69). In 1851, she attended lectures in Euclidean geometry (73), likely beginning with the axioms that prove so vexing for Maggie and Tom Tulliver in *Mill on the Floss*. Daniel Deronda, who studies mathematics at Cambridge, would also have worked through Euclid (though unlike Tom Tulliver, he would have mastered the first two books to pass his entrance exam). Once at Cambridge, he would have studied Newtonian calculus with an emphasis on problems that could be solved in an exam setting. His studies would build toward one exam—the Mathematical Tripos—which reigned supreme as chief arbiter of intellectual ability and physical stamina. These taxing efforts were richly rewarded: those who fared best (called Senior and Second Wranglers) were lauded in the press and the subject of bets and postcards, in part because success on the exam almost guaranteed subsequent success in the academy, the church, and politics.<sup>43</sup> The political arena deployed mathematics of a different sort. Former Senior Wranglers vaunted into lofty professional spheres would resort to probabilistic reasoning far more frequently than Newtonian calculus. Absent from the Tripos, a working knowledge of probability mathematics and statistics was increasingly treated as common knowledge, crucial to the synthesis and interpretation of the ever-growing data sets churned out by statistical societies and government offices. Knowledge of probability was not the only necessity; so too was an opinion on how and when probability should be used. In what follows, I lay out several period anxieties about probability logic, to argue that Eliot's critique of probabilistic prediction echoes period concerns raised within mathematical communities.

The probable's suspicious alignment with the easy and the wished-for surfaces early on in the development of the mathematical field in the *Port Royal Logic*, a problem to be solved only by careful observation of real-world frequencies. In Auguste Comte's *Course in Positive Philosophy*, which Eliot read while writing *Deronda*, Comte objects vehemently to "the vain pretension of a large number of geometers that social studies can be made positive by a fanciful subordination to an illusory mathematical theory of chances" (366). Though Comte's critique is of dubious rigor, firmer qualifications repeat and extend his account of methodological flaws in probability's applications. Prominent critics included mathematician Louis Poinsot, who objected to Poisson's 1835 applications of probability to judicial statistics, and James Clerk Maxwell, who was immensely concerned with the field's theoretical limitations. By the time Eliot heard

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<sup>42</sup> For a history of the Tripos, J.W.L. Galisher "The Mathematical Tripos" and W.W. Rouse Ball (187-221). Beginning in 1753, exam results were announced publicly until 1909, when it was de-emphasized as fostering mechanical, rather than imaginative, mathematical reasoning.

<sup>43</sup> For an account of the eventual careers of Cambridge's senior wranglers in mathematics, see Forfar, "What Became of the Senior Wranglers?"

Maxwell speak in an 1870 address to the British Association, he was offering “reflections on the limits of statistical knowledge” (203), repeatedly arguing that statistics could yield general predictions, but could not explain particulars.

Statistical societies often sought to defend against such charges by defining themselves as recorders of information, recusing themselves from prediction altogether. William Cooke Taylor contended that “[i]t is the business of the statistician to collect and tabulate facts in order to discover the laws of their occurrence; it is no part of his proper duty to investigate their causes” (11). Thus the motto of the Statistical Society—*Aliis Exterendum*—“to be threshed out later” (fig. 1).

Figure 1, Seal of the Royal Statistical Society, 1838-57.



*The Journal of the Statistical Society of London* explained that “Statistics differs from Political Economy, because, although it has the same end in view, it does not discuss causes, nor reason upon probable effects; it seeks only to collect, arrange, and compare, that class of facts which alone can form the basis of correct conclusions with respect to social and political government” (1 May 1838). Political economy might hazard guesses, but statistical societies tended to claim loftier ground, untrammelled by probability logic. In other words, statistical analysis was skeptical of probability’s predilection for *narrative*. This aversion had obvious political implications. An 1849 review in *The Edinburgh Review* of statistical analysis of coal production, for example, claims sympathy for the harsh working environment faced by miners, but applauds statisticians for suggesting “nothing else, that we cannot sustain by facts, and by the evidence of living witnesses” (546). This suspect skepticism of narrative synthesis was roundly mocked by Charles Dickens in “The Mudfog Papers” (1837) and *Hard Times*.

There were also objections to how probabilistic predictions, once made, might be read. Antoine Augustin Cournot (more widely known for his contributions to modern price theory) argued that probabilistic predictions were dependent on procedures that were effectively invisible to most readers:

the probability [we have calculated] will lose its objective meaning for someone unfamiliar with the work that revealed the result; depending upon the view this person has of the intrinsic value of the characteristic that served as the basis for the



corresponding categorization, the same size deviation may lead to different judgments in identical circumstances. (192-3)

In Cournot's account, many predictions are subject to interpretation, and can be read in many different ways. Continuing, Cournot argues that predictions have meaning only relative to the series on which they are based, writing that social statistics data admitted to many possible, even plausible, categorizations. When the processes governing data sorting and classification leave no trace, there is no fixed rule that can be used to evaluate whether or not observed differences might be due only to chance (199). Predictions depend upon where we begin, and in how we order and segment the data available. Cournot's objection calls predictions into question, suggesting that that arbitrarily selected beginnings are nonetheless crucial determinants of outcomes—the data on which computations depend are subject to “the make-believe of a beginning,” just as novels are (*Daniel Deronda* 3).

Oblivious to any such objections, Henry Thomas Buckle followed Condorcet, Laplace, and Quetelet in contending that observed social regularities suggested that the past could be charted via probability. He introduces the resulting *History of Civilization in England* (1857, 1861) by claiming to understand history deductively, discerning the “order, symmetry, and law” underlying social development. “Statistics have been so sedulously cultivated,” he writes, that he could “combine” all of history “into a whole, and ascertain the way in which they are connected with each other” (1.3). Buckle's attempts to mathematize the study of history are largely introductory, but important nonetheless. They license the scope and validity of his project, and explain in part its interest for its readers; *The New York Times* concluded its review of his second volume by deeming him a father and founder of “the Science of History” (July 28, 1861). Eliot read Buckle's first volume in 1857, when she was beginning *Adam Bede* (*Letters* 2.404), and dryly remarked that she found herself “very far behind Mr. Buckle's millennial prospect, which is that men will be more and more congregated in cities and occupied with human affairs, so as to be less and less under the influence of Nature, i.e., the sky, the hills, and the plains; whereby superstition will vanish and statistics will reign forever and ever” (*Letters* 2.417). His writing, she wrote, “inspires me with a personal dislike” (*Letters* 3.320).

Eliot, much like Buckle, was interested in synthetic, far-reaching explanations of historical process. This hope echoes through Eliot's posthumously published essay, “Historical Imagination.” In it, Eliot defines history as reconstructing

in detail the various steps by which a political or social change was reached, using all extant evidence and supplying deficiencies by careful analogical creation. How triumphant opinions originally spread—how institutions arose—what were the conditions of great inventions, discoveries, or theoretic conceptions—what circumstances affecting individual lots are attendant on the decay of long-established systems—all these grand elements of history require the illumination of special imaginative treatment. (243)

Like Laplace and Scott, Eliot regards detailed explanations of historical change as “analogical creation[s]”—“special imaginative” extrapolations based on likeness. Such step-by-step illuminations are crucial to navigating contemporary social movements. “For want of such real, minute vision of how changes come about in the past,” Eliot urges, “we fall into ridiculously inconsistent estimates of actual movements, condemning in the present what we belaud in the

past, and pronouncing impossible processes that have been repeated again and again in the historical preparation of the very system under which we live” (244). A fictional synthesis of extant evidence might illuminate historical process, and—in so doing—assist recognition of the real exigencies of the present. Yet Eliot describes this synthesis in a surprisingly vague way, demanding “brief, severely conscientious reproductions, in their concrete incidents, of *pregnant* movements in the past” (244, italics mine). Following Kames, Hume, and Fielding, Eliot links genetic and historical relation. Despite its familiarity, Kames might have found this description rather curious. Gone is his exuberant wish to be entertained by historical “illumination” in all the glory of its detail, replaced by Eliot’s urgent demand for consistent “estimation” of brief, severe, and concrete details. Eliot recasts Kames’s rapid-fire genetics of history (by which one event smoothly gives birth to the next) with a slower model: gestation. Concrete and convulsive effects follow causes so long past as to be forgotten.

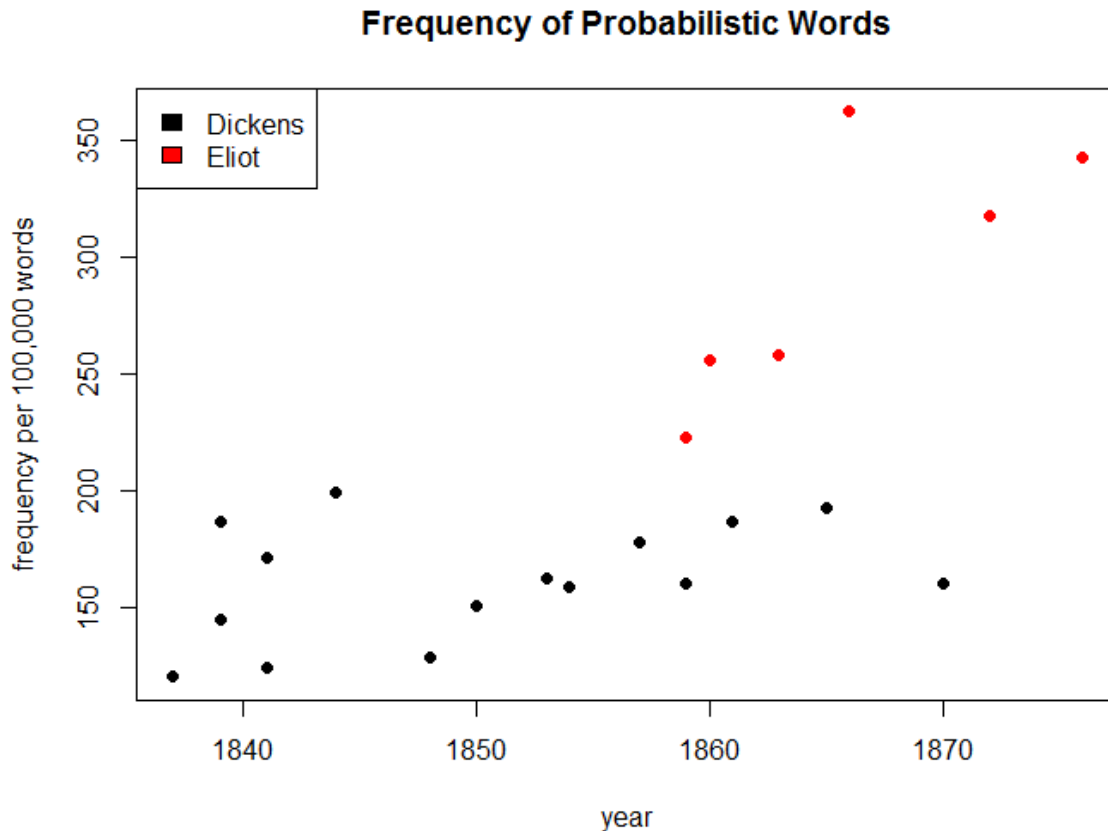
Eliot ties these two figures—gestational change so minute as to be invisible, and sudden eruption—in *Adam Bede*. “Are you inclined to ask whether this can be the same Arthur?” Eliot prods readers, as she depicts Arthur Donnithorne blithely imagining an easy end to Hetty’s sorrow at their parting (302). We are asked to connect Arthur’s irresponsibility to his past scrupulousness. Meanwhile, Eliot depicts Arthur constructing a future over which his dalliance with Hetty will have little import. His “lens of apologetic ingenuity” (301) reshapes the past as he wishes it to be; parting from Hetty, he finds himself admiring “the beautiful arrangement of things” (301). He does not prepare for the possibility of Hetty’s pregnancy, nor does he imagine the possible social consequences of her predicament. On the one hand, we confront the difficulty of reconciling an apparent discontinuity in Arthur’s past and present behavior; on the other, we watch as Arthur denies the possibility of a present cause giving way to a future effect. And yet the train of events leading to Hetty’s trial is already well underway. “Europe adjusts itself to a *fait accompli*, and so does an individual character,” Eliot writes, darkly, “until the placid adjustment is disturbed by a convulsive retribution” (302). Momentarily, Arthur’s inability to understand the convulsion ahead parallels the unpredictability of revolutionary history: beneath stable placidity lurks a convulsive retribution that has long been brewing, all too predictable, and entirely beyond prediction.

### **Alternative Predictive Strategies**

What distinguishes Eliot’s “special imaginative treatment” from Buckle’s probable histories? How might gestational change and sudden eruption tie together, if not via mathematical deductions based on widespread patterns? In what follows, I will suggest that the answer lies in an ethics—rather than a mathematics—of prediction, which Eliot lays out in *Daniel Deronda*.

*Daniel Deronda* is obsessed with probability. The mathematical historian Theodore Porter, a somewhat unlikely Eliot critic, observes offhandedly that Eliot treats statistics as a “tired cliché” in the novel (252). She certainly uses words like “probability” with striking frequency (fig. 2).

Figure 2, Frequency of Probabilistic Words in Eliot's Novels



Dickens's novels (represented here by black dots) are included for comparison to Eliot's (the red dots). We can see, on the one hand, the prevalence of probability-related words in Eliot's novels relative to Dickens's, and on the other, Eliot's mounting interest in probability over time.<sup>44</sup> Save for *Felix Holt* (1866), *Deronda* contains the greatest frequency of probabilistic words.

The novel also contains Eliot's most gifted mathematician. Daniel Deronda gets as far as Cambridge in his studies, where he "applie[s] himself vigorously to mathematics," and takes aim at a mathematical scholarship in his second year. Like Adam Bede, *Deronda* is also good, which we know as readers because—among many other things—he abandons his mathematical preparation to help his friend Hans prepare for his own exams. Perhaps more significantly, he also does so because he feels that mathematics cannot afford insight into "the vital connections of knowledge" (152). *Deronda*'s mathematical aptitude signals intelligence, stamina, and imaginative proclivity. His recognition that mathematics cannot help him understand "vital connections" suggests that he will espouse a method of conceiving of connection quite different from the all-encompassing statistical accounts of reality imagined by Quetelet and attempted by Buckle.

<sup>44</sup> Words used: lot, lots, likely, chance, lottery, probable, probability, odds, risk, hazard, expectation, expect, luck, statistics. To control for different lengths, the graph reflects the frequency of each of these words per 100,000 words in each novel. Eliot does not always use each of these words in their probabilistic sense, but the graph nonetheless indicates an overarching preoccupation with concepts of likelihood.

This possibility appears all the more likely, because of Eliot's eager embrace of contemporary critiques of probabilism. In *Deronda*, we encounter feelings disguised in calculation (as in *Adam Bede*), the moral degradation of the inveterate gambler's accurate predictions (as in *Romola*), and chronically misused probability logic. In "The Large Novel and the Law of Large Numbers, or Why George Eliot Hates Gambling," Jesse Rosenthal offers one example, arguing that Gwendolen and others in the novel are prone to the gambler's fallacy (the faulty assumption that stable long-run averages are reflected in the short term, often leading gamblers to believe that a present loss implies a future win). The novel, Rosenthal contends, shows an "increasing interest and unease in the explanatory power of statistics" (778). I would refocus the point, to suggest that Eliot shows an increasing interest and a remarkable unease with the ways in which mathematical computations of likelihood, accurate or not, are imported wholesale into daily spaces. (Eliot, as Jesse Rosenthal remarks with admirable brevity, "hates gambling," but her depiction of the gambler's fallacy doesn't really constitute evidence of her hatred: the gambler's fallacy is a *fallacy*, to be avoided by gamblers.) In what follows, I will argue that *Deronda* is shaped by a series of probabilistic judgments—those made by the characters, and those encouraged in the novel's readers. *Deronda*'s imaginative alternative to these judgments constitutes the novel's solution to the problems of prediction.

It is a truth universally acknowledged that gambling matters in *Deronda*. The novel opens at the roulette table, where Gwendolen Harleth chooses to lose dramatically rather than cash in on her dwindling winnings. Deronda watches, absorbed by his own speculations ("Was she beautiful or not beautiful?" (3)). Wilfred Stone points out that gambling unites the famously bifurcated novel: Gwendolen's reckless wagers with her money and her marriage contrast Deronda's risky commitment to Jewish nationalism (26-7). Within each story of risk-taking, lesser gamblers abound: Lapidoth, the inveterate gambler, who steals from his child to fuel his addiction, Gwendolen's family, whose fortunes collapse because of their risky investments in "rascally banking business" (240), Gwendolen's uncle, who wagers that by supplying Gwendolen with a fine horse, he might eventually supply her with a fine marriage, and so on. The novel extends *Romola*'s equation between betting and probabilistic reasoning, insisting that that anyone may, like Lapidoth, "gamble away" all sympathetic capacity, replacing it with calculation. Gambling outside of the casino in the novel is so common that it becomes itself hackneyed, tired, and dull. Indeed, for Grandcourt, gambling is a "confounded strain" because it is so *like* everyday life (136).

It is partly like everyday life because of the compulsive calculations that characters make about each other, and about themselves. Eliot's narrative aside that "a little speculation on 'what may be' comes naturally" seems a vast understatement; her characters predict compulsively, if often incorrectly (78). Only the novel's most loathed character seems to understand the limitations of using probability to predict individual behavior. Lush holds "some general certainties" about Grandcourt, but confronts the impossibility of predicting Grandcourt's future beyond two divergent and mutually exclusive courses of action: either Grandcourt will marry Gwendolen, or he will abandon her entirely. Lush knows Grandcourt "perhaps better than [...] any other subject," but he determines that "to know Grandcourt was to doubt what he would do in any particular case" (239). "Of what use," Eliot interjects, "is a general certainty that an insect will not walk with his head hindmost, when what you need to know is the play of inward stimulus that sends him hither and thither in a network of possible paths?" (239). Lush can determine the bounds within which Grandcourt will vary, but he cannot make an acceptable

prediction between two mutually exclusive outcomes; the only toss he can accurately predict is “his chin in despair of theory” (243).

Lush’s analysis is perhaps the most accurate of the novel. The novel represents characters succumbing to a series of irrational predictions. As in *Adam Bede*, it’s almost universally the case that equating the wished-for with the likely leads to unhappy ironies and chronic self-delusion, regardless of whether or not the event itself eventually obtains. Eliot reminds us that “a great deal of what passes for ‘likelihood’ in the world is simply the reflex of a wish” (82), and wish becomes near-certainty for Hans when he fancifully construes Mirah’s conversion as inevitable, her brother as vile, and Deronda as anything but a rival for her affections. “I can’t say that [Hans] is not active in imagining what goes on in other people,” Deronda comments caustically, “but then he always imagines it to fit his own inclination” (554). Similarly, Grandcourt reads his wife’s behavior through his own repulsive personality; Gwendolen finds herself “under eyes which saw her past actions solely in the light of her lowest motives” (515). The variety of hobbyhorses to which the probable is harnessed over the course of the novel reiterates Comte’s charge of the “fanciful subordination” through which desires begin to appear probable. Gwendolen, Hans, and Grandcourt mistakenly construe “bare possibility” as “the best-clad likelihood” when they mask their wish-laden likelihoods in the language of probability (325).

Perversely, consciousness of the pitfalls of wish-based projections leads characters into equally poor predictions. Recognizing the wished-for as over-weighted by their desire, characters compensate backwards, anticipating that which they fear. Eliot describes this double bind:

Wishes are held to be ominous; according to which belief the order of the world is so arranged that if you have an impious objection to a squint, your offspring is the more likely to be born with one; also, that if you happened to desire a squint, you would not get it. This desponding view of probability the hopeful entirely reject, taking their wishes as good and sufficient security for all kinds of fulfillment. Who is absolutely neutral? (322)

Eliot turns to address us directly. We, her readers, are charged with poor predictions, liable to compensatory error and confusion even when events seem certain. We’re told that we are

often unable to act on our certainties; our objection to a contrary issue (were it possible) is so strong that it rises like a spectral illusion between us and our certainty; we are rationally sure that the blind-worm cannot bite us mortally, but it would be so intolerable to be bitten, and the creature has a biting look—we decline to handle it. (109)

Certainty confuses our predictions just as wishes and fears do. As Rex pithily warns Gwendolen, “You see you can’t escape some sort of likelihood. And contradiction makes the strongest Likelihood of all” (56).

We might at this point toss our chins like Lush, and admit our chronic inaccuracy. But Eliot represents uncertainty as itself inspiring feverish prediction. Gwendolen (who teasingly tells Grandcourt during courtship that “I think I do [like uncertainty] rather. There is more in it”) (124), avoids interrogating her all-too-real doubts about her marriage by instead projecting on the blankness she perceives in Grandcourt, confidently anticipating she will easily manipulate him, and even imagining that she may compensate for her broken promise to Mrs. Glasher by

reinstating prospects in some form for Lydia and her children. Just as Gwendolen decides to read Grandcourt as she would a lizard (she “knew hardly anything about lizards, and ignorance gives one a large range of probabilities”), so too does she seek to write her new home as if on a blank slate (115). Offendene and Grandcourt offer “a large range of probabilities” within which Gwendolen can project as she pleases. Predictions like these are doubly problematic, not only in over-writing the future based on fluctuating and contradictory emotions, but also in their evacuation of the past. By imagining her future as distinct from the events that precede her, rather than reliant upon them, Gwendolen abandons what little past she knows, often defining her desires by a simple negation of her prospects:

[w]hat she was clear upon was, that she did not wish to lead the same sort of life as ordinary young ladies did; but what she was not clear upon was, how she should set about leading any other, and what were the particular acts which she would assert her freedom by doing. (43)

And so the past becomes the “ornament she could most conveniently part with” (13); Gwendolen pawns a necklace set with stones that had belonged to her father for funds to continue gambling.

As Eliot frames the question, we can neither grasp the probable nor the improbable in any individual case; if we do formulate predictions, they tend to be perverse combinations of laziness, wishes, and dreads, by turns rendering the dreaded improbable inevitable, and the wished-for good probable. Even an honest embrace of uncertainty might be self-serving, as it is for Gwendolen. The problem, as Eliot frames it, seems to be inherent in *any* predictive mode. In individual human consciousness, probability spaces do not behave in orderly ways; in particular, they need not sum to one, nor need they exhibit logical connections to the outside world, or plausible continuities through time. In hope and in dread, agents are bound by the certain salvation and doom against which (as Gwendolen finds) there can be no rebellion. As Eliot puts it in *Middlemarch*, “Probabilities are as various as the faces to be seen at will in fretwork or paper-hangings: every form is there, from Jupiter to Judy, if you only look with creative inclination” (303).

Damning of probabilities as it is, the novel is eager to offer a solution alongside its critique. As Stone argues, there is good gambling (Deronda’s) and bad (Gwendolen’s). I will suggest in what follows that Deronda’s risky ventures are valued in the novel partly for their independence from probability-based prediction; they therefore constitute an antidote to the poor reasoning of Gwendolen’s fallacious belief in her own good fortune. Whereas Gwendolen works to vacate her past, the orphaned Deronda finds his blank past debilitating, falling into “a meditative numbness” as a result (308). He learns to dread pastlessness, habitually connecting “dread with unknown parentage” (177). An avatar of Eliot’s view of history, he contemplates a number of possibilities, including the likely, though incorrect, supposition that his “uncle” Sir Hugo Mallinger is really his father, acknowledging all the while that “there must be possibilities of which he knew nothing” (146). Tentatively identifying Sir Hugo as his father, he nevertheless continues to identify his guess as “pure supposition” (437), and defers attaching specific probabilities to possibilities. Even when revelation is imminent, he is unwilling to “contemplate any one [possibility] as more likely than another, lest he should be nursing it into a dominant desire or repugnance, instead of simply preparing himself with resolve to meet the fact bravely, whatever it might turn out to be” (530). Understanding all too well the slippage between

predicting, wishing, and betting, Deronda attempts to avoid quantifying the unknowns of the past, even as he longs for recovery of it.

Though Deronda often manages to suppress calculations of likelihood, he cannot cease speculating altogether. Captivated by Gwendolen in the opening scene of the novel, Deronda's interest in her persists after her marriage, when he catches "all [the] negative whisperings [concerning Gwendolen]; nay, he repeated them distinctly to himself" (435). Aware of the possibility that Gwendolen knew of Lydia Glasher's existence before her marriage to Grandcourt, Deronda tries to imagine what led her to marry at all. Watching her at Diplow, he falls "again and again to speculating on the probable romance that lay behind that loneliness and look of desolation," but detaches himself from these speculations by smiling "at his own share in the prejudice that interesting faces must have interesting adventures" (158). Though Gwendolen becomes a surface onto which Deronda projects, he is all the while aware that his projections are grounded in assumptions that could be false. Like the tableaux, statues, and paintings that riddle the novel, the gulf between Gwendolen's stony exterior and her inner turmoil reveals the inadequacies of projection. Though Eliot echoes Quetelet in her dreams of the "narrator of human actions" who might, like the astronomer, thread "the darkness with strict deduction, accounting so for every visible arc in the wanderer's orbit" (139), the novel marks all such threading of the visible with the invisible as fictional extrapolation, to be discounted as such, however useful its performance may be.

Suspending prediction is an inadequate, even impossible, ethical mode, and Deronda does not manage to do it. Instead, he models prediction distanced from likelihood. Deronda's foremost, and most-discussed, prediction turns out to be purely stylistic—an imaginative illumination, if you will, of Gwendolen's possibilities. "You can, you will, be among the best of women, such as make others glad that they were born" (658), he tells Gwendolen, envisioning a future whose probability is a function of its relative good, rather than its likelihood. Deronda tempers the possibility that Gwendolen is guilty of Grandcourt's death by arguing that one must provide a "large imaginative lenience towards others" (612), not because such lenience is a means towards truth, but because it is a mechanism for future good. Deronda's lenience toward Gwendolen suggests that because Deronda can imagine a world in which Gwendolen *can* be good, he is bound to tell her that she *will* be good, and perhaps even that she *was* good. By the end of the novel, Gwendolen can repeat this lesson, writing to Deronda, "It is better—it shall be better with me because I have known you" (694-5). (As Eliot puts it in *Romola*, "to have once acted nobly seems a reason why we should always be noble" (348)—yet another reason for reading the past with imaginative lenience.) This method of prediction evokes extreme need in others; Gwendolen and Mordecai seek Deronda out repeatedly as a means of realizing improbable futures.

Unlike Mordecai's cause, which remains possible however unlikely, Gwendolen quickly becomes a problem case for Deronda's theories. Trapped as she is, she demands that he conceive of an escape for her. Yet her future looks as static as print. "I seem to see all that can be," Gwendolen tells Deronda, "and I am tired and sick of it" (387). She discovers "no effort at freedom that would not bring fresh and worse humiliation," as every struggle becomes a new mechanism of entrapment (473). Deronda offers her little concrete help; his only suggestion is that she think herself free by willingly pursuing selfless ends in context of her current obligations. He reminds Gwendolen, for example, of her commitment to her mother, "It is a duty that cannot be doubtful [...] Other duties will spring from it" (658). His efforts to change her expectations are entirely linguistic, as he acknowledges, wondering desperately, "How could

he grasp the long-growing process of this young creature's wretchedness?—how arrest and change it with a sentence?" (521). He can only offer her words, and "[w]ords seemed to have no more rescue in them than if he had been beholding a vessel in peril of wreck" (521). Perhaps the novel places more confidence in words than *Deronda* does. If there is a sentence in *Deronda* that arrests what Irene Tucker calls Gwendolen's "relentless self reading" (78), surely it is Deronda's insistence that Gwendolen can and will "be among the best of women." The novel ends with a stylistic return to this sentence: Gwendolen learns Deronda's predictive methods. "It is better—it shall be better with me because I have known you," she writes in parting. Understanding that her future is improved by her reimagining of it, Gwendolen echoes Deronda (and Han Solo) with her bold unwillingness to contemplate odds. A wish turns into a prediction, it's true—but the wish is both deliberate, and acknowledged. The wish becomes the *point*.

The very structure of the novel offers to convert readers, along with Gwendolen, to Deronda's mode of prediction. Opening with a temporal discontinuity which enacts Cournot's problems intrinsic to probability results, the novel startles us midway with the unexpected discovery that we have begun by reading a flashback. As Sarah Gates points out, Eliot's troubling of beginnings works to destabilize the narrative process altogether; "origin and conclusion" (175) are no longer contained within the novel to finalize its meaning. From novel's first syntactically upended sentences to its open ending, Eliot thwarts, defers, and mocks readerly predictions. Sophisticated literary prognosticators—identifying Deronda as Mirah's brother, or the dark Mrs. Glasher as the Cohen's daughter—might be right in many novels, but would be wrong in this one. Even generic conventions fail to serve as stabilizing forces; the novel flits from domestic to gothic to epic, troubling and disrupting formal properties of each. Most importantly, the story remains incomplete, a lengthy beginning to Daniel and Gwendolen's futures, forever open. We do not discover how the two central gambles of the novel work out, an ignorance we might address by weighing probabilities ourselves, had we not been trained by the novel to do otherwise.

The central "exercise" for the reader occurs with Grandcourt's death and the assignation of responsibility for it. Eliot forces us to suspend certainty (although we may conjecture as we wish) by delaying Gwendolen's explanation, just as she had, years earlier, delayed Hetty Sorel's tearful explanation of her abandonment of her child in *Adam Bede*. We must wait for Gwendolen to be collected, dried off, and put to bed for the night. When she finally begins her account to Deronda the next morning, Gwendolen describes her marriage at such length that the long-suffering reader must begin to wonder if she will bother to discuss its termination. As her account goes on, the reader can judge, hope, fear, and forecast alongside Deronda as Gwendolen speaks for page after page without acknowledging her responsibility. We can (like Grandcourt, who "knows what to think beforehand" (435)) guess as confidently as we please. But we are also invited to echo Deronda, "You can, you will, be among the best of women, such as make others glad that they were born" (658)—valuing the past in accordance with the possibilities it affords the future.

Through the novel's suspensions and reversals—structural, syntactical, and chronological—we are by turns goaded into prediction, and cautioned against predictive errancy. Deronda's non-probabilistic ethics suggest that fiction is a necessary means not only of inhabiting other consciousnesses, but of reading beyond mistakes, thereby re-creating both past and future. This ethics seeks not to violate the narratives of the past, but to re-narrate them. Thus even as Deronda actively weaves probabilities in his mind "about Gwendolen's marriage," and decides that she likely was aware of Grandcourt's connection with Mrs. Glasher, he begins



to excuse her and to project a course for her to have meant well in the past and to be better in the future (372). However significant (and terrible) he finds Gwendolen's past, Deronda seeks to tell a *possible* history that represents the best of all possible pasts. In parallel, Eliot constructs predictive spaces for her readers in which the bounds of the possible remain inviolable, but the probable is rendered perpetually dubious. This doubt changes not only how we view the future, but how we read the past and respond to the present. When we discover the fallibility of our habitual modes of prediction, we become responsible for finding ethically grounded ways of predicting about—or reading—history, and each other.

### **Conclusion: The Pleasure of Eliot's Probable Histories**

Hans-Georg Gadamer writes that a “person who is trying to understand a text is always performing an act of projecting” (841)—and in Eliot's novels, characters' performances of projection underscore this readerly necessity. But projection—and literary probability—take a new shape under Eliot's guidance. Eliot redefines the novel as an ethical predictive form, rather than empirical (*Tom Jones*, *The Female Quixote*). We are no longer charged with connecting cause and effect in the easiest manner possible; instead, we are asked to recognize connections as the necessary and important work of deliberative fictions. Challenged to reason about the past based on the “extant evidence,” readers are encouraged to regard predictions as stylistic interventions: subject to discourses both novelistic and scientific, liable to the foibles and pitfalls of each. This recalibration of literary probability toward the best of all possible histories represents not only a shift in readerly responsibilities, but also a condition for newfound pleasure. With “this drop of ink at the end of my pen,” Eliot commences *Adam Bede*, “I will show you the roomy workshop of Mr. Jonathan Burge, carpenter and builder, in the village of Hayslope, as it appeared on the eighteenth of June, in the year of our Lord 1799” (17). Eliot's sorcery—her drop of ink—promises “to reveal to any chance comer far-reaching visions of the past” (17). Without it, not only would men like Adam Bede be lost to us; so too would each and every vision to come.<sup>45</sup>

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<sup>45</sup> Deanna K. Kreisal argues that it is *only* through interventions like these that the story remains narratable (541).

## Chapter 5: Plot Circles: Hardy's Drunkard's and their Walks

Eliot's novels engage deliberately with contemporaneous uses and misuses of probability. In conclusion, I argue that deliberate engagement is not a necessary condition for literary-mathematical exchange. The shape of Thomas Hardy's Wessex novels reflects late nineteenth century mathematical models for motion and choice. In what follows, I offer readings of the binaries and circles structuring the Wessex novels, and argue that contemporary cultural artifacts—ranging from popular board games to mathematical and biological theories—demonstrate the prevalence of similar mathematical models in Hardy's world as ways of understanding and representing causation. These readings point to an exchange between the form of the novel and mathematical ideas percolating across disciplines and amusements in the late nineteenth century.

Hardy's characters walk in circles. Willingly or unwillingly, characters inevitably wind up back at their beginnings—traversing the geographies of their pasts, however deeply buried those pasts may be, and however far from home each has managed to travel. In their journeys, characters encounter not only their own histories, but also register fleeting fragments of the weighty national pasts that clutter Hardy's palimpsestic landscapes. Weighty these pasts may be, but re-encounter offers little substantive value for the present—more often than not, backwards journeys reflect an oft-repeated irony of narrative emptiness and purposelessness. The (former) Mayor of Casterbridge, for example, ends up just where he started, “on the precise standing which he had occupied a quarter of a century before” (277). In revisiting the “renowned hill” where the now-absent furmity tent stood “for so many generations,” Michael Henchard sees history repeat itself, but not as farce (275). Rather, Henchard faces his own failure, as he realizes that “his attempts to replace ambition by love had been as fully foiled as his ambition itself” (276). Henchard's final walk turns his life, and our journey as readers, into a circle. With Henchard, we end up right where he—and we—began.

Henchard's return has another shape, too: that of the drunkard's walk. The term describes Henchard's literally intoxicated mis-steps, but it also explains his trajectory in a technical and mathematical sense. Writing to *Nature* in July 1905, Karl Pearson posed the problem of the drunkard's walk in its present form. “A man starts from a point  $O$  and walks  $l$  yards in a straight line; he then turns through any angle whatever and walks another  $l$  yards in a second straight line. He repeats this process  $n$  times.” Noting that “[t]he problem is one of considerable interest” (294), Pearson asked readers to determine where his man wound up. That August, Lord Rayleigh directed *Nature's* readers to a near-identical problem, published and solved in 1880. Rayleigh's solution demonstrates that the walker is just as likely to wind up where he began as anywhere else.<sup>46</sup> In reply, Pearson observed that “[t]he lesson of Lord Rayleigh's solution is that in open country the most probable place to find a drunken man who is at all capable of keeping on his feet is somewhere near his starting point!” (318).

Henchard is by no means alone among Hardy's characters in his circling journey, a journey whose futility perpetually contrasts the richness of the histories that he traverses: English and Roman, recent and ancient, personal and collective. Like Henchard, Tess

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<sup>46</sup> For more on the history and theory of random processes like the drunkard's walk, see Theodore Porter's and Stephen Stigler's histories of statistics; for a generally accessible historical survey, see *Mathematics in Victorian Britain*. For a survey of the uses to which random processes have been put, see George H. Weiss's “Random Walks and their Applications.”

Durbeyfield must retrace her steps from the pastoral paradise of Talbothays back home, where her father's ravings of "family skillentons in their own vaults" (205) have only amplified in her absence. Jude Fawley, perhaps the least unwitting among these characters of the freighted histories his circles touch, spins dizzily round Marygreen and Christchurch in journeys that culminate in his final, crazed trek from Christchurch to Marygreen to see Sue one last time. The walking that begins so many of the novels turns out by each novel's close to have been always circuitous, if not precisely circular, always past-directed, and always past-determined, towards stories already told and courses already traversed. As Peter Casagrande has argued in *Unity in Hardy's Plots* (1982), these movements backwards—attempts to return home, to recover a buried past, or to restore some piece of history, however tiny—universally structure Hardy's plots. Every Hardy character spirals, like Henchard, through a memory-laden landscape, charged with personal and collective histories at once, even as this spiral comes to embody the evacuation of future possibilities.

Circular journeys are possible partly because of the intense geographical specificity that Hardy affords his novels. That specificity has drawn sustained attention since the novels' serial publication, eventually inducing Hardy himself to sketch maps and publish a guide book to the half-fictive, half-real region of Wessex.<sup>47</sup> But this oft-noted geographical unity masks an underlying structural principle that has so far gone unexplored. Choices in Hardy's novels—for readers and for characters alike—are radically limited to two, apparently equivalent, options. Even the landscape's coordinates are consistently binary. And this is where *Mayor* (1886)—and *Tess* (1891), *Jude* (1895), and *Return* (1878)—draw on contemporary developments in the mathematical study of probability, including the problems posed in *Nature* by Rayleigh and Pearson. Predictive models like the drunkard's walk link simplistic moments of limited (often binary) choice to larger, circuitous trajectories. By representing choice as binary, Hardy produces the roundabout geographic trajectories of his novels—symbolic geometries that I call "plot circles." Hardy's novels not only reflect contemporary Victorian models for human decision and movement; they turn these models into a formal principle.

## Narrative Equipossibilities

Simplified versions of Pearson's problem followed his initial query. Most often, the drunkard faces a series of binary decisions, or forks in his road. At each fork, he turns in one of two directions, walks a fixed number of steps, and reconsiders: right or left? In some versions of the problem, he tosses a coin to decide (Weiss 65). At each fork in the road, Pearson's drunkard turns in one of two directions, walks a fixed number of steps, and reconsiders: right or left? In some versions of the problem, he tosses a coin to decide. For now, we will bracket the larger shape—the drunkard's unfortunate tendency to circle back to his lamp post—and focus on the series of binary choices that produce this futile return. *The Mayor of Casterbridge* begins with one such choice, as Henchard and his wife arrive at the fair at Weydon-Priors, weary and thirsty.

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<sup>47</sup> Critical examination of what Hardy called his self-constructed "geographical limits" ("General Preface" xiii) in the Wessex novels has produced one of the most dynamic threads of Hardy scholarship, one that includes Eve Sorum's "geo-empathy" (180), by which Sorum posits geography as the connecting mediator of empathy in Hardy's novels and Forest Pyle's perceptive observation that in Hardy, time is represented spatially, so that when characters walk through space they also walk through time (362-63). These accounts are united in their consideration of the curious aesthetics that knits fragments of history and geography together, layer upon layer, to map Hardy's historical discontinuities onto the novels' radical spatial continuities.

They must decide between two tents—one marked, “Good Furmity Sold Hear” and the other, “Good Home-brewed Beer, Ale, and Cyder” (4). Henchard prefers the beer tent; it’s Susan who brings him round to the more “nourishing” furmity tent, where (unbeknownst to her) hard liquor in form of rum-laced furmity awaits. This decision sets the plot drunkenly spinning: three rum-laden basins later, Henchard offers his wife for sale, and Richard Newson, a stranger, buys her for five guineas. Save for Susan Henchard’s well-meaning insistence, the narrative of Michael Henchard’s blighted attempts to atone for her sale might never have got going. The novel’s repeated emphasis on this apparently mundane choice, and others like it, enhances its narrative oddity. Susan chooses furmity, and Henchard chooses to go along with her, but their imperfect information about the contents of each tent effectively randomizes their decision. *Mayor* is structured on a series of such apparent coin tosses.

Choices in the novel, as between beer and furmity, are routinely between two mutually exclusive options, and based on profoundly limited information. Should Farfrae stay in Casterbridge or go to America? Once in Casterbridge, should he choose Elizabeth-Jane or Lucetta? Wheat prices, Henchard is sure, will go up or down, and the direction they take will alter his fortunes, however ill equipped he may be to discern it: “before acting he wished—what so many have wished—that he could know for certain what was at present only strong probability” (159). Lucetta experiences the same struggle between two opposed courses as she selects her spring wardrobe. “But settling upon new clothes is so trying,” she complains. “‘You are that person’ (pointing to one of the arrangements), ‘or you are that totally different person’ (pointing to the other), ‘for the whole of the coming spring and one of the two, you don’t know which, may turn out to be very objectionable’ “ (143).

Curiously, the possibility that she broaden her field of arrangements remains unexamined. Nor can she broaden her selection of suitors. Having “decided to break away from Henchard one might have supposed her capable of aiming higher than Farfrae” (153), the narrator muses, nonetheless insisting that Lucetta aims no higher. In this admittedly unjustified insistence, the narrative flaunts its willfully small world, a world of two men, two dresses, and two tents. Why should the novel formulate such restrictively binary choices, and dwell upon them so explicitly? Plausible alternatives abound. Lucetta could consider other suitors. The Henchards could have seen the furmity tent first, giving it the prior temporal claim, or the novel might make room for a bewildering array of tents. Wheat prices don’t just go up or down; they also stand still. But in *Mayor*, they do not. Roads in *Mayor* are full of forks, but characters, contrary to Yogi Berra’s directive, cannot take them. They are stuck choosing, retracing, and regretting.

Like John Loveday in *The Trumpet-Major* (1880), who finds himself “so balanced between the impulse to go on and the impulse to go back that a puff of wind either way would have been well-nigh sufficient to decide for him” (167), characters pause again and again, contemplating choices so equally weighted as to seem only arbitrarily distinguishable. Regret-laden crossroads dominate decisions in the novel, and they reach even further, structuring the ways in which characters understand others. In their interpretations of each other, for example, characters often conceive of two divergent readings, imagining the two to be equally likely. Henchard’s fate, the returning Susan muses, could have taken radically different directions. “He had possibly drunk himself into his tomb,” she hypothesizes, “But he might, on the other hand, have had too much sense to do so; for in her time with him he had been given to bouts only, and was not a habitual drunkard” (22). Susan’s inability to determine Henchard’s course lines her up with most Hardy readers: as many critics have suggested, we don’t actually *know* these characters. Peter

Widdowson proposes that Hardy “exposes characterization itself as a humanist-realist mystification” (97); Gilles Deleuze observes that Hardy’s characters are not so much characters as collections of “so many ‘unique chances’—the unique chances from which one combination or another had been drawn” (*Dialogues* 40); while J. Hillis Miller points out that, rather than offering us an opportunity to empathize with these “collections,” Hardy insists that we gloss their conflicted and conflicting behavior, often without the satisfaction of definitive answers.

As Virginia Woolf puts it in “The Novels of Thomas Hardy,” “each man or woman is battling with the storm, alone, revealing himself most when he is least under the observation of other human beings” (244). But our access to this revelation is rarely unattended by perversely confused narrative guidance. The novel, like *Susan Henchard*, stubbornly offers us *too many* readings of its characters.<sup>48</sup> With surprising frequency, characters’ actions are circumscribed by a variety of possible, but radically different, readings. Like Michael Henchard’s laugh, upon which “many theories might have been built,” more than theory usually remains elusive. But theory abounds. Henchard’s laugh

fell in well with conjectures of a temperament which would have no pity for weakness, but would be ready to yield ungrudging admiration to greatness and strength. Its producer’s personal goodness, if he had any, would be of a very fitful cast—an occasional almost oppressive generosity rather than a mild and constant kindness. (27)

Hardy offers over-abundant and competing explanations. The producer of Henchard’s laugh might be good, and he might not; he could be pitiless, but perhaps also humble. More striking than the perspective-shifting jolt of these excessive narrative accounts is the frequency with which they come in twos. Donald’s success in trade, for example, might be because “his northern energy was an over-mastering force among the easy-going Wessex worthies” or might be only “sheer luck.” Regardless which, “the fact remained that whatever he touched he prospered in” (98). Similarly, Henchard’s “ambiguous gaze [...] at one moment seemed to mean satisfaction, and at another fiery disdain” (73). As readers, we become like Hardy’s characters, confronted by a series of two-fold choices as we travel through the novel. And like Lucetta, we remain woefully unaware of which choices may turn out to be “very objectionable.”

If Hardy throws us into “perpetual dilemmas” (*Return* 71), it’s notable that these dilemmas are authentic for both readers and characters, insofar as they are almost exclusively two-fold. In fact, the plot of *The Return of the Native* suggests that decisions *only* get made within this dual space, a space which seems to derail logical thinking even as it accommodates the illusion of it. The narrative itself is structured upon comparisons, comparisons which Hardy suggests may only be possible in limited horizons and amidst limited social spheres. Of Egdon Heath, he writes,

On the fine days at this time of the year, and earlier, certain ephemeral operations were apt to disturb, in their trifling way, the majestic calm of Egdon Heath. They were activities which, beside those of a town, a village, or even a farm, would have appeared as

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<sup>48</sup> Hardy’s “idiosyncratic mode of regard” (*Life* 225), which focalizes our reading experience through the lens of an uncommitted spectator, is a touchstone of Hardy criticism, discussed variously by Virginia Woolf, Eve Sorum, William A. Cohen, Peter Widdowson, Gilles Deleuze, Elaine Scarry, Sheila Berger, Lawrence Jones, Julie Grossman, and J. Hillis Miller.

the ferment of stagnation merely, a creeping of the flesh of somnolence. But here, away from comparisons, shut in by the stable hills, among which mere walking had the novelty of pageantry, and where any man could imagine himself to be Adam without the least difficulty, they attracted the attention of every bird within eyesight, every reptile not yet asleep, and set the surrounding rabbits curiously watching from hillocks at a safe distance. (135)

At first glance, Hardy appears to exalt the singularity of the landscape. “[A]way from comparisons,” he tells us, we can see the heath as it really is. But in describing Egdon Heath, Hardy enacts a series of comparisons: setting the heath beside “a town, a village, or even a farm,” Hardy contrasts an imagined Egdon, stagnant and fermenting, with the Egdon of the novel, where “any man could imagine himself to be Adam.” The ghost of the town that Egdon Heath *isn't* near haunts Egdon Heath, allowing us to attend to its “ephemeral operations” properly. *Return* is built from such impossible contrasts. Within its “enclosed plot” (333), actions depend on similarly illogical comparisons: Wildevle elopes with Thomasin once Thomasin has a clear alternative to him, and he mourns for his days with Eustacia because Eustacia is no longer his. Eustacia loves Clym “partly because he was exceptional in this scene, [...] chiefly because she was in desperate need of loving somebody after wearying of Wildevle” (144); she loves him for what he is not: Egdon Heath, Wildevle. Such choices—framed by dubious comparisons between past and present, near and far—drive almost every movement in the novel.

However nonsensical they may be, choices in *Return* have a curious way of looking simultaneously opposed and equivalent. Clym explains of Egdon: “When I first got away from home I thought this place was not worth troubling about. I thought our life here was contemptible. To oil your boots instead of blacking them, to dust your coat with a switch instead of a brush—was there ever anything more ridiculous?” (174). Clym’s explanation tellingly oversimplifies geographical opposition, shrinking the vast array of alternatives that his mother fervently imagines for him to pairs of possibilities: blacking or oiling, brush or switch. “I was endeavouring to put off one sort of life for another sort of life,” Clym insists, claiming that his Parisian experience “was not better than the life I had known before. It was simply different” (174). Clym reduces geographic, national, and cultural difference to the intricacies of clothing maintenance, and his empty contrasts—“one sort of life” against “another sort of life”—reinforce this sense of trivial difference. Lacking as it is in useful distinctions between Egdon and Paris (distinctions that Eustacia can supply all too easily), Clym’s explanation excludes any information that might allow for useful inference. Difference morphs into haphazard equivalence.

## Mathematical Equipossibilities

Egdon or Paris? Blacking or oil? The probability theory Hardy from which drew is massively concerned with how such apparently trivial differences might be quantified. In what follows, I will suggest that Hardy’s binaries reflect a key feature of probabilistic computations, including those Rayleigh employed to answer Pearson’s question. In his calculations, Rayleigh assigns equal probability to the drunkard turning right or left, assuming each direction to be equally likely, or equipossible. This prevalent idea, popularized by Laplace, was first defined explicitly in Jacob Bernoulli’s 1717 *Ars Conjectandi*. Bernoulli designates equipossibility as a mechanism for distributing belief over alternatives in the absence of information; given two

complementary alternatives, Bernoulli reasons, we should weight them equally until information arises to the contrary (219).<sup>49</sup> In essence, we might treat options about which we know nothing as if they were sides of a die, cards in a deck, or slots in a roulette wheel: equally likely to come up with each roll, draw, or spin. Blaise Pascal made use of the concept much earlier, in the initial calculation of his famous wager. “God is, or He is not,” Pascal writes, adding “Reason can decide nothing here. There is an infinite chaos which separated us. A game is being played at the extremity of this infinite distance where heads or tails will turn up” (45). Pascal arbitrarily figures incalculable odds as exactly equal. Laplace articulates this idea, which came to be called the “principle of indifference,” or “insufficient reason” in his 1814 definition of probability. Probability, Laplace explains, consists in “reducing all the events of the same kind to a certain number of cases equally possible, that is to say, to such as we may be equally undecided about in regard to their existence, and in determining the number of cases favorable to the event whose probability is sought” (iv).<sup>4</sup> And these even odds are not merely reserved for moments when we find ourselves “equally undecided” about two possibilities. As Laplace frames it, “reducing all the events of the same kind to a certain number of cases equally possible” is the primary goal of analysis: without defining a limited number of equally possible cases, no further computation could take place.

This reduction went far beyond computational practicality. In his 1718 textbook on probability, *The Doctrine of Chances*, Abraham de Moivre repeatedly orients problems around equipossibility. “Supposing a Lottery wherein the proportion of the Blanks to the Prizes is as Thirty-nine to One,” de Moivre writes in his Preface, promising readers that “it may be proved, that in twenty eight Tickets, a Prize is as likely to be taken as not” (iii). An entire section of *The Doctrine* asks the question of “how many Trials will be necessary to make it indifferent to lay on its Happening or Failing” with varying set-ups (58). Solutions to such problems have dubious use, and do little to “explode the Notion of Luck,” de Moivre’s stated aim in writing the text. Instead, they seem to serve the ancillary hope that probabilistic endeavors might be capable of “pleasing the Mind” (v). Beyond the computational convenience of equipossibility (Laplace, for example, arbitrarily assumed equipossibility in computing jurors’ rate of wrongful conviction), contemplation of even odds seems to offer de Moivre, Laplace, and others *pleasure*.

Though there is nothing to suggest that Hardy’s apparent interest in equipossibility filled him with de Moivre’s zest for computation,<sup>50</sup> Hardy was certainly aware of, and perhaps even versed in *The Doctrine of Chances*. In *A Laodicean* (1881), Will Dare carries around a well-thumbed copy. If Hardy had read so far as the preface, he would have seen de Moivre likening probabilistic reasoning to “a long train of consequences,” a kind of reasoning that Will applies as he seeks to direct the lives of those around him, and a kind of reasoning that we might easily construe as inhering in traditional narrative form (ii). He would also have seen de Moivre’s hope that the text would discourage, rather than encourage, gambling. “There are many,” de Moivre declares in his dedication, “who are prepossessed with an Opinion, that the Doctrine of Chances has a Tendency to promote Play; but they soon will be undeceived, if they think fit to look into the general Design of this Book” (9). Not so for Will Dare, whose father despairs, “[t]hese runs

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<sup>49</sup> There needn’t be only two cases—but the initial, most basic scenario is indeed two cases, each considered equally likely.

<sup>50</sup> De Moivre, like Bernoulli before him, focused on the binomial distribution, a distribution of outcomes of independent experiments with two possible outcomes—yes or no, zero or one, and so on. This particular focus rendered computations particularly vexing. See Stigler, “Statistics Before 1827,” for discussion of this focus and its effects on probability studies.

of luck will be your ruin, as I have told you before” (348). Dare’s reckless gambles suggest that Hardy was familiar with the futility of de Moivre’s hope: the book enjoyed a remarkably warm reception among gamblers, becoming known as a handbook of sorts.

As Lorraine Daston has illustrated, eighteenth-century probabilists promoted their discipline as an antidote to poor reasoning (49-111). De Moivre’s book is a paradigmatic case, proclaiming itself an “Introduction to the Art of Reasoning” (12). In the novel, however, Will’s devoted perusal fails to bolster his plotting. The pleasure of the equipossible seems to consume Will, who cannot leave the roulette table, even when (the plot suggests) more important matters are being settled elsewhere. Somerset, the novel’s hero, recognizes this pleasure, even though he cannot explain it, wondering that players and spectators “could be interested in what to the eye of perfect reason was a somewhat monotonous thing” (324). *A Laodicean* contains accurate explanations of sophisticated concepts in probability (for example, the gambler’s fallacy and the law of large numbers), but other characters articulate these explanations in response to what they perceive as Will’s poor judgment. And though Will’s strategies eventually pay off at roulette, he loses his larger game: Somerset, not Will’s father, marries Paula Broadwell. We remain in suspense over Hardy’s knowledge (and assessment) of de Moivre: is Will a poor reader of *The Doctrine*, or does *The Doctrine* inspire and endorse Will’s poor reading? The two conjectures appear perfectly balanced.

Laplace’s principle of indifference imbues such balanced conjectures with the same perplexing allure that Somerset observes at the roulette table. Possibilities look enticingly equivalent in *Mayor* partly because information is chronically incomplete; moreover, counterfactuals remain only partially formulated, always leaving open the possibility that choice might be altogether irrelevant to outcome. Lacking in *Mayor* are the relative popularity of Lucetta’s two arrangements, the historical trajectory of grain prices, and the number of drunks loitering outside each tent. These details become no more apparent after the fact—the furnity tent sells rum, although the beer tent might, too (we never step inside). We’re left with the illusion that beer might have been wholesome relative to furnity; we conjecture that the novel depends upon this selection, but we can’t be entirely sure. Without more information, our best guess is that each tent might have equally well been chosen, and that outcomes, though ultimately unknowable, could have been profoundly different, or exactly the same.

As substantive, but incomplete, information tugs both ways at each of the novel’s myriad crossroads, the resulting equipossibilities bring pleasures of their own: the pleasure of suspense, and the freedom of conjecture. Hardy articulates this experience—one he affords both characters and readers—with his description of those who wonder about what happened to young Clym Yeobright. Egdon locals muse that he

had been a lad of whom something was expected. Beyond this all had been chaos. That he would be successful in an original way, or that he would go to the dogs in an original way, seemed equally probable. The only absolute certainty about him was that he would not stand still in the circumstances amid which he was born. Hence, when his name was casually mentioned by neighbouring yeomen, the listener said, “Ah, Clym Yeobright—what is he doing now?” When the instinctive question about a person is, What is he doing? It is felt that he will be found to be, like most of us, doing nothing in particular. There is an indefinite sense that he must be invading some region of singularity, good or bad. The devout hope is that he is doing well. The secret faith is that he is making a mess of it. Half a dozen comfortable market-men, who were habitual callers at the Quiet



Woman as they passed by in their carts, were partial to the topic. In fact, though they were not Egdon men, they could hardly avoid it while they sucked their long clay tubes and regarded the heath through the window. Clym had been so inwoven with the heath in his boyhood that hardly anybody could look upon it without thinking of him. So the subject recurred: if he were making a fortune and a name, so much the better for him; if he were making a tragical figure in the world, so much the better for a narrative. (172)

Torn between good narrative and Clym's good, between secret faith and devout hope, no one can make a coherent prediction over what might befall him. Clym's fate might be singular, but he could also be "like most of us, doing nothing in particular." If singular, by-standers muster devout faith for two distinct, mutually exclusive courses, unable to decide between them, save for their dark longing for a "tragical figure": "so much the better for a narrative."

### **If odds are even, why is doom so certain?**

"[S]o much the better for a narrative." Egdon Heath residents' narrative preferences prove chillingly accurate predictions of Clym's eventual, tragic trajectory. It's worth pausing to point out that while Hardy's plots frame choice as two-fold, equipossible, and open, what Hardy terms bad "region[s] of singularity" arise with much greater frequency than good ones. Even Henchard notices, vaguely sensing some power "working against him" (164). Character behavior, meteorological events, and readerly predictions might be figured as evenly split, but they don't *feel* that way once outcomes become apparent—as Barbara Hardy has suggested, the novels feel like board games riddled with snakes and no ladders (72). In *Tess*, Hardy goes even further to suggest that even the existence of favorable odds has little determining power within the novel. As Tess tells Abraham, a few stars are blighted, but most are "splendid and sound" (21). Abraham's response, "'Tis very unlucky that we didn't pitch on a sound one, when there were so many more of 'em," perfectly sums up Tess's depiction of the odds: it is both unlikely and unfortunate, in her formulation, that our world should be unsound and blighted. Woolf thought this was a failed moment for Hardy, excessive because it unmasked "the springs of the machine" (255). Offering us an overly detailed insight into numerical odds, Hardy exposes the particular unluckiness of Tess's world—there were so many chances for her to have landed on a sound and splendid planet.

Hardy's possibilities, as I claimed earlier, are more often than not detached from specific odds, allowing for the prevalent illusion of equipossibility. But much suggests that Tess and Henchard are dead right that we're witnessing an "unequal" struggle. Susan Henchard, too, sees her odds as less than fair: "When she plodded on in the shade of the hedge, silently thinking, she had the hard, half-apathetic expression of one who deems anything possible at the hands of Time and Chance except, perhaps, fair play. The first phase was the work of Nature, the second probably of civilization" (2). Though nature offers a future that's equally open to good and bad, this openness gets progressively skewed for the worse by ongoing social distortions. Importantly, though, Susan's expectations are otherwise vague: although her world seems creatively bent on delivering inequity, she remains unwilling to make predictions, expecting *anything* except fair play. Perhaps most importantly, she only half cares.

The assumption that we should assign precise weight to events about which we know nothing received increasing attention after Laplace. As Daston has argued, the nineteenth-century shift from conceiving of probability as degrees of belief to a computation based on

historical frequencies put Laplace's principle of indifference in tenuous philosophical space, and the idea received increasingly hostile attention (190). The principle upset John Stuart Mill, who fretted over it in his *Logic* in 1843. "To be able," Mill writes, "to pronounce two events equally probable, it is not enough that we should know that one or the other must happen, and should have no grounds for conjecturing which. Experience must have shown that the two events are of equally frequent occurrence." Without this knowledge, "we should proceed as much at hazard in staking equal sums on the result, as in laying odds" (379).

But the problem of assigning odds remains. Despite Mill's dissatisfaction, the convenience of the principle resurfaces when Mill exercises it to solve the classic scenario of choosing balls of different colors from an urn. Although Mill grudgingly admits that the theory of equipossibility "appears to be tenable" (381), he does so amidst pages of grumblings and examples. *Mayor* and *Return* give this dissatisfaction narrative voice, making readers contend with their desire to assign specific, often equivalent, weights to possibilities about which they know very little. Loveday's pause at his crossroads literalizes this problem. Though the experience of equipossibility is tangible with Loveday's indecision, we know that only one possibility will obtain, and that we will never fully understand the likelihood of and repercussions stemming from the complementary, but eternally inscrutable, alternative.

The evacuation of fair play was perhaps not only an aesthetic choice—"so much the better for narrative"—but also an important aspect of Hardy's understanding of realism. Echoing contemporary critiques of *Clarissa*, Hardy defends the novel in his essay, "The Profitable Reading of Fiction."

However cold, even artificial, we may, at times, deem the heroine and her companions in the pages of that excellent tale, however numerous the twitches of unreality in their movements across the scene beside those in the figures animated by Fielding, we feel, nevertheless, that we are under the guidance of a hand which has consummate skill in evolving a graceful, well-balanced set of conjectures, forming altogether one of those circumstantial wholes which, when approached by events in real life, cause the observer to pause and reflect, and say, "What a striking history!" (70)

Going on to compare Richardson's "constructive art" to Greek tragedy, Hardy revels in Richardson's flaws as much as in his achievement. This assessment of Richardson offers a telling avenue into Hardy's own narrative structure and aims. It is notable that Hardy deems "well-balanced conjectures" constitutive of the novel, accumulating to *construct* (Hardy's verb) a tragedy. Indeed, the grace and balance of the novel's conjectures is the primary compensation for Richardson's otherwise shoddy realism: artificial characters and their twitching, unreal actions. Importantly, Hardy seems to find Richardson's well-balanced conjectures so admirable because they *strike* (characters and readers alike, we might add).

The relation Hardy identifies between *Clarissa's* well-balanced conjectures and its tragic whole echoes the tension between his plots' moments of equipossibility and their relentless march into misfortune. Like Susan Henchard, readers might begin to suspect some malevolent, Eustacia-Vye-like God at work in Hardy's world. But once we approach the novels from the perspective of what Hardy terms "events in real life" or from moment to moment, rather than cumulatively, conjectures appear well-balanced. At each narrative crossroads, the outcomes of each decision are either beyond anyone's guess, or roughly equivalent. The furmity tent turns out



circles when represented spatially.<sup>51</sup> As J. Hillis Miller has it, “the novel moves forward from episode to episode, knotting and reknitting itself in nodes” (*Topographies* 36). The map is the ripple of circles created by these knots, “what remains after the characters are dead or happily married” (20).

Tess is born into a circle, the Vale of Blackmore, “in which her life had unfolded,” and which she knows by heart: “Every contour of the surrounding hills was as personal to her as that of her relatives’ faces” (25). Though the novel might read as a series of departures—Tess sets out from Marlott for Chaseborough, for Talbothays, for Flintcomb-Ashe, and finally for Kingsbere—it is also a series of returns. Tess cannot make a one-way journey in the novel, save to the scaffold, a journey which literalizes her geographic circles with the material shape of the noose. Tess trudges through her “allotted circles” (as Angel Clare describes his own and Felix’s intellectual domains) (128), toggling in Phase the First from Marlott to Chaseborough three times, from Chaseborough to Trantridge, and from Trantridge to Shaston. Even Tess’s arrival at Bramhurst Court, the mansion where she and Angel briefly take refuge, turns out to be a return of sorts. “I have been thinking of that empty mansion we passed,” Angel tells Tess, and they retrace their steps to clamber inside (313). Seemingly linear, unidirectional movement in the novel turns out always to have “been circuitous” (187).

As characters circle geographically, they also circle in time. Movement through already-trodden landscapes resurrects earlier narrative moments at every step. Tess cannot avoid recalling her past, as she walks thoughtfully “among the gooseberry bushes in the garden, and over Prince’s grave” (34), as she retreats from Alec, walking up “the same down which d’Urberville had driven with her so wildly on that day in June” (58), and even in looking at a calendar, as she “philosophically noted dates as they came past in the revolution of the year” (77). Similar memories surface in Angel’s search for Tess upon his return from Brazil, when Angel retraces Tess’s life, passing “by the field in which he had first beheld her at the dance” on his way to Marlott, where he arrives “at the spot of his dear Tess’s birth” (301). He retraces pasts of which he must be entirely unaware, passing “the unholy stone whereon Tess had been compelled” to swear “the strange oath that she would never willfully tempt [Alec] again,” and pasts that he manages to reconstruct, as at Flintcomb-Ash, where he begins to grasp “the hardships she had chosen to undergo [...] rather than apply to his father for more funds” (293). (This hardship included Tess’s turn at the threshing-machine, an endeavor which, in “The Dorsetshire Laborer,” Hardy explains induces an internal spinning: “A thin saucer-eyed woman of fifty-five, who had been feeding the machine all day, declared on one occasion that in crossing a field on her way home in the fog after dusk, she was so dizzy from the work as to be unable to find the opposite gate, and there she walked round and round the field, bewildered and terrified, till three o’clock in the morning, before she could get out” (55).)

It is Alec, though, who has the prior claim in his circling round Tess, spinning about the spot where she lies at the close of Phase the First. “Roaming up and down, round and round” (58), he embarks on a drunkard’s walk in his effort to find the spot where he left Tess lying,

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<sup>51</sup> In “Maps,” of *Graphs, Maps, and Trees* (2005), Franco Moretti designates village narratives as tending to produce circular orbits for characters, because of the self-contained nature of the village. “Sufficient unto itself: this is why village stories organize themselves in circular patterns: a circle is a simple, ‘natural’ form, which maximizes the proximity of each point to the centre of the ‘little world, while simultaneously sealing it off from the vast universe that lies outside its perimeter” (Moretti 44). This explanation—resonant with my readings in this chapter—holds significant appeal for a variety of texts, including *Return*, but falls short for novels like *Mayor*, *Tess* and *Jude*, which chart a circular orbit underlying their characters’ zig-zag ventures beyond the villages in which they begin.

covered by his cloak. Alec's spatial journey "round and round" sets a larger, historical circle into motion. "Doubtless," Hardy writes, "some of Tess d'Urberville's mailed ancestors rollicking home from a fray had dealt the same measure even more ruthlessly towards peasant-girls of their time" (58). This genealogical revolution—Tess, the D'Urberville, becomes the raped peasant-girl—nests within the geographic circle that she and Alec inscribe as they wander, lost in the Chase. And this reversal itself becomes part of a larger pattern, duplicating the errors of history: "why so often the coarse appropriates the finer thus, the wrong man the woman, the wrong woman the man, many thousands years of analytical philosophy would have failed to explain to our sense of order" (58). Hardy contemplates his plot as a member of a historical pattern, a pattern that seems to recur ceaselessly and without substantive change.

Given Tess's chronic search for a newer world, the tessellation of pasts in the plot's present is particularly ironic. The pasts she recalls into narrative being are spatial and genealogic—the grave that reminds her of Prince's death, the road that recalls her drive with Alec, her home in Marlott which changes with each return, the D'Urberville tombs which recall her to her family's imagined ancestors, and the fabled coach whose sight or sound bodes ill for any D'Urberville—but they are also broadly historical, however loath Tess may be to acknowledge this dimension. ("[W]hat's the use of learning that I am one of a long row only—finding out that there is set down in some old book somebody just like me, and to know that I shall only act her part" (99), she demands of Angel, when he offers to teach her history.) Though Tess hopes to blind herself to the "long row" of history of which she forms a part, the novel offers no such respite; history writ large yawns around her: "Within the space of a mile from its outskirts every irregularity of the soil was prehistoric, every channel an undisturbed British trackway; not a sod having been turned there since the days of the Caesars" (296), Hardy writes of Sandbourne, the setting for Alec's murder. The final space in which we encounter Tess epitomizes this intersection of histories personal and collective, recent and ancient, occurring when Tess and Angel definitively decide to quit their circuitous meanderings. As they attempt to find their way out of their plot circles and escape the consequences of Tess's crime, Angel reckons that "we shall soon get out of this district altogether. We'll continue our course as we've begun it and keep straight north" (309). Amidst his plan for straight-line evacuation intervenes a circular and massively historical form, the only thing in the novel that is "older than the centuries; older than the d'Urbervilles" (318), Angel tells Tess—Stonehenge. This megalithic circle gets encompassed by yet another ring, this time of sixteen armed men, who surround Stonehenge and arrest her.

Across the novels, an obsession with circular form manifests itself from the deeply trivial to the deeply structural. The scene of Eustacia and Wildeve's demise in *Return*, like Tess's at Stonehenge, is round; we find that Shadwater Weir "had at its foot a large circular pool, fifty feet in diameter" (366), the spinning vortex at its center, prefigured by the couple's confused "whirling" at the Rainwater Dance (36), eventually swallows them up. Hardy's circular plots dwell fetishistically upon circular objects like *Return's* weir. From "the circular beer-stains on the table" of Jude's first drink with Arabella (40), to the "liquid circles" that stamp the surface of the tables at Lord-Quantock-Arms Inn in *A Laodicean*, few bar scenes are complete without some description of glasses' circular marks (485). And circles are favorite metaphors. Henchard's desire to leave Casterbridge for good gets derailed when "the centrifugal tendency imparted by weariness of the world was counteracted by the centripetal influence of his love for his step-daughter" (276). Tellingly, when young Jude contemplates life, he imagines it as a circle: "As you got older, and felt yourself to be at the centre of your time, and not at a point in its

circumference, as you had felt when you were little, you were seized with a sort of shuddering” (17). Jude envisions traveling through time as inherently circular, formulating a peculiarly precise geometric metaphor for aging that nonetheless fails to explain how one arrives at the center of one’s time—via a radius-like line? Via meandering? Driven at random by the terrible shuddering that seems to come from outside? However one arrives inside, as Jude imagines it, being alive is equivalent to being stuck inside a shaking, shuddering circle. This description might hold equally well for the experience of reading a Hardy novel.

Hardy’s notes and essays show a sustained interest in circular representation: “Things move in cycles,” he writes in his 1890 essay, “Candour in English Fiction” (15). Attracted to Auguste Comte’s progressive idea that both individual and collective human progress might be a “looped orbit,” spiraling backwards in order to move forward, Hardy diagrammed the image of this loop in his notebooks (76), and recalls this loop in “Candour,” hoping that spirals backwards might be necessary for sudden leaps forward. Hardy would bring up the same idea in his 1922 “Apology,” adding, “I repeat that I forlornly hope so” (*Earlier* xviii). Hopeful or not, Hardy chronically defers the evolution that might come of revolutions. Elsewhere in his notebooks, he turns towards Schopenhauer’s exposition of Nietzsche’s theory of eternal recurrence, quoting from “On the Sufferings of the World” (1851): “He who lives to see two or three generations is like a man who sits some time in the conjurer’s booth at a fair, and witnesses the performance twice or thrice in succession. The tricks were meant to be seen only once; & when they are no longer a novelty & cease to deceive, their effect is gone” (2.28). Early on in *Tess*, Hardy wonders “whether at the acme and summit of the human progress these anachronisms will be corrected by a finer intuition, a closer interaction of the social machinery than that which now jolts us round and along,” but concludes that “such completeness is not to be prophesied, or even conceived as possible” (31).<sup>52</sup> Comte’s spiral appealed in theory, but within Hardy’s novels, the spiral forward becomes only a circle—and a shuddering one, at that.

## Frequency versus Equipossibility

Debates contemporary to *Jude* and *Tess*, which are almost universally about the nature of realism, tend to fixate on questions of frequency, or statistics. Tess’s suspicions about the structural inequity of her universe quickly crept into early reviews, though most reviewers insist that Hardy’s failures exist only insofar as he neglects to portray his characters according to real-world likelihoods. A character might be immoral (“Hardy did well,” *The Saturday Review* observes, “to let [Tess] pay the full penalty” for Alec’s murder), but at least she behaves “naturally.” *The Spectator* lauds the “perfect naturalness, and even inevitability, of all [Tess’s] impulses,” while the *Athenaeum* asserts that “Tess herself stands, a credible, sympathetic creature” (381- 82). Though these reviewers note Tess’s individual credibility, the same publications concur that the overarching causal structure in the universe of the novel is flawed: “in almost every page,” *The Spectator* contends, “the mind rebels against the steady assumptions of the author” (385). The *Athenaeum* charged Hardy with “wrestling every error and every accident to his own advantage”

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<sup>52</sup> Only Tess’s mother can defeat the baggage of historical circles as the past (“She dismissed the past—trod upon it and put it out, as one treads on a coal that is smouldering and dangerous” (154)). Tess’s belief in the importance of the past, in the potential potency of her own history, might be the very mechanism by which that history manages to baggage the future—a claim I’ll discuss more in closing.

and noted the “untowardness of circumstances.” “Not alive, not true,” Stevenson wrote to Henry James in 1892. “Not even honest!” he concludes (387).

Margaret Oliphant’s treatment of the novel encapsulates this critical stance. Oliphant, who finds earlier Hardy not “round” enough, embraces the “real existence” that Hardy portrays in *Tess*; despite the “lesson hidden beneath his apron,” she hails him “to the profession, the brotherhood of imagination and art!” (465). Tess’s character, *despite her improbability*, warrants acceptance as “a kind of princess” in Hardy’s chosen milieu (466). This praise ceases with the third volume of the novel, which Oliphant roundly critiques. Angel Clare—“the insufferable being whom Mr. Hardy has set up as a man”—is scarcely possible for Oliphant, just as Lovelace was scarcely possible, a century before, for Henry James Pye. Her anger at Clare extends to harp-toting habits, his name, and the smallest details of his behavior. She reacts bitterly, too, to Tess’s crime: “We do not for a moment believe that Tess would have done it,” she writes (473).

Oliphant’s response shares a pervasive vagueness that characterizes objections to the novel. Critics like Oliphant assert some of the novel’s events to be palpably real, while others prove anger-inducingly false. It’s difficult to discern the specific authorly assumptions in *Tess* identified as dishonest, or to unpack reviewers’ tendency to object to the novel as having (as Stevenson puts it) “no earthly connection with human life or human nature” (387). What’s obvious in these mixed reviews, though, is a general sense of betrayal—of morals for some, of style for others, and of realism for almost all. The possibility that at least some of these objections might be linked, and the possibility that this link might lie in content did not go unremarked.<sup>53</sup> In *The Life of Thomas Hardy*, Hardy recalls “an endeavour was made by some critics to change it to scandalous notoriety” (*Life* 243). Even with the first edition, we see Hardy responding to charges of dishonesty, spending almost half of his 1891 “Explanatory Note to the First Edition” defending the novel’s open admissions of “what everybody nowadays thinks and feels” (ix). He wrote anxiously to Norman MacColl, editor of the Athenaeum, in hopes that MacColl would supply readers with an account of the novel’s real-life beginnings: “the opening incident, which some critics have denounced as unnatural, took place under Mr. Hardy’s eyes” (Millgate 116).

Though Hardy writes that the best fiction ought to be exceptional, “more true, so to put it, than history or nature can be” (Millgate 81),<sup>54</sup> Hardy’s defense of his novel usually depends on claims about just how common the events depicted in his novel really are. In his “Preface to the Fifth and Later Editions,” Hardy ascribes his motivation in writing *Tess* to the feeling that “there was something more to be said in fiction than had been said about the shaded side of a well-known catastrophe” (ix). Hardy makes similar claims in a private exchange with Leslie Stephen, who felt that Hardy allowed his heroines to marry badly much too often. But women often did marry the wrong man, Hardy explained. “Not in magazines,” Stephen said firmly. Statistical arguments creep into Hardy’s novels alongside the moment- by-moment experience of equipossibility and the illusory openness accompanying it. “[N]obody did come” to comfort a dejected Jude, Hardy tells us, “because nobody does” (27).

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<sup>53</sup> Style, for example, was cited as problematic, with *The Saturday Review*’s contention that Hardy “tells an unpleasant story in an unpleasant way” (384), but the chief example of stylistic failure is in fact a problem with Hardy’s “side suggestions” explicitly describing Tess’s sensuality—surely as much a topical problem, as a stylistic one.

<sup>54</sup> He repeats that a “story must be exceptional enough to justify its telling” twice in his journal (citation).

## Circling the Board

We now have two figures in hand—the equipossible (Henchard’s choice between beer and furrity), and the circle (Henchard’s return to Weydon-Priors). Both figures occur with stunning frequency in Hardy’s novels. These two figures were linked mathematically as early as 1880, with models of the ways in which arbitrary motions and sounds might form repeating patterns. In the 1890s, increasing interest in temporal repetition led to work by Henri Poincaré and others on specifically circular, and repetitive motion. Before considering this technical link, I would like to suggest that “well-balanced” or equipossible conjectures and circular trajectories were connected for the less quantitatively gifted, in the board game.

Hardy himself represents the binaries he portrays in terms of games, most often in *Return*. Diggory Venn rails against Wildeve’s “backward and forward play, and his not knowing whether he’ll have [Thomasin] or no” (100). Wildeve finds himself at one of Hardy’s many crossroads; in Venn’s terms, Wildeve’s refusal to make a sequential move in the game he’s playing is profoundly unfair. His refusal to choose Thomasin “or no” induces Venn to enter the game, offering himself as an alternative (rendering her choice, like Wildeve’s, double). Venn’s entry marks the first of “Venn’s counter-moves” in what the narrative figures as a sustained game against Wildeve (267); his second “providential countermove” restores the family guineas (272). Eustacia, like Venn, sees her relationship with Wildeve as a game, insisting that, “I never dreamt of playing such a game on my side till you began it on yours” (281). *Mayor* makes clear that not just loving, but living, looks an awful lot like gambling. Henchard finds himself “reminded of what he had well known before, that a man might gamble upon the square green areas of fields as readily as upon those of a card-room” (162). Elizabeth-Jane’s final dismissal of Henchard stems from her inability to see life in these terms; she doesn’t realize that Henchard’s “lie had been the last desperate throw of a gamester who loved her affection better than his own honor” (283).

Though Hardy’s characters gamble—literally, as Venn and Wildeve do on Egdon Heath, and figuratively, as Henchard does in his last grasps at Elizabeth Jane’s affection—their trajectory through space and time resembles the Victorian board game more than it does the roulette table of *A Laodicean* or the dice play of *Return*. The Game of Goose, credited as the original race game, encapsulates the backwards and forwards surprises, the emphatic experience of equipossibility, and the structural inevitability of return so crucial to Hardy’s plots. The board, usually consisting of 63 squares in a spiral or circular formation, offers the possibility of advancement and of ignominious return with each roll of the dice. So called, as Joseph Strutt explains, “because at every fourth or fifth compartment in succession a goose is depicted, and if the cast by the player falls upon a goose, he moves forward double the number of his throw” (337), the board was full of opportunities for sudden, Farfrae-like advancement. Doom was equally possible: one square, often labeled with a skull, sent unlucky players back to the beginning, while the prison square kept players from advancing.

Historical, geographic, and moralistic iterations of the game proliferated, achieving such popularity that Walter Scott could ruefully bemoan the reduction of the history of England to “a new and complicated edition of the Royal Game of the Goose” in his 1814 novel *Waverley* (12). Abstract moralistic orbits of Snakes and Ladders or Kismet (fig. 2) become geographic circles in race games like “A Cycle Game” (fig. 3), in which players bicycle through the countryside.



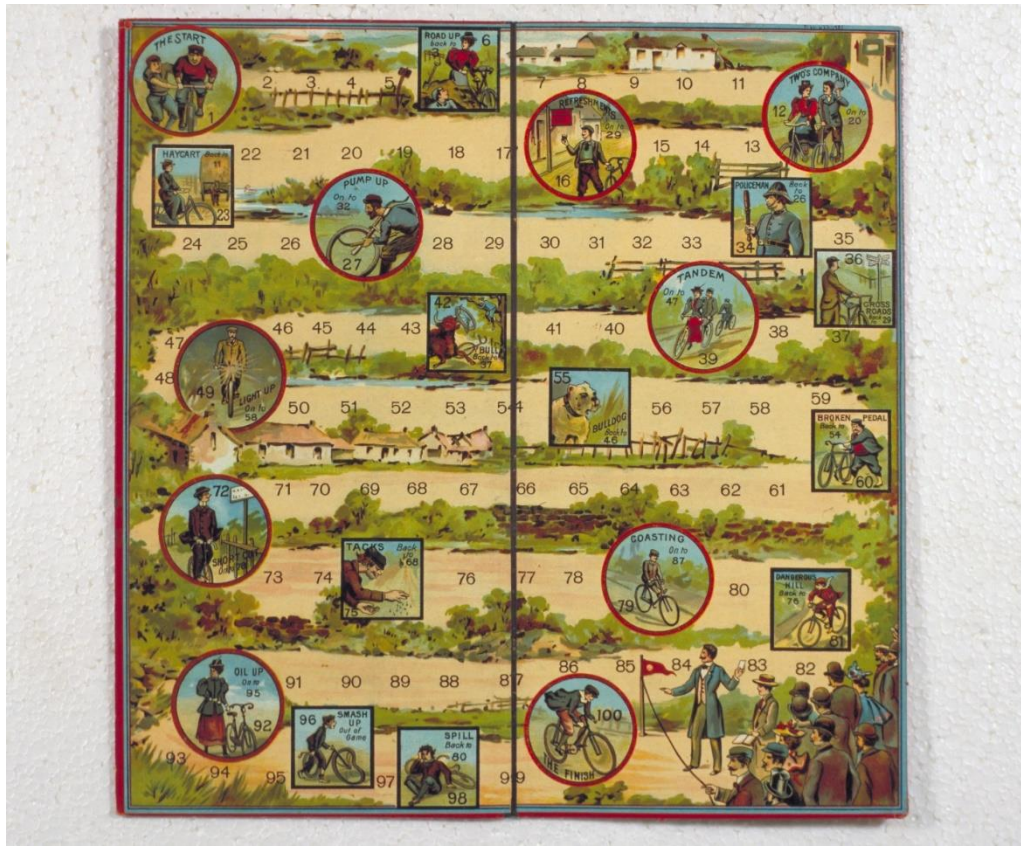
Figure 2, "Kismet," circa 1895. Storage, Victoria and Albert Museum, London. MISC.423-1981. Reproduced by permission of the Victoria and Albert Museum.





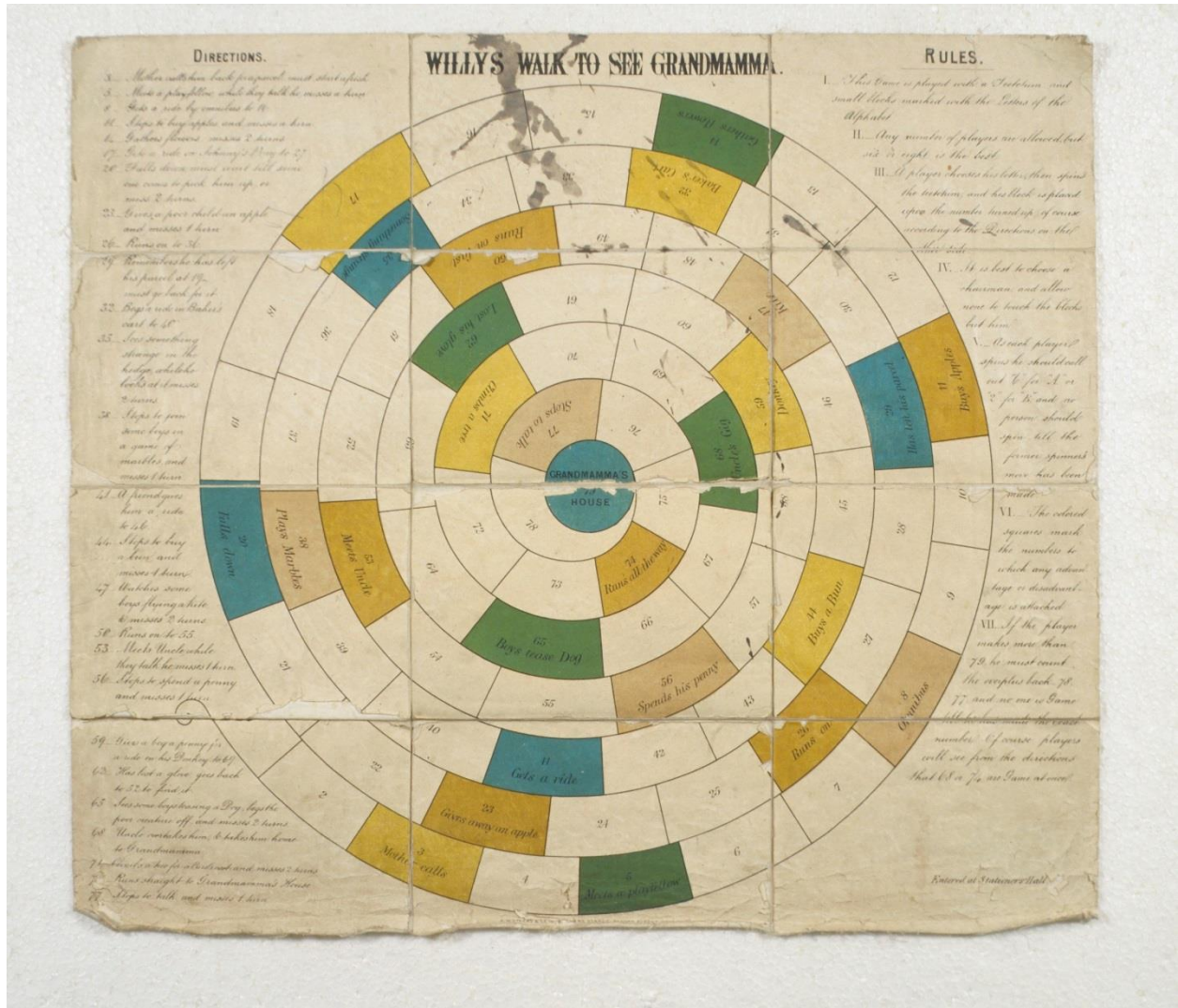
Similarly structured games map out “Safe and Expeditious” tours of Europe, or journeys through “the British Colonies and Foreign Possessions.” These games echo the spatial experience of equipossibility illustrated by John Loveday’s crossroads. In games like “The Cottage of Content” (fig. 4), players move backward or forward, right or left with each roll, passively tracing circle after circle before the game’s close, keenly aware at each crossroads that only a puff of wind stands between the “right roads” and “wrong way.” Historical circles are no less prevalent than geographic orbits; the popular eighteenth-century game “The Sun of Brunswick” progresses through history towards George IV’s reign, forcing players to move backward and forward through time as they struggle to reach the game’s historical finish-line. In an updated version, “British Sovereigns,” a circular organization around Queen Victoria shows 56 pictures of events occurring in the reigns of the sovereigns from Egbert to William IV. In their travels towards the present (Queen Victoria), players navigate historical time as if it were geographic space, moving disjointedly through the past in their efforts to arrive in the present. Like Tess and her mother, who stand in for the Victorian and Jacobean ages with no stop in between, the game offers the intrepid player the opportunity to leap from the Georgian period to the Elizabethan without even a nod to the Stuarts (14). Like *Mayor*, which flits from mid-century English town to Roman Amphitheater, race games shape geographic and temporal disjoints into circles—a spatial experience strikingly familiar to Hardy’s readers.

Figure 4, “A Cycle Game,” circa 1900. Storage, Victoria and Albert Museum, London. MISC.422-1981. Reproduced by permission of the Victoria and Albert Museum.



Despite the lack of talent required to win a game of Goose, many versions represent progress as directly related to the skill—and even virtue—of players. Subtitled “A Moral Board Game,” Cottage of Content censures those unlucky enough to wind up on “Bad Boy’s Road,” where a boy is depicted, running off with a goose. On such a board, each new roll of reinforces the moral luck that’s famously prevalent in *Mayor*: a few drinks more or less, and Henchard might have been too drunk, or too sober, to sell his wife; a different bet on the weather, and he might have remained a rich man. In framing the ups and downs of spatial progress as both moral *and* coincidental, board games like Kismet paradoxically suggest a radical principle of indifference for human decisions and their outcomes. An 1869 race game called “Willy’s Walk to see Grandmamma” emphasizes the point by reversing the typical moral structure of race games, offering payoffs for laziness (accepting a ride on a cart) and requiring forfeits for selflessness (helping people or animals) (fig. 5).

Figure 5, A N Myers & Co. “Willy’s Walk to See Grandmamma,” 1869. Storage, Victoria and Albert Museum, London. MISC.30-1966. Reproduced by permission of the Victoria and Albert Museum.



In this world, beer and firmity are equivalent—either one might send Henchard sliding down a moral snake, laying the ground for the massive ladder he ascends before Susan’s return, but also setting the stage for another series of falls from which he cannot recover.

Entirely coincidental victories seem to demand an account of what value victory might have; we might wonder, like Somerset at the roulette table, why such games are entertaining in the first place. Board games themselves play upon these questions: in “The New Game of Life: Being the Most Agreeable and Rational Recreation Ever Invented for Youth of Both Sexes,” players move backward and forward within *their own lives* as characters in the board game—drunkards, for example, are sent back to start their lives again at age two. These drunkards, like Henchard, retrace their steps in shame to confront their narrative beginnings, with nothing to show for the long succession of stumbles that brought them to square 62 in the first place.

Race games’ circles through space and time are, like Michael Henchard’s movements, drunkard’s walks. More precisely (since bicycles, time travel, and snakes broaden the mode of transportation significantly), games like Kismet are Markov chains, of which the drunkard’s walk is one example. A Markov chain is a series of events, or decisions, each independent of the last, and each devoid of pattern or logic.<sup>55</sup> With each new roll, and at each crossroads, the player might with equal probability move right or left, make a gigantic leap towards victory, or an unfortunate backslide towards her beginnings. Markov chains like the drunkard’s walk received increasing scrutiny in mathematical communities in the late nineteenth century. Each was characterized by two things: a limited, often binary, set of local possibilities, and an overarching expectation that, on average, the object of study would wind up back in a place previously occupied. Lord Rayleigh’s 1880 demonstration—which solved Pearson’s question 35 years later—was about sound. Rayleigh addressed the question of how a large number of independent sounds might coalesce. The answer, it turns out, was that an ongoing collection of arbitrary sounds could, on average, be expected to sound as they had previously. Henri Poincaré’s 1890 recurrence theorem is perhaps the crowning exploration of systems that go nowhere. Poincaré proved that, given sufficient time, finite systems would necessarily pass through previous configurations. (This proof was in direct response to a hypothesis dating back to the Renaissance that a system of three circles might be aligned such that, over any period of time, the circles could rotate in such a way that they might never duplicate a previous alignment.) In other words, if the matter in the universe could be conceived as finite, and time as infinite, then history would cycle, again and again and again.<sup>56</sup>

## Conclusion: Imagined Tethers

Hardy’s characters walk in circles, and their choices are confined to binary equipossibilities. A link between these two seemingly distinct narrative shapes was prevalent in

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<sup>55</sup> Defined in full in 1907, examples of Markov chains, like the drunkard’s walk, Brownian motion, and problems involving coin-flipping or dice-rolling, were subjects of increasing interest in the decades leading up to Markov’s definition. For a more extensive definition of Markov chains and their applications, and for an account of the relationship between Markov chains and Pushkin, see Brian Hayes’ “First Links in the Markov Chain.”

<sup>56</sup> For a more extensive discussion of Poincaré’s theorem, see Milic Capek’s “The Theory of Eternal Recurrence in Modern Philosophy of Science.” For a discussion of the relationship between Poincaré’s theorem and previous hypotheses about systems of circles in motion, see Robin Small’s “Incommensurability and Recurrence: From Oresme to Simmel.”

both mathematical discourse and popular culture, in the form of Markov chains and race games. Hardy might have encountered Poincaré's connection between simple systems and cyclical recurrence. Whether or not he did, his plots stage an intuitive grasp of the idea. The decisions that lead to plot circles are stark in their simplicity. Tess can marry Angel, or not; Henchard can choose beer or furmity; Loveday can go one way or the other; once married, Tess can reveal her past to Angel, or refrain. Invariably, decisions between these binaries send characters spinning in circles. Tess's marriage and subsequent confession send her back home, to her beginning, into British and Roman history, and beyond recorded history itself, to Stonehenge. In her microcosm, Tess's hesitance proves in many ways unimportant—"She had consented. She might as well have agreed at first" (153), Hardy tells us bleakly. Tess's seemingly noble hesitation, though meaningful locally, is irrelevant to the shape her narrative traces, which would have been, the narrator suggests, no different had she consented immediately. Her inner life and its struggles and hesitations are inherently circular, and seem therefore to make no material difference—except, importantly, for readers, who must engage with this struggle over time through the act of reading.

Like Michael Henchard, Tess is back where she started, though her journey lingers hauntingly for readers. If walking in Hardy means walking drunkenly, and if walking drunkenly sends us circling back to the same damn spot, we must ask, with Sue and Jude, Tess and Angel, how much the route by which we return matters. If we end up—as readers, as characters, as Kismet players—where we began, we might reasonably wonder what the trajectory that brought us circling back means, and what it has to do with the future.

On the one hand, Markov chains offer us a definitive valuation of historical trajectories. Computationally, a past trajectory makes no difference to our predictions for the future of a game of Kismet or a drunkard's walk. Though our current position on the board helps us quantify future possibilities, no move before it does. And yet the narrative of how we got to that particular spot lingers, particularly if accompanied by the moralistic snippets that so often adorn the board. ("Pay 2 for Laughing," the Cottage of Content directs, should we be so unlucky as to join the boys laughing at a man in stocks on the aptly named "Laughing Stock Lane.") In fact, this inattention to the past is one of the *benefits* of the Markov chain in practice, known as the "Markov property." This very property renders Markovian models immensely useful for modern biology, finance, and game theory—history becomes irrelevant once causation is structured in a series of nodes or forking paths, a coin toss at each fork.

Hardy's novels, on the other hand, are more conflicted about the role of the past. The very question of how much history matters is a plot mover in Hardy's novels, most strikingly in *Jude the Obscure*. Jude and Sue find themselves pulled in two directions—into a future in which they might define marriage for themselves (in his postscript, Hardy contemplates Sue as a "modern" woman), and into the religious, national, and familial pasts that offer definitions of their own. *Jude* constructs a series of double binds, in which only one of any two commitments can be honored, and in which only one of any two broken unions can be restored in any form. Throughout, Jude wonders over the family tradition first enjoined in the novel by his aunt, who reminds him the Fawleys make bad marriages. "Jude, my child, don't *you* ever marry. 'Tisn't for the Fawleys to take that step any more" (13), she cautions; again, after his marriage: "There's sommat in our blood that won't take kindly to the notion of being bound to do what we do readily enough if not bound" (59). Sue later worries over this dictum, telling Jude "I have just the same dread lest an iron contract should extinguish your tenderness for me, and mine for you, as it did between our unfortunate parents" (204).

Conflicting claims on a single agent ask this same question even more pressingly, as Jude and Sue must puzzle out the extent to which personal chronology matters in their storied marriage and divorce records. How, and in what cases, should the past be restored? Jude and Sue's double romantic commitments go a step further to demand: *which* past, and *why*? The past seems valuable, and perhaps worthy of recovery of some kind, but pasts abound in their multiplicity, and in their competition with other pasts. Should Michael honor his responsibility to Lucy or to Susan? Should Jude honor his commitment to Arabella, or to Sue? Though, as in the romance, the past occasionally explodes back into the narrative present (Alec, Arabella, and the furmity woman return, after all) to offer a new complication or resolution, the mere threat of the past's re-emergence is equally, if not more so, an engine for plot. Rather than settling the question of whether, how much, and which history matters, Hardy stages the conflict of the confluence of these questions within the novels, novels which (as Casagrande has pointed out) might themselves be considered acts of preservation of particular histories and geographies.

Hardy registers a struggle akin to Jude's in restoring a church in his 1906 "Memories of a Church Restoration." The "artist instinct and the care-taking instinct part company," Hardy writes, in contemplating "the disappearing creation."

The true architect, who is first of all an artist and not an antiquary, is naturally most influenced by the aesthetic sense, his desire being, like Nature's to retain, recover, or recreate the idea which has become damaged, without much concern about the associations of the material that idea may have been displayed in. Few occupations are more pleasant than that of endeavouring to recapture an old design from the elusive hand of annihilation. Thus if the architect have also an antiquarian bias he is pulled in two directions—in the one by his wish to hand on or to modify the abstract form, in the other by his reverence for the antiquity of its embodiment... In short, the opposing tendencies excited in an architect by the distracting situation can find no satisfactory reconciliation. All that he can do is of the nature of compromise.

A single agent cannot solve this problem, and its solution cannot very well be suspended, as the "disappearing creation." Nor can Jude and Sue decide how to restore, or update, the pasts to which they attend so thoughtfully.

Narrative, however, might offer a potential solution to this problem: multiple instantiations of a building, a person, and a place can co-exist both through narrative's durational extension, and through the narrative's ability to conjoin past and present creatively, insisting at every moment upon imperfect, and yet careful recalling. The narrative can in a sense *make* the past matter by acknowledging people, places, and times, though they no longer exist. And narrative's capacity for generating plot circles of our own, via rereading, allows for a kind of permanence amidst circularity that is elsewhere not just dangerously conservative, but practically impossible. (In his only literary review, Hardy praises the poet William Barnes for his "power to cast his memories of that life in beautiful and pleasing form" (Millgate 17).) Narrative, in short, can wed form and time—circles and duration. We can see pattern, and that pattern can be, finally, pointless—even as it is locally meaningful. Thus the spatial memory that Hardy's spaces exhibit for pasts of all dimensions becomes not so much a characterological phenomenon by which the characters cannot escape the past, but a narrative phenomenon by which the past insists on its narrative preservation, in spite of its potential uselessness. This narrative structure underscores the perplexed relation between form and temporal sequence, by foregrounding the

difference. A story that finally goes nowhere insists that we recognize the journey around (and around, and around) as itself valuable, as itself the *point*.

Hardy seems himself conflicted over just what difference Jude's blighted familial history might make, explaining in a letter to Florence Henniker that the story "is really one about two persons who, by a hereditary curse of temperament, peculiar to their family, are rendered unfit for marriage, or think they are" (2.94). Writing to Sir Edmund Gosse on the same day, Hardy omits "or think they are" from a similar formulation (2.93). Though the omission suggests that Hardy may have leaned towards a model in which the past exerts a ghostly and near-inexplicable pressure on the future, his letter to Henniker, and the novel itself, indicate that this question is far from settled: maybe Jude and Sue's family history shapes the future in a meaningful way, but perhaps Jude and Sue's attention to the past is all that allows it to impinge on their future. Perhaps the d'Urberville coach is a harbinger of familial degeneration, and perhaps it is just an illusion. As Forest Pyle puts it, "[t]he characters' desires for history are certainly genuine; but the sustaining narratives of history have disappeared and their disappearance has left these characters unmoored" (372). Or perhaps they are tethered all too closely, like the colt in *A Laodicean*, who always ends up *one way*.

During its progress the colt springs upward, across the circle, stops, flies over the turf with the velocity of a bird, and indulges in all sorts of graceful antics; but he always ends in one way—thanks to the knotted whipcord—in a level trot round the lunger with the regularity of a horizontal wheel, and in the loss for ever to his character of the bold contours which the fine hand of Nature gave it. Yet the process is considered to be the making of him. (7)

The histories buried in the landscape make us, whether we read them rightly or no, like the colt who unwittingly traces an already-plotted circle. Or, we are free to write those same histories, untethered from our pasts, altogether unlike the colt; if we are stuck in a circle, nothing but a self-forged tether holds us. It is the most well-balanced conjecture of all, an equally balanced conjecture that spurs the tragedy along, and that remains itself unsettlingly unresolved.



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