

**A**merican romantics are generally taken to resist the positive claims of science, preferring intuition to rationality, speculation to empiricism, and mystical moist nights to learned lectures in astronomy. But if for better or for worse romantics have helped separate science and literature, the story of this estrangement, like all stories of estrangement, cannot be reduced to irreconcilable dualisms. Not only did some American romantics draw on the science of their day, they sometimes found in it directions for living and writing under conditions of indeterminacy. For some scientists and romantics alike, a key idea for mediating uncertainty was chance, whose role in U.S. thought and culture changed in the mid-nineteenth century.

Traditionally, chance threatened enlightenment confidence in a predictable, rule-bound universe, prompting thinkers to deny its existence and define it instead as human ignorance of absolute causal laws. But while chance was often aligned with skepticism and set against the Newtonian world, it continued to lurk in the shadows of the Enlightenment as rational systems—intellectual and social—attempted to manage its seemingly irreducible presence. What Ian Hacking has called “the taming of chance” is occasionally traced in European and British literature, while nineteenth-century American attitudes toward chance have been treated in studies on gambling, luck, accidents, insurance, and crime.<sup>1</sup> Yet no one has studied at length how shifting notions of chance have shaped romantic epistemology and aesthetics.

As an early adopter of probability theory who dropped out of college because of gambling debts, Poe helps reveal how new approaches to chance influenced American romanticism. Poe famously traverses

the boundaries of knowledge by indulging disruptive forces usually read as gothic horror, linguistic indeterminacy, psychosexual anxiety, racial fear, or some volatile combination thereof. Chance is also crucial to Poe's thinking about the limits of reason, particularly in his tales of ratiocination—"The Murders in the Rue Morgue" (1841), "The Mystery of Marie Rogêt" (1842–43), and "The Purloined Letter" (1844). Exploring emergent theories of probability through his polymath investigator Dupin, Poe confronts the challenge of skepticism by working with, not against, science as he and his culture move toward more modern—and more pragmatist—points of view. It has long been recognized that Poe asks some of the hardest epistemological questions. His encounters with chance show that he offers more answers than is often supposed.



D. H. Lawrence once called Poe "almost more a scientist than an artist," though as "almost" suggests, most readers of Poe do not consider him a serious scientific thinker.<sup>2</sup> In his early poem "Sonnet— to Science" (1829), Poe calls science a "Vulture" of "dull realities" that preys on the "poet's heart." Such fervent lamentation turns to an often hostile irony in his later scientific hoaxes, which take the authority of science to lie not in a rigorously objective method but in what the historian of science Peter Dear calls "socially embedded genres of argument."<sup>3</sup> Poe's resistance to science should not obscure the fact that he knows enough to mock it in detail. He did well in mathematics at West Point and pursued interests in astronomy and cosmogony. In a more empirical vein, his "Letter to Mr. B—" (1831) praises Francis Bacon's methods; and his "South-Sea Expedition" (1843) lauds "scientific men, imbued with the love of science."<sup>4</sup> In the culmination of his scientific efforts, *Eureka* (1848), Poe draws so provocatively on Newton, Kepler, Alexander von Humboldt, Pierre Laplace, and others that one review gushed, "Mr. Poe is not merely a man of science—not merely a poet—not merely a man of letters. He is all combined."<sup>5</sup> Writing before Matthew Arnold's "Literature and Science" (1882) and C. P. Snow's "Two Cultures" (1959), Poe embraces grand holistic designs, deriding "*merely* scientific men . . . who cultivate the physical sciences to the exclusion . . . of the mathematics, of metaphysics and of logic."<sup>6</sup> Of these areas, Poe's metaphysics have dominated critical attention, though—as John Irwin has marvelously shown—mathemat-

ics and logic figure importantly in Poe's writings, especially his tales of ratiocination.<sup>7</sup>

Jorge Luis Borges praised "The Murders in the Rue Morgue" as a "perfect specimen" of detective fiction, though Poe's story of a razor-wielding orangutan who climbs through a fourth story window and kills two women can be seen less as a drama of crime and punishment and more as a narrative thought experiment fascinated with questions of method.<sup>8</sup> From its expository start, the tale simultaneously celebrates and subverts rationality: the most difficult mysteries "are not beyond *all* conjecture," but our "analytical" faculties themselves remain "but little susceptible of analysis," so much so that the "very soul and essence of method" take on "the whole air of intuition" (*PT*, 397). Poe thus foregrounds a commitment to examining what is often named intuition. Fittingly, Dupin's first act in the story is to read the narrator's wildly associative thoughts, a feat so seemingly beyond rational explanation as to antagonize some undergraduates and prove a point Poe made in 1846: the popularity of "Rue Morgue" comes from its "method and *air* of method."<sup>9</sup> Like the narrator himself, doubters may wonder about Dupin's "method—if method there is"; but as with scientific hoaxes, chess automatons, and P. T. Barnum exhibits, it is precisely the skepticism of readers that keeps them reading on (*PT*, 402).

As critics note, Dupin's methods are difficult to stabilize once he begins his investigation of the crime.<sup>10</sup> He examines the murder scene "with a minuteness of attention" and "scrutinize[s] everything," before moving beyond what he calls "inductions" to "legitimate deductions" that lead "*inevitably*" toward "a single result" from which there is "no escape" (*PT*, 413–18). Though some evidence is withheld from the reader (most maddeningly the broken nail that fails to secure a window), Dupin confirms his suppositions with additional forensic evidence and a fake advertisement, following a rough scientific method of observation, hypothesis, and testing. Yet as Poe joins his era's scientific consensus by privileging a posteriori empiricism over a priori speculation, "Rue Morgue" simultaneously registers a skeptical concern, participating in what Mary Poovey describes as a growing challenge to induction (*PT*, 418).<sup>11</sup> The challenge begins with Joseph Glanvill and, most notably, with David Hume and continues in the nineteenth century through the work of the logicians and philosophers of science Richard Whately and William Whewell. Like them, Dupin

circumscribes the power of empiricism, mocking the Parisian police for their “vast parade of measures” and anticipating Poe’s later complaint about “*merely*” empirical scientists who “chiefly write the criticisms *against* all efforts at generalization—denouncing these efforts as ‘speculative’ and ‘theoretical’” (*PT*, 412).<sup>12</sup> Indeed, as some dubious students will note, Dupin’s inductions do not necessarily point to a murderous orangutan unless one makes the kind of leap in logic that for Whatley and Whewell is not inducible from empirical facts. Against such views—and despite their own significant differences—John Herschel and John Stuart Mill argue that general conclusions can be reasoned from experience by analogy.<sup>13</sup> Yet such claims do not solve the problem of induction and are particularly shaky in the context of Poe’s “*very extraordinary*” and “*excessively outré*” tale, for only an unlikely combination of events might be analogous to the Rue Morgue case (*PT*, 420, 422). Poe thus broaches a critical question: if deduction and even induction are insufficient methods, does logic give way to some other mode of knowing, something closer to guessing or intuition?

Toward the end of the story and in the middle of what appears to be a dramatic climax, Dupin reaches the limits of his ratiocination, abruptly cutting short his reconstruction of the crime: “I will not pursue these guesses—for I have no right to call them more—since the shades of reflection upon which they are based are scarcely of sufficient depth to be appreciable by my own intellect” (*PT*, 425). Such restraint is surprising considering Dupin’s earlier dissections of his rational processes, though it is fully consistent with Poe’s opening statement that the analytic powers are unknowable. That our most searching mental faculties are ineffable can recall a familiar Poe—the skeptic who undermines enlightenment order with putatively rational protagonists whose insistent claims to logic only highlight the instability of reason. Yet to accept too readily this reading of Poe is to risk two mistakes: to assume hard distinctions between reason and irrationality that Poe makes only to dissolve, and to diminish his tales of ratiocination along with much of his critical and creative work, rendering all his talk of induction and deduction—of evidence, method, logic, and science—little more than lengthy diversions from the irreducible fact of intuition. Doubtless Poe’s ratiocinative tales contain some fraction of fudge, but what appears to be inexplicable intuition remains open to scientific explanation.

In the manner of later detective fiction, Poe postpones revealing

the methods of Dupin, tempting the reader with red herrings and exhausting every seeming solution: it is not the bank employee; there is no secret passageway; the bags of gold do not matter. Only after the reader is slowly brought with the narrator to “the verge of comprehension” does Dupin finally align his method with “the theory of probabilities—that theory to which the most glorious objects of human research are indebted for the most glorious of illustration” (*PT*, 421–22). Dupin’s enthusiasm indicates how far the taming of chance had advanced by the mid-nineteenth century. Drawing on Laplace’s influential *Philosophical Essay on Probabilities* (1814), Charles Babbage built a calculation machine and studied the frequency of letters in his cryptology work, while Siméon-Denis Poisson (a student of Laplace) formulated his law of large numbers in the 1830s, refining claims that seemingly unpredictable events follow regular laws when viewed in the mass. Adolphe Quetelet’s studies in social statistics applied the law of large numbers to humans; and Herschel and Mill engaged probability theory in the 1830s and beyond. In general, probabilistic thought alleviated the problem of induction; for if no quantity of empirical facts could verify absolute laws, they improved predictive accuracy so that, in Martin Jay’s words, “the bugaboo of skepticism was no longer quite as frightening.”<sup>14</sup> It was not simply that increasingly sophisticated formulae solved increasingly complicated puzzles involving dice, coins, cards, and bags full of marbles. Probability theory spread beyond such abstract classical models; or as Laplace wrote in his *Essay*, “[T]he most important questions of life . . . are indeed for the most part only problems of probability.”<sup>15</sup>

In “The Murders in the Rue Morgue” and beyond, Poe refers to the “theory of probabilities” (*PT*, 421), the “doctrine of chance” (*PT*, 507), and the “Calculus of Probabilities” (*PT*, 554), though—as is so often the case—his intellectual sources are difficult to verify. Poe at times refers to Laplace, Herschel, and Mill, and also points to Babbage’s *Ninth Bridgewater Treatise* (1837), which discusses (among other thinkers) Laplace, Poisson, and the probability theorist Augustus De Morgan. Many of these figures published texts for nonspecialists, and the antebellum culture of reprinting further disseminated their work on chance. In the early nineteenth century, the occasional treatment of chance was typically a learned theological essay defending the argument from design, whereas after Laplace authors increasingly addressed probability in relation to everyday issues—lotteries, elec-

tions, life insurance, weather, stargazing, navigation, and medicine. In the years Poe wrote his ratiocinative tales, probability science was entering antebellum culture, so much so that by 1847 the *Commercial Review* could claim, “We have in the United States . . . become familiar with the doctrine of probabilities. . . . The calculations of the merchant—the harvest of the planter—the fate of a ship at sea—the very existence of the world for another day, are all but probabilities.”<sup>16</sup>

One achievement of “Rue Morgue” is that it draws on probability theory for a psychomathematical account of intuition that, not unlike some neuroscience of the twenty-first century, explains how human beings act according to probabilities without rationally weighing their chances. We might call this a kind of unconscious calculation—a probabilistic method neither driven by reason nor wholly accessible to it, which is paradoxical only if we define calculation as something intellectual and willed. However, nineteenth-century probability theorists recognized that feeling, intuition, and the unconscious cannot be purged from probabilistic determinations. Laplace wrote, “[T]he theory of probabilities is at bottom only common sense reduced to calculus; it makes us appreciate with exactitude that which exact minds feel by a sort of instinct without being able oftentimes to give a reason for it.” Mill also referred to probabilistic thinking as a “sort of instinct,” as did De Morgan, who noted in 1838, “Probability is the feeling of the mind.” As Lorraine Daston has shown, probability theorists acknowledged that experiential forms of knowing were sometimes superior to formulae and that, because certain causes tend to lead to certain outcomes, humans learn to act probabilistically through conditioning, not ratiocination.<sup>17</sup> For example, I might fold a pair of jacks in poker not because I know precisely the odds or consciously notice my opponent scratching his ear but rather because experience has taught me without my noticing that my hand tends to lose in such circumstances. Whereas I might attribute my decision to intuition or some extrarational hunch, probability theorists did not invoke transcendent, sentimental, or supernatural mechanisms, nor did they have access to Darwinian evolution or the neuroscience described in Malcolm Gladwell’s *Blink* (2005). Instead, they grounded unconscious calculations in psychological associations that do not lead to absolute certainty but move one toward probable degrees of belief. Thus Dupin has good reasons for refusing to pursue the nominal “guesses” that are not “appreciable by [his] own intellect.” He knows that he cannot know precisely

how he knows; but he also knows that his hypotheses are not random or entirely inexplicable. We are better probability theorists than we realize and so must attend to those unconscious calculations that often go by the name of intuition, which Poe in a discussion of Laplace in *Eureka* calls the “mathematical instinct” (*PT*, 1322).

Of course, unconscious calculation restricts the authority of reason understood as intentional analysis. It can even challenge what is typically thought of as thinking. The orangutan in “Rue Morgue” has learned that when it sees a whip, it is likely to be beaten, a behaviorist response that the antebellum era explained in terms of the association of ideas. Dupin displays his own facility with this psychology when retracing the thoughts of various characters; and just as the ape leaps from the lightning rod to the window, Dupin follows him by making what Poe in *Eureka* calls a “seemingly intuitive leap” (*PT*, 1264). Such mirroring can conflate human and animal, head and heart, master and slave. In fact, recent experiments in neuroeconomy show that monkeys act with a remarkably acute sense of probability, quickly mastering games of chance to maximize their payoff of juice.<sup>18</sup> But if Dupin’s instincts are not exclusive to his species, they are crucially improved by the very human invention of probability theory. For Laplace and others, intuition can correct mathematics but mathematics sharpens intuition, for experience is not always a reliable guide, particularly in outré or emotionally charged situations or when fine distinctions are required. Poe concurs in “Rue Morgue” when suggesting that analysis and its air of intuition are “much invigorated by mathematical study,” just as Dupin in “The Purloined Letter” is shown to be both a poet and a mathematician (*PT*, 397). By improving intuition with probabilistic logic, Dupin tames the threat of chance, sending the disruptive, improbable orangutan to the Jardin des Plantes, that monument to a knowable, orderly nature, and a favorite example of opponents of chance (including the natural philosopher Henry Duncan, whom Poe reviewed in 1840).

Chance, it seems, is finally contained, though it remains a real presence in the story. In Horace’s representation of fate, Necessity holds a fistful of nails, symbolizing the inflexible laws of a universe without chance.<sup>19</sup> In “Rue Morgue,” nails turn out to be fractured as chance erupts into a seemingly closed system that is not absolutely locked down. Dupin ultimately reestablishes order by synthesizing feeling and logic, offering a new and probabilistic way to think about the

unconscious. The tale's powerful sexual subtext makes it hard to preclude Freudian readings, though given Poe's historical moment and the relative dearth of information on Dupin's interior life, Freud and his followers do not offer much help in describing Dupin's methods. More historically proximate but also inadequate are romantic theories of the unconscious. Dupin's methods have little directly to do with post-Kantian philosophy. Nor does Dupin privilege childlike innocence or inspirational moments in nature. Nor even do Poe's ratiocinative tales link the unconscious with vatic revelation, for (to paraphrase Laplace's supposed comment to Napoleon) God is not a necessary hypothesis in the stories.<sup>20</sup> Instead of these recognized coordinates for romantic and Freudian depth psychology, "Rue Morgue" uses probability science to explain how we suddenly find ourselves knowing but not knowing how we know. Probability theory in this way combines psychological and mathematical readings of Dupin. It also shows how Poe's tales of ratiocination theorize not a solution for but a response to skepticism by offering a way to determine actionable beliefs in the absence of absolute certitude. Unconscious calculations move facts toward generalizations, observations toward testable hypotheses. As an adept of probability theory, Dupin models in "Rue Morgue" how one might proceed in the face of doubt, though as might be expected in a chancy world, his methods are not guaranteed.



In "The Mystery of Marie Rogêt," genius seems thwarted at every turn, if only because Poe attempts to apply probability theory to an actual crime—the 1841 disappearance of Mary Rogers, who was later found dead in the Hudson River. Poe exports the facts of the Rogers case to Paris, where Dupin brings his brilliance to bear. Unfortunately for Poe, the real-life case was solved during the serialization of his thinly fictionalized story, forcing him to work with faulty suppositions already made in print. In part because the tale is so desperately improvised, "Rogêt" struggles to advance the method of "The Murders in the Rue Morgue" as Poe encounters the failure of "the Calculus of Probabilities," that "most rigidly exact in science applied to the shadow and spirituality of the most intangible in speculation" (*PT*, 507). More specifically, Poe's problem—both epistemological and aesthetic—is that he moves from psychology toward social statistics, from probabilistic degrees of belief about a single event toward a frequentist approach that measures probability as a function of large numbers.

Theodore Porter has shown how Laplace and Poisson inspired statisticians such as Quetelet, who held that individual phenomena are driven by chance but in the long run occur with regular frequency and so can be predicted en masse. The law of averages makes good sense when, say, flipping a coin: the more times it is flipped, the more likely outcomes will regress to a fixed average of fifty percent. Quetelet ambitiously extended this logic to a range of social subjects, formulating what he called the “average man” as a composite or “type” of a country or people, thus bringing a quantitative method to romantic interests in national and racial identity.<sup>21</sup> Such thinking arose in Europe in the 1830s, but Americans quickly caught on—in medical journals and legal debates, in the expansion of the census, and in the growth of the annuity and insurance industries, which increasingly relied on statistics. By the time of “The Mystery of Marie Rogêt,” statistical reasoning was rising and engendering resistance. It was not simply that there were, as the saying goes, lies, damn lies, and statistics; the notion of fixed averages, despite Quetelet’s assurances, entailed a kind of determinism. Romantics might be expected to recoil from what Ralph Waldo Emerson called “the terrible tabulations of the French statist.”<sup>22</sup> Yet Emerson, like Henry David Thoreau and Walt Whitman, appreciated the notion that—despite the ebb and flow of individual experience—nations, races, and even humanity as a whole moved toward a common telos.<sup>23</sup>

For his part, Poe in “The Mystery of Marie Rogêt” is initially drawn to statistical reasoning. The story asserts that women disappear with “great frequency, in large cities,” prompting (as critics have pointed out) thumbnail statistical analyses from Dupin (*PT*, 510).<sup>24</sup> Through Dupin, Poe praises probability theory: “[M]odern science has resolved to *calculate upon the unforeseen*. . . . *Accident* is admitted as a portion of the substructure. We make chance a matter of absolute calculation” (*PT*, 534). Yet for all the tale’s statistical acuity, no solutions arise. By the end of “Rogêt,” a frustrated Dupin complains of the law of large numbers: “The practice, *in mass*, is . . . philosophical; but it is not the less certain that it engenders vast individual error” (*PT*, 530), a charge repeated when the story ends by decrying the “mistakes which arise in the path of Reason through her propensity for seeking truth *in detail*” (*PT*, 554).<sup>25</sup> Quetelet also recognizes the risk of viewing subjects (as Dupin later echoes) “too closely”: “[W]e must study the masses, with the view of separating from our observations all that is fortuitous or individual.”<sup>26</sup> The problem is that the individual

case matters intensely in “Rogêt”; and so Poe comes to side with an opponent of Quetelet—the mathematician and statistician Charles Dupin, who argued in 1836 that social behaviors, particularly crimes, were so complicated that probability theorems could not account for specific incidents.<sup>27</sup> As Irwin shows, Poe had opportunity and motive to engage Charles Dupin’s work at West Point, and other thinkers in the early 1840s (including Mill and Herschel) questioned Quetelet’s bold applications of probability theory to sociology.<sup>28</sup> Whether Poe borrowed from them or made his own inferences, *his* Dupin similarly takes issue with the law of averages, a critique of probability theory that Poe extends into aesthetics.

Though symbolists and modernists have extracted artistic dictums from Poe, his fiction and poetry are often at odds with his manifestos, which themselves are not internally coherent.<sup>29</sup> Poe’s practical criticism is even more turbulent: seldom has one reviewer issued so many injunctions with such animus in so short a time. But one consistent factor in Poe’s astringent literary judgment is his favoring of what he calls in “The Mystery of Marie Rogêt” the “unlooked for and unimagined” (*PT*, 534). Following Bacon, Poe lauds in his criticism the “element of strangeness—of unexpectedness—of novelty—of originality,” an aesthetic evident not only in his obsession with plagiarism but in his extraordinary characters and plots (*ER*, 1381). Nonetheless, Poe’s reviews often complain of “monstrously improbable” incidents (*ER*, 328), “*ultra*-accident[s]” (*ER*, 214), “absurd sacrifices of verisimilitude” (*ER*, 154), and “ill adapted and improbable” events (*ER*, 350)—sins that Thomas Dunn English charged to Poe himself when spoofing Poe’s use of probability theory in 1848.<sup>30</sup> As early as 1837, Poe noted the tension between his desires for both the plausible and the surprising: “Original characters, so called, can only be critically praised . . . when presenting qualities known in real life, but never before depicted, (a combination nearly impossible)” (*ER*, 976). How one determines what best corresponds to “real life” is, of course, a thorny question. But as Poe pursues his nearly impossible task of writing tales that are simultaneously surprising and realistic, he finds potential aesthetic justification in statistical reasoning.

To some extent, he was not alone. In the Aristotelian mimetic tradition, the Common Sense philosopher James Beattie asserted that “Fiction must be Probable, or Plausible,” suggesting (as Michael McKeon has argued) that claims to historical accuracy gave way to probabilis-

tic verisimilitude as a standard for prose fiction, paralleling a broader intellectual shift from naive empiricism to more modern skepticism.<sup>31</sup> This standard held true in the antebellum period, when reviewers judged a narrative's worth according partly to its plausibility, though they rarely asked how plausibility should be determined.<sup>32</sup> One exception is an 1837 essay appearing in the *Gentleman's Magazine* (later renamed *Burton's Gentleman's Magazine*). William Burton himself probably wrote "Victor Hugo and the French Drama," which complains that Hugo's work "sets probability at defiance" and then draws on statistical science for a theory of verisimilitude:

[I]t has been the fashion with novelists and penny scribblers to call upon the world to hold up their hands in wonderment at some circumstance illustrating the hackneyed truism, "Truth is often much stranger than fiction." To be sure it is: it would be exceedingly strange if it were not. . . . Fiction is based on statistics; it has a calculus of its own, and its estimates of probabilities often present problems. . . . [F]iction deals not in the exceptions but the generalities of life, it is more or less the estimate of the mean proportional of humanity according to the most approved tables of Quetelet and Babbage.<sup>33</sup>

This passage follows Quetelet's claim that statistics can keep artists "within due limits." And it is likely that "Victor Hugo and the French Drama" made an impression on Poe, if only because *Burton's Gentleman's Magazine* negatively reviewed *The Narrative of Arthur Gordon Pym* (1838), chastising Poe for "improbabilities" and "outraging possibility."<sup>34</sup> Nonetheless, Poe worked as Burton's assistant editor from 1839 through 1840 before the arrangement ended with a bitter fight in which Poe complained about the *Pym* review. Shortly thereafter, Poe borrowed from the Hugo article—calling Hugo in 1841 an "absurd antithesis-hunter" and exploring in "The Mystery of Marie Rogêt" the aesthetic implications of statistics (*ER*, 989).

That part of Poe appreciated social statistics makes sense. Probability theorists were keen to emphasize their ability to predict the seemingly unpredictable and make plausible the unexpectedness of real life. Quetelet, who once aspired to a literary career, gushed in his *Treatise on Man* (1835): "Sad condition of humanity! We might even predict annually how many individuals will stain their hands with the blood of their fellow-men, how many will be forgers, how many will

deal in poison.” Such power, noetic as well as dramatic, helped speed the rise of statistics. It might be useful to determine regularities in height and age, but to do so is also to track anomalies—the tallest man, the oldest human being, or (my own childhood touchstones) the longest fingernails and the heaviest twins. Quetelet called such outliers “monstrosities,” but they help constitute the average man and can be especially fascinating when combined with the power of large numbers.<sup>35</sup>

How enticing to consider not just the magnitude but also the frequency of anomalies, as when Quetelet sorted murders by such categories as “Cutting, stabbing and bruising instruments,” “Strangulations,” “[D]rowning,” and “Stones.”<sup>36</sup> Statistical projects like these were driven in part by a paradoxical type of sensationalism in which the quantification of extraordinary events renders them simultaneously more common and more interesting—more knowable and possible, and therefore more chilling. Frequent subjects for studies of the time read like a list of Poe *données*—suicide, insanity, crime, and death, often tracked by gender, nationality, and race. More specifically, Quetelet counted marriages between women in their sixties and men in their twenties, a proposition Poe exploits in “The Spectacles” (1844); and Laplace famously claimed that regularity governed the number of dead letters in the Paris post office, a subject that Herman Melville alludes to in “Bartleby, the Scrivener” (1853), as does Poe in “The Purloined Letter.”<sup>37</sup>

Yet for all its piquant potential and broadening popularity in antebellum culture, statistical reasoning proves an aesthetic liability in “The Mystery of Marie Rogêt.” The story is certainly worth reading, but most students, scholars, and anthologists prefer Dupin’s other tales. Characters in “Rogêt,” including even Dupin, lack individuation as personal motives and agency give way to sociological claims about how types—jilted lovers, sailors, children—generally behave. As with “The Murders in the Rue Morgue,” the tale’s patient pacing feels like preparation for a masterly conclusion, but the more “Rogêt” recycles clues and conjectures, the more Poe appears to be stalling. Moreover, the investigation—premised as it is on statistical analysis, not intuitive genius—can make the evil of the crime feel banal, particularly when it is called an “*ordinary*” case with “nothing peculiarly *outré* about it” (*PT*, 519). The story does have sexually charged details that conjure the real cause of Rogers’s death—a botched abortion; and as David

Van Leer and Mark Seltzer argue, the knowledge that young women disappear with great frequency can be terribly and compellingly modern.<sup>38</sup> Nonetheless, Poe fails to bring vivid specifics to a story about large numbers, a problem that Quetelet himself predicted when differentiating his science from literature: “It is the social body which forms the object of our researches, and not the peculiarities distinguishing the individuals composing it. The . . . literary man and the artist, on the contrary, will endeavour to understand, in preference, those peculiarities which we endeavour to separate from our results.”<sup>39</sup> Both Charles and C. Auguste Dupin agree that statistical reasoning can explain the plausibility and even inevitability of monstrosities, but the law of averages is too blunt a tool for analyzing or dramatizing individual cases, particularly for an author like Poe whose best fiction is always to some degree psychological.

An earlier Poe story, “The Man of the Crowd” (1840), makes this point more intentionally. The story’s narrator is a statistical reasoner whose observations of a city street take “an abstract and generalizing turn”: “I looked at the passengers in masses, and thought of them in their aggregate relations” (*PT*, 389). Then, “descend[ing] to details,” he invokes various social categories—different “classes” of businessmen, the “tribe of clerks,” “gamblers,” “Jew pedlars,” and so forth (*PT*, 390–91). Not until nightfall does he undertake an “examination of individual faces,” ultimately following an elderly man who has an air of “absolute idiosyncrasy” (*PT*, 392). The twist is that the man forever seeks out crowds and remains stubbornly inaccessible, prompting the narrator to call him a “type” and name him “*the man of the crowd*” (*PT*, 396). Among other things, the wanderer can represent Quetelet’s average man who is “only the type of a people,” a statistical composite with no individual existence outside the law of large numbers (that is, crowds).<sup>40</sup>

“The Man of the Crowd” ultimately succeeds in that it demonstrates through its lack of characterization the limits of statistical reasoning. Unlike in “Rogêt,” the point of the tale is not to solve the puzzle at hand; for Poe announces from the start that some “mysteries . . . will not *suffer themselves* to be revealed,” just like a book that “does not permit itself to be read” (*PT*, 388). The story can even exact for Poe a measure of personal revenge from those who would subordinate imaginative literature to the supposed exactitudes of statistical science. Five months after William Burton fired him, Poe published

“The Man of the Crowd” in the very magazine that Burton had just sold. The story shows how fruitless it is to believe “Victor Hugo and the French Drama,” for tales “based on statistics” cannot get at reality, stories using “the tables of Quetelet” are unreadable, and critics like Burton and Dunn English who complain of Poe’s improbabilities do not recognize that anomalies are not only quite plausible but constitutive of averages in the first place.

Poe’s aesthetics in this sense are surprisingly realistic. His poetic theory, the main focus of scholarly attention, generally privileges imaginative freedoms over real world referents; but his fictional practices seek to expand and thereby meet standards of verisimilitude. That is, Poe defends outré characters and plots, not by denying realism as a legitimate measure, but instead by insisting that the seemingly fantastic is not beyond probability. In doing so, Poe places romantic aesthetics in rational relation with the actual world, a project that Alan Singer has more generally reconstructed.<sup>41</sup> For Poe, statistical science rightly understood shows that truth can be originally strange; and theories of chance support Aristotle’s claim in *Poetics* that “it is probable that improbable things will happen.”<sup>42</sup> The sociological narrator of “The Man of the Crowd” dramatizes what Quetelet recognized and “Rogêt” painfully learns: the average case, like 2.3 children, is less real than any anomaly.



As a taut, intensely self-reflective text that builds on Dupin’s previous adventures, “The Purloined Letter” has been taken as Poe’s most realized and indeterminate ratiocinative tale. Whether formulated in terms of semiotic instability or post-Cartesian paradoxes of the self, philosophically inclined readings of the story insist that interpretation can never be complete and that Dupin’s methods of investigation force us to confront the limitations of our own.<sup>43</sup> “The Purloined Letter” is indeed about skepticism, though the focus need not be on poststructural theory or even solely on the tale’s relation to ideas; it instead can be shifted to everyday practices and a cultural logic of pragmatism, thereby retaining the tale’s epistemological sophistication without ceding its historical ground. Discussions of chance in the antebellum period help synthesize these critical imperatives. For as extraordinary as “The Purloined Letter” is, it also participates in popular debates over probability, so much so that radical indeterminacy need not be the final word on the tale.

Perhaps chastened by the struggles of “The Mystery of Marie Rogêt,” Poe in “The Purloined Letter” returns to what works in “The Murders in the Rue Morgue”: a closed room, a fully imagined crime, the intuition of a genius, and the application of probability theory, not to large numbers, but to an outré case. What most differentiates “The Purloined Letter” from “Rue Morgue” is that the antagonist is not an orangutan but the Minister D——, a fellow mathematician and poet who makes Dupin’s use of probability theory analogous to that of a gamer. The story’s interest in gaming is most evident in its celebrated description of the boy who mastered the game of even and odd. Though the boy employs a “principle of guessing,” he is not simply lucky, for his method entails the “identification of the reasoner’s intellect with that of his opponent” (*PT*, 689). The process begins empirically with “observation and admeasurement” but finally relies on something like intuition when the boy says, “I fashion the expression of my face, as accurately as possible, in accordance with the expression of [my opponent], and then wait to see what thoughts or sentiments arise in my mind or heart, as if to match or correspond with the expression” (*PT*, 690). Barbara Johnson finds in the play between even and odd an unending struggle between symmetrical order and open-ended uncertainty.<sup>44</sup> Yet Dupin’s repeated emphasis on “odd” also points to probability theory, for we can attribute the boy’s method to the unconscious calculation of odds, in part because of a possible source text for “The Purloined Letter.”

Appearing in the South Carolina magazine *Magnolia*, “The Philosophy of Chance” (1842) connects intuition, probability theory, and facial expressions. Beginning with references to Laplace and Quetelet, the article discusses how probability science “extends also to mental phenomena,” including “that peculiar kind of sympathy . . . by which the muscles of our face are contracted, when we behold another laugh or yawn.” Such facial mirroring allows subjects to share “[k]indred feelings and sensations,” for their similar physiological actions are associated with similar psychological states. Moreover, these associations are primarily unconscious, coming “not so much to the whole head, but to a certain part, to a particular corner of it, just as one is apt to explore only certain compartments of a bureau for a mislaid paper, where alone some mysterious presentiment tells him that it is to be found.”<sup>45</sup> There is no hard evidence that Poe read “The Philosophy of Chance,” though both the article and “The Purloined Letter” use a “mislaid paper” to discuss intuition as a form of probabilistic rea-

soning that occurs through “mysterious” unconscious associations between facial expressions and feelings. Both texts also describe how probability theory operates through and in the body, for unconscious calculation is not just the feeling of the mind but also has physiological sources.

Probabilistic thinking is further embedded in culture when “The Purloined Letter” enters into antebellum debates over chance. Alexis de Tocqueville writes in 1840 that “[t]hose who live in the midst of democratic fluctuations have always before their eyes the image of chance; and they end by liking all undertakings in which chance plays a part.”<sup>46</sup> As Jackson Lears argues, nineteenth-century Americans were especially preoccupied with chance—in part because of the frontier and entrepreneurial ethos, in part because of the market revolution, in part because rational Protestantism sought to limit the growing prominence of chance. The taming of chance thus played out in ideas and culture as probability theory shaped and was shaped by social applications. For Lears and Andrew Delbanco, the taming of chance did not culminate in the United States until the later nineteenth century, but Poe’s references to games in his ratiocinative tales indicate an important pre-history.<sup>47</sup>

At the start of “The Murders in the Rue Morgue,” Poe favorably contrasts whist to chess because whist involves chance and so entails “things external to the game”—the luck of the deal, the accidental dropping of a card, an opponent’s expression that might serve as a tell (*PT*, 399). “The Mystery of Marie Rogêt” continues to resist chess-like methods, criticizing the “rectangular precepts” of the police (*PT*, 529). And in “The Purloined Letter,” the police search for the missive by “dividing the surface of [the Minister D——’s] building into registered square inches,” treating the world like an orderly chessboard when it is really more like whist (*PT*, 690). The tale also mentions the “game of puzzles . . . played upon a map” in which one player names a word on the map that an opponent must then find (*PT*, 694). The trick, Dupin says, is not to name a small word but a large one that stretches across multiple grids, for the chess-like mind of a logical opponent will not think outside such boxes.

Dupin’s triumph in “The Purloined Letter” vindicates his methods, which emphasize probabilistic thinking over rational exactitude. The king and queen of the story may point to either chess or whist, but Dupin knows that the Minister D—— must keep the letter “*at hand*,”

and he ultimately finds the missive concealed in a rack of “cards” (*PT*, 695). As in “Maelzel’s Chess-Player” (1836), Poe’s exposure of a dwarf hidden inside a supposed chess automaton, something odd lurks within square and even models of reason. Fifty years later, Arthur Conan Doyle’s Sherlock Holmes worried about such anomalies in “The Adventure of the Cardboard Box” (1892)—a story that mentions “The Murders in the Rue Morgue,” and whose title suggests both the boxes of a chessboard and the playing cards of whist. Though Holmes correctly identifies the murderer, he ends with a haunting question: “What object is served by this circle of misery and violence and fear? It must tend to some end, or else our universe is ruled by chance, which is unthinkable.”<sup>48</sup> But is it so unthinkable for Poe? Is he a post-Enlightenment author who prefigures modern skepticism? Or is he, as has been increasingly recognized, a writer in tune with his era? In other words, is Poe antebellum or antifoundational? The probable answer is “yes.”

By contrasting chess and whist, Poe joins in a broad contemporary debate over chance. Reflecting the reformist zeal of the period, an 1836 article from the *Baltimore Monument* warned that chess “prostrated and ruined” young minds, as shown in the story of a chess prodigy who became a gambler and was killed in a card game. For the author, the tragic connection was clear: “[B]oth were games of chance.” Most commentators, however, associated chess with rational certitude. New York’s *Family Magazine* claimed in 1837 that “[o]ne of the greatest charms of [chess] lies . . . in the circumstance, that whilst man is everywhere surrounded by chance, in this game . . . he has entirely excluded it.” The *Anglo American* agreed: “[T]he study of [chess] may be well considered the study of a science.”<sup>49</sup>

If chess was largely seen as rational, whist with its obvious element of chance was a frequent counterexample. In Charles Lamb’s oft-reprinted sketch, “Mrs. Battle’s Opinions of Whist” (1823), the whist-loving protagonist “could not conceive of a *game* wanting the sprightly infusion of chance,” so much so that a nearby game of chess filled her “with insufferable horror.” In his 1838 history of card games, William Chatto quoted the linguist William Jones who found in India a version of chess that included dice. For Jones, the introduction of chance “seems to exclude [such] Chess from the rank which has been assigned to it among the sciences, and to give the game before us the appearance of *Whist*.” Along similar lines, *Godey’s Lady’s Book* referred

to “the science of Chess” in 1844; but that same year, it satirized similar claims for whist in a story by none other than William Burton, who (sweet revenge!) created a villain whose interest in probability is reminiscent of Poe’s. With a burst of sophistry, the drunken gambler entices a college freshman into whist: “‘The abstract contemplativeness of a good whist-player is peculiarly adapted to the formation of a metaphysical state of mind; the ‘throws’ of a pair of dice are integral portions of sexagesimals, and, therefore, are logistic, if not logical in effect.’”<sup>50</sup> Here and elsewhere, whist is portrayed as a kind of gateway drug, though as the villain’s scientific jargon suggests, a minority of voices in Britain and the United States were beginning to defend whist as a scientific pursuit.

*Blackwood’s Magazine* in 1835 referred to “the science of whist,” as did a sporting magazine in 1837 that included whist among its “*Scientific Games*.” Whist handbooks offered strategic formulae and detailed probability tables, while postbellum encyclopedias referred to the “modern scientific game of whist.”<sup>51</sup> By the time William Pole wrote *The Philosophy of Whist* in 1885, it was the presence, not the absence, of chance that legitimized the game as a science:

It may perhaps be thought that the existence of the element of chance to such a large extent in Whist tends to lower its intellectual character as compared with other games, such as chess. . . . [But] the element of chance, so far from standing in the way of intellectual exercise, is what chiefly gives the opportunity for it. . . . [T]he calculations, provisions, and speculation, arising out of many uncertainties occurring in Whist-play, furnish the most important objects for scientific investigation.<sup>52</sup>

For Pole and others, games of chance became increasingly acceptable in the later nineteenth century, and the rising use of gambling as a metaphor for life coincided with the advent of social Darwinism, literary naturalism, and pragmatism—traditions that all participated in the U.S. taming of chance.<sup>53</sup>

Poe’s anticipation of such thinking makes him both a part of and ahead of his time; if like his contemporaries he contrasts the rationality of chess to the chanciness of whist, unlike them he values whist as an epistemological challenge precisely because it models indeterminacy. Thoreau concurs in *Walden* (1854) when a stunning loon refuses to be confined by the author’s checkerboard metaphor, just as

the deeper meanings of the pond elude the ice-cutters who, like Poe's Parisian police, divide Walden's ice into registered squares. Emerson and Emily Dickinson prefer circles, spheres, and angles to the rectilinear figures of chess. And Ahab, too, rejects rationalism when smashing his quadrant and comparing life to a game of cards. Yet for all their resistance to positivist methods—to rigid taxonomies, mechanistic causalities, and linear discursive forms—American romantics seldom slide into utter skepticism, occupying a middle ground that for Poe is bounded by two concepts of chance: a milder form that governs individual cases but regresses to averages in the long run; and an irreducible, unpredictable, disruptive form that Hacking (following Charles Sanders Peirce) calls “absolute chance.”<sup>54</sup>

Particularly in the early and mid-nineteenth century, probability theorists appealed to what Laplace called “the great laws of nature,” including Quetelet, who claimed that “all is lawlike: only our ignorance leads us to suppose that all is subject to the whims of chance.”<sup>55</sup> Poe himself writes in “The Mystery of Marie Rogêt” that “[God's] laws were fashioned to embrace *all* contingencies” (*PT*, 553); and following (but misunderstanding) an example from Laplace, he then claims that if two consecutive die rolls turn sixes, the chance of another six coming up is diminished—the so-called gambler's fallacy that mistakenly holds that past outcomes affect specific future trials. Such thinking continues in *Eureka* when Poe announces that “[t]he plots of God are perfect” and predicts that all matter will converge toward a telos in the same way that infinitely repeated probabilistic trials regress to a set limit (*PT*, 1342). The problem that Poe names but does not adequately credit is that infinity does not occur within human time, so that two sixes in a row are so infinitesimal a sample as to have no predictive value. That Poe falls willingly into the gambler's fallacy might explain his early exit from the University of Virginia. It also suggests that Walter Benjamin overestimates Poe's denial of historical teleology.<sup>56</sup> More surely, Poe's faith in perfect plots indicates his attraction to triumphal logic and transcendent truths, for rationalists and gamblers alike are susceptible to the dangerous conviction that given enough patience, methodological discipline, and chips, total order will be realized. Dostoyevsky, a fan of Poe and another disastrous bettor, portrays this rage for order in *The Gambler* (1866) when roulette players studiously record past outcomes only to turn into slobbering brutes once the wheel begins to spin. Poe often depicts similar instances of what Joan

Dayan terms the “convertibility” of rationality; and so despite—and in some ways, because of—his unconsummated pursuit of pure reason, Poe considers views of chance that Laplace, Quetelet, and Sherlock Holmes could not countenance.<sup>57</sup>

A main narrative in nineteenth-century probability theory is the emergence of absolute chance. Against Laplace’s great laws, Peirce wrote in 1884 that “as everything is subject to change everything will change after a time by chance.”<sup>58</sup> Peirce did not envision a random universe in which probability had no purchase; but when facing the problem of induction, he doubted that eternal laws could be apodictically proved and that chance could be utterly tamed, so much so that he fully expected the unexpected: “[E]verything which happens is improbable.”<sup>59</sup> To a provocative extent, “The Purloined Letter” anticipates such views. Poe’s sense of intuition, as Nancy Harrowitz argues, resembles Peirce’s “abduction” in that both men find induction and deduction insufficient to explain leaps in logic.<sup>60</sup> Peirce also quotes Poe, uses the example of a mislaid paper in “Design and Chance” (1884), and offers a recognizable version of unconscious calculation, describing “*intuition*” as “something out of the consciousness” that originates in “chance” and registers as a “feeling.”<sup>61</sup>

What is most striking about similarities between Peirce and Poe in “The Purloined Letter” is that neither considers a world governed by chance unthinkable or beyond navigation. In Peirce’s chancy universe, individuals and societies do best to adopt fallibilist, empirical, pluralistic methods that admit the power of probability without assuming a priori laws. “The Purloined Letter” may feel remarkably teleological: there is little clue gathering, careful conjecturing, or dramatic unwinding of a solution. But if the cocksure Dupin appears to move unerringly toward his answer, he actually follows a Peirce-like method. Upon entering the apartment of the Minister D——, Dupin suspects that the stolen letter is on a table until a “long and very deliberate scrutiny” convinces him otherwise (*PT*, 695). He then “conclude[s]” that the letter is in the rack of cards, a by-now-familiar leap in logic made by probabilistic intuition. Yet this conclusion is really a hypothesis, for Dupin examines the letter more closely “[t]o be sure” and finds it “strongly corroborative of suspicion” before finally judging the sum of intuition and evidence “sufficient” proof (*PT*, 696). Though his deliberations are dramatically telescoped (and thus often missed), Dupin observes, hypothesizes, and tests as he does in “The Murders

in the Rue Morgue.” Once again he is startlingly effective because he listens to intuition—not in the form of immediate revelations that cannot be verified, but rather as unconscious but calculated suspicions that require corroboration because they are based in probability.

In contrast to the teleology of *Eureka*, Dupin’s methods are surprisingly pluralistic. After Dupin condemns the police for considering “only their *own* ideas of ingenuity” and for having “no variation of principle in their investigations” (*PT*, 690), the narrator mentions Dupin’s “quarrel . . . with some of the algebraists of Paris” (*PT*, 692). Dupin charges that, despite such thinkers’ claims to “what is called *pure algebra*,” they do not deal in “abstract or general truths”; for “mathematical truths . . . are only truths within the limits of *relation*” and therefore must, like the behavior of the Minister D—, be considered “with reference to the circumstances” (*PT*, 693). In Irwin’s words, Dupin recognizes “the conditionality of many of the traditional certainties in mathematics and logic.”<sup>62</sup> Such an acknowledgment can push interpretation toward a profound engagement with the history of mathematics, but it can also turn “The Purloined Letter” and its encounters with chance and contingency away from abstract systems of signs toward more pragmatist domains.

“The Purloined Letter” invites philosophical analysis, though which philosophy one uses matters. Deconstructive readings of the story tend to emphasize the circulating, shifting, and unrevealed contents of the letter itself—for instance, when Jacques Derrida accuses Jacques Lacan of applying an essentialist frame to the tale, or when Joseph Riddel argues that “the letter is never at the center, is never representational, except as a sign that is always elsewhere.” More than any other critical tradition, deconstruction has brought “The Purloined Letter” and its spectacular linguistic play to light. Yet such readings have led to what Irwin calls a self-referential “vertigo”; and Stanley Cavell has hinted that they neglect Poe’s efforts to leave behind—or at least come to terms with—linguistic skepticism.<sup>63</sup> From a pragmatist perspective, one might even wonder what difference the contents of the purloined signifier might make. In a text often seen as a never-ending paradox, Dupin’s methods are remarkably successful. To focus too much on aporia is to make the mistake of the Parisian police by deemphasizing some obvious facts: Dupin solves the crime, takes his revenge, furthers his political agenda, and gets paid. Such practical results should not reduce “The Purloined Letter” to some putatively

pragmatist cash value. Rather, they recall two related claims in “The Murders in the Rue Morgue”—that we appreciate analytic methods “only in their effects,” and that truth is “invariably superficial” (*PT*, 397, 412). Because “The Purloined Letter” does not rest its case on deep or absolute truths, the story is not debilitated by its inability to establish rational certitude. Because the tale finds empirical surfaces to be epistemologically sufficient, it never reaches a point—as do, say, Melville’s *Confidence-Man* (1857), some of Dickinson’s poems, and even “The Man of the Crowd”—in which skepticism leads to narrative, emotional, or philosophical paralysis. In the indeterminate world of “The Purloined Letter,” one can still work toward and take odds on truth, even knowing (more like Peirce than Laplace) that the laws of the game may take yet another turn.

To take such odds is to acknowledge a pragmatist universe. William James writes in “Pragmatism’s Concept of Truth” (1907): “To copy a reality is, indeed, one very important way of agreeing with it, but it is far from being essential. . . . Any idea that helps us to *deal*, . . . that *fits*, in fact, and adapts our life to the reality’s whole setting, will agree sufficiently to meet the requirement.”<sup>64</sup> In “The Purloined Letter,” Dupin copies the seal and address of the stolen missive, though to switch his imperfect facsimile with the original, he requires a confederate to stage a ruckus on the street so that the Minister throws open his window. Thus representation in the tale does not operate within a closed system, for letters must be managed within reality’s whole setting, which includes things external to language games—embodied intuitions, cultural forms of chance, the chaos of the street that comes in at the window. It is appropriate that Dupin uses a piece of bread to forge the Minister’s “cipher” on the fake letter; for if Poe puns on the French *du pain* in a moment of semiotic play, he also suggests that practical, real-world objects cannot be separated from the linguistic economy of the tale (*PT*, 697). In “The Purloined Letter,” reality is too pluralistically complicated—too embedded in material contingencies—to be perfectly represented or predicted, yet the investigator who proceeds with probabilistic caution may find courses of action and ultimately answers that both James and Dupin term “sufficient” (*PT*, 696). To expect more certainty is to share the rational rage of Parisian policemen, Laplacian teleologists, chess players, and pure algebraists who—like Poe in his moments of grandeur—cannot resist the promise of absolutism.

Clearly Poe did not influence classical pragmatism as powerfully as did Emerson; but—as Louis Menand’s emphasis on chance suggests<sup>65</sup>—he participated in the intellectual and cultural contexts that helped shape the Metaphysical Club. Peirce called the middle of the nineteenth century “*the* most productive period of equal length in the entire history of science,” in part because of “[t]he idea that chance begets order”—an achievement he attributed to (among others) Quetelet, Herschel, and De Morgan.<sup>66</sup> James also located the origins of pragmatism sometime “about 1850”: “For humanism, conceiving the more ‘true’ as the more ‘satisfactory’ (Dewey’s term), has sincerely [renounced] rectilinear arguments and ancient ideals of rigor and finality.”<sup>67</sup> Dedicated to pluralism, empiricism, and chance, the pragmatists found in probability theory a way to move beyond absolutes without becoming thoroughgoing skeptics. In his dealings with chance, Poe offers some literary and cultural roots to their story, roots the classical pragmatists might have appreciated given their interdisciplinary breadth and sense that ideas are enmeshed in history.

Thinking of Poe in terms of pragmatism also helps recast his work, particularly the tales of ratiocination. The subversive, ironic marplot of rationalism becomes more of a constructive critic in whose writings intuition looks more like unconscious calculation, skepticism more like science, and radical indeterminacy more like James’s radical empiricism, insofar as admissible evidence exists in a web of relations and includes inklings beyond the positivist pale. The best readings of Poe tend to set him swinging between rational hubris and debilitating doubt. Such accounts are correct in many ways; yet the Dupin tales show that in addition to dramatizing the shock of indeterminacy to the logical mind, Poe sought along with others in his culture a more practical, livable approach to skepticism under conditions of chance.

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## Notes

- 1 Ian Hacking, *The Taming of Chance* (New York: Cambridge Univ. Press, 1990). For British and European studies, see, for instance, Douglas Lane Patey, *Probability and Literary Form: Philosophic Theory and Literary Practice in the Augustan Age* (Cambridge, Eng.: Cambridge Univ. Press, 1984); Thomas Kavanagh, *Enlightenment and the Shadows of Chance: The Novel and the Culture of Gambling in Eighteenth-Century France*

- (Baltimore: Johns Hopkins Univ. Press, 1993); and Leland Monk, *Standard Deviations: Chance and the Modern British Novel* (Stanford, Calif.: Stanford Univ. Press, 1993). Americanist works include Ann Fabian, *Card Sharps, Dream Books, and Bucket Shops: Gambling in Nineteenth-Century America* (Ithaca, N.Y.: Cornell Univ. Press, 1990); Jackson Lears, *Something for Nothing: Luck in America* (New York: Viking, 2003); Nan Goodman, *Shifting the Blame: Literature, Law, and the Theory of Accidents in Nineteenth-Century America* (Princeton, N.J.: Princeton Univ. Press, 1998); Eric Wertheimer, *Underwriting: The Poetics of Insurance in America, 1722–1872* (Stanford, Calif.: Stanford Univ. Press, 2006); Mark Seltzer, “The Crime System,” *Critical Inquiry* 30 (spring 2004): 557–83; and Jason Puskar, “William Dean Howells and the Insurance of the Real,” *American Literary History* 18 (spring 2006): 29–58.
- 2 D. H. Lawrence, *Studies in Classic American Literature* (New York: T. Seltzer, 1923), 74.
  - 3 *Edgar Allan Poe: Poetry and Tales* (New York: Library of America, 1984), 38. Further references to this work will be cited parenthetically in the text as *PT*. Peter Dear, *Discipline and Experience: The Mathematical Way in the Scientific Revolution* (Chicago: Univ. of Chicago Press, 1995), 245.
  - 4 *Edgar Allan Poe: Essays and Reviews* (New York: Library of America, 1984), 1243. Further references to this work will be cited parenthetically in the text as *ER*.
  - 5 *The Poe Log: A Documentary Life of Edgar Allan Poe, 1809–1849*, ed. Dwight Thomas and David K. Jackson (Boston: G. K. Hall, 1987), 719.
  - 6 Poe to George Isbell, 29 February 1848, in *The Letters of Edgar Allan Poe*, 2 vols., ed. John Ward Ostrom (Cambridge: Harvard Univ. Press, 1948), 2:363.
  - 7 John Irwin, *The Mystery to a Solution: Poe, Borges, and the Analytic Detective Story* (Baltimore: Johns Hopkins Univ. Press, 1994), esp. 318–97.
  - 8 Jorge Luis Borges, *Borges: A Reader*, ed. Emir Rodriquez Monegal and Alastair Reid (New York: E. P. Dutton, 1981), 147.
  - 9 Poe to Philip P. Cooke, 9 August 1846, in *The Letters of Edgar Allan Poe*, 2:328.
  - 10 David Van Leer, “Detecting Truth: The World of the Dupin Tales,” in *New Essays on Poe’s Major Tales*, ed. Kenneth Silverman (New York: Cambridge Univ. Press, 1993), 65–88; Loisa Nygaard, “Winning the Game: Inductive Reasoning in Poe’s ‘The Murders in the Rue Morgue,’” *Studies in Romanticism* 33 (summer 1994): 223–54.
  - 11 Mary Poovey, *A History of the Modern Fact: Problems of Knowledge in the Sciences of Wealth and Society* (Chicago: Univ. of Chicago Press, 1998).
  - 12 Poe to George Isbell, 29 February 1848, *The Letters of Edgar Allan Poe*, 2:363.
  - 13 John Herschel, *A Treatise on Astronomy* (Philadelphia: Carey, Leah, and Blanchard, 1834), 11; John Stuart Mill, *A System of Logic: Ratiocinative*

- and Inductive*, 2 vols. (1843; reprint, London: Longmans, Green, Reader, and Dyer, 1875), 2:87–94.
- 14 Martin Jay, *Songs of Experience: Modern American and European Variations on a Universal Theme* (Berkeley and Los Angeles: Univ. of California Press, 2005), 47.
  - 15 Pierre Laplace, *A Philosophical Essay on Probabilities*, trans. Frederick Truscott and Frederick Emory (New York: Dover, 1951), 1.
  - 16 “Life Insurance at the South,” *Commercial Review* (May 1847): 358.
  - 17 Laplace, *A Philosophical Essay*, 196; Mill, *A System of Logic*, 1:288; De Morgan quoted in Theodore Porter, *Rise of Statistical Thinking, 1820–1900* (Princeton, N.J.: Princeton Univ. Press, 1986), 75. Lorraine Daston, *Classical Probability in the Enlightenment* (Princeton, N.J.: Princeton Univ. Press, 1988), 58–111.
  - 18 Paul Glimcher, Michael Dorris, and Hannah Bayer, “Physiological Utility Theory and the Neuroeconomics of Choice,” *Games and Economic Behavior* 52 (August 2005): 213–56.
  - 19 Nicholas Rescher, *Luck: The Brilliant Randomness of Everyday Life* (New York: Farrar, Straus, and Giroux, 1995), 8.
  - 20 By way of contrast, see “Instinct vs. Reason—A Black Cat” (1840) where Poe attributes intuition to God (*PT*, 370–72).
  - 21 Porter, *Rise of Statistical Thinking*, 41–54, 100–109.
  - 22 Ralph Waldo Emerson, *Representative Men* (1850), in *Essays and Lectures* (New York: Library of America, 1983), 670.
  - 23 For Emerson, see Barbara Packer, “Emerson and the Terrible Tabulations of the French,” in *Transient and Permanent: The Transcendentalist Movement and Its Contexts*, ed. Charles Capper and Conrad Edick Wright (Boston: Massachusetts Historical Society, 1999), 148–67. For Thoreau’s faith in the “law of average,” see *Walden and Other Writings*, ed. William Howarth (New York: Modern Library, 1981), 260. Whitman writes in his 1855 preface to *Leaves of Grass* that “the fruition of beauty is no chance of hit or miss” and finds “the law of perfection in masses” (*Leaves of Grass and Other Writings*, ed. Michael Moon [New York: Norton, 2002], 623).
  - 24 Seltzer, “The Crime System,” esp. 64–68; Leon Chai, *The Romantic Foundations of the American Renaissance* (Ithaca, N.Y.: Cornell Univ. Press, 1987), 116–20.
  - 25 See also Poe’s “Chapter of Suggestions” (1845): “The theory of chance, or . . . the Calculus of Probabilities, has this remarkable peculiarity, that its truth in general is in direct proportion with its fallacy in particular” (*ER*, 1292).
  - 26 Adolphe Quetelet, *A Treatise on Man and the Development of His Faculties* (1842; reprint, Gainesville, Fla.: Scholars’ Facsimiles and Reprints, 1969), 5, 7.
  - 27 Porter, *Rise of Statistical Thinking*, 82–84.
  - 28 Irwin’s account of Poe’s links to Charles Dupin is extensive and convinc-

- ing, though it is mainly concerned with doubling and politics, not statistical reasoning (*Mystery to a Solution*, 340–56). For Mill and Herschel, see Porter, *Rise of Statistical Thinking*, 152–61.
- 29 See, for instance, Rachel Polonsky, “Poe’s Aesthetic Theory,” in *The Cambridge Companion to Edgar Allan Poe*, ed. Kevin J. Hayes (New York: Cambridge Univ. Press, 2002), 42–56.
- 30 Thomas Dunn English, “Hints to Authors: On the Germanesque,” *John-Donkey*, 3 June 1848, 364–65.
- 31 James Beattie, *Elements of Moral Science*, 2 vols. (1790–93; reprint, New York: Garland, 1977), 2:595; Michael McKeon, *The Origins of the English Novel, 1600–1740* (Baltimore: Johns Hopkins Univ. Press, 1987), 53–64; Barbara Shapiro, *Probability and Certainty in Seventeenth-Century England: A Study of the Relationships between Natural Science, Religion, History, Law, and Literature* (Princeton, N.J.: Princeton Univ. Press, 1983).
- 32 Nina Baym, *Novels, Readers, and Reviewers: Responses to Fiction in Antebellum America* (Ithaca, N.Y.: Cornell Univ. Press, 1984), esp. 78–80.
- 33 “Victor Hugo and the French Drama,” *Gentleman’s Magazine*, November 1837, 315–16.
- 34 Quetelet, *A Treatise on Man*, v; Review of *Narrative of Arthur Gordon Pym, Burton’s Gentleman’s Magazine*, reprinted in *Edgar Allan Poe: The Critical Heritage*, ed. I. M. Walker (London: Routledge and Kegan Paul, 1986), 96.
- 35 Quetelet, *A Treatise on Man*, 7, x.
- 36 “Nature and History of Vital Statistics,” *New York Journal of Medicine and Collateral Sciences*, November 1844, 325.
- 37 Laplace, *A Philosophical Essay*, 61.
- 38 Van Leer, “Detecting Truth,” 88; Seltzer, “The Crime System,” 559. See also Kathleen Woodward, “Statistical Panic,” *differences* 11 (summer 1999): 177–203. For a discussion of abortion in the real Rogers case, see Laura Saltz, “‘(Horrible to Relate!)’: Recovering the Body of Marie Rogêt,” in *The American Face of Edgar Allan Poe*, ed. Shawn Rosenheim and Stephen Rachman (Baltimore: Johns Hopkins Univ. Press, 1995), 237–67.
- 39 Quetelet, *A Treatise on Man*, 6.
- 40 *Ibid.*, 98.
- 41 Alan Singer, *Aesthetic Reason: Artworks and the Deliberative Ethos* (University Park: Penn State Univ. Press, 2003).
- 42 Aristotle, *Poetics*, trans. Malcolm Heath (New York: Penguin, 1996), 45.
- 43 *The Purloined Poe: Lacan, Derrida, and Psychoanalytic Reading*, ed. John P. Muller and William J. Richardson (Baltimore: Johns Hopkins Univ. Press, 1988); Barbara Johnson, *The Critical Difference: Essays in the Contemporary Rhetoric of Reading* (Baltimore: Johns Hopkins Univ. Press, 1980), 110–46; Irwin, *Mystery to a Solution*; and Joseph Riddel, *Purloined Letters*:

- Originality and Repetition in American Literature*, ed. Mark Bauerlein (Baton Rouge: Louisiana State Univ. Press, 1995), 140–48.
- 44 Johnson, *The Critical Difference*, 110–46.
- 45 “The Philosophy of Chance,” *Magnolia*, December 1842, 346.
- 46 Alexis de Tocqueville, *Democracy in America*, ed. Richard D. Heffner (New York: Penguin, 1956), 215.
- 47 Lears, *Something for Nothing*, esp. 84–85; Andrew Delbanco, *The Death of Satan: How Americans Have Lost the Sense of Evil* (New York: Farrar, Straus, and Giroux, 1995), 143.
- 48 Arthur Conan Doyle, *The Complete Sherlock Holmes* (New York: Doubleday, 1927), 901.
- 49 “The Chess Game,” *Baltimore Monument: A Weekly Journal, Devoted to Polite Literature, Science, and the Fine Arts*, 15 October 1826, 12. “Chess,” *Family Magazine; or, Monthly Abstract of General Knowledge*, 1836, 379 [no month given]. “Chess,” *Anglo American: A Journal of Literature, News, Politics, Drama, The Fine Arts, Etc.*, January 1844, 263.
- 50 Charles Lamb, *Essays of Elia* (Menston, Eng.: Scolar Press, 1969), 83. William Chatto, *Facts and Speculations on the Origin and History of Playing Cards* (London: John Russell Smith, 1838), 17. “The Science of Chess,” *Godey’s Lady’s Book*, April 1844, 190; William Burton, “The Three Breakfasts,” *Godey’s Lady’s Book*, November 1844, 199. Burton may also be satirizing Poe’s logical rhetoric in “Descent into the Maelstrom” (1841), which refers to “Sexagesima” (*PT*, 436).
- 51 “A Catechism of Whist,” *Blackwood’s Magazine*, November 1835, 637; *The Philodorian: A Magazine of Chess, and Other Scientific Games*, ed. George Walker (London: G. Walker, 1838), ii; *Johnson’s New Universal Cyclopedia*, ed. A. J. Johnson, 4 vols. (New York: A. J. Johnson, 1875–77), 4:1391.
- 52 William Pole, *The Philosophy of Whist: An Essay on the Scientific and Intellectual Aspects of the Modern Game* (London: Thos. De La Rue, 1885), 3.
- 53 Michael Orienda, *Sporting with the Gods: The Rhetoric of Play and Game in American Culture* (New York: Cambridge Univ. Press, 1991), 161–91.
- 54 Hacking, *The Taming of Chance*, 201; Charles Sanders Peirce, *The Essential Peirce: Selected Philosophical Writings, Volume 1 (1867–1893)*, ed. Nathan Houser and Christian Kloesel (Bloomington: Indiana Univ. Press, 1992), 243.
- 55 Laplace, *A Philosophical Essay*, 3. Quetelet quoted in Porter, *Rise of Statistical Thinking*, 105.
- 56 Walter Benjamin, *Illuminations*, trans. Harry Zohn, ed. Hannah Arendt (New York: Harcourt, Brace, 1955), 179–80.
- 57 Joan Dayan, *Fables of Mind: An Inquiry into Poe’s Fiction* (Oxford, Eng.: Oxford Univ. Press, 1987), 14.
- 58 *Essential Peirce, Vol. 1*, 220. See also Peirce’s “Laws of Nature” (1898) in *The Essential Peirce: Selected Philosophical Writings, Volume 2 (1893–1913)*, ed. Nathan Houser et. al. (Bloomington: Indiana Univ. Press,

- 1998), 67–74. For Peirce’s general relation to chance, see Louis Menand, *The Metaphysical Club* (New York: Farrar, Straus, and Giroux, 2001), esp. 195–200, 272–84.
- 59 *Essential Peirce, Vol. 1*, 198.
- 60 Nancy Harrowitz, “The Body of the Detective Model: Charles S. Peirce and Edgar Allan Poe,” *The Sign of Three: Dupin, Holmes, Peirce*, ed. Umberto Eco and Thomas Sebeok (Bloomington: Indiana Univ. Press, 1983), 179–97. Harrowitz also discusses Peirce’s knowledge of Poe (195). See also Paul Grimstad, “C. Auguste Dupin and Charles S. Peirce: An Abductive Affinity,” *Edgar Allan Poe Review* 6 (spring 2005): 22–30.
- 61 *Essential Peirce, Vol. 1*, 216, 11, 348–49.
- 62 Irwin, *Mystery to a Solution*, 384.
- 63 Riddel, *Purloined Letters*, 143. Irwin, *Mystery to a Solution*, 11; Stanley Cavell, “Being Odd, Getting Even (Descartes, Emerson, Poe),” in *The American Face of Edgar Allan Poe*, 3–36. Cavell’s most explicit reference to “The Purloined Letter” is his title; but by departing from Lacan and Derrida, he conjures the famous critical history of the story.
- 64 William James, *Writings, 1902–1910* (New York: Library of America, 1987), 579.
- 65 Menand, *The Metaphysical Club*, 177–84.
- 66 *Essential Peirce, Vol. 1*, 358.
- 67 James, *Writings, 1902–1910*, 859–60.