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Pale Light: Natural Difficulties and Poetic Epistemology in the Enlightenment

By

Ian Michael Thomas-Bignami

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Committee in charge:

Professor Kevis Goodman, Chair Professor Kent Puckett Professor Thomas Laqueur

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Abstract

Pale Light: Natural Difficulties and Poetic Epistemology in the Enlightenment

by

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Doctor of Philosophy in English

University of California, Berkeley

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Pale Light: Natural Difficulties and Poetic Epistemology in the Enlightenment explores the relationship between natural history and poetry, considered as rival sciences during the Enlightenment, and it explores the environmental ground out of which eighteenthcentury aesthetics arose. Focusing on poetic treatments of the strangely ubiquitous phenomenon known as the *ignis fatuus* or will-o-the-wisp, I describe the development of a distinct poetic epistemology that valued a way of knowing paradoxically attentive to the permanence and power of the unknown. Tracing the numerous treatments of the ignis fatuus as a phenomenon that marked the limits of scientific confidence, I show how eighteenth-century poets constructed a distinct epistemology within the context of the New Science and the problems inherent in its protocols, such as the limits and distortions of the senses and the provisional nature of knowledge derived through inductive accumulation. Natural history in the British Enlightenment is characterized at once by an interest in these problems and by a waning attention to the ways in which objects like the ignis fatuus fracture the foundations of knowledge. In this context, the widespread poetic appropriation of difficult natural historical cases illustrates that eighteenth-century poetry not only attends to these fissures but also comes to lodge and develop in the niches they provide. I contend that a central experience of the Enlightenment was not knowing but rather *not-knowing* and that, by making palpable the limits and dilemmas of knowledge, poets cultivated an active form of negative epistemology.

My use of the *ignis fatuus* as a representative case highlights the predicament posed by the very use of cases as building blocks of general knowledge. I draw attention to the critical issues raised by the case study's inductive procedures both as they relate to epistemological anxieties in the long eighteenth century and as they bear on my own methodological practices. These methodological reflections reveal how literary history's adoption of the case study – and, with it, the ability to make connections between any particular literary artifact and larger formal categories or cultural processes – carries with it a specific set of epistemological problems as part of its Enlightenment inheritance.

My first chapter explores the central role of the faculty that Francis Bacon labels the "suspension of judgment," – an ability to remain in a state of attentive uncertainty – within the New Science. In a detailed reading of natural historical treatments of the *ignis*

fatuus across two centuries, ranging from essays in the *Philosophical Transactions* to lessons in pedagogical chapbooks, I show how the suspension of judgment, once a central methodological tenet of the New Science, became in practice an unspoken and often neglected epistemological state.

Chapter Two examines the ways that Abraham Cowley, John Wilmot, Earl of Rochester, and John Milton employ verse as a form of guidance and correction within the destabilized epistemological landscape of the late seventeenth century. Each poet deploys the *ignis fatuus*, counter-intuitively, not simply as a figure for the threat of vulgar superstition but as a sign of more unexpected dangers: learned authority (in Cowley), rational thought (in Rochester), and the very possibility and value of stable knowledge itself (in Milton).

In Chapter Three, I read James Thomson and Oliver Goldsmith, two poets not usually associated with epistemological disruption, in close proximity to the presence and power of not-knowing expressed in works such as William Collins's "Ode to Fear" and "Ode on the Popular Superstitions of the Highlands." Doing so brings into focus each poet's use of verse not only as a space for exploring the problems surrounding how and what one knows but also a means by which such problems might be transformed into a practice of mobile attention. I argue that this mobile attention, which provides both the freedom and security found in the suspension of judgment, comes to characterize an increasingly distinct poetic epistemology.

Chapter Four focuses on the ways in which Anna Letitia Barbauld's and Erasmus Darwin's poetry unexpectedly complicates their own stated pedagogical intentions. I read their verse in relation to didactic texts for children and popular audiences in which treatments of the *ignis fatuus* are used to expunge rather than to induce states of suspended judgment, and I argue that while Darwin's and Barbauld's poems share many features of these popular didactic texts they also, often unexpectedly, revel in the experience of not-knowing.

In Chapter Five, I turn to a group of poets who actively embraced forms of epistemological disruption by seizing upon the figure of the *ignis fatuus*. Here I trace the use of the figure from Robert Burns's humorous letters and poetry to John Keats's disorienting *Endymion*, and from Keats's remarks on the nature of poetry to John Clare's poetry and prose. The late eighteenth- and early nineteenth-century adoption of the phenomenon, often as a figure for poetry itself, and the increasingly explicit engagement with its epistemological stakes helps us to see Romantic poetry not as a radical departure from earlier orientations toward knowledge but as a means of preserving the epistemological self-consciousness that was once vital to the British Enlightenment. My epilogue uses Leigh Hunt's essay "Fictions and Matters of Fact" (1825) as a final lens for viewing changing notions of poetry's place in the wake of the Enlightenment.

The Appendix catalogues visual representation of the *ignis fatuus* in the eighteenth and nineteenth centuries and includes paintings, etchings, satirical prints, and book illustrations.

For Lisa, my love

Table of Contents

Acknowledgements

Introduction The Wandering Light

Chapter One Doubting as Long as One Can:

A Natural History of the *Ignis Fatuus*

Chapter Two Authority and States of Suspension

in Cowley, Rochester, Milton

Chapter Three Ambivalent Light and the Potential of Imagination

in Thomson, Goldsmith, Collins

Chapter Four The Lesson of the *Ignis Fatuus*: Pedagogical Texts

and the Poetry of Barbauld, and Darwin

Chapter Five "Come then my guardian spirit!": Getting Lost

in Burns, Keats, and Clare

Epilogue "Will-o'-the-wisps being abolished, poetry is at a stand"

Appendix Visual Representations of the *Ignis Fatuus*

Bibliography

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Elliot, with all the exuberance of a four-year-old, cheered his father on just when he needed it most. My wife, Lisa, has taken care of me since the very beginning.

Introduction

The Wandering Light

Ι

William Blake's plate for "The Little Boy Lost" is characterized by a powerful interplay of illumination and darkness. The pale light draws the child toward the left margin of the page, into the blankness beyond the edge of the image. The flame hovers at the very edge, deceptively stationary, and seemingly tactile, yet resistant to capture. Everything leans toward this strange phenomenon:



Figure 1: William Blake, *Songs of Innocence and Experience*, Plate 13, "The Little Boy Lost," 1789, Etching, 11.8×7.2 cm, The Fitzwilliam Museum, Cambridge. Available from: The Blake Archive, http://www.blakearchive.org. (accessed May 26, 2015).

The central human figure, the little boy in the long white robes, chases the flame, his hands desperately outstretched. He points with his right hand, and proffers his left as if wishing to be led. He leans toward the light: he raises his left heel as he shifts his slight weight smoothly forward to the toes of his right foot. The child, alone, chases the light, and yet his longing permeates the image; his pursuit of the fleeting light is both literal and figurative, an attempt to "see" in the darkness that surrounds him but also to discover some deeper truth, some place of security. The shadows form concentric rings of darkness that focus our attention on the flame. The large trees on the right side of the image lean toward the phenomenon as if compelled by the same impulse that grips the boy.

William Blake's "The Little Boy Lost" captures the fear of being lost and the host of other powerful emotions unleashed both by literal darkness and by the epistemological uncertainty that darkness often figures. In the opening lines of the poem, the child cries out to his departing father, a figure of familiarity, security, and authority whose absence partly explains the darkness of the image:

Father, Father where are you going O do not walk so fast Speak father, speak to your little boy Or else I shall be lost. (1-4)

Calling out for direction, for a voice to guide him through unknown ways, the little boy is lost in a "dark" silence visually figured in the gap between the poem's two quatrains. Instead of giving the boy the comforting and directive voice of his father, Blake breaks the poetic lines and fills the vacuity with elaborate and indistinct lines and loops, multiple and diffuse, which split, converge, and double back upon themselves.



Figure 2: [Detail] William Blake, "The Little Boy Lost."

When the poem resumes, however, it is strangely unfamiliar, written in a different, disorienting register. The first person expostulations of the desperate child disappear into the far more distant voice of a disembodied third person speaker:

The night was dark no father was there The child was wet with dew The mire was deep, & the child did weep And away the vapour flew. (5-8) Blake abruptly amplifies his reader's sense of distance from the distressing scene by switching from first to third person – from the sound of the child's voice, whose frail form we see in the image, to the sound of a disembodied voice – wrenching his reader from the desperate present tense of the boy's plea to the cold past tense of the second stanza. This sudden shift in voice and tense pulls the reader away from an initial spatial, temporal, and emotional proximity to the child, while the simplicity of the second stanza's language effectively drains the final lines of compassion for the child's plight. The poem's final stanza is a dry catalogue of the child's condition, as devoid of sympathy as the "dark" night or the "deep" mire are of warmth. "The child was wet" and "the child did weep" mirror the similarly emotionless descriptions: the "night was dark," "the mire was deep." They are observation, no more. In addition to creating a sense of spatial, temporal, and emotional distance from the lost child, Blake's switch to the past tense in the second stanza shifts the poem from a concrete to a symbolic register. While the first line – "The night was dark no father was there" – describes the actual absence of the child's father in that specific spatial location, it also, potentially, hints at a more powerful claim about the ontological status of the father and the security and authority he represents. While it may be the literal case that "no father was there," it may just as easily mean that there never was any father in the first place. In both the particular and the absolute absence of a father, the child is left in literal and figurative darkness.

Just as suddenly as the father disappears, the "vapour" appears. More accurately, just as the father disappears from the poem prior to the moment the reader enters into the act of reading, so too does the vapor fly from the poem before the reader realizes it is there. Blake situates the image of the boy and the "vapour" above the text of the poem, despite the fact that the "vapour" only departs (and only appears in its departure) in the final verse. The vapor's textual arrival in the very moment of its departure echoes the sense of beginning in medias res that the reader experiences with the father's disappearance in the poem's first line. Like the father, its existence is posited in the very language that announces its absence. The vapor is at once a placeholder for the father, an intangible gesture towards the possibility that the father was never there in the first place, and a figure for the absence that emerges as a result of this realization. The reader's journey through this disorienting interplay of visual and textual juxtapositions, echoes, and substitutions aligns him or her with the lost little boy who chases after the pale light. Like the boy, Blake's reader comes to recognize – if only belatedly – that he or she was lost even before the poem began. The reader and the boy are forced to endure the painful frustrations of not knowing, of discovering that a seemingly stable world is suddenly revealed to be devoid of authority and epistemological certainty. Blake shuttles the lost child and his reader between states – the state of security and the state of being lost, the state of knowing and the state of not knowing. The poem is a medium that makes such an experience and its subsequent epistemological realizations possible. "The Little Boy Lost" thus illustrates and enacts two "contrary states," though not necessarily those of innocence and experience. The reader who seesaws back and forth between "states" is, in many ways, visually and symbolically akin to that figure between two points of space and time who recurs throughout Blake's work: "The Traveller who hasteth in the Evening."



Figure 3: William Blake, For the Sexes: The Gates of Paradise, Plate 18, "The Traveller hasteth in the Evening," 1793, Engraving and Etching, 67×45 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015).

If, in Blake's "The Little Boy Lost," a child is stripped of the security of his father and left to wander in the dark, chasing a vapor, then in the companion poem, "The Little Boy Found," the child finds a strange new security in the figure of his mother. The two poems follow the forces that lead the child onward. If in "The Little Boy Lost" the child chases a vapor that has taken the place of his father, in "The Little Boy Found" the child, still chasing the "wandering light" (2), encounters "God," who strangely appears "like his father in white" (4) and then leads him to his mother. The two poems recount a series of replacements: the father is replaced by the vapor, which is then replaced by God (who resembles his father), who is replaced (in turn) by the mother. Blake suggests the way in which one figure substitutes for another by using the same verb to describe the child's response both to the vapor and to God, for the boy is "*led* by the wandering light" (2) just as he is "by the hand *led*" (5) when God "appear[s] like his father in white" (4). The fact that this is a series of disorienting substitutions is clear when one considers



Figure 2: William Blake, *Songs of Innocence and Experience*, Plate 14, "The Little Boy Found," 1789, Etching, 11.7×7.2 cm, The Fitzwilliam Museum, Cambridge. Available from: The Blake Archive, http://www.blakearchive.org. (accessed May 26, 2015).

that in the engraved plate for "The Little Boy Found" the adult figure to the left of the child occupies the same location as the vapor in the plate to "The Little Boy Found" and, furthermore, that one is not immediately able to tell whether the Divine is a refigured father leading the boy to his mother, or his mother refigured as the divine. The visual ambiguity of the engraving emphasizes the disorienting effects of the two poems and exacerbates a cruel irony. Despite the fact that the second poem is called "The Little Boy Found" and the image initially appears comforting, the poem leaves the reader in a strange suspension. The father of the first poem never reappears, and the second poem's final lines, rather than describing the reunion of mother and child, focus instead on the mother "Who in sorrow pale, thro the lonely dale / Her little boy weeping sought" (7-8). The poem's final emphasis on the act of searching (even after the moment of reunion) suggests that the child has found a newly tentative, circumspect, and uncertain form of security.

To ask what Blake is doing with the fiery vapor in the poem is, I hope to have suggested, also to ask what he seeks to do with the poem itself. By investigating Blake's "vapour" – a poetic figure based on the natural phenomenon known throughout the long eighteenth century as the

ignis fatuus – we are able to get a clearer sense of the kind of light or knowledge that Blake thought his poem might produce. Phrased more broadly, we might ask what literary and cultural history makes it possible for Blake to use this fiery vapor as a figure for the very discursive, wandering, epistemologically disruptive work of the poem itself. As we will see, Blake both inherited and transmitted this particular, though now obscure, figure for epistemological uncertainty, a figure he uses both to interrogate the extent and security of human knowledge and to evoke a sense of epistemological doubt in his readers, making them feel, if only momentarily, like the little boy lost. In the following chapters I offer not only a history of the long eighteenthcentury's interest in the phenomenon Blake calls a "wandering light" but also, and more importantly, investigate the larger significance of this broad cultural interest. What does it mean for so many poets to seize on a similar natural-historical occurrence? How are individual poetic treatments of the ignis fatuus unique and yet similar, inasmuch as the phenomenon consistently functions as a figure for problems of knowledge? What do the varying poetic treatments of this natural historical phenomenon over the course of the seventeenth, eighteenth, and early nineteenth centuries reveal about shifting conceptions of poetry's relation to natural history and the production of knowledge more generally? By focusing on poetic treatments of Blake's "wandering light," the following chapters explore how a variety of poets over the course of three centuries grappled with epistemological problems such as the limitations of inductive reasoning and the reliability of the senses (to name just two) and describe the development and articulation of an increasingly distinct poetic epistemology, a sense that poetry fulfills some unique function within the British Enlightenment's engines of knowledge production. While Chapter One offers an extensive survey and analysis of natural historical treatments of the phenomenon and subsequent chapters investigate the phenomenon's appearance in verse, it is necessary to offer a few more introductory words here about the history and poetic ubiquity of the "wandering light."

In the folklore of the British Isles, Blake's "vapour" – frequently called either the *ignis* fatuus or the will-o'-the-wisp – was believed to be a mischievous spirit who led night travelers from their paths to a boggy demise. The *ignis fatuus* is associated, in both scientific treatments of meteors and folkloric traditions, with other luminous, atmospheric phenomena, such as St. Elmo's Fire and the *ignis lambent*. While seventeenth and eighteenth-century natural philosophers vigorously debated the phenomenon's precise nature and quarreled over its causes, poets frequently used the *ignis fatuus* as a figure in their verse. Perhaps the most familiar instance of this use appears in that most important of British poetic landmarks, the very moment in *Paradise Lost* that Satan leads Eve astray. The serpent "rolled / In tangles," making "intricate seem straight," visibly brightens with the hope that his deception might succeed:

As when a wandring fire
Compact of unctuous vapours, which the night
Condenses, and the cold environs round,
Kindled through agitation to a flame,
Which oft, they say, some evil spirit attends,
Hovering and blazing with delusive light,
Misleads the amazed night-wanderer from his way
To bogs and mires, and oft through pond or pool,
There swallowed up and lost, from succour far.

The appearance of the *ignis fatuus* in writers as varied as Milton, Rochester, Cowley, Thomson, Collins, Goldsmith, Barbauld, Darwin, Blake, Burns, Coleridge, Keats, and Clare suggests that it is no mere curiosity. It is my contention that this widespread poetic interest in the *ignis fatuus*, with its associated complex of aesthetic and epistemological issues, offers insight into the poetic appropriation of natural historical material over the course of the long eighteenth century and, furthermore, that the dynamics of this appropriation reveal significant shifts in the type of knowledge eighteenth-century poets hoped to produce. Not simply a poetic representation of a scientific object or a mere repetition of scientific fact, the poetic use of the *ignis fatuus* redeployed the object in ways that highlighted its disruptive epistemological status as an object so empirically difficult to know that it threatened to undermine the security of science. The *ignis fatuus* became, in other words, a powerful figure with which poets and readers of poetry could work through the threatening experience of not-knowing, or what in the early seventeenth century Francis Bacon, describing the capacity that combats "impatience of doubt" and a dangerous "haste to assertion," referred to as the "suspension of judgment."

The widespread poetic appropriation of the *ignis fatuus* offers a fresh line of inquiry into Geoffrey's Hartman's central insight in "False Themes and Gentle Minds," where he famously argued that romance survived the rationalizing force of the Enlightenment as an atrophied presence in British poetry, and was able to remain, so to speak, precisely because it had been weakened to the point where it was a pleasurable surmise rather than a real threat, thereby "reflect[ing] a freer attitude of the mind toward the fictions it entertains." Recognizing that an "atrophied presence" is still a presence, Hartman suggests that "if Romance is an eternal rather than an archaic portion of the human mind, and poetry its purification, then every poem will be an act of resistance, or negative creation – a flight from one enchantment to another." Hartman's suggestion that romance constitutes an ineradicable and therefore inescapable territory of the human mind rather than a developmental stage reflected on both the individual and historical level has provided the foundation for critical reappraisals of eighteenth-century poetry's relation to the growth of secular reason and the rise of empirical science during the British Enlightenment.

The historical shift my readings trace parallels Patricia A. Parker's exploration, in *Inescapable Romance*, of a shift she describes as a movement from an "attack on the 'error' of figurative language in the period between Spenser and Milton [to] the revival and ambivalence of romance in the decades before Wordsworth and Keats." My treatment differs from Parker's in that I see romance as one among several modes available for poets to explore the feeling and potential of not-knowing as something other than simply an "ambivalent" curiosity, a poetical toy. Elements of romance survive only insofar as they have been wrested from earlier modes of thought and been imbued with a different function in their new location, as a means to explore the larger significance of not-knowing. As I hope to make clear in the following chapters, poets gradually took an interest in the experience, problems, and potentials of this particular epistemological state, and, over the course of the eighteenth century, poetic treatments of the suspension of judgment evolved in such a way that the epistemological capacity to suspend judgment came to be closely aligned with how poets saw the work of poetry itself. While romance does not strictly delimit the extent of poetic engagement with the experience of notknowing, Parker's description of not-knowing in its romantic mode hints at the uneasiness I have described, as well as its creative power. "Romance," Parker explains, "is characterized primarily as a form which simultaneously quests for and postpones a particular end, objective, or object."xi I share with Parker an interest in the way poets created a "threshold or 'twilight' space before

final revelation or ending [that] is not only the veil of an unfolding narrative but part of the nature of all mediation, including the medium of time."xii We might describe the particular mental state that poetry induces as a kind of conceptual twilight, a twilight that became a central poetic concern during the eighteenth century precisely because it was not limited to a particular poetic mode and because it ultimately reveals, and revels in, the mediating role of the human mind. In other words, poetic engagements with states of not-knowing show not only that it takes time for the mind to arrive at knowledge, but also that some knowledge will remain forever elusive, the possibility of certainty glimpsed but perpetually distanced. The *ignis fatuus* is one of a class of natural historical phenomena, many of them meteorological, that prompt an awareness of such limits. As Arden Reed has pointed out in his work on climate in the Romantic era, "in their pre-Enlightenment sense, 'meteors,'" of which the ignis fatuus constitutes a preeminent example, "have a renegade significance – they are unstable, unpredictable, indeterminate – they invade unexpected fields like geography and psychology. As figures, 'meteors' typically extend even further into discourses on epistemology, ontology, time, religion poetics, and language." XIII Attending to these dynamics, I argue that poetry, in part by using the figure of the ignis fatuus to think through problems of knowledge, becomes increasingly conscious of itself as a kind of alternative epistemology against the historical backdrop of an increasingly confident and culturally dominant empirical methodology.

The case of the *ignis fatuus* shows that poets seized not only on atrophied "false themes" – say, nymphs and naiads – but also on very real, very troublesome, and very "true" themes: scientifically recognized phenomena that remained nonetheless so perceptually unsettling and affectively powerful they eluded rational explanation. The *ignis fatuus* is an actual phenomenon that nonetheless creates an epistemological twilight – it is the romance of and in the real. In the pages that follow I take seriously Hartman's suggestion that romance is "an eternal rather than an archaic portion of the human mind," and I argue that a significant number of poets operated under that assumption and its epistemological implications. xiv While Hartman, adapting a phrase from William Collins's "Ode on the Popular Superstitions of the Highlands of Scotland," argues that poets continued to seize on "false themes" that opened the gap between what one could (with "false surmise") believe and what one supposedly knew to be true about the world, I suggest that poets also seized on real phenomena that served to reveal the disjunction between the affective plenitude of doubt and the affective paucity of the scientifically known, a paucity most famously expressed in Keats's complaint that "philosophy" works "to unweave the rainbow" and enlist what was once awe inspiring "in the dull catalogue of common things." xv These objects, of which the *ignis fatuus* is a particularly powerful case, reveal this important disjunction by their ability to trouble empirical methodology and check epistemological overconfidence, to disrupt explanation and undermine certainty.

II

As the grounding metaphor of "Enlightenment" suggests, the production of knowledge in the seventeenth and eighteenth centuries was a continued negotiation of the boundary between the known and the unknown, figuratively envisioned as a division between illumination and darkness. An increase in knowledge brought with it a simultaneous awareness of how much remained unknown; as the late Enlightenment figure Joseph Priestly commented: "The greater

the circle of light, the greater is the boundary of the darkness by which it is confined."xvi I take Priestley's statement not as a novel recognition of a new epistemological condition, but as a fresh acknowledgment of an old condition, felt, if not overtly articulated, throughout the period. Focusing on a set of specific epistemological problems that arose during the British Enlightenment, my project investigates the way in which this widespread confrontation with the unknown, with what resists and reveals the limits of positive knowledge, over the course of the seventeenth, eighteenth, and early nineteenth centuries opened up a space for the development of a distinct poetic epistemology.

The specific epistemological problems I wish to consider – the insufficiency of inductive reasoning to determine causality with absolute certainty, the troubling nature of sensory illusion, the interpretation of experience within the context of empiricism – shadow the rise of inductive science and empirical philosophy as it developed in the wake of Francis Bacon and the New Science more generally, and I address many of these problems in Chapter One. While I refer to "science" as a category of knowledge seemingly distinct from "literature" at numerous points in the ensuing investigation, one of the goals of this dissertation is both to resist and refine this crude but necessary distinction. As Raymond Williams points out in a comment on the evolution of the term, prior to the seventeenth century "science" initially referred to "knowledge and learning" more generally and only assumed the more specific meaning of the "theoretical and methodical study of nature" in the early nineteenth century. It was at that time that "science" became increasingly subdivided into the various disciplinary fields of "physics, chemistry, and biology" which took "the hard objective character of the materials and the methods" as "defining" characteristics. xvii Etymological evolution is, of course, never as tidy as we often heuristically assume. As Sydney Ross points out, over the course of the eighteenth century science "retained as one of its meanings any knowledge acquired by study, or any skill acquired by practice" despite the fact that by the beginning of the seventeenth century "science and knowledge were not considered ... synonyms: science stood for a particular kind of knowledge – firmer and less fallible." Sketching a timeline that accords with Williams's own mapping of the term's evolution, Ross notes that by the early nineteenth century "all knowledge save that of the material world had been excluded from science." In an effort to respect the definitional particularity of the term, I attempt to avoid using the word "science," opting instead for the eighteenth century's preferred term for the study of natural phenomena, "natural history." Nonetheless, there are instances, especially in this introduction, where I must employ the term, but I do so with its complex evolution in mind. In fact, one might even say that the difficulties attendant on discussing what we know as science is part and parcel of this dissertation, one of the auxiliary goals of which is to trace the broad changes in ways of thinking about and producing knowledge that we have come to call the "scientific revolution." xix

While the scientific revolution established the conditions of the British Enlightenment – that ever widening circle of light described by Priestley – new epistemological problems naturally arose, at the axiomatic level of the new system, as Thomas Kuhn's analysis of the shift in scientific paradigms suggests. If the scientific revolution inaugurated a fundamental shift away from earlier explanatory paradigms, it nonetheless relied on fundamental assumptions – assumptions that only became visible when the paradigm encountered anomalies for which it could not account.* The *ignis fatuus* represents a very minor form of what Kuhn describes as the way that "anomalies, or violations of expectation, attract the increasing attention of a scientific community" and of "the emergence of a crisis that may be induced by repeated failures to make an anomaly conform." While it may not have precipitated a full-blown crisis, the *ignis fatuus*

nevertheless caused a degree of epistemological circumspection and discomfort and became a means for voicing broader anxieties. The new, axiomatic assumptions that underlay the New Science and the accumulation of knowledge over the course of the Enlightenment also gave birth to new anxieties about those assumptions, which lingered, developed, and resurfaced throughout the period. The inevitable confrontation with these epistemological problems elicited a variety of responses within the discourses of natural and moral philosophy over the course of the seventeenth and eighteenth centuries, ranging from the suppression, or blanket rejection, of such problems by certain natural historians to David Hume's mid-eighteenth-century epistemological crisis. While Hume's *Treatise of Human Nature* and its radical critique of inductive reasoning may have, in his own phrase, "fell still-born from the press," it was the child of widespread concerns that Hume attempted to articulate. xxii "Skeptical doubt," Hume writes, "both with respect to reason and the senses, is a malady, which can never be radically cur'd, but must return upon us every moment, however we may chase it away, and sometimes seem entirely free from it." As we will see, skeptical doubt was not only an integral part of the New Science's methodology, it was a state that seemed to "return upon," if not to haunt, natural history as the discipline operated with greater confidence in the accumulation of natural knowledge.

In the following chapters I focus on the way in which this broader Enlightenment negotiation with uncertainty increasingly takes place within the arena of poetry. Rhetoric, here conceived as figurative or poetic language, or as language as something other than simply a medium of communicating information, was increasingly excised from the new scientific discourse that emerged in the Enlightenment – a discourse that had no place for paronomasia and its potential for unleashing doubts, misinterpretations, and the like. Banished from natural history, rhetoric took refuge within an increasingly distinct poetic discourse, carrying with it a particular sensitivity to those epistemological problems around which it arose. xxiv Thomas Sprat's praise of the Royal Society's "constant resolution to reject all the amplifications, digressions, and swellings of style: to return back to the primitive purity, and shortness, when men delivered so many things almost in an equal number of words" reveals something of the general process by which the suppression of certain rhetorical registers, especially those that called attention to language as language, was a constitutive feature of knowledge production in the period. xxv Sprat's praise of a "close, naked, natural way of speaking; positive expressions; clear senses; a native easiness: bringing all things as near the Mathematical plainness, as they can" is echoed in Leviathan, where Hobbes describes the imprecise use of language as the greatest obstacle to the growth of knowledge. **The light of the human mind is perspicuous words, but by exact definition first snuffed, and purged of ambiguity;" writes Hobbes, "Reason is the pace; Encrease [sic] of Science, the way; and the Benefit of man-kind, the end." As if seduced by the very rhetorical registers he criticizes. Hobbes himself seems unable to resist deploying a fiery metaphor of his own against the destructive rhetorical conflagration whose excision he counsels. In contrast to the precise use of language that establishes a sure path toward the increase of knowledge, Hobbes claims that "metaphors, and senslesse [sic] and ambiguous words, are like *ignes fatui*; and reasoning upon them, is wandering amongst innumerable absurdities; and their end, contention, and sedition, or contempt."xxviii We will see that it is no accident that Hobbes uses the *ignis fatuus* as a figure for language gone astray, given the phenomenon's association with doubt, misinterpretation, and wandering.

As the historian of rhetoric Thomas Conley points out, however, the development of a simpler, more "scientific" rhetorical mode in the seventeenth century did not constitute a complete rejection of rhetoric:

The retreat from metaphor and from highly amplified prose was not a retreat from a rhetorical standpoint, from an affective prose, but an improved way of achieving emotional impact and moving wills. The plain style can be more effective because it is more concrete (therefore impressing the imagination more deeply), easier to follow (hence more affective), more precise in its diction . . . and better fitted . . . to the way the mind, appetites, and will of man work psychologically. *xxix*

While some sense of the rhetorical efficacy of the plain style may well have been part of its development, the effect, over time, was one of diminished attention to rhetoric in a given text and, more generally, within the production of natural historical knowledge. In other words, while the retreat from "highly amplified" language did not seek to escape the bounds of rhetoric, it nevertheless resulted in the production of texts in which the affective work of language itself still served the rhetorical purpose of "moving wills," even if the role that language played in this process became harder to recognize.

In the following pages I use the term "literary" according to Paul de Man's definition – "the use of language that foregrounds the rhetorical over the grammatical and the logical functions" - to demarcate a variety of discourses that come to be identified with the domain of imaginative literature over the course of the long eighteenth century. In other words, I wish to argue that the modern concept of "Literature," which, according to Raymond Williams, developed over the course of the eighteenth century, took shape in those poetic texts that employed a distinctly self-aware rhetorical medium to attend to epistemological problems unearthed by the New Science. xxxi Our understanding of the literary as a category, the contours of which become increasingly more defined over the course of the eighteenth century, must take into account the subtle epistemological ramifications of the use of rhetorical language in light of the general epistemic climate of the British Enlightenment. The poetry of the British eighteenth century shows both that a central experience of the Enlightenment was not knowing but rather not-knowing, and that the strategies marshaled to cope with, and contain, this lingering epistemological unease failed to effect any permanent cure, merely assuaging the "malady" that Hume claims could never be "radically cured." Heeding the dialectical structure between knowing and not-knowing in this historical moment, the way that positive knowledge raises the specter of what remains, or might remain, unknown, I argue that the literary emerges as a distinct category for texts and thinkers concerned not only with knowledge production but also – and perhaps more importantly – with the recognition of the powerful affective implications of epistemological impasse. By pointing out this historical development, I hope to suggest that the modern notion of literature's autonomy is in fact an enabling condition of Enlightenment knowledge production. xxxii

While many critics have addressed the complex relationship between literary and nonliterary texts in the seventeenth and eighteenth centuries, the majority of these studies focus on particular genres or authors at the expense of the larger systemic patterns. I am less interested in charting the way in which mid-century novelists participate in the skeptical debates typical of the period, as investigated in the works of William Donoghue or Christina Lupton, or with how realist novels adopted the methods of British empiricism (the central claim of Ian Watts's influential *The Rise of the Novel*) than I am in tracking the larger, systemic processes of which these instances were a part. Michel Foucault's project in *The Order of Things*, his desire to "bring to light . . . the epistemological field, the *episteme* in which knowledge . . . grounds its

positivity and thereby manifests a history which is not that of its growing perfection, but rather that of its conditions of possibility" is a notable instance of this interest in larger patterns. xxxiv While Foucault's work is important to the developments I trace, my project explores the ragged edges and messy remainders of what he describes as a fundamental, encompassing, and fairly neat epistemic shift. Literary texts provide evidence for the messiness and the discomforting affective experience that Foucault leaves out of his conception of the epistemic shift, even as they are also prime engines of that shift. Catherine Gallagher's "The Rise of Fictionality" addresses the place of imaginative texts in this historical transition, arguing that "modernity is fiction-friendly because it encourages disbelief, speculation, and credit" and that novels, insofar as they "promote a disposition of ironic credulity enabled by optimistic incredulity," illustrate the "flexible mental states [that] were the sine qua non of modern subjectivity." Gallagher's argument illustrates a larger literary-critical trend, namely that a large number of the critical works on the literary facets of the eighteenth-century epistemic transition have focused almost exclusively on the novel. Most recently, Sarah Tindal Kareem, whose discussions of the novel in Eighteenth-Century Fictions and the Reinvention of Wonder accord well with my own, has argued that novels seized on the experience of wonder precisely because of its epistemological power and implications. "Wonder's allure," writes Kareem, "resides in its promise that one might consume marvels while maintaining one's critical faculties – one's ability to question and learn. Yet wonder's contradictory elements also make it unstable, fueling anxieties about the consequences of failing to sustain its delicate balance." Noting that the Enlightenment is "epistemologically" and "constitutionally unstable because [its] commitment to probable reasoning grows out of a radical skepticism that threatens to undermine its own assumption," Kareem claims that eighteenth-century fiction "replicates this torque, creating a profound indeterminacy by at once obscuring and calling attention to its fictionality, disturbing the illusion upon which it also depends."xxxvii I take these recent inquires into the epistemological context of eighteenth-century literature beyond the confines of the novel, narrative elaboration, and the category of the "fictive" and explore them in the more dominant genre of the period, poetry, and through poetry's rich engagement with natural history.

There are a number of explanations for why poetry offers a different view of these epistemological issues than the novel. First, because poetry does not need to concern itself with narration or plot and, over the course of the century, increasingly dispenses with characters, it is able to foreground the act of perception more aggressively than the novel; it can rely more heavily on pure description, and thus interrogate the basis of empirical knowledge in a fundamentally unique way. Second, the poetry of the long eighteenth century frequently engages, more so than the novel, with phenomena studied by natural historians (St. Elmo's Fire, ignis fatuus, etc.). xxxviii By focusing on poetry in its encounter with natural history, my project charts a middle course between a focus too narrow to account for systemic relations (such as studies devoted exclusively to the novel) and one so broad it fails to register shared features such as concerns about the reliability of sensory experience and the problem of identifying causal relations with any degree of certainty. Rather than focus on a particular author (or group of authors) or philosophical position (e.g. skepticism), I consider the way a wide variety of poets dealt with problems of epistemology over the course of the Enlightenment. It is precisely within the context of these general anxieties that the roots of our modern distinction between literary and non-literary discourses are to be found.

By focusing on poetry's interaction with natural history to explore the development of an increasingly distinct concept of the literary, I wish to resist, or at least qualify, those accounts

that employ a loose notion of influence to characterize the relationship between literary and non-literary discourses. The notion of influence misconstrues the role that one discourse plays in relation to another, by suggesting a relation of dominance, rather than something more dialectical. Numerous critics have suggested ways in which non-literary discourse has shaped literary texts or, alternately, how literary modes have shaped non-literary texts. Ultimately, this emphasis on questions of priority tends to obscure the deeper connections and forms of interdependence. By the end of the eighteenth century literature does come to have a fundamentally different orientation toward knowledge than non-literary discourse. In order to understand this orientation we must attend to the way it functions in relation to other seventeenth and eighteenth-century knowledge-producing practices.

Ш

In the following chapters I explore the transition between two dominant modes of thinking about poetry through the complicating figure of the *ignis fatuus*. In turning to a particular natural historical object and its figuration I am following a critical methodology that sees minute particulars as pregnant with significance, as lenses that allow us to glimpse broader culturalhistorical content. From Lorraine Daston's work on so called "scientific objects" to Ian Hacking's interest in what he calls the "ecological niche" that precipitated the rise of "transient mental illness" in the nineteenth century, scholars have long turned to minute particulars that transgress seemingly stable chronological, canonical, or disciplinary boundaries in ways that enrich even as they upend established historical knowledge. XXXIX A fine example of this approach in literary studies is Marjorie Hope Nicholson's analysis of the cultural representation of mountains over the course of four centuries. x1 The last few decades have seen the rise of popular histories intended for general audiences that use the minute observation of particular objects to shed light on broader historical processes. Works like Mark Kurlansky's Salt, Tom Standage's History of the World in 6 Glasses, and, more apropos to our discussion of ignes fatui, John Emsley's The 13th Element: The Sordid Tale of Murder, Fire, and Phosphorus all speak to this point. xii These texts utilize a methodology that inquires into particulars to arrive at larger patterns and historical perceptions, a modified (popular) version of what Giovanni Levi, defining microhistory, calls "the reduction of the scale of observation," or of what Paula Findlen describes as a historiographical process that "takes a singular episode from the past and makes it stand for something much bigger than the sum of its parts, without straining the meaning to be teased from the evidence." While the method I employ in the following chapters is to a large extent microhistorical, my dissertation also strives to achieve a balance between what Findlen describes as the "longue durée" of the French Annales School and the petite histoire that developed over the course of the 1970's and 1980's. xliii In focusing on the *ignis fatuus* as a kind of minute particular, my project invites the kind of methodological self-consciousness that Findlen gestures towards when she cautions those "making [a singular episode] stand for something much bigger" to be wary of the danger of "straining the meaning to be teased from the evidence." As Levi points out, microhistory is also always a meditation on historiographical practice and must perpetually confront the problem of "finding a way of both acknowledging the limits of knowledge and reason whilst at the same time constructing a historiography capable of organizing and explaining the world of the past"; microhistories are, in other words, necessarily

historiographical meditations, investigations into historical epistemologies, that call into question "the meaning of history seen as an interpretive practice." "xliv

By focusing on the *ignis fatuus*, I necessarily employ the case study not only as a means for concentrating my inquiry within manageable limits but also because the methodology of the "case" comes equipped with its own built-in questions about literary history's debt to other modes of inquiry and their attendant epistemological problems. The case study allows me to follow a specific set of problems over the course of multiple texts with greater consistency and thus to avoid the comparatively more difficult, and slippery, project of identifying an epistemological problem in abstract terms before proceeding to seek out all the ways in which literary texts address it. By focusing on the way literary texts represent the idea of the *ignis* fatuus, for example, I am able to track a concrete set of reactions to a consistent set of problems and to chart the way a variety of texts address the specific case. xlv Since the very nature of a case is a central question during the Enlightenment, my project invites the kind of self-reflexive, meta-critical considerations I have discussed above in relation to microhistories. Indeed, I want to draw attention to and reflect upon the critical issues raised by the case study's reliance on induction both in my own literary history and within the broader discipline of literary history.xlvi The notion of the case, which Lauren Berlant has described as a "problem-event that has animated some kind of judgment," directs our attention to the critical actions that arise in the space between "problem" and "judgment," not only within natural history, but within literary history as well. xfvii While I direct the bulk of my attention to tracing the relation between the ways that literary and nonliterary texts address specific epistemological problems during the eighteenth century, as well as to the fact that this difference drives their further division, I also wish to explore the critical issues raised by my own attempt to approach these broad relations between discourses through extreme particulars. By adopting the case study as a critical mode – and here I would suggest that my project is a fairly extreme case of what literary scholars do all the time – literary studies also inherited a specific set of epistemological problems. These problems raise important questions about the methods of literary history. What types of knowledge does literary history seek to produce by subsuming the specific under the general? What are the ramifications of literary history's inheritance of the case? And, finally, what impact does this particular methodology have on literary history's status as a discourse of knowledge?

In addition to sharing in these broader critical techniques focused on the history of, and historical processes which coalesce around particular objects, my project seeks to reengage with a method of figural analysis that seems intimately bound up with the problems of the case I will be examining: the method of M. H. Abrams's wonderful investigation into the shifting notions of poetry and poetic creation in *The Mirror and the Lamp*. We might recollect that the mirror and the lamp of Abrams's title refer to the major figures that, he claims, we can use to represent the general shift from "imitation to expression," from a conception of poetry as a "mirror of truth" to an expression of the "motives, emotions, and imagination of the individual poet." While Abrams's focus is poetry and poetics, he clearly sees this shift as part of a wider historical development. "Not an isolated phenomenon," Abrams remarks, the changes were "an integral part of a corresponding change in popular epistemology – that is, in the concept of the role played by the mind in perception which was current among romantic poets and critics." In the chapters that follow I respond to Abrams's argument about the connection between poetic and epistemological developments in two ways. First, I argue that this shift was underway long before its explicit articulation by romantic critics. Secondly, I suggest that the figure of the ignis fatuus functions as an important intermediary, a fulcrum, in the pivot Abrams describes between

the figure of the "mirror" and the figure of the "lamp." A careful examination of widespread poetic attention to the *ignis fatuus* and its complex relationship to the idea of the "lantern" will deepen our understanding of the epistemological stakes of romantic authors seizing upon "the lamp projecting light" as their "favorite analogy for the activity of the perceiving mind."

As interested as I am in the *ignis fatuus* as a natural historical object, its true critical potential arises from its ubiquitous figural existence in the seventeenth and eighteenth centuries. We should not, Abrams reminds us, underestimate the power and importance of analogy: "Mental events must be talked about metaphorically, in an object-language which was developed to deal literally with the physical world. As a result, our conception of these events is peculiarly amenable to the formative influence of physical analogies from which these metaphors are derived." To attend, then, to the under-examined figure of the *ignis fatuus* within a given historical period is to acknowledge and investigate the metaphoric embodiment of a neglected set of mental events. Doing so opens up the possibility of a more detailed understanding of those "changes in popular epistemology" that occurred between Abrams's two stages of poetic expression. What if the shift in eighteenth-century poetics that we associate with the rise of literature (as Williams notes) was not a pivot from mirror to lamp but, alternatively, a movement from mirror, to ignis fatuus, to lamp? What if, to take this question one step further, the figure of the lamp that is so integral to Abrams's model, and functions in that model as an expression of epistemological confidence, reveals upon closer inspection the unmistakable features of a far more dubious source of light?

My examination charts poetic treatments of the *ignis fatuus* in order to show a general, though not always neatly linear, shift from overtly negative to increasingly positive treatments of the phenomenon. I will argue that insofar as the figure calls attention to problems of knowledge, shifts in its poetic representations help chart corresponding shifts in poetry's relation to knowledge in general. I hope to show, furthermore, how poets came increasingly to identify their work with the figure of *ignis fatuus* over the course of the long-eighteenth century and how this identification marks a change in poetry's relation to knowledge and the specific nature of poetry's productiveness.

John Milton and John Keats stand near the chronological peripheries of my investigation. Milton's meditations on the nature of knowledge and its relation to a mode of thought that privileges not-knowing are the literary origins of my subsequent chapters. If at one end of the British Enlightenment Adam and Eve are advised, "Sleep on, / Blest pair; and O yet happiest if ye seek/ No happier state, and know to know no more," Keats, at the other, champions the "capabil[ity] of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason," and he finds this "negative capability" in "a man of achievement especially in literature," where that word has come to mark something more specific than writing or literacy. Milton instructs his readers to "know to know no more," while Keats's shepherd king, Endymion, cherishes a "known Unknown." It is no accident that these authors turn to the specific case of the *ignis fatuus*, for, as I hope to establish, the phenomenon is both the occasion for, and a figuration of, the contest between knowing and not-knowing, and serves to shed light on the emergence of the concept of literature in the long eighteenth century out of the epistemological dilemmas of the Enlightenment.

Notes

William Blake, "The Little Boy Lost," in Songs of Innocence and Experience (Princeton: Princeton University Press, 1991).

ii See also Blake's plate "Principle 4," in *All Religions Are One*, reproduced and cited in the Appendix (fig. 34).

iii William Blake, "The Little Boy Found," in Songs of Innocence and Experience (Princeton: Princeton University Press, 1991).

iv I will, of course, be discussing many uses of the figure that both predate and postdate Blake's "The Little Boy Lost." It is worth mention here that the general narrative setting found in Blake's treatment of the phenomenon – a little boy and his father encountering supposedly supernatural forces in a wood – resonates with similar features in Goethe's "Erlkonig." Franz Schubert, who set Goethe's "Erlkonig" to music in 1815, would later adapt Wilhelm Muller's poem on the wandering fire in Winterreise [Op. 89, 1828] as "Irrlicht" in his famous romantic song cycle. The first lines of Schubert's text read: "I have been lured deep into the rocky gorges by a will-o'the-wisp. Finding my way out does not concern me." Translated by Louis McClelland Urban, Schubert's Winterreise: A Winter Journey in Poetry, Image, and Song, ed. Louis McClelland Urban (Madison: University of Wisconsin Press, 2003), 84.

^v John Milton, *Paradise Lost*. 2nd ed., ed. Alastair Fowler (New York: Longman, 1998), 9.631-642.

vi There are many poetic references not included in this list. For example, in Shakespeare's A Midsummer Night's Dream Puck is said to "mislead night-wanderers, laughing at their harm" (2.1, 39). William Shakespeare, The Complete Works Of William Shakespeare. vol. 2 (New York: Bantam Books, 1988). See also the phenomenon's history as a visual representation in the Appendix.

vii I discuss Bacon's concept at greater length in Chapter One. In *The Advancement of Learning* Bacon writes that one must be wary of the epistemological errors which stem from "an impatience of doubt, and haste to assertion without due and mature suspension of judgment." Francis Bacon, "The Advancement of Learning," in *The Works of Lord Bacon*. vol. 1 (London, 1838), 12.

viii Geoffrey Hartman, "False Themes and Gentle Minds," in *Beyond Formalism: Literary Essays* 1958-1970 (New Haven: Yale University Press, 1970), 285.

ix Hartman, 289.

^x Patricia A. Parker, *Inescapable Romance: Studies in the Poetics of a Mode* (Princeton: Princeton University Press, 1979), 7.

xi Parker, 4.

xii Parker, 13.

Arden Reed, *Romantic Weather: The Climates of Coleridge and Baudelaire* (Hanover: Brown University Press, 1983), 7. On the epistemological ramification of weather more generally, Jan Golinski writes that extraordinary meteorological events "pointed up the uncertainties of the science, its failures to predict such events or to reconcile them with the pattern of normal expectations. For this reason, anomalous weather signaled the limits of Enlightenment science. Strange weather phenomena showed the natural world in its most recalcitrant aspect, continuing to resist attempts to bring it within the pale of scientific reason." Golinski, *British Weather and the Climate of Enlightenment* (Chicago: University of Chicago Press, 2007) 76. See also Jayne Elizabeth Lewis, *Air's Appearance: Literary Atmosphere in British Fiction, 1660-1794* (Chicago: University of Chicago Press, 2012).

xiv Hartman, 289.

xv John Keats, "Lamia," in *Keats's Poetry and Prose*, ed. Jefferey N. Cox (New York: W.W. Norton & Company, 2009). 2.231-237.

xvi Priestley, Joseph. Experiments and Observations on Different Kinds of Air. vol. 1 (Birmingham, 1790), xix.

xvii Raymond Williams, "Science," in *Keywords: A Vocabulary of Culture and Society*. Revised Edition (New York: Oxford University Press, 1985), 277, 278, 279, respectively.

xviii Sydney Ross, "Scientist: The Story of a Word," *Annals of Science* 18 (1962): 68, 67, 75, respectively.

xix For more on the "Scientific Revolution" and its cultural impact see: John Brewer, *The Pleasures of the Imagination: English Culture in the Eighteenth Century* (Chicago: University of Chicago Press, 1997); William Clark, Jan Golinski, and Simon Schafter, eds. *The Sciences in Enlightenment Europe* (Chicago: University of Chicago Press, 1983); I. Bernard Cohen, *Revolution in Science* (Cambridge: Belknap Press, 1985); Tore Frängsmyr et al., *The Quantifying Spirit in the Eighteenth Century* (Berkeley: University of California Press, 1990); Norman Hampson, *A Cultural History of the Enlightenment* (New York: Pantheon Books, 1968); Ulrich Im Hof, *The Enlightenment* (Cambridge: Blackwell, 1994); Roy Porter, *The Creation of the Modern World: the Untold Story of the British Enlightenment* (New York: Norton, 2000).

xx Paul Feyerabend has described the way in which the consolidation of scientific knowledge represents the development of an ideology. I discuss the consolidation of scientific knowledge at some length in Chapter Four where I analyze the rise of pedagogical texts in the late eighteenth century. Feyerabend's reflections on the consolidation of science are helpful here, insofar as they address the way that science develops toward increased certainty, away from an awareness of its epistemological limitation: "There is nothing in science or in any other ideology that makes it

essentially liberating. Ideologies can deteriorate and become stupid religions. . . . [T]hat the science of today is very different from the science of 1650 is evident at the most superficial glance. For example, consider the role that science now plays in education. Scientific 'facts' are taught at a very early age and in the very same manner in which religious 'facts' were taught only a century ago." Feyerabend, "How to Defend Society Against Science," in *Scientific Revolutions*, ed. Ian Hacking (Oxford: Oxford University Press, 1981), 157. See also Feyerabend, *Against Method: Outline for an Anarchistic Theory of Knowledge* (London: Verso, 1975).

xxi Thomas S. Kuhn, *The Structure of Scientific Revolutions*. 2nd ed. (Chicago: University of Chicago Press, 1970), ix.

xxii See R. H. Popkin, "Scepticism and the Enlightenment," in *Scepticism and the Enlightenment*, ed. R. H. Popkin (Dordrecht: Kluwer Academic Publishers, 1997).

xxiii David Hume, *A Treatise on Human Nature*, ed. L. A. Selby-Bigge (Oxford: The Clarendon Press, 1968), 218.

xxiv John Bender notes that "The eighteenth-century scientist's insistence on the separation of the scientific fact from the capriciousness and imprecision of language was crucial. Experimental scientists became publicly credible because they emphasized the limits of the authority of language and the dominance of specialized modes of knowledge. Paradoxically, they leaned heavily on visual and linguistic rhetorics to make the distinction clear. Over time the perceived remoteness of science from the world of rhetoric gave it independence and power." *Ends of Enlightenment* (Stanford: Stanford University Press, 2012), 89.

John Wilkins, *An Essay Towards a Real Character and a Philosophical Language* (London, 1668). Wilkins's philosophical language sought to remove such things as "equivocals," "synonymous words," and "Anomolisms." Of "equivocals," which "render speech doubtful and obscure," Wilkins singles out both "absolute equivocals" having two applications and the more complicated issue concerning "the ambiguity of words by reason of metaphor and phraseology." Of the later problem, Wilkins remarks that "every language [has] some peculiar phrases belonging to it, which, if they were to be translated verbatim into another tongue, would seem wild and insignificant. . . . And though the varieties of phrases in languages may seem to contribute to the elegance and ornament of speech; yet, like other affected ornaments, they prejudice the native simplicity of it, and contribute to the disguising of it with false appearances" (17-18). On the often hyperbolic rhetoric of early empirical inquiry – notable for its disappearance in subsequent years – see Lorraine Daston, "The Language of Strange Facts," in *Inscribing Science: Scientific Texts and the Materiality of Communication*, ed. Timothy Lenoir and Hans-Ulrich Gumbrecht (Stanford: Stanford University Press, 1998), 20-38.

xxvi Sprat, 113.

xxvii Thomas Hobbes, *Leviathan*, ed. Richard Tuck (Cambridge: Cambridge University Press, 1991), 36.

xxviii Hobbes, 36.

radition (Chicago: University of Chicago Press, 1990), 170. Conley points out a general shift between the sense of rhetorical forms as a tool with which to think and as a tool of persuasion: "If the old rhetoric was a way of managing uncertainty [controversia], the new is, by contrast, a way of managing the uncertain by shaping the 'movements of their souls' to conform to the proposition advanced by the orator" (176).

xxx Paul de Man, *Resistance to Theory* (University of Minnesota Press, 1986), 14. On the language of literature, see also: Paul de Man, "The Epistemology of Metaphor," *Critical Inquiry* 5:1 (Autumn, 1978): 13-30; Roman Jakobson, "Linguistics and Poetics," in *Style in Language*, ed. Thomas A. Sebeok (Cambridge: MIT Press, 1960); Victor Shklovsky, "Art as Technique," in *Russian Formalist Criticism: Four Essays* (1917), ed. Lee T. Lemon and Marion J. Reis (Omaha: University of Nebraska Press, 1965).

xxxi See Raymond Williams's discussion of "Literature," in *Keywords: A Vocabulary of Culture and Society* (New York: Oxford University Press, 1983), 183-88. As Williams points out, "literature" initially described literacy and writing more generally, but over the course of the seventeenth and eighteenth centuries gradually came to designate creative or imaginative writing. In short, it was over the course of the centuries under examination in this dissertation that literature acquired its modern signification.

xxxiii John Bender, building upon Catherine Gallagher's notion of "fictionality" (discussed below), makes a similar claim about the rise of the novel in relation to disciplinary division during the eighteenth century. "As the century unfolded," Bender writes, "the earlier discourse that integrated fictionality in narrative and science mutated into a protodisciplinary division between manifest fictionality in the novel and the tacit, methodologically submerged fictionality that supported a new factuality in science – a fiction that is called 'hypothesis.' I maintain, further, that manifest fictionality in the realm of the novel came, over time to certify scientific fictionality" (6).

xxxiii See William Donoghue, *Enlightenment Fiction in England, France, and America* (Gainesville: University Press of Florida, 2002); Christina Lupton, "*Tristram Shandy*, David Hume, and Epistemological Fiction," *Philosophy and Literature* 27 (2003): 98-115; J. T. Parnell, "Swift, Sterne, and the Skeptical Tradition," *Studies in Eighteenth-Century Culture* 23 (1994): 220-42; and Ian Watt, *The Rise of the Novel: Studies in Defoe, Richardson, and Fielding* (Berkeley: University of California Press, 1967). While many studies have considered the effects of nonliterary texts on literary genres, most tend to describe this relationship as one in which literary texts passively imbibe the insights, methods, and formal features of nonliterary genres. My project describes a relationship in which literary texts played a more active, epistemologically complex role.

xxxiv Michel Foucault, *The Order of Things: An Archeology of the Human Sciences* (New York: Vintage Books, 1994), xxii.

catherine Gallagher, "The Rise of Fictionality," in *The Novel, Vol. 1: History, Geography, and Culture*, ed. Franco Moretti et al. (Princeton: Princeton University Press, 2007), 345-346. See also Mary Poovey, *A History of the Modern Fact: Problems of Knowledge in the Science of Wealth and Society* (Chicago: University of Chicago Press, 1998); Barbara J. Shapiro, *Probability and Certainty in Seventeenth-Century England: A Study of the Relation Between Natural Science, Religion, History, Law, and Literature* (Princeton: Princeton University Press, 1983); and Shapiro, *A Culture of Fact: England, 1550-1720* (Ithaca: Cornell University Press, 2000).

xxxvi Sarah Tindal Kareem, *Eighteenth-Century Fiction and the Reinvention of Wonder* (Oxford: Oxford University Press, 2014), 9.

xxxvii Kareem, 21-22.

xxxviii The only novel that I am aware of that repeatedly refers to the *ignis fatuus* in a substantive way is *Jane Eyre*. It is worth noting that something of a rural/metropolitan divide widens over the course of the period between poetry and novels. Poets became increasingly likely to describe scenes of rural nature, while novelist became increasingly likely to narrate the actions of characters in metropolitan settings.

xxxix Lorraine Daston, ed., *Biographies of Scientific Objects* (Chicago: University of Chicago Press, 2000). Ian Hacking, *Mad Travelers: Reflections on the Reality of Transient Mental Illnesses* (London: Free Association Books, 1999).

Marjorie Hope Nicolson, *Mountain Gloom and Mountain Glory: The Development of the Aesthetics of the Infinite* (Seattle: University of Washington Press, 1997). For Nicolson's work on the relation between poetry and the New Science see *Newton Demands the Muse: Newton's Opticks and the Eighteenth Century Poets* (Westport, Conn.: Greenwood Press, 1979).

xli John Emsley, *The 13th Element: The Sordid Tale of Murder, Fire, and Phosphorus* (San Francisco: John Wiley and Sons, 2002); Mark Kurlansky, *Salt: A World History* (New York: Penguin Books, 2003); Tom Standage, *History of the World in 6 Glasses* (New York: Walker and Company, 2005).

xlii Giovanni Levi, "On Microhistory," in *New Perspectives on Historical Writing*, ed. Peter Burke (University Park: Pennsylvania State University Press, 1991), 95; Paula Findlen, "The Two Cultures of Scholarship?" *Isis* 96:2 (June, 2005): 236.

xliii Findlen, 233.

xliv Levi, 95. On the disruptive capacity of microhistories, Levi writes that "microhistorians have concentrated on the contradictions of normative systems and therefore on the fragmentation,

contradictions and pluralities of viewpoints which make all systems fluid and open" (107). "The reduction of scale," Levi claims, ""is an experimental operation" because it calls into question the understanding of "context" as that "which imputes meaning to seemingly 'strange' or 'anomalous' particulars by revealing their hidden significance and consequently their fit within a system; or, on the other hand, as a matter of discovering the social context in which an apparently anomalous or insignificant fact assumes meaning when the hidden incoherences [sic] of an apparently unified social system are revealed" (107). Levi paraphrases Jacques Revel's definition of microhistory as an "attempt to study the social not as an object invested with inherent properties, but as a set of shifting interrelationships existing between constantly adapting configurations ... [and as] a response to the obvious limitations of those interpretations of social history which in their quest for regularity give prominence to over-simplified indicators" (110). See also Edward Muir, "Introduction: Observing Trifles," in *Microhistory and the Lost People of Europe*, ed. Edward Muir and Guido Ruggiero (Baltimore: Johns Hopkins University Press, 1991), vii-xxviii.

originally, each chapter of this dissertation was to take up a different, difficult natural historical case – bird migration, earthquakes, cryptogamic plants, etc. – and was to analyze the historical implications of the way these phenomena were treated in eighteenth-century poetry. However, my inquiry into the *ignis fatuus* soon took on an unexpected archival richness and revealed a surprising poetic ubiquity that exceeded both my own expectations and, ultimately, the confines of a single chapter. Using the single case of the *ignis fatuus* not only serves to avoid a potentially repetitive argumentative structure in which various cases are one-by-one provided as evidence of a single historical process, but also serves to emphasize and clarify the secondary, methodological implications of this project. My research into alternate cases suggests that the general historical transitions revealed in the case of the *ignis fatuus* are also borne out by those cases which I was unable to include in these pages.

xlvi Addressing the way in which the use of "cases" linked fiction and scientific hypothesis, John Bender writes that "Even rigorous experimentation and theorizing could not guarantee or ultimately underwrite the difference between the scientific hypothesis and fiction because both are based in "cases" – that is, in causal and narrative sequences – and both share basic technologies of world-making and sense making: they are not just features of logic and science or of fantasy and literature, but of both" (49).

xlvii Lauren Berlant, "On the Case," *Critical Inquiry* (On the Case) 33:4 (2007): 663-72. See also James Chandler, *England in 1819: The Politics of Literary Culture and the Case of Romantic Historicism* (Chicago: University of Chicago Press, 1998).

xlviii M. H. Abrams, *The Mirror and the Lamp: Romantic Theory and the Critical Tradition*. (Oxford: Oxford University Press, 1971), 57, 326, respectively.

xlix Abrams, 57.

¹ Abrams, 60.

li Abrams, 158.

lii John Milton, *Paradise Lost.* 4.773-5. John Keats to George and Tom Keats, January 5, 1818, *Keats's Poetry and Prose*, 109.

Chapter One

Doubting as Long as One Can: A Natural History of the Ignis Fatuus

I. Francis Bacon and the Suspension of Judgment

In his preface to the *Novum Organon Scienctiarum* (1620), Francis Bacon imagines the pursuit of knowledge as a perilous journey along a winding path. "One must travel" he instructs, "always through the forest of experience and particular things in the uncertain light of the senses, which is sometimes shining and sometimes hidden." Bacon believes that the "uncertain light of the senses," although frail and fluctuating, is man's surest guide, largely because its very frailty and flux demand a strict vigilance against possible error. The uncertain senses offer doubtful, yet valuable, guidance through a world that "to the observing mind, is like a labyrinth, where on all sides the path is so often uncertain, the resemblance of a thing or a sign is deceptive, and the twists and turns of nature are so oblique and intricate." Throughout the text, Bacon remains acutely attentive to uncertainty, whether the uncertainty arises from the inherent limitations and misprisions of the senses or stems from the ultimately provisional status of even the most rigorous mode of induction.

Bacon's emphasis on the importance of attending to uncertainty grows out of his observation that the failure to do so has, somewhat counter-intuitively, stood as the central obstacle to the advancement of learning; in his view, scientific progress has been retarded not by what mankind doesn't know about the world but by what man mistakenly believed he has learned and already knows. Bacon repeatedly singles out the propensity of the human understanding to escape or bypass uncomfortable states of uncertainty by leaping, with hasty assent, to false beliefs about the world. This precipitousness of the mind is on display in those ideas about the natural world Bacon calls "anticipations" in contrast to the more measured mental processes evident in "interpretations." "Anticipations," Bacon argues, "are much more powerful in winning assent," and "they are gathered from just a few instances, especially those which are common and familiar, which merely brush past the intellect and fill the imagination." According to Bacon, the mind grasps desperately for explanations and beliefs to ameliorate the anxiety of doubt and assuage the unease of uncertainty. Bypassing the unpleasant difficulty of the winding path, the mind in effect leaves behind not merely the proper way but the world itself. "The mind," writes Bacon, "loves to leap to generalities, so that it can rest; it only takes a little while to get tired of experience." Bacon strives to fortify the mind for the fatigues of the iourney along the winding path by recognizing the difficulty of the way and supplying a method by which travelers might make the journey. Recognizing that the exhausted mind wants nothing more than to assent passively and that the imagination quickly seizes upon the seeming security of false knowledge, Bacon constructs a rigorous series of stages that the mind must negotiate in its quest for knowledge, all designed to restrain the mind's precipitous impulse to assent. Above all, Bacon's Novum Organon is a process of thought that restrains the operations of the mind in such a way as to allow the mind to bestow a lingering attention both to its own counterproductive tendencies and to what remains unknown. While Bacon pursues knowledge, he does so in large part through the methodical suppression of the impulse to catch at knowledge. The fundamental technique of Bacon's new system of knowledge is the cultivation of a suspended epistemological state.

The following pages provide a brief overview of the faculty Bacon labels the suspension of judgment. I first sketch its philosophical roots before tracing the concept through the work of Bacon's heirs, the natural historians of the seventeenth and eighteenth centuries. As we will see, these natural historians struggled – at times explicitly – to chart a middle course between the desire to arrive at specific knowledge and the need to suspend judgment. This struggle becomes particularly visible in the case of natural phenomena that had attracted significant amounts of Aristotelian and folkloric attention and explanations. While seventeenth-century natural philosophers felt compelled to correct both modes of explanation, and rigorously attempted to do so, phenomena like the *ignis fatuus* remained curiously resistant to examination, analysis, and conclusive explanation, despite the fact that they could be empirically investigated. By turning to the scientific and cultural history of the *ignis fatuus*, I show how this particular case illustrates the shifting role that the suspension of judgment played – indeed, continues to play – in these debates. A closer look at these diverse treatments of the *ignis fatuus* reveals a waning emphasis on such suspension as it is applied to individual phenomena, and hints at the shifts over the course of the long eighteenth century in the application and cultural visibility of this key epistemological inheritance of the New Science. Ultimately, this is one of the central concerns of this project: to ask where the concept and the faculty of the suspension of judgment migrates as it comes to play a less and less visible role in the natural sciences and their cultural reception over the course of the long eighteenth century.

Far from being a seventeenth-century innovation, the epistemological theory on which Bacon bases his suspension of judgment has its origins in the skeptical tradition's concept of epochē. Defining epochē as the "withholding of assent and dissent, i.e. suspension of judgment," the Oxford Dictionary of Philosophy notes that "ancient scepticism combined a thesis, "There is no knowledge," with a prescription, "Practice epochē." Bacon, careful to distinguish his project from the more extreme sects of the skeptical tradition, (the Pyrrhonian claim that there is no knowledge, for example) assures his readers that "one should not be frightened of such a suspension of judgment in a doctrine which does not assert simply that nothing can be known, but that nothing can be known except in a certain order and by a certain method." Richard Popkin explains: "Bacon criticizes the sceptics for misrepresenting the problems involved in gaining knowledge through the senses. They had seized . . . upon the errors and deceptions of the senses in order to 'pluck up Sciences by the roots.'" Bacon's texts are clear on this matter, and I do not wish to exaggerate the influence of skepticism on Bacon's ultimate appraisal of man's capacity for knowledge. For Bacon, knowledge is possible, and he clearly wishes to disassociate his own practice from the skeptical disavowal of all knowledge. Yet, having made this distinction clear, he nonetheless deploys a modified version of *epochē* as a strategic tool in what Popkin has referred to as a "partial or temporary skepticism." Bacon's science is a method of knowledge constructed as much upon the recognition of what does not constitute knowledge – what one does not yet or cannot know – as it is a science built upon positive knowledge. "We do not need," Bacon exclaims in a particularly striking metaphor, "to give men's understandings wings, but rather leads and weights to check every leap and flight." The epistemology expressed in Bacon's poetic image of minds working with great force simply to remain still, like birds hovering in flight, reverberated through subsequent centuries as natural historians and philosophers carried out his project.

The suspension of judgment's importance as an integral skill within the new system of knowledge that emerged in Bacon's wake is evident throughout seventeenth- and eighteenth-century scientific discourse. Thomas Browne, Thomas Sprat, and Robert Boyle adopt versions of

Bacon's faculty and transmit it to late eighteenth-century thinkers such as Erasmus Darwin and Joseph Priestley. In order to counter what Bacon calls an "impatience of doubt, and a blind haste to assertion without due and mature suspension of judgment, "xi these thinkers, attempt to cultivate an appreciation for the importance of suspended judgment in their readers, even if they do not always specifically refer to this faculty as such. Bacon's influence is felt, for instance, in Thomas Browne's Pseudodoxia Epidemica: or Enquiries into Very Many Received Tenents [sic] and Commonly Presumed Truths (1746), not least in the concluding epigraph from Lactantius, "Primus sapientiae gradus est, falsa intellegere" ("wisdom's first step is the recognition of what is false"), an epigraph that neatly encapsulates Browne's own project. xii Browne's text is based on the principle that knowledge begins with a rigorous examination of false notions and mistaken beliefs coupled with a careful examination into the ways such forms of false and pseudoknowledge arise. To recognize what is false, even before, or as the necessary condition prior to, acknowledging what is true, is to perform a strategic suspension of judgment insofar as it disrupts the comfort offered by existing explanations and casts us back into the unease of not knowing. Using a method Karen Edwards has characterized as "probing, cautious, humorous attempts to discriminate between what might be true and what is customarily taken to be true,"xiii Browne's general investigation of popular error in the *Pseudodoxia* provides a catalogue of those classes of error that Bacon's focused, philosophical criticism, and regimented system attempted to combat. Browne's chief target is "Popular Error," which he divides into various classes ranging from vulgar ignorance to those chimeras sprung from the technicalities of logical fallacy, from errors resulting from an innate credulity to those resulting from a mistaken respect for the authority of antiquity. Of credulity in general, a defect similar to that love of "leap[ing] to generalities" that Bacon classes among the "Idols of the Tribe," Browne writes:

This is a weaknesse in the understanding, without examination assenting unto things which from their natures and causes doe carry no perswasion; whereby men often swallow falsities for truth, dubiosities for certainties, fesibilities for possibilities, and things impossible as possibilities themselves. Which, though a weaknesse of the intellect, and most discoverable in vulgar heads, yet hath it sometimes fallen on wiser brains, and great advancers of truth.^{xv}

Browne revives Bacon's attack on precipitous assent by taking to task both popular notions and once venerable texts. The *Pseudodoxia*'s parade of errors seeks to induce a mode of circumspection, an awareness of the oft-precipitous process by which assent is erroneously bestowed. While Browne revels in the often humorous results of man's epistemological shortcomings, his "parade" also encourages in his readers a wariness of false beliefs and a general appreciation for the suspension of judgment.

As one of Bacon's greatest champions in the later half of the seventeenth century, Thomas Sprat insists that his contemporaries vigilantly exercise the suspension of judgment. In his *History of the Royal Society* (1667), Sprat praises the way that society functions as a kind of institutional instantiation of Bacon's intellectual system, a mechanism that retards the precipitous rush to judgment. In Sprat's view, one of the most important roles of the Society is that it checks the "over hasty, and precipitant concluding upon causes." Building upon Charles Webster's reassessment of seventeenth-century English Protestantism in *The Great Instauration*, Joanna Picciotto has offered compelling evidence that the Royal Society served to codify a set of informal practices already widely employed by mid-seventeenth-century experimentalists. "Viii"

Clearly, Bacon's suspension of judgment, along with other aspects of his empiricism, was alive and well during the Interregnum, utilized by experimentalists working outside the confines of institutional structures. Nonetheless, institutional codification and prescription made these practices increasingly legible in the later half of the century. For Sprat, one of the best qualities of the Society was the difficulty it had in "concluding," a difficulty that earned it an early reputation as an ineffectually disputatious society of mere speculators. The stringent requirement that all members of the society be appeased before conclusions could be drawn was an attempt to ward off the danger of eager assent.

The danger of falling into "general contemplation" upon causes – the first slip in the larger descent into final, erroneous conclusions – was for Sprat (as for Bacon) the "fatal point, about which so many of the greatest *Wits* of all ages have miscarried." To emphasize the importance of this point, Sprat deploys an illustrative metaphor that draws Bacon's claim in the *Novum Organum* that "one must travel through the forest of experience . . . in the uncertain light of the senses." Sprat adds layers of complexity to Bacon's original metaphor:

So many wary steps ought to be trodden in this uncertain path: such a multitude of pleasing *errors*, false *lights*, disguised *lies*, deceitful *fancies* must be escap'd: so much care must be taken, to get into the right way at first: so much, to continue in it; and at last, the greatest caution still remaining to be us'd; lest when the treasure is in our view, we undo all, by catching at it too soon, with too greedy, and rash a hand. xix

Sprat introduces a number of new complications into Bacon's original metaphor. In Sprat's version not only is the night dark and the light of the senses uncertain but the darkness itself is also filled with "pleasing errors, false lights, disguised lies, [and] deceitful fancies."

Notwithstanding Sprat's attempts to maintain parallel structure, there is a significant categorical slippage in the catalogue that warrants closer examination. The first, third, and fourth groups – "pleasing errors . . . disguised lies, [and] deceitful fancies"—pair an adjective with a closely associated abstract noun: "errors," "lies," and "fancies." The second item in Sprat's catalogue, however, breaks the pattern. "False lights" not only disrupt the pattern of Sprat's catalogue ("errors," "lies," and "fancies" are mental phenomena, whereas "lights" are physical) but it also does so in the service of maintaining the overarching metaphor of a journey along a dark, uncertain path. In other words, although it appears second in a catalogue of dangerous errors, Sprat's "false lights" might be said to stand as an image from the real world of empirical evidence for the more mental, abstract concepts that surround it. "Pleasing errors," "disguised lies," and "deceitful fancies" all appear as "false lights" in the context of Sprat's extended metaphor.

The significance of Sprat's use of "false lights," another common term for *ignes fatui*, is not simply that it may function as the primary figure for a range of epistemological mistakes, but that it reworks the way "uncertain light" functioned in Bacon's original metaphor. The "uncertain light of the senses" found in Bacon's metaphor become possible *ignes fatui* in Sprat's, not only providing poor light but threatening to lead astray. Sprat, in other words, heightens the sense of danger found in Bacon's discussion of the "forest of experience" by exaggerating Bacon's warning. In Sprat's darkened world there is not simply a "forest," but a wilderness populated by "errors," "lies," and "fancies" that flit about the wanderer after truth like so many "false lights." More importantly, in Sprat's metaphor, false lights do not emanate from the perceiving subject; rather, they are external objects. The fact that Bacon's "uncertain light of the

senses" becomes Sprat's objective "false lights" clarifies the way that the latter's metaphor treats the subject's relation to the other items in the catalogue. While the adjectives maintain some sense of the connection between the dangers and the inner desires and shortcoming of the perceiving subject, Sprat's "pleasing errors," "disguised lies," and "deceitful fancies" are very much external threats. Sprat's treatment of these abstract nouns weakens the sense that they arise from inherent, and subjective, epistemological limitations and, ultimately, externalizes the threat of uncertain light by uncoupling it from sensory limitation and relocating it in a "false light" that exists in the darkness outside the perceiving subject. Sprat's adaptation of Bacon's metaphor subtly shifts the threat of error from the interior perceiving subject to the external world. In doing so, Sprat's transformation of the metaphor hints at a subtle, yet growing distance from Bacon's original epistemological claims – a slight shift that is nonetheless symptomatic of the rising confidence of late seventeenth-century natural historians.

Although Sprat may unintentionally modify Bacon even as he champions him, he nonetheless insists on the need to exercise the suspension of judgment. In proportion to the degree to which his modification of Bacon heightens the sense of danger captured in the original metaphor of the narrow path, Sprat is equally profuse in his praise for those features of the Royal Society that restrain it from catching precipitously at conclusions and equally strident in his warnings against the threat of epistemological overreach. Addressing the Royal Society's ongoing battle against the counterproductive propensity to assent, Picciotto notes that Sprat's contemporary Robert Hooke, motivated by the belief that "overconfident assertions of hypotheses posed a constant menace to the 'philosophical liberty' of others," attempted "to pass a resolution forbidding 'hypothesizing' in the Society, demanding that members indulge this vice in private." For Sprat, as for Hooke, the suspension of judgment is not an obstacle to knowledge (and, by extension, to action) but a vital stage that allows for true movement to occur:

There is scarce any comparison to be made between him who is only a thinking man, and a man of experience. The first does commonly establish his constant rules, by which he will be guided; the later [sic] makes none of his opinions irrevocable. The one, if he mistakes, receives his errors from his understanding; the other only from his senses; and so he may correct, and alter them with more ease. The one fixes his opinion as soon; the other *doubts as long as he can*. The one chiefly strives to be unmovable in his mind; the other to enlarge, and amend his knowledge; and from hence the one is inclined to be presumptuous, the other modest in his judgment. *xxi

Sprat is clear that this need for suspension, for "so many wary steps," and for doubting "as long as [one] can" is not the same thing as abandoning all pursuit, not an instance of what he elsewhere derides as a "fall into speculative skepticism", in fact, it is a constructive process that protects against the tendency to rush to judgment precisely by constantly calling attention to that proclivity. Sprat makes the curiously counterintuitive point (one that the poets I discuss in later chapters echo) that it is, in fact, he that exercises a greater degree of mental mobility who gains the surest protection against the allure of the false path rather than the one who "chiefly strives to be unmovable in his mind." To find one's way out of Bacon's dark "forest" one must first recognize one's own identity as someone who wanders. The mental mobility that Sprat describes in a "man of experience" provides the basis for a modest, careful, and more accurate exercise of judgment precisely because it enables a temporary suspension of that faculty. Ultimately, the suspension of judgment is not merely restrictive, insofar as it keeps one from

charging down the wrong path, but also permissive in that it gives space to a mobile mind, helping it avoid "catching at" "false lights" too soon – with too rash a hand – and allowing it, instead, to wander along the way.

Recognizing this more permissive aspect of the suspension of judgment, Robert Boyle takes note of the difficulty and importance of exercising a suspension of judgment in his 1681 dialogue, "Advice in Judging of Things Said to Transcend Reason." Drawing attention to the seemingly innate drive to form conjectures and make judgments, Boyle's Eugenius remarks: "Methinks it is hard to avoid the framing of conjectures, even about those sublime subjects, concerning which we can forme [sic] but conjectures, and those often very slight ones." Arnobius's reply is recognizably Baconian in its sympathy for mental shortcomings and propensities that must be acknowledged and contained. "I confess," says Arnobius "an absolute suspension of judgment is a very uneasy thing, nor do I strictly require you should entertain no conjectures, but only that we should consider, that we may be easily mistaken in them, and by further information see cause to lay them down, and perhaps exchange them for contrary ones." Picking up on that permissive quality of the suspension of judgment found in Sprat, Boyle commends the faculty for its ability to permit conjecture as much as its ability to mitigate the danger of hasty assent. In terms that are particularly relevant to the "Christian Virtuoso" Boyle, xxv Popkin notes "Sceptic' and Believer' are not opposing classification. The skeptic is raising doubts about the rational or evidential merits of the justifications given for a belief; he doubts that necessary and sufficient reasons either have been or could be discovered to show that any particular belief must be true, and cannot possibly be false. But the skeptic may, like anyone else accept various belief." Indeed, this interchange between Eugenius and Arnobius appears in a section Boyle titled "The Second Advice, or Rule," and described as follows: "That we be not hasty to frame negatives about privileged things, or to reject propositions or explications concerning them; at least, as if they were absurd or impossible." As Boyle's heading makes clear, by warning not only against the framing of positives but also against the hasty framing of negatives, the suspension of judgment both restricts and permits, guarding against the framing of negative as much as it checks the production of positive claims. Additionally, the difficulty attendant on the suspension of judgment demands and instills a powerful mode of attention. Describing this productive uneasiness in Boyle's experimental program, Picciotto notes that "it was essential that the making of physical discoveries, however delightful, remain uneasy. A truly innocent curiosity was insatiable; the anxious doubts fostered by the disquieting passions only spurred the investigator on to be ever more 'scrupulous.'"xxviii For Boyle, as for Sprat, the suspension of judgment, although it is a difficult state to inhabit for a prolonged period of time, allows one to entertain a proposition that might have otherwise been rejected as "absurd or impossible" while at the same time guarding against the danger of too hastily assenting to it.

The language surrounding the suspension of judgment, the nature of assent, and the need for a circumspect mode of conjecture found in these seventeenth-century reflections on methodology reappear throughout seventeenth- and eighteenth-century natural historical treatments of natural phenomena in general, but are particularly visible in discussions of natural phenomena that resist, challenge, or thwart easy explanation. While numerous phenomena – ranging from the source of earthquakes to the cause of waterspouts, from the generation of mushrooms to the mystery of instinct in bird migration – illustrate the dynamic by which particular natural historical cases raise general epistemological problems, the case of the *ignis fatuus* stands as a particularly representative example of this category. Within natural historical treatments of the *ignis fatuus*, the difficulty of establishing accurate details, gathering

experimental data, and reaching conclusive explanations often resulted in elaborate epistemological meditations, the intensity and importance of which far exceed the seemingly inconsequential stakes of the particular case. As we have already glimpsed in the analysis of Sprat's introduction of "false lights" into Bacon's original metaphor, I contend that we best perceive the larger historical significance of these highly specific treatments of the *ignis fatuus* when we view them as the medium through which natural historians expressed, intentionally or not, far more significant epistemological anxieties. These seemingly inconsequential treatments of a troublesome natural phenomenon are in fact vehicles for a set of ongoing epistemological reflections and debates that, as I will show in subsequent chapters, were taking place simultaneously within seventeenth and eighteenth-century poetic texts.

II. Defining the *Ignis Fatuus*

In a pair of articles published nearly two-hundred years after the birth of modern chemistry, that discipline which offered the best chances for establishing a definitive explanation of the *ignis fatuus*, the geologist A. A. Mills investigated the history of scientific theories surrounding the phenomenon and outlined the present status of scientific explanation. In the earlier of the two articles, published in 1980, Mills begins by noting that "the origin of the will-o'-the-wisp attracted considerable scientific attention in the 19th century, but no specimen has ever been 'captured' for laboratory study." "With no satisfactory proof or explanation of the glow," Mills continues:

It is not surprising that some have asserted that it was no more than a figment of the popular imagination. Is this true – or should the phenomenon (like so many peasants' tales) have a foundation in fact? Have the drainage and land reclamations schemes by which so many bogs have disappeared led to the extinction of the will-o'-the-wisp, or does it still shine forth on rare occasions in some lonely marsh?**

Setting out the basic explanatory dilemma in these terms, Mills offers a brief summary of the various historical explanations, usefully dividing these into bioluminescence, chemiluminescence, and combustion. xxx Although I will return in some detail to these diverse explanations later in this chapter, what interests me here is Mills's own explanation of the phenomenon, or rather the absence of any explanation. While Mills, in fine Baconian fashion, offers a list of those explanations for which "we can now say that – whatever it is – it is not," he ends the article (and again I am led to think of Bacon) by merely offering "some possible explanations"xxxi and outlining "ways by which the existence and constitution of the will-o'-thewisp might be resolved: by the investigation of the spectrum and/or analysis of the natural phenomenon itself, or by the generation of samples of luminous bio-gas in the laboratory." Not only does Mills – in the playful terms long associated with serious science's passing interest in mere curiosities – rekindle long dormant debates over the curious, fiery phenomenon, he returned two decades later to fan those faint embers with a short article entitled "Will-o'-the-Wisp Revisited." Reading the second article, it would seem that Mills returns to the subject only to note the significance of his first attempt's failure. "It was hoped," Mills writes, "that the publication [of his initial article] might stimulate observers to report at least one site somewhere in the world where will-o'-the-wisp might still be seen, but . . . this hope has not so far been

realized." "In the absence of hard evidence," Mills admits that "one can only speculate on its nature,"xxxiii and offers a few possibilities, none of which, by his own admission, correspond exactly with the reported qualities of the phenomenon. Far from furnishing an answer to his initial query, in revisiting the problem Mills seems farther than ever from a satisfactory explanation. This is the case, first, because those boggy wastes subject to land reclamation where the phenomenon historically appeared and might now intentionally be sought had become increasingly rare in the intervening decades. Moreover, while admitting that the chances of serendipitously discovering an explanation within a laboratory environment have likewise diminished, Mills offers this melancholy aside: "Few luminous reactions are reported nowadays, since we tend to work in well lit laboratories!" The more Mills approaches the problem, the more he seems capable only of remarking upon the ways in which it recedes, the way it escapes his grasp. Furthermore, the scientific space where empirical study is carried out – the "well lit laboratories" where science more often than not carries out its work of knowledge production – is the very antithesis of the environment in which one might perceive the flickering light of an ignis fatuus and hinders more than advances the possibility of perceiving the phenomenon even if it were spontaneously to appear.

The Oxford English Dictionary defines the *ignis fatuus* as "a phosphorescent light seen hovering or flitting over marshy ground, and supposed to be due to the spontaneous combustion of an inflammable gas (phosphuretted hydrogen) derived from decaying organic matter." While I want to avoid attributing too much significance to what must be the OED's procedural formulae in defining natural phenomena, I would nonetheless like to point out that the circumspect "supposed to be due," which introduces a parenthetical aside "(phosphuretted hydrogen)," qualifies the certainty of this explanation. Despite probable, suppositional explanations, the phenomenon is not conclusively explained, just as it is not in Mills's articles. A note, appended to the definition – again, I take this as both procedural but nonetheless significant – effectively splits the chemical-scientific definition of the phenomenon from its cultural history, as evident in the following, subordinated text:

It seems to have been formerly a common phenomenon; but is now exceedingly rare. When approached, the *ignis fatuus* appears to recede, and finally to vanish, sometimes reappearing in another direction. This led to the notion that it was the work of a mischievous sprite, intentionally leading benighted travelers astray. Hence the term is commonly used allusively or fig. for any delusive guiding principle, hope, aim, etc.

The OED definition, even if only obeying broader editorial protocols, reveals many of the specific dynamics surrounding attempts to define the phenomenon: the unstable status of its scientific explanation and the complex relation between its history as a scientific object and its status as a common cultural object.

The "formerly . . . common phenomenon," which the Latin name *ignis fatuus* reduces to a single, seemingly explicable, chemical reaction, enjoyed a variety of names throughout the seventeenth and eighteenth centuries. In England the most common folk name for the phenomenon was will-o'-the-wisp. The term refers to the folk notion that the deceptive light was emitted from a lighted bundle of sticks, or wisp, carried by an impish sprite, Will. Samuel Johnson, drawing on Pieter van Musschenbroek's *Elements of Natural Philosophy* (1744), offers a lengthy description of the phenomenon, one of the longest citations in his *Dictionary*, in his entry on "will with a wisp:"

Will with the wisp is of a round figure, in bigness like the flame of a candle; but sometimes broader; and like a bundle of twigs set on fire. It sometimes gives a brighter light than that of a wax-candle; at other times more obscure, and of a purple colour. When viewed near at hand, it shines less than at a distance. They wander about in the air, not far from the surface of the earth; and are more frequent in places that are unctuous, mouldy, marshy, and abounding with reeds. They haunt burying places, places of execution, dunghills. They commonly appear in summer, and at the beginning of autumn, and are generally at the height of about six feet from the ground. Now they dilate themselves, and now contract. Now they go on like waves, and rain as it were sparks of fire; but they burn nothing. They follow those that run away, and fly from those that follow them. Some that have been catched were observed to consist of a shining, viscous, and gelatinous matter, like the spawn of frogs, not hot or burning, but only shining, so that the matter seems to be phosphorus, prepared and raised from putrified [sic] plants or carcasses by the heat of the sun; which is condensed by the cold of the evening, and then shines.

A paraphrase, more or less, of Musschenbroek, Johnson's citation does not explicitly refer to the popular traditions associated with the phrase. One of the passages Johnson excises from Mussechenbroek's work is the claim that "it is a mere fiction that these fires are evil spirits, or wandering ghosts, misleading travelers out of mere spite, to plunge them into ditches and bogs, as some trifling philosophers have told us." Instead of concerning himself with "mere fictions," Johnson offers a description of the phenomenon that could be an abstract from an article on the phenomenon in *Philosophical Transactions*. However, while Johnson does not explicitly outline the folk traditions associated with the phenomenon, evidence of these traditions arise nonetheless, despite their submergence in his definition. Indeed, in the first clause of the passage the anthropomorphizing phrase "roundish figure" suggests a plump corporal form or body. It is only with the introduction of the subsequent clause, "in bigness like the flame of a candle," that this "figure" is divested of anything resembling flesh and blood presence and reduced to the status of a mere geometric object: a light of small, circular shape. Johnson's citation gives the light a ghostly intentionality insofar as it describes how they "wander." The oblique presence of associated folk traditions bursts forth more explicitly from the pseudoscientific description with Johnson's suggestion that "they haunt burying places, places of execution, and dunghills." Johnson's adoption of Musschenbroek's definition of the will-with-awisp is thus itself haunted by the folk traditions from which it seeks to distance itself.

The various folk names carry within themselves hints of the traditions and explanations surrounding the phenomenon. The *ignis fatuus* or will-with-a-wisp was also known as a spunkie, jack o' lanthorn, jacket-a-wad, wandering fire, corpse candles, hobby lanterns, elf fire, foolish fire, friars-lanthorn, and Kitty-candlestick, amongst other highly descriptive names. One associated folktale explaining the appearance of the will-with-a-wisp tells of a smith named Will, who "after being given a second spell of life by St. Peter, spent it in such wickedness that he was debarred both from Heaven and Hell. The most the Devil would do for him was to give him a piece of burning pit coal to warm himself, with which he flickers over boggy ground to allure poor wanderers to their death." The diversity and multiplicity of these common names, registered throughout the British Isles, provides evidence of a widespread cultural preoccupation with the phenomenon.

The different common names and associated folk traditions should also alert us to issues surrounding the notion of "common" invoked by the OED's definition I discussed above. Indeed, the term "common" operates in relation to the *ignis fatuus* in a variety of senses. The OED's use of the term in the phrase "formerly a common phenomenon" is a marker, of course, for temporal frequency. However, as the multitude of folk names for the phenomenon attest, the ignis fatuus was not merely a temporally common phenomenon, but a socially common phenomenon. "Common," Raymond Williams notes, can mark something shared by a group or the "generality of mankind" and function as "an adjective and noun of social division"; it can "be used to affirm something shared or to describe something ordinary . . . or again . . . to describe something low or vulgar." In other words, the phenomenon's former temporal and spatial frequency is simultaneously a reflection of its cultural ubiquity amongst a particular social class. To say that the *ignis fatuus* was common, or commonly seen, is also to say that it garnered the attention of the commons and, with that attention, numerous folk explanations that contemporary natural philosophers would have considered vulgar opinions. Seventeenth- and eighteenthcentury natural philosophers opted for the more scientific term *ignis fatuus* in part because of a scrupulous desire to avoid the commonness of the phenomenon's other names. Touching on these general anxieties throughout A Social History of Truth: Civility and Science in Seventeenth-Century England, Steven Shapin claims that "modern' practitioners [of science] were highly skilled in condemning opinions by noting that it was 'commonly' held." The various names for the ignis fatuus mark precisely the kind of "widely distributed perceptual reports of the 'vulgar'" that Shapin explains "expert knowledge" intended to combat. "Nothing," writes Shapin, "was deemed so likely to be in error as common opinion." While the term ignis fatuus seeks to give the phenomenon a single, authoritative. Latin name for use amongst a scientifically enlightened elite, a name that, stripped of erroneous notions and vulgar traditions, they might use to view the phenomenon in a clear light, the messy diversity of folk terms testifies to the phenomenon's cultural and geographical omnipresence. xliv

III. Broad Shifts in Natural Historical Treatments

Natural historical inquiries into the *ignis fatuus* are a complex and generally neglected subfield in the general study of luminescence, and the phenomenon has remained curiously resistant to conclusive explanation. E. Newton Harvey's comprehensive *A History of Luminescence: From the Earliest Times Until 1900* surveys the broader field of inquiry. While the *ignis fatuus* ranks quite low in the measure of attention it garners from natural philosophers, Harvey documents interest in the phenomenon dating from at least the mid-sixteenth century work of Conrad Gesner. The treatment of luminescence in the sixteenth and seventeenth centuries focused primarily on the luminescence of decaying wood and flesh, glow-worms, salt water, and the *aurora borealis*, with relatively few treatments of the *ignis fatuus*. Phenomena often associated with the *ignis fatuus* – the *ignis lambens*, the *aurora borealis*, St. Elmo's fire, comets, and meteors – received significant attention over the centuries, and until the early seventeenth century, the most influential source on such matters was Aristotle's *Meteorologica*.

As much as seventeenth- and eighteenth-century natural philosophers wished to distance themselves from any reliance upon Aristotle's theories, the case of the *ignis fatuus* seems to have retained an Aristotelian residue well into the eighteenth century. Indeed it is possible to trace a direct textual genealogy from Aristotle's treatment of meteorological phenomena to late

eighteenth-century treatments of the *ignis fatuus*. Given the importance of Aristotle's treatment of meteors to later discussions of their nature, both in terms of what they take from Aristotle and what they reject in his methodology, it is important to take note of what his *Meteorologica* has to say about the fundamental cause of meteors:

Having determined these principles let us explain the cause of the appearance in the sky of burning flames and of shooting-stars, and of 'torches', and 'goats,' as some people call them. All these phenomena are one and the same thing, and are due to the same cause, the difference between them being one of degree. The explanation of these and many other phenomena is this. When the sun warms the earth the evaporation which takes place is necessarily of two kinds, not of one only as some think. One kind is rather of the nature of vapour, the other of the nature of a windy exhalation. That which rises from the moisture contained in the earth and on its surface is vapour, while that rising from the earth itself, which is dry, is like smoke. Of these the windy exhalation, being warm, rises above the moister vapour, which is heavy and sinks below the other. **Ivii

It is easy to recognize the methodological practice that caused Bacon and his followers such discomfort: Aristotle begins with determined "principles" that can be applied to "explain the causes" of a given "appearance." This deductive process allows Aristotle to provide a single "explanation" for "these and many other phenomena." However, even though natural philosophers during the seventeenth century scientific revolution began pushing back against Aristotelian authority, the *Meteorologica* remained a force in sixteenth- and seventeenth-century treatments of many natural phenomena, and of the *ignis fatuus* in particular. William Fulke's 1563 description "of lights that goeth before men, and followeth them abroad in the field by the night season" is a valuable example of sixteenth-century Aristotelian treatments that, despite the subsequent seventeenth-century introduction of Baconian methodology, continued to serve as a source text for treatments of the phenomenon well into the eighteenth century.

Fulke's treatment "of lights that goeth before men, and followeth them abroad in the fields by the night season" is worth quoting at some length not only for what it reveals about the phenomenon's remarkable features and perceptually disorienting effects but also because it sets a pattern that is recycled, in whole or in part, in later accounts. The light "leading them out of their waye unto waters, & other dangerous places," Fulke writes:

Seen on the land, is called in Latin, *Ignis fatuus*, foolish fire, that hurteth not, but only feareth fools . . . The foulish [sic] fire is an *Exhalation* kindled by means of violent moving, when by cold of the night, in the lowest region of the air, it is beaten down, and then commonly, if it be light, seeketh to ascend upward, and is sent down again, so it danseth up & down. Else if it move not up and down, it is a great lump of glueysh or oily matter, that by moving of the heat in it self, is enflamed of it self, as moist hay will be kindled of it self. In wet and fenny countries, these lights are often seen, and where as is abundance of such unctuous and fat matter, as about churchyards where through the corruption of the bodies there buried, the earth is full of such substance, wherefore in churchyards, or places of common burial, oftentimes are such lights seen, which ignorant & superstitious fools, have thought to be souls tormented in the fire of purgatory. In deed the devil hath used these lights (although they be naturally caused) as strong delusions to captive the minds of men. xiviii

Fulke clearly adopts the Aristotelian theory of exhalations as described in the *Meteorologica*. Interestingly, however, he also insists on a natural explanation, even as he claims that the natural phenomenon has been put to use by "the devil" to foster superstitious beliefs among the masses. Retreating from this theologically grounded insistence on natural explanation, Fulke offers his thoughts on the perceptual issues at play in the phenomenon and his views on the precise way in which it leads individuals astray:

The cause why they lead men out of the way, is, that while they take heed to such lights, and are also sore afraid, they forget their way, and then being ones but a little out of their way, they wander they woote not whether, to waters, pits, & other very dangerous places. Which, when at length they happe the way home, will tell a great tale, how they have been lead about by a spirit in the likeness of fire. Now the cause why they seem to go before men, or to follow them, some men have said to be the moving of the air by the going of the man, which air moved, should drive them forward if they were before, and draw them after, if they were behind. But this is no reason at all, that the fire which is often times, three or four miles distant from the man that walketh, should be moved to and fro by that air which is moved through his walking, but rather the moving of the air & the man's eyes, causeth the fire to seem as though it moved, as the Moon to children seemeth, if they are before it, to run after them: if she be before them, to run before them, that they can not overtake her, though she seem to be very near them. Wherefore these lights rather seem to move, then that they be moved indeed.\(^1\)

Fulke emphasizes the distinction between what a phenomena "seemeth" to do and its actual behavior or characteristic, thus drawing attention to the way *ignes fatui* call the reliability of perception into question. Fulke also sees fit to detail not just the perceptual effect of the phenomenon but also its affective impact on travelers in the night, going so far as to imagine the way this emotional impact spreads by means of "great tale[s]" throughout a community. If

Fulke's treatment of the *ignes fatui* in A Goodly Gallerye continued to play a part in later treatments of the phenomenon, surviving especially as a recycled source in popular treatments of natural history in subsequent centuries. lii It is possible to trace a direct textual genealogy from the mid-sixteenth to the late eighteenth century, including Thomas Blount's 1656 Glossographia, which cites Fulke's 1563 Goodly Gallerye, and John Brand's 1777 Popular Antiquities that, in turn, cites Blount. Thus, while natural historical treatments of the phenomenon in the seventeenth and eighteenth centuries occurred within the context of the new scientific method developed by Bacon and his seventeenth-century followers, traces of earlier treatments of the *ignis fatuus* continued to play a role in the broader cultural life of the phenomenon, especially in popular treatments of natural phenomena outside the pages of the *Philosophical Transactions*. Just as folk notions surrounding the will-o'-the-wisp were passed from generation to generation, so too were earlier descriptions and explanations. By the eighteenth-century, this transmission resulted in an incredible diversity of treatments. Essentially Aristotelian texts survived well into the eighteenth century alongside the new empirical accounts of the phenomenon. When we consider that these empirical accounts could by no means come to a consensus about basic phenomenal description, let alone an explanation of the phenomenon, and that empirical accounts were not only resisting Aristotelian treatments but also ubiquitous supernatural folk explanations, the rich complexities of these texts becomes increasingly legible.

Harvey's narrative of scientific development charts a shift within philosophy from medieval attention to a limited number of luminous phenomena reported as curiosities and explained, if at all, according to Aristotelian principles, to the careful collection of empirical data and the rigorous application of an investigative methodology. While "knowledge of luminous phenomena during the middle ages was sketchy and the beliefs fantastic," critical attention to the phenomena increased in the fifteenth and sixteenth century, and, Harvey writes, by the seventeenth "the investigation . . . [was] carried on in an extensive and logical manner," thanks in large part to the work of Bacon and other early empirical philosophers. Changes in the treatment of luminous phenomena continued to develop in the wake of the new science. Whereas the seventeenth century was, according to Harvey, a time in which "a very considerable body of facts regarding [luminescent] properties had been accumulated," the eighteenth century saw "many detailed studies of luminescent phenomena . . . new examples of all types of luminescence . . . discovered, and new facts assembled," with a corresponding movement towards an "explanation of the cause of light emissions."

While seventeenth and eighteenth-century treatments of the ignis fatuus record the shift Harvey notes in his discussion of general inquiries into luminescence, from the accumulation of facts to an active search for cause, from cursory remarks merely noting the existence of luminescence to sustained attention, there are more subtle variations in the case of the *ignis* fatuus. Seventeenth and eighteenth-century natural historical treatments of the phenomenon fall roughly into three stages, a series of changes that mark an increase in the general cultural authority of natural philosophers. The earliest seventeenth-century texts record the phenomenon - in much the same way as Fulke's *Goodly Gallerye* - as a curiosity that must be forcefully reclaimed from the realm of vulgar folk beliefs and explicitly acknowledged and explained as an observable physical phenomenon. Next, texts from the late seventeenth through the early eighteenth century contain more detailed attention to the phenomenon's actual features as reported by specific witnesses, attempt a search for specific causes, and take part in an ongoing controversy between competing scientific explanations. Later treatments, from the mideighteenth to the early nineteenth century (if not, with Mills, into our own time), increasingly take place in texts not intended for actual practitioners of natural history – marking the phenomenon's fall from being an object of serious natural historical investigation – and are characterized by a repeated rephrasing of earlier texts and testimony, a condescending pleasure in the recitation of folk beliefs associated with the phenomenon, and, occasionally, an explicit recognition of the lingering questions surrounding its appearance.

While there were, of course, many treatments of strange luminescence prior to the seventeenth-century, a remarkable number of authors turned their attention to the phenomenon of the *ignis fatuus* following in the wake of Francis Bacon's attack on Aristotelian authority and his construction of a rigorously empirical methodology. In addition to Bacon himself (whose thoughts I will return to in the final pages of this chapter), over the course of the century Kaspar Schott, John Swan, John Ray, Thomas Blount, William Simpson, and Isaac Newton also took note of the phenomenon. Ivi Often addressed in passing, the *ignis fatuus*, wrapped as it was in vulgar superstitions, was an appealing object for a nascent empirical methodology on the offensive. While the phenomenon provided an object around which to consolidate the identity of the natural philosopher in opposition to common opinions, the specific opinions of natural philosophers were by no means consolidated among themselves. As we will see, although the will-o'-the-wisp appeared to invite empirical examination, it proved, in reality, stubbornly resistant to stable explanation.

Scorn for vulgar explanations is easily visible in early treatments. John Ray's 1673 Observations Topographical is representative in privileging the term ignis fatuus over alternate terms associated with vulgar opinion. Ray refers, in a not-so-subtle nod to the acuity of gentlemen observers, to "a discovery made by a certain gentleman and communicated to me by Francis Jessop esq; which is, that those reputed meteors call'd in Latin Ignes Fatui, and known in England by the *conceited names* of Jack with a Lanthorn, and Will with a Wisp, are nothing else but swarms of . . . flying glow-worms" (emphasis mine). Ivii Setting aside Ray's explanation (glow-worms) for the moment, let us consider the rhetorical work that takes place in this quotation. Most notably, Ray opposes the clarity of his own ideas, and the veracity of his correspondent, to the false notions surrounding various "conceited names" for the phenomenon. The terms "Jack with a Lanthorn and Will with a wisp" are "conceited" in the sense that they are "fanciful, fantastical, whimsical . . . [and] full of notions." Disdain for vulgar conceits appears throughout seventeenth-century treatments of the subject, lix for instance in John Swan's remark that "the much terrified, ignorant, and superstitious people may see their own errors in that they have deemed these lights to be walking spirits . . . in all which they are much deluded." Swan's statement displays the vitriol with which these denunciations were often invested. Ix The vehemence of both Ray's and Swan's remarks highlights the feeling among certain natural philosophers that they were engaged in active combat not only against particular superstitions but against a fundamentally deluded way of understanding the world. The fact that the vehemence of seventeenth-century attacks on superstition mellows into late eighteenth-century bemusement registers a more general transition in which natural philosophers became increasingly comfortable with their own disciplinary legitimacy.

The brief appearance of the *ignis fatuus* in Newton's *Opticks* signals a shift toward sustained attention to the mechanical questions raised by the phenomenon, and his dispassionate remarks are typical of the second stage of treatment, represented as well by William Derham in the *Philosophical Transactions of the Royal Society*. Newton eschews any reference to popular notions, focusing instead on more technical questions regarding immediate cause. References to *ignes fatui* appear in short succession in the queries of the 1717 edition of Newton's *Opticks*. In the eighth query, Newton asks:

Do not all fix'd Bodies when heated beyond a certain degree, emit light and shine, and is not this emission perform'd by the vibrating motions of their part...whether the agitation be made by heat, or by friction, or percussion, or putrefaction...as for instance; sea water in a raging storm; Quicksilver agitated in vacuo; the back of a cat, or neck of a horse obliquely struck or rubbed in a dark place; wood, flesh and fish while they putrefy; Vapours arising from putrefied water, usually call'd Ignes Fatui, stacks of moist Hay or Corn. lxi

Newton's reference to *ignes fatui* is striking in that it both unquestioningly ascribes the appearance to "vapours arising from putrefy'd water" and classes the phenomenon in that category and yet couches that confident assertion in a *query*, a disjunction that acknowledges the mystery of its underlying mechanism. The second reference, in query ten, does the same again by defining it as "a vapour shining without heat" in the midst of asking: "Is not Flame a Vapour, Fume or Exhalation heated red hot, that is, so hot as to shine?" Newton's project has nothing to do with vulgar opinions or with positioning his own work in relation to those opinions. His description of the phenomenon shows no trace of doubt as to the immediate cause, even though

he concedes a lack of knowledge about its underlying mechanical dynamics. In doing so, Newton's passing treatment of the *ignis fatuus* exemplifies the next stage of natural philosophical treatments, which are characterized by a notable rift between the confidence with which the phenomenon is described and the lingering questions and controversies about its underlying causes.

Writing in the *Philosophical Transactions* in 1729, William Derham describes an encounter with the phenomenon in some detail:

My own observations I made at a place that lay in a valley between rocky hills, which I suspect might contain minerals, in some boggy ground near the bottom of those hills. Where, seeing one in calm, dark night, with gentle approaches I got up by degrees within two or three yards of it, and viewed it with all the care I possibly could. I found it frisking about a dead thistle growing in the field, until a final motion of the air (even such as was caused only by the approximation of my self) made it skip to another place, and thence to another, and another . . . As I took it then, so I am of the same opinion now, that it was a fired vapour. Liviii

Derham's essay intervenes in the ongoing debate regarding the causes of the phenomenon, debates as to whether it was the result of some subtle, fired vapor, the product of glowing insects, or some other biological material. In his 1736 *Description of a Great Variety of Animals and Vegetables*, Thomas Boreman includes a lengthy essay in which, as its title ("Ignis Fatuus, or Jack in the Lanthorn, a Flying Insect") suggests, he argues that "the light called by this name proceeds from some nocturnal flying-insect," and that he "shall take the liberty to assign the reasons which induce [him] to believe it, and [his] objections to its being a vapour, till time and experience shall demonstrate the real truth." In 1739, Benjamin Martin notes that the phenomenon occurs "when a fat unctuous Vapour is kindled, and wasted about by the motions of the air, near the surface of the earth, like a light in a lanthorn [sic]." Robert Gibson, speaking specifically about the source of the luminescence in 1755, claims that "some that have been catched [sic], have been found to consist of a shining, viscous matter, like the spawn of frogs, not hot or burning, but only shining; so that the matter seems to be phosphorus, which is raised and prepared by the heat of the sun, from putrefied plants and carcasses; which being condensed by the cold in the evening, then shines."

That the debate as to ultimate causes continued well into the eighteenth century can be seen clearly in an essay on the *ignis fatuus* that John Brand included as an appendix to his *Observations on Popular Antiquities*. Brand presents the competing explanations of the previous centuries – Newton's, Blount's, Willoughby's, Ray's, Derham's, and Boreman's. Ixvii The argument among these authors is by now familiar. What is significant about Brand's treatment of them is the way he explicitly evades making a final decision about the nature of the phenomenon, his recognition that, despite the significant energy invested in its study, the phenomenon remains unexplained. "After having summoned such respectable witnesses in the cause under consideration," Brand writes, "and having found that their depositions by no means agree, I shall not presume to sum up the evidence or pronounce sentence. We leave therefore the decision of the controversy to future discoveries in natural history, and to the determination of succeeding times." Brand's suspension of judgment in the matter of final explanation nonetheless presupposes that a more sophisticated future natural history will furnish a natural explanation.

Later eighteenth-century natural philosophers repeated earlier accounts, reintroduced earlier explanations, and attended to lingering explanatory deficiencies. No longer appearing in works of serious natural philosophy (e.g. Bacon, Newton), treatments of the phenomenon increasingly find a place in the works of popularizers, preachers, and pedagogues. Evidence for this shift can be seen in the fact that the *ignis fatuus* became a popular object lesson in late eighteenth-century pedagogical texts, about which I will have more to say in Chapter Four. The popularity of the *ignis fatuus* in pedagogical texts ranging from grammar books to natural history primers seems to stem from the fact that the phenomenon was well suited to the Horatian artistic dictum to please and instruct simultaneously; the *ignis fatuus* allowed authors to entertain their readers with a mysterious, fascinating phenomenon while simultaneously instructing them in a proper, empirical perception of the natural world. For instance, an explicitly pedagogical attack on the vulgar notions long associated with the phenomenon appears in the works of two late eighteenth-century religious authors, Olinthus Gregory and Christopher Sturm, who treat the phenomenon as an object lesson for children in the dangers of superstition. "Should any persons who have been thus miserably misinformed, peruse these lessons," Gregory exclaims, "I hope they will be quickly convinced that these horrible Jack o' Lanthorns, are far from having any thing supernatural about them: on the contrary their cause, and the effects they produce, may be accounted for in a very natural and easy manner." Gregory stresses the importance of "being educated without having any superstitious or childish prejudices engrafted on the mind." having any superstitious or childish prejudices engrafted on the mind. Sturm's lesson similarly focuses on the dangers of superstition, reflecting "How much we torment ourselves by vain terrors, which have no foundation but a disordered fancy. We might spare ourselves many fears, if we would take the trouble to examine the objects which frighten us, and seek for their natural causes." Gregory and Sturm are less interested in precise, natural explanation than they are in disabusing their readers of false notions by instilling a sense that such natural explanations should be the only kind to which they have recourse.

IV. Bacon's Representative Case

I would like to end this chapter's overview of seventeenth and eighteenth-century natural historical treatments of the *ignis fatuus* by once more returning to Bacon and a minor, but nonetheless significant, appearance of the phenomenon in his Novum Organon Scientiarum. As a methodological guide, the Novum Organon establishes the basic epistemological principles for an empirically based accumulation of knowledge and illustrates how this method operates by specific examples. In the second book, for example, Bacon illustrates his technique through an investigation into "the nature of heat." In the first stage, the "presentation," he composes a descriptive catalogue of observed phenomena: a list of all known "instances" of heat, a list of closely related instances that are "devoid of the nature of heat," and a table of the "degrees or comparisons on heat." Following the "presentation," "induction itself has to be put to work," as Bacon proceeds to a process of "exclusion" wherein specific phenomena are barred from consideration in determining the nature of heat by showing how they are distinct from the central phenomenon. "Only when the rejection and exclusion has been performed in proper fashion," Bacon explains, "will there remain (at the bottom of the flask, so to speak) an affirmative form, solid, true and well-defined (the volatile opinions having now vanished into smoke)." Bacon's combustion metaphor draws as much attention to what is burned off (the smoke/vapor) as it does to the pursuit of the purified substance that remains. That is to say, Bacon's

methodology, consciously and precisely, attends to that which is spurious, irrelevant, and insubstantial in order to arrive at stable knowledge. lxxiv

The *ignis fatuus* appears in Bacon's illustrative case study of heat not only in the primary catalogue of observed phenomena (under the category "any flame,") but also as a caveat to an item in the table of "closely related instances which are devoid of the nature of heat." In response to number six ("any flame") in Table 1 ("Instances meeting in the nature of heat"), Bacon rejects any negative (that is, the existence of any flame without heat), but then offers a series of caveats and complications. "To the sixth," writes Bacon, "all flame is more or less hot, and there is no negative attached." "However" Bacon continues in a passage in which instances of strange flames seem to proliferate:

They do say that the so-called *ignis fatuus*, which even sometimes settles of a wall, does not have much heat, perhaps like the flame of spirit or wine, which is gentle and weak. The flame which is found appearing around the heads and hair of boys and girls in some serious, reliable histories seems to be still weaker; it did not burn the hair at all but softly flickered around it. It is also quite certain that a kind of gleam without obvious heat has appeared around a horse sweating as it travelled at night in clear weather. A few years ago a notable incident occurred which was almost taken for a miracle: a girl's girdle flashed when it was moved or rubbed a little. . . . Similarly salt seawater is sometimes found to sparkle at night when forcefully struck by oars. And in storms highly agitated sea foam gives off a flash; the Spanish call this flash *the lungs of the sea*. There has not been enough investigation of how much heat is given off by the flame which sailors in the ancient world called *Castor and Pollux* and today is called *St Elmo's Fire*. lxxv

The *ignis fatuus* functions here, alongside that miraculous, flashing girdle, as an important qualification of Bacon's earlier claim that all flame involves heat. Bacon includes the *ignis* fatuus and related phenomena as checks on the absolute nature of his claim that "all flame is more or less hot." Although Bacon claims that the phenomenon "does not have *much* heat." it is not clear if the *ignis fatuus*, or the associated instances he proceeds to list, have any heat whatsoever. This is evident later in the text when the *ignis fatuus* reappears in the discussion of degrees of strength or weakness of heat as the gentlest of flames: "The flame from spirit or wine seems to be the gentlest of flames; unless perhaps *ignis fatuus* or flames or flashes from the sweat of animals are gentler." The *ignis fatuus* functions here and in the earlier passage in a realm somewhere between an affirmation and a rejection of the claim that "all flame is more or less hot." Significantly, in neither proving nor disproving the proposition, the phenomenon shows Bacon running afoul of his own prescriptions. Exxviii How does Bacon know that the *ignis* fatuus produces heat and arrive, by extension, at the claim that all flame has heat, when the phenomenon is so faint as to be barely visible, let alone capable of being registered and measured as heat? In other words, Bacon's use of the phenomenon is at once an attempt to qualify or check an absolute claim and simultaneously an inadvertent rush to judgment, an instance in which he fails to recognize that he has approached the phenomenon with certain "anticipations" or principles already in place.

To be sure, the *ignis fatuus* is a minor item in Bacon's catalogue of related phenomena, but it is precisely its existence on the fringe of Bacon's observations that makes it so powerful. The minor example of the *ignis fatuus* leads Bacon into the very dangers of prejudice he so meticulously derides. This tension within Bacon's text manifests itself, on a much grander scale,

within natural history more generally, during the subsequent centuries, when, counter-intuitively, natural historians and philosophers increasingly run afoul of the command to suspend judgment, especially when it comes to specific phenomena. Furthermore, the dual status of the *ignis fatuus* in Bacon's *Novum Organon* is representative of its broader cultural function as a figure that both announces the need for a suspension of judgment and functions as a threat to that very faculty. Bacon's treatment of the *ignis fatuus* reveals many of the epistemological problems that gather around the tempting, useful, and treacherous case as natural historians and an exceptionally wide range of poets – inspired in large part by Bacon's own revolutionary methodology and fervent admonishments – approached the phenomenon in the ensuing centuries.

Notes

¹ Francis Bacon, *The New Organon*, ed. Lisa Jardine and Michael Silverthorne (Cambridge: Cambridge University Press, 2000), 10. Note that Bacon adapts the Christian religious distinction between the broad and the narrow path as an epistemological metaphor "Enter in at the straight gate; for broad is the way, that leadeth to destruction, and many there be that find it. Because straight is the gate and narrow is the way, which leadeth unto light and few there be that find it" (Matthew 7:13-14, KJV).

ii Bacon, The New Organon, 10.

ⁱⁱⁱ Bacon, *The New Organon*, 38. Bacon continues: "Interpretations by contrast are gathered piece by piece from things which are quite various and widely scattered, and cannot suddenly strike the intellect. So that, to common opinion, they cannot help seeming hard and incongruous, almost like mysteries of faith" (38).

iv Bacon, The New Organon, 36.

^v For more on the way that anomalous natural phenomena were subsequently integrated into natural history over the course of the Enlightenment, see Lorraine Daston and Katherine Park, *Wonders and the Order of Nature*, 1150-1750 (New York: Zone Books, 1998).

^{vi} *Epochē*, in *The Oxford Companion to Philosophy*, ed. Ted Honderich (Oxford: Oxford University Press, 1995).

vii Bacon, The New Organon, 23.

viii Richard H. Popkin, *The History of Scepticism from Erasmus to Spinoza* (Berkeley: University of California Press, 1979), 126. See also B. H. G Wormald, *Francis Bacon: History, Politics and Society, 1561-1626* (Cambridge: Cambridge University Press, 1993), 352-562.

ix Popkin, History of Scepticism, 126.

^x Bacon, *The New Organon*, 83.

xi Bacon, *The Advancement of Learning, The Works of Lord Bacon.* vol. 1 (London: William Ball, 1838), 12.

xii Sir Thomas Browne, "Pseudodoxia Epidemica," in *The Prose of Sir Thomas Browne*, ed. Norman Endicott (Garden City: Anchor Books, 1967), 240.

xiii Karen Edwards, *Milton and the Natural World: Science and Poetry in Paradise Lost* (Cambridge: Cambridge University Press, 1999), 47.

xiv Lisa Jardine describes Bacon's "Idols of the Tribe" as "errors attributable to characteristics of human nature itself, which taints perceptions, and encourages men to form systems 'ex analogia hominis' rather than 'ex analogia universi' – systems appearing consistent to the human mind, rather than systems consistent with the way things are in nature." Noting the preeminent importance Bacon places on the recognition of error, Jardine states: "The starting point for Bacon's procedure for arriving at certain truth in nature is a survey of the inherent and acquired defects of the senses and the mind, which such a procedure must circumvent." Jardine, Francis Bacon: Discovery and the Art of Discourse (Cambridge: Cambridge University Press, 1974), 80.

xv Browne, "Psuedodoxia Epidemica," 118.

xvi Sprat, 101.

xvii Joanna Picciotto, *Labors of Innocence in Early Modern England* (Cambridge: Harvard University Press, 2010). See also Charles Webster, *The Great Instauration: Science, Medicine, and Reform 1626-1660* (Gloucester, Eng.: Duckworth, 1975).

xviii Sprat, 100.

xix Sprat, 101.

xx Picciotto, 307. Newton's famous statement in the 1713 edition of the *Principia*, "*Hypotheses non fingo*" – "I do not make hypotheses" – follows in this tradition. Andrew Janiak, "Newton's Philosophy," in *The Stanford Encyclopedia of Philosophy* (Summer 2014 Edition), ed. Edward N. Zalta, accessed June 9, 2015, http://plato.stanford.edu/archives/sum2014/entries/newton-philosophy/.

xxi Sprat, 335; italics added.

xxii Sprat, 101.

xxiii Sprat, 335.

xxiv Robert Boyle, *The Works of the Honorable Robert Boyle*. vol. 4. (London, 1744), 57-58. Boyle was himself deeply involved in the study of luminescence, and the qualities of phosphorus in particular. See, for example: *The Aerial Noctiluca; or Some New Phenomena* (London, 1680); *New Experiments and Observations Made Upon the Icy Noctiluca* (London: 1681/2); and "Some Observations About Shining Flesh." *Philosophical Transactions* 7 (1672): 5108-16.

xxv The term "Christian Virtuosi" is, of course, Boyle's own. See Robert Boyle, *The Christian Virtuosi, Shewing that by being addicted to Experimental Philosophy, a Man is rather Assisted than Indisposed, to be a Good Christian* (London, 1690).

xxvi Popkin, History of Scepticism, xix.

xxvii Boyle, 57.

xxviii Picciotto, Labors of Innocence, 213.

xxix A. A. Mills, "Will-o'-the-wisp," Chemistry in Britain 16:1 (1980): 69.

xxx Mills, "Will-o'-the-wisp," 69.

xxxi Mills, "Will-o'-the-wisp," 71. Of these possible explanations, Mills claims, "the chemiluminescent oxidation of some volatile substance entrained in the methane would appear the most plausible hypothesis" (71).

xxxiii A. A. Mills, "Will-o'-the-wisp revisited," Weather 55:7 (2000): 240.

xxxiii Mills, "Will-o'-the-wisp revisited," 240.

xxxiv Oxford English Dictionary Online, s.v. "ignis fatuus, n.," accessed 1 April 2015. http://OED.com

xxxv Oxford English Dictionary Online, s.v. "will-o'-the-wisp, n.," accessed 1 April 2015. http://OED.com. It is worth noting that this has remained one of the more common usages for the phenomenon to this day, ultimately trumping *ignis fatuus*. The preference for using will-o'-the-wisp and its variants seems to emphasize the poetically evocative nature of the phenomenon over its scientific explanations.

xxxvi Oxford English Dictionary Online, s.v. "Will, n. 3," accessed 1 April 2015. http://OED.com.

xxxvii Samuel Johnson, *A Dictionary of the English Language* 2nd ed. vol. 2 (London, 1755-56), s.v. "will with a wisp." Johnson cross-references *ignis fatuus* as "will with the wisp, Jack with the lanthorn," and cites Newton: "Vapours arising from putrified waters are usually called *ignes fatui*." See also Johnson's definition of "Nightfire," followed by these lines from George Herbert's "Dotage" in *The Temple* [1633]: "Foolish night-fires, women and children's wishes, / Chases in arras, gilded emptiness: / These are the pleasures here." Under the definition to

"Nightfaring" Johnson cites Gay: "Will-a-wisp misleads night-faring clowns, / O'er hills, and sining bogs, and pathless downs." Johnson's source for his definition is Pieter van Musschenbroek, *Elements of Natural Philosophy*. vol. 2. (London, 1744). Musschenbroek's text on "wandering fires, or ignes fatui" also appears to be the source for much of Robert Gibson's remarks on the phenomenon.

xxxviii Musschenbroek, 292.

xxxix Kathrine Briggs lists the following names: corp-candle or dead-candle, Billy-wi'-t'-wisp, Hobbledy's-landtern, Hobby-Lantern, Jack-a-lantern, Jenny-burnt tail, Jenny-wi-wi't'-lantern, Joan-in-the-wad or Joan-the-wad, Kit-in-the-candlestick, Kitty-candle-stick, Kitty-wi'-the-wisp, the Lantern-man, Peg-a-lantern, Pinket, Friar Rush, Gyl Burnt-Tayle, Hinky Punk, Spunkies, Puck or Pouk, and Robin Goodfellow. See also, Jabez Allies, *On the Ignis Fatuus, or Will-o'-the-Wisp, and the Fairies* (London, 1846); Francis Grose, *A Provincial Glossary* (London, 1778); Katherine Briggs, *An Encyclopedia of Fairies* (New York: Pantheon, 1976), 231; and Elizabeth Mary Wright, *Rustic Speech and Folk-Lore* (Oxford: Oxford University Press, 1914). Not surprisingly, the *ignis fatuus* has a number of passionate followers on the internet. Among these, Sean B. Palmer has compiled an impressive annotated bibliography on the *ignis fatuus* along with extensive notes on nomenclature. Sean B. Palmer, "Will-o'-the-Wisp" – The Lantern Man, Feu Follet, Ignis Fatuus. Accessed May 26, 2015. http://inamidst.com/lights/wisp.

xl Briggs, 231.

xli Raymond Williams, *Keywords: A Vocabulary of Culture and Society. Revised Edition* (New York, Oxford University Press, 1983), 70-71.

xlii Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago: University of Chicago Press, 1994), 232.

xliii Shapin, A Social History of Truth, 232.

xliv On vulgar notions of meteorology see Golinski, *British Weather and the Climate of Enlightenment*.

xlv E. Newton Harvey, *A History of Luminescence: From the Earliest Times Until 1900* (Philadelphia: The American Philosophical Society, 1957), 66.

xlvi A number of short pamphlets debating the phenomena were published on the continent in the second half of the seventeenth century: Stephanus Bering, *Dissertatio physica de igne erratico*, *Vulgo Irr-Wischen* (Marberg, 1690); Samuel Pomarius, *De meteoris ignis in genere et in specie de igne fatuo et dracone volante* (Wittenberg, 1652); Adam Rechenberg, *De igne fatuo* (Leipsic, 1666); Johann Saltzmann, *Disputatio meteorologica de igne fatuo* (Argentoriati, 1664); Georgius Schultze, *De igne fatuo* (Lipsia, 1672); and Christian Ziegra, *De igne fatuo disputationem physicam* (Wittenberg, 1680). I have not found any reference to these pamphlets in British texts.

On the related phenomenon, *ignis lambens*, see P. Castro, *Ignis Lambens Historia Medica Prolusio Physica Rarum Pulchrescentis Naturae Specimen* (Veronae, 1642).

xlvii Aristotle, *Meteorologica*, trans. E. W. Webster, in *The Works of Aristotle*. vol. 3., ed. W. D. Ross (Oxford: Clarendon Press, 1931), xiv.

xlviii William Fulke, A Goodly Gallerye with a most Pleasant Prospect, into the garden of natural contemplation, to behold the natural causes of all kynds of Meteors, as wel fyery and ayery, as atery and earthly (London, 1563) not paginated. I have modernized most spellings.

xlix Fulke's target here is the Catholic Church through which the Devil works his deceit: "Indeed the devil hath used these lights (although they be naturally caused) as strong delusions to captive the minds of men, with fear of the Popes purgatory, whereby he did open injury to the blood of Christ, which only purgeth us from all our sins."

¹ Fulke, *A Goodly Gallerye*. Fulke's text was republished throughout the sixteenth and seventeenth century (1571, 1602, 1634, 1640, 1654). See, for instance, *Meteors* (London, 1654).

^{li} As I discuss in Chapter Five, John Clare's poem, "Will-O'-Wisp," makes the reporting of the phenomenon, the "greate tale" that one tells of an encounter with the phenomenon, a central feature.

Thomas Blount writes: "Ignis Fatuus (Lat.) foolish fire, or (as the Country people call it) Will of the Wisp, is a certain viscous substance, reflecting light in the dark, evaporated out of a fat earth, and flying in the air. It commonly haunts Churchyards, Privies and Fens, because 'tis begotten out of fatness; it flyes about Rivers, Hedges, &c. because in those places there is a certain flux of air; it follows one that flyes it, and flyes one that follows it; because the air doth so. Per. Instit. It is called Ignis fatuus, because it onely feareth fools. Hence 'tis, when men are led away with some idle fancy or conceit, we use to say an Ignis fatuus hath done it." Thomas Blount, Glossographia, (London, 1661). See also Kaspar Schott, Magia Universalis Naturae et Artis (Herbipoli, 1657); William Simpson, Zymologia Physica, or a brief philosophical discourse on fermentation (London: 1675), 127; Edward Floyd, "An Account of the Burning of Seueral Hay-Ricks by a Fiery Exhalation or Damp," Philosophical Transactions 18 (1694): 49-50.

lii On the extensive publication history of Fulke's text, see Alastair McBeath and Andrei Gheorghe, "Meteor Beliefs Project: A Goodly Gallerye - William Fulke's 'Meteors,'" WNG, Journal of the International Meteor Organization 35:1 (2007): 23-28.

liii Harvey, 53.

liv Harvey, 89.

^{lv} Harvey, 148.

lxiii William Derham, "Of the Meteor called the Ignis Fatuus," *Philosophical Transactions* 36 (London, 1729), 205.

^{lxiv} Thomas Boreman, A Description of a Great Variety of Animals and Vegetables (London, 1736), 113.

lxv Benjamin Martin, *The Philosophical Grammar, Being a view of the present state of experimental physiology, or natural philosophy, in four parts* (London, 1735), 172.

lxvi Robert Gibson, A Course of Experimental Philosophy, being an introduction to the true philosophy of Sir Issac Newton (Dublin, 1755), 181.

lxvii See also Augustin Calmet, "Of the *Ignis Fatuus*, or *Will-with-a-wisp*," in *Dissertation Upon the Apparitions of Angels, Daemons, and Ghosts* (London, 1759), 105-7.

lxviii John Brand, "Of the Phenomenon, vulgarly called WILL or KITTY with the WISP, or JACK with a LANTHORN," in *Observations on Popular Antiquities* (Newcastle upon Tyne, 1777), 369-73.

lxix Olinthus Gregory, Lessons, Astronomical and Philosophical, for the Amusement and Instruction of British Youth: Being an Attempt to Explain and Account for the Most Unusual Appearances in Nature, in a Familiar Manner from Established Principles. The Whole Interspersed with Moral Reflections. 2nd ed. (London, 1799), 138.

lvii John Ray, *Travels Through the Low-countries, Germany, Italy and France, with Curious Observations, Natural, Topographical, Moral, Physiological etc.* (London: 1738), 351-2. See Shapin's *Social History of Truth* on the concept of the "gentleman" in seventeenth-century science.

lviii Oxford English Dictionary Online, s.v. "conceited," accessed June 9, 2015, http://OED.com

lix In the later eighteenth century this disdain mellows to a condescending amusement at quaint notions. See, in particular my discussion of the *ignis fatuus* in late eighteenth-century pedagogical texts in Chapter Four.

^{lx} John Swan, *Speculum Mundi* (Cambridge, 1635), 94.

lxi Isaac Newton, *Opticks*, 2nd ed. (London, 1718), 314-5. In an anonymous Latin poem published in 1731, Newton is praised as the daylight that disperses the fantastic *ignes fatui* produced by the Cartesians. Anon. *Ignis fatuus* (Cambridge, 1731).

lxii Newton, Opticks, 316.

lxx Gregory, 140.

lxxi Christopher Sturm, *The Beauties of Sturm, in lessons on the works of God, and his providence: rendered familiar to the capacities of youth* (London, 1798), 229.

lxxii Bacon, 110.

lxxiii Bacon, 110.

lxxiv Bacon's method is a process of epistemological flux. The attention to the spurious and insubstantial lasts only until such objects are finally cast off. The act of listing objects begins slowly to precipitate one's understanding of a given phenomenon out of an initial suspension of judgment. If uncertainty remains as one collects, it wanes as one begins to discard.

lxxv Bacon, 114-15.

lxxvi Bacon, 122.

lxxvii Bacon, 114.

lxxviii In his table of exclusion Bacon writes: "7. By comparison with burning iron and the flame of sprit of wine (of which heated iron has more heat and less light, the flame of spirit of wine has more light and less heat), once again reject brightness and light." Bacon claims that the comparison between these two phenomena undermines the claim to any direct relation between degree of light and degree of heat insofar as "every contradictory instance destroys a conjecture about a form" (128-9).

Chapter Two

Authority and States of Suspension in Cowley, Rochester, and Milton

I. "Yet still, methinks"

The first stanzas of Abraham Cowley's "Ode to the Royal Society," that most familiar of poetic paeans to the new science, devote themselves to praising Bacon and his followers. The ode's later stanzas, however, gently chastise those praised in the earlier stanzas in order to keep an increasingly confident practice of knowledge production commensurate with its core principle: epistemological openness. Now that Bacon has thrown open the "orchard" (3.18) of the natural world for human contemplation, man can enter a newly discovered terrestrial Eden. "Come," writes Cowley, "enter, all that will, / Behold the rip'ned fruit, come gather now your fill" (3.20-21). After extending this gracious invitation, however, Cowley is quick to qualify it with an expression of doubt, a circumspect pause, a subtle warning: "Yet still, methinks, we fain would be / Catching at the Forbidden Tree" (3.22-23). Cowley admonishes the reader, and the members of the Royal Society, to check their enthusiasm, their desire to know, lest they overstep the limits of sense in their desire to "be like the Deitie" (3.24). Cowley seems acutely aware not only of the danger Bacon acknowledges in his *Novum Organum* when he suggests that man's understanding needs "leads and weights to check every leap and flight," but also of the danger that the Society may not do enough to counter that dangerous impulse in its increasingly confident pursuit of knowledge. In order to combat this propensity that Joanna Picciotto, summarizing Walter Charleton's views, describes as the way "our raging desire of science instills us with 'Impatience' and 'Praecipitancy,' goading us on to constant error and sin," Cowley suspends his readers on the threshold between the newly liberated orchard and the figurative darkness of the pre-Baconian era. In doing so Cowley redirects his readers' attention inward, from an outwardlooking survey of the orchard and its promised fruitfulness to the very nature of their own epistemological tendencies, desires, and limits. I wanted to begin with this brief passage from Cowley's "Ode to the Royal Society" – a poem to which I will return shortly – because it offers a glimpse of the complex relation between the New Science and poetry in the latter half of the seventeenth century. I will argue that for Cowley, Rochester, and Milton the relationship between poetry and the New Science was far from simple; it was a mixture of encomium and attack but reducible to neither. Sharing with Picciotto and Karen Edwards a conviction that Milton and other seventeenth-century poets were not merely campaigning or advocating on behalf of the New Science, but in fact doing the New Science, I argue that the poets I consider in this chapter used their poems not simply as a space in which to respond to the New Science but also as an occasion to take an active role in the epistemological issues raised by it. To varying degrees, Cowley, Rochester, and Milton use poetry not only to advocate for the suspension of judgment but also as an instrument by which such suspension might be both exercised and maintained.

For later seventeenth-century poets, to enlist verse as a means of maintaining attention to truth while grappling with the illusory if not the deceitful nature of poetry was not particularly innovative. Since at least Edmund Spenser and Sir Philip Sidney and, before them, Aristotle and Plato, the potentially deceitful nature of poetry and questions regarding its utility as a tool in the service of truth had been a matter of debate.ⁱⁱⁱ From Sidney's defense of poetic texts on the basis

that they "nothing affirmeth . . . therefore never lieth," iv to Bacon's claim that poetry is but the "shadow of a lie," poetry's position as a complicated intermediary status somewhere between truth and falsehood has been a recurrent critical subject. Although poetry's ability to tell untruths without being deceitful – due to the reader's awareness of a poem's provisional or imaginative status – had been recognized and debated for centuries, the rise of the New Science and a corresponding re-conceptualization of scientific truth's provisional, or at most probable, status served to magnify the importance and epistemological potential of poetry's discursive status. What did change, however, in the late seventeenth century, were the terms in which these debates about the work of poetry were conducted, terms that suggest that the epistemological stakes had been raised and reflect a corresponding intensification of interest in the question of poetry's relation to knowledge production in other fields. We can see the new form these old debates took in the course of the seventeenth century by attending to the figurative objects with which poets sought to articulate and think through poetry's unique epistemological status. The fact that the *ignis fatuus*, as my first chapter has illustrated, drew together numerous tensions, anxieties, and preoccupations made it an attractive object for poets. Cowley, Rochester, and Milton each independently seized on the phenomenon not simply because it was historically available but because it was a preeminent phenomenon within their historical moment – a rich matrix of scientific debates, cultural tensions, and disciplinary divisions.

Each of the poets I discuss in this chapter employ the figure of the *ignis fatuus* in their verse as a figure for error, but error in radically different forms. In his straightforward treatment of the phenomenon in the "Ode to the Royal Society," Cowley employs the phenomenon as a figure for the bad authority he claims Bacon exorcised from natural philosophy and that the Royal Society must continue to hold at bay. Despite his very different poetic career and concerns, Rochester takes aim at some of the same targets as Cowley in his critique of scholasticism and uses the ignis fatuus as a figure for man's faith in reason (another form of bad authority), a figuration that allows for a surprisingly complex examination of the dangerous chasm between the products of reason and the products of something more corporeal and instinctive. To be clear, Rochester ultimately takes aim at the false security of reason because it so easily ends in the revelation of failure and a crippling form of skeptical doubt. Though hardly an advocate of epistemological openness – there's no wavering on the threshold of the garden for Rochester – he nonetheless uses poetry and the *ignis fatuus* as a way to grapple with epistemological problems much like Cowley. Compared to Cowley and Rochester's, Milton's use of the figure is far more complex. In Paradise Lost, Milton uses the ignis fatuus in an elaborate epic simile that ultimately reveals a dangerous false opposition between philosophical and folk readings of the phenomenon. Milton's figure stages a confrontation between competing explanations as a lesson in error and the dangerous ramifications of the presumptuous overconfidence in the belief that one might arrive at a final explanation and stable knowledge. As different as each poet's particular use of the figure initially appears, each seeks to ward off forms of epistemological error (variously conceived) by calling attention to its potential dangers, and each poet uses the poem itself as a means to combat the threat of the *ignis fatuus* it contains.

II. Cowley

While the *ignis fatuus* makes a brief, yet representative appearance in Cowley's "Ode to the Royal Society," which appeared in the 1668 publication of Thomas Sprat's *History of the Royal*

Society, the figure as well as the anxieties it expresses reappear throughout Cowley's poetry. In the second stanza of the Ode, Cowley describes the pre-Baconian state of philosophy as divorced from man's "own business" (2.1), a philosophical practice that, instead of providing "vigorous exercise," led into "pleasant labyrinths of ever-fresh discourse" (2.6). Rather than seeking true knowledge, the pre-Baconian philosopher was "entertained . . . with painted scenes and pageants of the brain" (2.10-12). According to Cowley, Bacon's revolution reveals these deceptively pleasant, imaginary labyrinths to be places of real danger. If the second stanza stresses the "amusements of wanton wit" and the pleasures of superfluous discourse, the third describes the darker, more dangerous aspects of the pre-Baconian era when man was led astray by the false power of authority:

Authority, which did a body boast,
Though 'twas but Air-condens'd, and stalk'd about,
Like some old Giants more Gigantic Ghost,
To terrify the Learned Rout.
With the plain Magick of true Reasons Light,
He chas'd out of our sight,
Nor suffer'd Living Men to be misled
By the vain shadows of the Dead:
To Graves, from whence it rose, the conquer'd Phantome Fled.
(3.1-9)

Here, authority's ghostly form recalls the discourse surrounding the *ignis fatuus*; its "aircondens'd" body "stalk[s] about." Cowley's description of Bacon's mode of vanquishing the foe emphasizes the reference to wandering lights. With "the plain magic of true Reasons light" Bacon is said to have "chas'd [these apparitions] out of our sight," using a weapon (reason's light) that emphasizes the falseness of the light reason serves to banish. No longer misled by the "vain shadows of the dead," the "phantom" authority flees "to graves, from whence it rose." Cowley's account of the Baconian assault on "Ridiculous and senseless Terrors" draws on theories describing the origin of the *ignis fatuus* as a product of putrefaction. In particular, Cowley's reference to "graves" echoes John Swan's claim in *Speculum Mundi* that "these kinds of lights are often seen . . . in church-yards or places of common buriall, because the carcases have both fatted and fitted the place for such kinde of oyly Exhalations," a macabre theory reflected in an alternate name for the phenomenon: "corpse-candle." Insofar as it is thought to be the product of putrefaction, the *ignis fatuus* is an apt metaphor for those dead authorities whom the practitioners of the new science, in their turn to strictly empirical practices, must consign to their graves and disregard even in spectral form.

Cowley's use of the figure of the *ignis fatuus* in his "Ode to the Royal Society" is part of his broader interest in using verse to recognize and warn against the various errors and dangers that threaten to lead an individual, a society, or a nation astray. In fact, Cowley's insertion of the phenomenon in his "Ode to the Royal Society" as a figure for false intellectual authority about the natural world recasts his earlier use of the phenomenon as a figure for bad political authority. In his "Ode Upon His Majesties Restoration and Return" Cowley had attacked Cromwell as a false light who led a benighted nation from its proper course. Viii According to Cowley, Cromwell appeared to the "shaken nation" (7.1) when the country was sunk "in the midst of . . . confused night" (7.5). "Loe, the blest Spirit move'd" writes Cowley:

And there was light. For in the glorious General's previous Ray, We saw a new created Day. We by it saw, though yet in Mists it shone, The beauteous Work of Order moving on. (7.6-10)

According to Cowley, Cromwell brought a fleeting sense of order to a nation in chaos. The lines hint, however, that there is something suspicious about this guiding light, appearing as it does in the midst of a "confused night" and serving only to reveal a world shrouded in "mists." With these subtle references to the danger of the *ignis fatuus*, Cowley hints at the deceptive influence of Cromwell's false light and sets the stage for a far more explicit use of the figure later in the poem. With the monarchy restored, Cowley announces, the nation can now look back in the light of day on the delusive lights that previous led them astray:

The foolish Lights which Travellers beguile, End the same night when they begin; No Art so far can upon Nature win As e're to put out Stars, or long keep Meteors in. Where's now that Ignis Fatuus which e're while Mis-lead our wandering Isle? (10.1-6)

Cowley's use of the *ignis fatuus* in the "Ode on his Majesties Restoration and Return" illustrates the way the phenomenon functioned as a versatile figure not only for epistemological but also for political error, or rather, as a figure that illustrates the disorienting effects of political upheaval. While, as the title of Cowley's "Ode Upon His Majesties Restoration and Return" makes clear, the monarchy has been restored, the country is left nonetheless with deeply disturbing evidence of its vulnerability and its capacity to be misled. Cowley's "Ode Upon His Majesties Restoration and Return" may celebrate a return to the semblance of political stability, but it does so while attesting to the ways that the political disruptions of the revolution linger. In both this ode on the restoration and his "Ode to the Royal Society," Cowley embeds serious words of caution into messages of triumphant praise.

Before concluding I would like to shift from Cowley's explicitly political poems to more narrowly epistemological concerns by examining one final appearance of the *ignis fatuus* in Cowley's poetry, used yet again as a figure for the danger of misdirection in "Reason: The Use of it in Divine Matters." Cowley begins by criticizing those who would rely upon their "fore-fathers" for a knowledge of God rather than their own experience in the world, before going on to criticize those who view "Vision and Inspiration" as proper guides "their course here to direct":

Like senseless Chemists their own wealth destroy, Imaginary Gold t'enjoy. So Stars appear to drop to us from sky, And gild the passage as they fly: But when they fall, and meet th'opposing ground, What but a sordid Slime is found? (2.1-8)

Here Cowley seems to make use of various theories and testimonials about meteors (in general), combining descriptions of falling stars with the boggy genesis of *ignes fatui* out of slime.^x In contrast to those who would rely on "visions and inspiration" to direct their course toward a knowledge of "Divine Matters," Cowley praises those who use reason not to gain full knowledge of the divine, but to arrive at the very threshold of "Faith's Myst'eries."

What each of Cowley's uses of the figure share is their function as a warning within poems that, ultimately, advocate a circumspect epistemological stance. I began this chapter by quoting those lines from Cowley's "Ode to the Royal Society" in which he carefully qualifies his excessive praise of the Baconian project. As Picciotto notes, Cowley "imagines the reformist task of poetry in Baconian terms" and "wants to adapt poetry to the ends of magnifying truth."xi He does this, however, not merely in the way that he redirects poetry from fabulous to scriptural subjects (in his *Davideis*), but also in his use of poetry as an effective means of calling attention to these limits. Cowley's concern in the "Ode to the Royal Society" - "But still, methinks, we fain would be / Catching at the Forbidden Tree" – prompts him, in this poem and elsewhere, to try to establish the proper limits of man's knowledge and the proper means with which to approach truth. XII In "The Tree of Knowledge, That there is no Knowledge, Against the Dogmatists," Cowley claims that by grasping the fruit hanging on the tree of knowledge, "the onely Science Man by this did get, / Was but to know he nothing Knew" (3.1-2) – lines that claim that the precipitous leap toward knowledge (Eve's error in Eden) leads only to a shameful awareness of ignorance. XIII So too in the poem "Reason," having eschewed shortcuts toward knowledge of the divine, Cowley advocates a more tentative approach that leads one "to Heaven's door, and there does humbly keep, / And there through Chinks and Key-holes peep" (6. 3-4), or, as in the "Ode to the Royal Society," to the threshold of the newly liberated garden. By consistently hesitating at the threshold with a "But still, methinks," Cowley's poems meditate on the proper posture one should take toward knowledge.

III. Rochester

John Wilmot, the Earl of Rochester, calls attention to the problematic boundaries between the prodigious and the natural, man and beast, and sense and reason in "A Satyr Against Mankind," a poem that he refers to in later lines as "my paradox" (217). The *ignis fatuus* is at once the first and arguably the most significant extended metaphor in the entire poem. Initially disparaging the five senses as "too gross," Rochester voices his dismay that man must "contrive / A sixth, to contradict the other five" (8-9). Rochester introduces this sixth sense, "Reason," as a paranormal sense contrived by man himself and set in opposition to "certain instincts" — "certain" in the sense of both more specific and more secure, with a more direct (though still "gross") sensory relationship to the external world. Having introduced reason as a figment of man's imagination, Rochester launches into an extended metaphor comparing reason and its effects to the deceptive light of the *ignis fatuus*:

Reason, an Ignis fatuus, in the Mind,

Which, leaving light of Nature, sense behind:
Pathless and dang'rous wandring ways it takes,
Through errors, *Fenny-Boggs*, and Thorny *Brakes*;
Whilst the misguided follower, climbs with pain, *Mountains* of Whimseys, heap'd in his own *Brain*;
Stumbling from thought to thought, falls head-long down,
Into doubts boundless Sea, where, like to drown,
Books bear him up awhile, and makes him try,
To swim with Bladders of *Philosophy*;
In hopes still t'oretake the'escaping light,
The *Vapour* dances in his dazled sight,
Till spent, it leaves him to eternal Night.
(12-24)

Taking as his initial targets those older scholastics and pedantic schoolmen, whose "bladders of philosophy," although apparently full, are in reality hollow, Rochester appears to align himself with the new modes of philosophy practiced by the Royal Society. However, Rochester attacks both the attenuated reason of the schoolmen and the knowledge derived from those "gross senses" with which proponents of the new science set out to understand the world. Rochester deploys the *ignis fatuus* as a metaphor for the very faculty, "reason," which natural philosophers marshaled against supernatural interpretations of phenomena (recall, for example, Cowley's description of Bacon banishing phantoms with the "plain magic of true Reason's light"). Rochester's use of the *ignis fatuus*, moreover, calls attention to the strange way that the natural phenomenon is used as a visual figure for an abstraction, that is to say as a figure for reason rather than, for example, sight. I want to stress the significance of this use of the ignis fatuus as a metaphor for reason instead of for merely erroneous sensations, given that the danger of the willo'-the-wisp lies, for the most part, in sensorial misapprehension. For Rochester, however, the real danger is not sensory misapprehension but rather the rational mind's attempt to grasp the phenomenon; the fault is ultimately one of thought, not of sight. If "sense," for Rochester, is the "light of nature," then "reason" is an unnatural illumination that is not to be trusted. While it may appear like a sixth sense, for Rochester reason is only a spurious faculty premised on a misconception of man's role in the world, a mistaken belief that humans are meant not merely to act in but also understand the world. xv The desire to understand the world – to "o'ertake the escaping light" – rather than simply perceive and take action, is what leads to error. This desire for knowledge is akin to the variety of modes in which, according to Rochester's poem, man is guilty of overstepping his place. Man is a "prodigious creature" (2) largely because by reasoning beyond the senses he thinks himself so. Advocating for a non-prodigious human leaves Rochester arguing, paradoxically, for a non-human human. Man's "supernatural gift" of reason, which "makes a mite / Think he's the image of the infinite" (76-77), not only separates him from the beasts but, paradoxically, from himself.

Rochester is not unique in using the *ignis fatuus* as an allegorical figure for abstract notions, and we have already seen the way that Cowley employs it as a figure for authority. Samuel Johnson, in the mid-eighteenth century, would come to use the phenomenon as a figure for "venturesome pride" in "The Vanity of Human Wishes." Rochester's use of the phenomenon as a figure for reason differs from Johnson's pride, however, not only because it figures something that is generally believed to be a positive force (i.e. reason) but also because it

calls explicit attention to the way in which the phenomenon becomes deceptive, the way in which erroneous thought must be added to the mere perception of the light to make it a danger to the viewer. In this way Rochester's use of the figure transforms Cowley's "true Reason's light" into a symptom of, rather than a cure for, epistemological disease. Rochester makes this clear by presenting reason as a faculty that seeks to go beyond nature and by making the very desire to understand – mankind "frames deep mysteries, then finds them out" – a negative, unnatural impulse. Like the *ignis fatuus*, man is both a natural phenomenon and a prodigy, but Rochester identifies the very faculty that would be capable of distinguishing between the natural and the prodigious as itself a prodigious outgrowth of man's nature. The pleasure of Rochester's poem, indeed the pleasure of paradox more generally, stems from a sudden awareness that the very tools by which we seek to maintain mastery are the ties that bind us as slaves; we may believe ourselves to be chasing the *ignis fatuus* when in fact, Rochester reminds us, we are merely being led astray.

IV. Milton

A more central moment in English literature can scarcely be imagined than those scenes in Paradise Lost where Eve succumbs to the serpent's temptation. Milton's retelling of the biblical fall is a retelling of what might be called the original instance of error. Milton anatomizes the stages by which Eve falls into error as a series of steps in which what appear to be effective defenses against error become in fact the very forces that exacerbate it. The ignis fatuus stands at the core of this scene as the figure that introduces Eve's early movements astray. The figure, however, does more: Milton's complex deployment of it reveals the deeper epistemological dynamics behind Eve's error. By combining natural explanations typical of contemporary natural historical perspectives with vulgar, folkloric explanations grounded in local traditions, Milton calls attention to the way these competing explanations function as a false opposition, both appearing to offer an explanation for the phenomenon in much the same way that Eve believes she can find stable knowledge by tasting the fruit. The figure of the *ignis fatuus* therefore functions as part of Milton's broader argument about the need for epistemological doubt and limits, for an ability to rest content with knowing no more than one knows. As Raphael explains to the first couple, man must rest content with "knowledge within bounds," cautioning them that they must "beyond abstain/ To ask, nor let [their] own inventions hope / Things not revealed" (7.120-22). Milton's treatment of the phenomenon helps us to see that, for the poet, wandering is not an error in and of itself but rather a manifestation of an inescapable epistemological state and that, ultimately, it is when one ceases to wander and rests in presumptuous certainty that one truly falls prey to error. The figure of the ignis fatuus helps us to see Milton's broader epistemological claim in the representation of Eve's error. The phenomenon stands as a representative instance of that class of "specious object[s] by the Foe suborned" (9.361) which, because "God left free the will, for what obeys / Reason, is free" (9.352) may cause one to "fall into deception unaware" (9.362). Elevated to the position of poetic figure, the phenomenon calls attention to this epistemological vulnerability. xvii

Consider in this light Eve's initial reaction to the serpent's powerful speech on the virtues of the fruit when they first encounter one another in Book Nine. Eve responds to the serpent with a seemingly healthy suspicion, stating that his "overpraising leaves in doubt / The virtue of that fruit" (9.615-16). Eve's response is not that the serpent didn't provide enough argument for

the virtues of the fruit – that is to say that the serpent's speech suffered from a poverty of information – but that he provided too much. The serpent's speech does not "leave" an absence; it leaves a dubious excess that Eve exposes in her accusation of "overpraising." Her doubt about the serpent's rhetorical excess have their roots in seventeenth-century suspicions of verbal sophistry and the demands for empirical proof discussed in Chapter One. The well-known champion of plain speaking, Sprat, would have surely approved of Eve's implicit claim that such rhetorical excess is inherently suspect. In his *History of the Royal Society*, recall, Sprat famously claims that:

The ornaments of speaking . . . make the *Fancy* disgust the best things, if they come sound and unadorn'd: they are in open defiance against *Reason*; professing, not to hold much correspondence with that; but with its Slaves, *the Passions*: they give the mind a motion too changeable, and bewitching, to consist with *right practice*. Who can behold, without indignation, how may mists and uncertainties, these specious *Tropes* and *Figures* have brought on our knowledge . . . ? It will suffice my present purpose, to point out, what has been done by the *Royal Society*, towards the correcting of its excesses in *Natural Philosophy*; to which it is, of all others, a most professed enemy. They have therefore been most rigorous in putting in execution, the only remedy that can be found for this *extravagance*: and that has been, a constant resolution, to reject all the amplifications, digressions, and swellings of style: to return back to the primitive purity, and shortness, when men deliver'd so many *things*, almost in an equal number of *words*. xix

In Milton's verse, Eve voices a sentiment akin to Sprat's: clear language is the most effective defense against error. And yet, despite her initial hesitation, Eve ultimately fails to live up to the careful circumspection and suspension of judgment that Sprat praises in the work of Bacon and the new experimentalism more generally.

The terms with which Milton describes Eve throughout Book Nine might seem to cast doubt on a reading of Eve as a model of seventeenth-century empiricism. For example, the narrator of *Paradise Lost* describes Eve as "much deceived, much failing, hapless" (9.404), "our credulous mother" (9.644), who responds, "amazed unwary" (9.614), to the serpent's prodigious appearance. On the other hand, Eve's initial open-mindedness and desire for empirical verification would seem to align her behavior with many of the practices of late seventeenth-century natural philosophy. Picciotto has made the important, clarifying distinction that Eve's behavior exemplifies not the true "experimentalist" but, rather, the "naïve empiricist." "As her symbolic identity dictates she must," Picciotto explains, "Eve behaves like a naïve empiricist, convinced that she can obtain knowledge of things through direct experience of things, regardless of the methods she employs." What Adam refers to as Eve's "strange / Desire of wandering" (9.1135-6) is suggestively close to a desire for *wondering*. Eve's wandering leads her into error because it ultimately takes the form of a dangerous search for certainty. Having eaten the fruit, Eve extols the virtues of empirical inquiry:

Experience, next to thee I owe, Best guide; not following thee, I had remained In ignorance, thou op'nst wisdom's way, And giv'st accéss, though secret she retire. (9.807-10)

Interlacing Eve's dangerous credulity with the language of empirical inquiry, Milton criticizes that overconfident form of empiricism that lays claims to certainty on the basis of experience but radically underestimates its epistemological liabilities and limitations.

While Eve's reaction to the serpent's speech initially appears as a salubrious antidote to the serpent's deceptive wiles, it is precisely her desire to see for herself that prompts her (or provides the excuse) to follow the serpent. In other words, Eve follows up her suspicion of rhetorical excess with a recognizably Baconian, and perhaps praiseworthy, demand to see for herself. However, not having taken Satan's word for it, Eve's healthy skepticism begins to transmute into an unhealthy curiosity, into a reason to follow where the serpent leads. Eve is no longer wandering of her own accord but rather being led by a "guide" (9.808). It is worth noting that, in the lines quoted above, Eve ultimately names *both* experience *and* the serpent as her two best "guide[s]" (9.808). The radical transformation of the seemingly clear-headed, skeptical mode with which Eve questions the serpent's speech into its opposite – the curious, desirous, and delusional impulse that leads Eve to accept the serpent's guidance – is on full display in the extended simile that describes the serpent's appearance and movements in response to Eve's request:

He leading swiftly rolled
In tangles, and made intricate seem straight,
To mischief swift. Hope elevates, and joy
Brightens his crest, as when a wandering fire,
Compact of unctuous vapor, which the Night
Condenses, and the cold environs round,
Kindled through agitation into Flame,
Which oft, they say, some evil spirit attends
Hovering and blazing with delusive Light,
Misleads the amazed night-wanderer from his way
To bogs and mires, and oft through pond or pool,
There swallowed up and lost, from succour far.
(9.631-42)

The simile arises out of a comparison with the serpent's "crest," which appears to brighten as his seduction of Eve begins to succeed. The serpent's movements give physical form to the very epistemological danger Bacon warned against when describing sensory perception as "a labyrinth, where on all sides the path is so often uncertain, the resemblance of a thing or a sign is deceptive, and the twists and turns of nature are so oblique and intricate." Like Bacon's "twists and turns of nature . . . oblique and intricate," the serpent, seen here "rolled / In tangles" (9.631-2), threatens to make what is in fact a complex, dangerous, and "intricate" world "seem straight" (9.332) to Eve. It is within the context of this recognizably Baconian epistemological danger that Milton introduces the figure of the *ignis fatuus*. Beginning with "as when a wandering fire," the simile neatly divides in two at line 638, where Milton introduces a subordinate clause and adds additional depth to the figure. If the first three lines of the simile introduce the figure with an account of its natural causes, the last five deviate into a recitation of

folk notions surrounding the phenomenon. It is no accident that the proto-scientific description ("compact of unctuous vapor, which the Night / Condenses") precedes the folk explanation in Milton's lines. The counter-intuitive (or at least counter-chronological) reversal by which the scientific precedes the folkloric, rather than succeeding it and functioning as a demystifying commentary (as we have seen is frequently the case in natural philosophy), highlights a strange reversal in the general accuracy of the two explanations. We should recall that it is the scientifically erroneous folk tradition that, in this case, most accurately attributes an "evil spirit" to the appearance of the wandering fire. In other words, the vulgar explanation buried at the bottom of the simile comes closest to describing the actual situation in which Eve finds herself: face to face with the preeminent evil spirit. The figure of the ignis fatuus both describes Satan's physical appearance and, given the vulgar folk notions concerning evil spirits that haunt the passage, hints at his devious intentions. At the same time, the sequential subordination of the vulgar explanation to the purported natural causes of the phenomenon mimics the subordination of Eve's vague doubts and suspicions to rational and experiential explanation. The warning implicit in the folk notions is trumped by the seemingly matter-of-fact natural explanation ("compact of unctuous vapor") that would strip the *ignis fatuus* of any demonic danger.

Ultimately, Eve follows the serpent out of a passionate desire for certainty that masquerades as a cool, disinterested curiosity, as seemingly mechanical as the scientific description of "unctuous vapor . . . kindled into fire" with which the simile begins. The language of the simile's first lines hints at Milton's broader analogy between cold things kindled into flame by the condensing pressure of the night, and Eve, a seemingly cool, pure thing bursting spontaneously into fiery sin. It is precisely because Eve believes she is acting in a rational way that she falls into the trap, that she, in the language of the folk tradition, is led into "Boggs and Mires . . . there swallowed up and lost, from succour far." The demonic force of the folk tradition is able, paradoxically, to take hold of Eve precisely by means of the seemingly disinterested, empirical curiosity that is supposed to protect against error. In Eve's fall Milton undermines the notion that a clear-headed empirical practice, when unaccompanied by self-doubt and epistemological circumspection, can protect against a dangerous demonic desire for certainty.

With these stakes in mind, we should consider more carefully the exact manner in which Milton's "night wanderer" is misled within the simile. It may be due, variously, to the act of chasing after what one believes to be a spirit or a spirit one mistakes for a real light. This is to say, we cannot categorically ascribe the night wanderer's mistake to the fault of knowingly chasing the supernatural (trying to catch a sprite), as it might very well stem from a failure to recognize that the chimerical light he is trying to reach is in fact only that – an illusion. The night wanderer's mistake may not be superstitious beliefs or an overactive imagination but an excessive certainty that the light he chases is the real light he believes it to be. In this sense, the danger or the evil spirit might be understood precisely as the disjunction between the real world, the night wanderer's visual perception, and his erroneous beliefs about the relation between the two. This distinction is at once commonplace and, given the stakes of its context in Milton's verse, profound. The error may very well be the belief that the light one sees is the real light toward which one intends to travel, a belief so strong that one is led astray without realizing that one wanders. Picciotto notes that Eve's curiosity was, in the seventeenth century, identified with a "speculative knowledge . . . understood as an accomplice of naïve empiricism, the easy acceptance of undiagnosed empirical evidence that always turned out, on closer inspection, to be the projection of the observer's fallen desire." For Eve, seeing for herself is not a remedy for excessive verbal description – the serpent's "overpraising" – but rather the same thing, insofar as

it instills in her an equally excessive confidence in her ability to investigate and come to a thorough knowledge of what she sees. In this crucial moment before the fall, Milton draws his reader's attention to a false distinction between two explanations of the *ignis fatuus*. Indeed, the phenomenon is a rich figure to use at this moment precisely because of its ability to flicker between the seemingly discontinuous discourses of folklore and natural history. For Milton both explanations are dangerous precisely because they function as false alternatives for one another; they are, in effect, two versions of the same dangerous overconfidence. Not simply a diatribe against error, the *ignis fatuus* is also a deeper meditation on the very dynamics of error. While he uses the phenomenon as a figure for the serpent's deceptive powers, a figure for a deceitful and destructive form of wandering astray, Milton is far from oblivious to wandering's potential productivity. Eve's error is not so much that she wanders but that she is *led* to eat. The act of eating and the error it represents takes place only at the point when wandering, that physical manifestation of mental wondering or suspension of judgment, ceases.

Notes

¹ Abraham Cowley, "Ode to the Royal Society," in *The English Writings of Abraham Cowley: Poems*, ed. A. R. Waller (Cambridge: Cambridge University Press, 1905). All subsequent citations refer to this edition.

ii Picciotto, 227.

iii Recall that Plato would banish poets from his Republic: "You can see how right we'd be to refuse [the poet] admission into any community which is going to respect convention. . . . He destroys the rational part by feeding and fattening up this other part . . . he establishes a bad system of government in people's minds by gratifying their irrational side, which can't even recognize what size things are . . . by creating images, and by being far removed from truth." Plato, "Republic," in *The Norton Anthology of Theory and Criticism*, ed. Vincent B. Leitch (New York: W. W. Norton & Company, 2001), 78.

Philip Sidney, *The Defense of Poetry* (Cambridge: Hilliard and Brown, 1831), 54. A fuller quotation is provocative: "[To rebut the claim that poets] should be the principal liars, I answer paradoxically, but truly, I think truly, that of all writers under the sun the poet is the least liar; and though he would, as a poet can scarcely be a liar. The astronomer, with his cousin the geometrician, can hardly escape when they take upon them to measure the height of the stars. How often, think you, do the physicians lie, when they aver things good for sicknesses, which afterwards send Charon a great number of souls drowned in a potion before they come to his ferry? And no less of the rest which take upon them to affirm. Now for the poet, he nothing affirmeth, and therefore never lieth. For, as I take it, to lie is to affirm that to be true which is false; so as the other artists, and especially the historian, affirming many things, can, in the cloudy knowledge of mankind, hardly escape from many lies. But the poet, as I said before, never affirmeth. The poet never maketh any circles about your imagination, to conjure you to believe for true what he writeth" (54).

^v Francis Bacon, "Of Truth," in *The Works of Lord Bacon*, vol. 1. (London, 1838), 261. Elsewhere in the same essay Bacon writes: "One of the fathers, in great severity, called poesy, *vinum daemonum*; because it filleth the imagination, and yet it is but the shadow of a lie. But it is not the lie that passeth through the mind, but the lie that sinketh in, and settleth in it, that do the hurt" (261).

vi These "terrors" are "senseless" insofar as they are not based purely on the senses and, therefore, devoid of merit.

vii John Swan, Speculum Mundi (Cambridge, 1635), 94.

viii Cowley, English Writings.

ix Cowley, English Writings.

^x Recall Gibson's mid-eighteenth-century account: "some that have been catched [sic], have been found to consist of a shining, viscous matter, like the spawn of frogs" (Gibson, 181).

xi Picciotto, 388.

xii "They have escaped the prejudices that used to arise from authority, from inequality of Person, from insinuations, from friendships; but above all, they have guarded themselves against themselves, lest the strength of their own thoughts should lead them into error" (Sprat, 92).

xiii Cowley, "The Tree of Knowledge. That there is no Knowledge. Against the Dogmatists," in *English Writings*.

xiv John Wilmot, "A Satyr Against Mankind," in *Poems by John Wilmot, Earl of Rochester*, ed. Vivian De Sola Pito (Cambridge: Harvard University Press, 1953).

xv Rochester does note, later in the poem, that "whilst 'gainst false reas'ning I inveigh,/ I own right *Reason*, which I wou'd obey:/ That *Reason* that distinguishes by sense,/ And gives us *Rules*, of good, and ill from thence" (98-101). Here reason functions as a natural outgrowth of experience, something which one "obey[s]" and that provides "Rules," rather than a means of epistemological empowerment.

xvi Johnson notes how "rarely reason guides" (11) mankind in a world where emotions and impulse, "Hope and fear, desire and hate, / O'erspread with snares the clouded maze of fate / Where wav'ring man, betray'd by vent'rous pride, / To tread the dreary paths without a guide, / As treach'rous phantoms in the mist delude, / Shuns fancied ills, or chases airy good" (5-10). Samuel Johnson, "The Vanity of Human Wishes," *The Poems of Samuel Johnson*, ed. David Nichol Smith and Edward L. McAdam (Oxford: The Clarendon Press, 1962.)

But God left free the will, for what obeys Reason, is free, and reason he made right, But bid her well beware, and still erect, Lest by some fair appearing good surprised She dictate false, and misinform the will

Firm we subsist, yet possible to swerve, Since reason not impossible may meet Some specious object by the foe suborned, And fall into deception unaware." (*Paradise Lost* 9.351-62)

possible for skepticism to exist in Eve's prelapsarian mind? Is not skepticism, doubt, or, more strongly phrased, wariness of deceit, a product of our postlapsarian condition? While this wariness is due in part to the fact that both Adam (and Eve, in turn) have been warned about the danger of an intruder, the warning is itself a response to the possibility of a demonic addition to Eden. Eve's statement makes clear that it is an effect of excess, of the superadded, and arises with the entry of the serpent. Like the "overpraise" of his rhetoric, the serpent is himself something extra, something excessive. In this sense, Eve's particular mode of skepticism might be seen not only as a defense but a demonic effect, a byproduct of Satan's entry into the garden.

xix Sprat, 111-3.

xx Picciotto, 475. Drawing on broader Baconian claims about the human propensity to rush to judgment and avoid uncertainties, Picciotto claims that Eve's failure grew from the desire for certainty: "What the body hungers for above all is to rest in certainty" (475). Picciotto draws a contrast between Eve and what she calls the Adamic investigator. If Eve rushes to judgment, the Adamic investigator delays and dwells in uncertainty: "delay . . . dominated experimental procedure; by striving to remain indifferent in the heat of investigation, forestalling the subjective satisfaction of certainty for as long as possible, the investigator safeguarded his innocence and imparted it to the knowledge he produced" (468).

xxi Milton weaves together "wander" and "wonder" throughout the book: at another point, the fruit is "Wondrous indeed, if cause of such effects" (9.650). Addressing Milton's advocacy of "wandering" Picciotto writes that, "railing against scholastic debates," the young Milton "urged his classmates to put down their books and 'let your eyes wander' over maps and the physical world, gleaning real knowledge of the nature of stones, herbs, stars, and meteors; the study of maps, history, and nature all come together in an ocular 'wandering' ('oculis peramubulare'). Describing observation as a form of movement, Milton clothes contemplation in the language of action" (406-7).

xxii Bacon, The New Organon, 10.

xxiii Picciotto, 229.

Chapter Three

Ambivalent Light and the Potential of Imagination in Thomson, Goldsmith, and Collins

In the fairyland of fancy genius may wander wild; there it has a creative power and may reign arbitrarily over its own empire of chimeras. The wide field of nature also lies open before it, where it may range unconfined, make what discoveries it can, and sport with its infinite objects uncontrolled, as far as visible nature extends, painting them as wantonly as it will.¹

- Edward Young, Conjectures on Original Composition (1759)
- I. "incredibilities . . . more acceptable than truth"

In his 1774 *History of English Poetry*, Thomas Warton mourns the way in which a revolution in epistemological practices has stripped poetry of the power it once found in romance. "Romantic poetry," Warton writes, "gave way to the force of reason and inquiry." According to Warton, this transition from romance to reason entailed a number of trade-offs:

The lover of true poetry will ask, what have we gained by this revolution? It may be answered, much good sense, good taste, and good criticism. But in the meantime, we have lost a set of manners, and a system of machinery, more suitable to the purpose of poetry, than those which have been adopted in their place. We have parted with extravagances that are above propriety, with incredibilities [sic] that are more acceptable than truth, and with fictions that are more valuable than reality.ⁱⁱⁱ

As I noted in my introduction, in his "False Themes and Gentle Minds" Geoffrey Hartman, addressing eighteenth-century poetic engagements with the loss Warton notes, argues that romance in fact survived the rationalizing force of the Enlightenment as an atrophied presence in British poetry and was able to do so precisely because it had been weakened to the point where it was a pleasurable surmise rather than a real threat. In doing so, Hartman contends, poetry after Milton began to reflect a "freer attitude of the mind toward the fictions it entertains." Whereas Hartman's argument, borrowing a phrase from William Collins, centers on the ways in which poets seized on "false themes" that raised the disjunction between what one could (with false surmise) believe and what one supposedly knew to be true about the world, I show how poets also seized on real objects, such as the *ignis fatuus*, that exposed the disjunction between the affective plentitude surrounding particular natural phenomena and the affective paucity of a given phenomena's scientific explanation, an affective imbalance captured by Keats's well-known complaint that "philosophy" works to "unweave the rainbow" and enlist what was once "awful" "in the dull catalogue of common things."

In the following pages I discuss how James Thomson and Oliver Goldsmith, two poets who have not been traditionally associated with a poetics of epistemological disruption, nevertheless grapple with the role of poetry in a world of rational inquiry, and how a third poet, William Collins, makes this epistemological disruption explicit. While Thomson gained significant praise for the technical accuracy of the natural history in his verse (in John Aikin's Essay on the Application of Natural History to Poetry and Thomas Percival's On the Alliance of

Natural History, and Philosophy, with Poetry, for example), I hope to show how Thomson's treatment of the *ignis fatuus* (and other phenomena) not only calls attention to epistemology but also employs poetry as a medium through which one might mitigate the danger of epistemological overconfidence by attending to the limits and failures of knowledge. Thomson performs this intervention through a poetic practice that simultaneously absorbs and disrupts readerly absorption, creating a kind of mobile attention, one that is alternately seduced by various poetic allurements and yet continually unsettled. Employing the quick tempo of the ballad form that contrasts with the meditative pace of Thomson's blank verse, Goldsmith's poem, "Edwin and Angelina," provides a useful comparison with Thomson insofar as it similarly undermines certainty and instills an appreciation for epistemological openness, by means of the careful management of readerly attention. In so doing, both Thomson's and Goldsmith's poems take part in a larger mediating practice that subtly, but persistently, illustrates that a central experience of the Enlightenment was not *knowing* but rather an active form of *not-knowing*, an epistemological unease that Collins ultimately equates with poetry itself.

II. Thomson

The Seasons offers an extended meditation on the ability of poetry both to track changes in and to mediate between epistemological states. The poem is a careful description of natural appearances in verse form, a subtle examination of the practice of reading verse, and an exercise in experimental poetics that reflects both on the way one reads and the way one comes to know the world. I hope to show not only that Thomson views epistemology and its problems as suitable subjects for poetry but also that he uses poetry as a corrective epistemological exercise. He does so, ultimately, to position the poet and the work of poetry as a useful intermediary between two states: an overconfident certainty and a debilitating doubt. Examined carefully, Thomson's poetry both acknowledges a desire to understand and tempers that desire with a countervailing ability to remain cognitively detached. As Thomson envisions and employs it, poetry is at once an *ignis fatuus* that draws the reader into a state of belief and an antidote that dissipates such a dangerous state of absorption. Using poetry in this way, Thomson cultivates in his readers a form of mobile attention that amounts to a poetic epistemology.

The first of two passages from "Autumn" that I would like to consider commences with the setting of the sun, the cooling of the earth, and the appearance of rising mists, which presage a state of sensory disorientation. "Where creeping waters ooze," Thomson writes, "Where marshes stagnate, and where rivers wind, / Cluster the rolling fogs, and swim along / The duskymantled lawn" (1084-88). Thomson's verse, often dense with allusions to other poems, employs a particularly condensed Miltonic mode in this description of evening. Here the reader encounters the same atmospheric effects Milton details in *Paradise Lost* when the Serpent appears to Eve in the metaphoric mist of the *ignis fatuus*. Recall how Milton's lines blend the natural historical and the folkloric in a medley of competing explanations:

As when a wandring fire Compact of unctuous Vapour, which the night Condenses, and the cold environs round, Kindled through agitation to a flame, Which oft, they say, some evil spirit attends Hovering and blazing with delusive light, Misleads the amazed night-wanderer from his way To bogs and mires, and oft through pond or pool, There swallowed up and lost, from succour far. (9.634-42)

Thomson transforms Milton's "Compact of unctuous vapour, Which the Night / Condenses and the cold environs round" into "Humid evening . . . / In her chill progress, to the ground condensed/ The vapours throw" (1083-85). The effects of this Miltonic allusion are threefold. First, it reveals Thomson's poetic inheritance, insofar as the reader is aware, or partially aware, of the description's Miltonic precursor. Second, the passage's vague familiarity (it is after all a rewriting and not a direct quote) creates an uncanny and disorienting effect; like the rising mist, Milton seems semi-present. Finally, Thomson's borrowing from Milton foreshadows the appearance of the *ignis fatuus* that will, in Milton's phrase, be "kindled through agitation to a flame" sixty-four lines later in Thomson's poem. The overall effect of the Miltonic echo is a subtle thickening of the poetic medium that evokes in the reader an awareness of the poem's own atmospheric effects, the presence of unseen forces mediating the reader's clarity of vision.

Whereas the initial lines on evening create an uncanny atmosphere that draws the reader's attention to the poetic medium itself, the ensuing lines on the telescope make Thomson's interest in the theme of mediation explicit. The role of mediation has been central to a number of critical engagements with Thomson's verse. In particular, Kevis Goodman's analysis of the "microscopic eye" and its associated anxieties in Thomson's poetry is vital to my reading of the poet's interest in lenses and other mediating technologies as figures for the work of the poem itself. In Georgic Modernity and British Romanticism, Goodman argues that the specter of the microscopic eye haunts Thomson's poetry as a mediating technology that threatens to erase the protective limitations of human perception. viii In terms that are related to the argument I will shortly be making about the dangers of absorption in the poem, Goodman writes that the microscopic eye in Thomson "is not only . . . an eye for detail but also the fantasynightmare of what it would be like if we were to live in such a state of enhanced sensation that our eyes could not help but function as acute, and non-detachable, microscopes, with our ears and sense of touch simultaneously amplified." Goodman's larger argument that the poem's own mediation counters this threat in its ability to "exercise restraint, to regulate the entrance of information from the senses and, by limiting the touch of the real, maintain order in the 'Presence room' [of the mind]" is akin to my focus on the poem as an intervention between the conflicting forces of total absorption and total detachment. There is, however, more to be said about Thomson's interest in the problems of knowledge whispering beneath the cacophony of perceptual form, insofar as he is interested in the ability of poetry to play with visual objects in a way that amplifies and articulates those problems. As evening descends, Thomson describes the rising of the moon and its topography as viewed through a telescope. Thomson's focus on the telescope once again evokes a Miltonic precursor: the famous passage from Book One of Paradise Lost where Milton describes Satan's shield:

> like the Moon, whose orb Through Optic Glass the Tuscan Artist views At Ev'ning from the top of *Fesole*, Or in *Valdarno*, to descry new Lands,

Rivers or Mountains in her spotty Globe. (1.287-91)

Like the Miltonic verses it echoes, Thomson's telescope calls attention to poetry's telescopic ability to bring distant objects near:

Meanwhile the moon
Full-orbed and breaking through the scattered clouds,
Shows her broad visage in the crimsoned east.
Turned to the sun direct, her spotted disk
(Where mountains rise, umbrageous dales descend,
And caverns deep, as optic tube descries)
A smaller earth.
(1088-93)

Thomson links the work of the "optic tube" to the work of the poem itself. Just as it is through the lens of the telescope that one "descries" the detailed features of the moon, so too does the poem allow for a form of telescopic vision, which comes from the poem's ability to shift and direct focus, to pause and approach, and in general to control the reader's distance from the object under examination. Thomson trains his reader's gaze on the act of mediation through the repetition of Milton's own use of "spotted." Thomson's further decision to substitute the term "disk" for Milton's "globe" calls direct attention to the disk shaped lens that is integral to the work of the telescope. In other words, Thomson emphasizes Milton's mediation on mediation by focusing on the lens within the optic tube. We might go so far as to say that in doing so he smudges the lens, making it (like the moon) "spotted" so that the reader is unable to ignore its mediating presence.

Having drawn attention to the poetic medium, Thomson shifts his focus to problems stemming from sensory perception and misinterpretation. With the moon occluded by clouds, Thomson describes the brightness of the stars and the sudden appearance of a meteor shower. Here Thomson's passage shifts into a darker phase. From a work of astronomical description, the text turns to an examination of the mass's psychological reactions to unusual meteorological phenomena:

Oft in this season, silent from the north A blaze of meteors shoots – ensweeping [sic] first The lower skies, they all at once converge High to the crown of heaven, and all at once Relapsing quick, as quickly re-ascend, And mix and thwart, extinguish and renew, All ether coursing in a maze of light. From look to look, contagious through the crowd, The panic runs, and into wonderous shapes The appearance throws – armies in meet array, Thronged with aerial spears and steeds of fire. (1108-18)

The crowd's panic results from an over-investment in the significance of the visual analogy between the celestial phenomenon and the weapons of war. Because the celestial display -Thomson has the *aurora borealis* in mind – looks like shining weapons they are taken as "armies in meet array," and as portents of armed conflict. xi Thomson's lines mimic the crowd's ready assent to the suggestions of their senses (the shower resembles armies) in the omission of the word "like" in lines that flirt with simile but, using the mute hyphen, draw instead a simple equivalence. Indeed, the hyphen (a colon in early printings of the poem) marks the very location of error, the place where the imagination oversteps its boundaries and converts visual similarities into identities. Just as Thomson draws attention to the dynamic of the error by refusing the overt simile, so too he draws attention to the dynamic behind the transmutation of one visual appearance (the aurora borealis) into the sign for another (armies), by mimicking the visual substitution on an auditory level in the shift from "appearance" to "aerial spears." These visual and acoustic echoes mirror the transformation of simple celestial phenomena into "wonderous shapes" within the human mind. The poem registers the way in which the mind reshapes the phenomenon and mirrors that reshaping in its description of the phenomenon itself: the aurora borealis and the perceiving mind are equally amorphous.

Having identified the basic error behind the crowd's misreading, Thomson describes their escalating fears. By elaboration, the crowd compounds the simple error by refusing to maintain the fine line between similarities and instead collapsing the distance into an erroneous identity. As they "scan the visionary scene," in a process that cannot but suggest the reading of poetry, the crowd pursues its undisciplined misreading of appearance:

On all sides swells the superstitious din, Incontinent; and busy frenzy talks
Of blood and battle; cities overturned,
And late at night in swallowing earthquake sunk,
Or hideous wrapt in fierce ascending flame;
Of sallow famine, inundation, storm;
Of pestilence, and every great distress;
Empires subversed, when ruling fate has struck
The unalterable hour: even nature's self
Is deemed to totter in the brink of time.
(1123-32)

What begins as a simple miscategorization of sensory similarity quickly threatens to "subverse" not only human empires, but also the very empire of nature. The prodigious misreading of celestial phenomena undermines "even nature's self," precisely by undermining nature's *evenness*, the fundamental consistency of nature's law. Nature "totter[s]" because the crowd erroneously reads a celestial appearance. Consumed by the appearance of the phenomenon and over-invested in their own misreading of the sky, the crowd goes astray.

In the final lines of the passage, however, Thomson shifts his focus from a negative to a positive model of reading. If the crowd's main fault is its failure to attend to the underlying errors in their reading practice, Thomson abruptly claims it is "not so" with "the man of philosophic eye / And inspect sage" (1133-34). The philosopher reads differently because he remains aware of both the phenomenon and his own reading practice; he inspects the phenomenon differently because he also engages in an act of sagacious *introspection*. Alongside

the description of what the man of philosophic eye sees, Thomson includes his reaction to what he sees:

the waving brightness he Curious surveys, inquisitive to know The causes and materials, yet unfixed, Of this appearance beautiful and new. (1134-37)

With the exception of a "waving brightness," the lines focus entirely on the philosopher's reactions rather than the objective phenomenon. Thomson's placement of the phrase "yet unfixed" is particularly important as a conceptual hinge between the phenomenon and the philosopher's reaction. The clause is syntactically ambivalent – syntactically "unfixed," one might say. While "yet unfixed" seems at first to have "causes and materials" as its referent, it also functions as a description of the philosopher who is "inquisitive to know." The sense that "yet unfixed" may well refer to the philosopher's state of mind is strengthened by the way Thomson repeatedly draws attention to the philosopher's fluid mental states, identifying him as having a "curious" and "inquisitive," reaction to an "appearance beautiful and new." The first two adjectives describe his perspective while the last two describe aesthetic rather than material properties of the phenomenon. "Yet unfixed" nestles between these adjectives describing the philosopher's inner state while functioning syntactically as both a description of the amorphous physical phenomenon and the philosopher's mind. The philosopher thus straddles something of a divide: he shares with the crowd a desire to know but differs in his ability to remain in a state of unknowing. As the description of his perceptual process makes clear, he remains unfixed or mobile precisely because of his ability to attend to the internal working of his mind. The philosopher is not inherently different from the crowd – he is still drawn to the phenomenon – but he has a distinctly different reading of it and, more importantly, a distinctive awareness of his own act of reading. Addressing the contrast between these two modes of apprehension in another meteoric passage of *The Seasons*, Arden Reed poses two questions:

Does [Thomson] intend for the reader to choose the role of philosopher over that of the herdsman and look through 'meteors' to the clarity and harmony beyond? Or does he exploit Newton, so that, by leaving the demonstration of unity to the philosopher, Thomson frees himself (and his reader) to indulge the want of method and look at 'meteors' more attentively than any other Enlightenment poem? ^{xiii}

While Thomson's passage ends with the philosopher's gaze as a kind of corrective to the wild speculations of the crowd, Thomson nonetheless leaves the reader with an experience of the phenomenon bifurcated between the two positions. Furthermore, as Reed points out, and as "yet unfixed" suggests, the moment of total knowledge is "deferr[ed] to a point outside the poem." The epistemological state Thomson's passage induces is in fact a mobile space of not-knowing, or, at the very least, knowledge deferred.

The passage that immediately follows begins with another shift, as Thomson describes the deepening darkness that obscures the familiar, visible world. Amidst this dark, unfamiliar world, Thomson places a wandering "benighted wretch" searching in vain for the guiding light of human habitation. Taking note of the similarities between Thomson's and Milton's treatments,

Ralph Cohen writes that although "both give accurate scientific descriptions of the phenomenon [the *ignis fatuus*] to illustrate the dangers of a God-created environment . . . Thomson establishes the secret influence of nature upon man" such that the interaction between man and phenomena "and the procedure of being submerged embody Thomson's sense of a nature that man cannot predict." Thomson's description of the *ignis fatuus* focuses on the way it breaches the boundary between inner and outer worlds. Thomson writes:

Drear is the state of the benighted wretch Who then bewildered wanders through the dark Full of pale fancies and chimeras huge: Nor visited by one directive ray From cottage streaming or from airy hall. (1145-49)

Thomson here introduces a figure who might just as easily have been a member of the previous passage's superstitious crowd, "benighted" both by night and by ignorance. He plays on this dual sense of darkness to emphasize the relation between the wanderer's inner and outer states and to begin blurring the two. Consider, in this regard, the syntactical ambiguity of the adjective "full." Reading Thomson's line, it is unclear whether "the dark" or the "benighted wretch" is "full of pale fancies and chimeras huge." This ambiguity is, of course, precisely Thomson's point: the wretch's inability to distinguish between his internal states and his perceptions of the external world.

It is at this moment of interpenetration between the wretch's external perceptions and internal states that Thomson introduces the *ignis fatuus*:

Perhaps, impatient as he stumbles on, Struck from the root of slimy rushes, blue The wild-fire scatters round, or gathered, trails A length of flame deceitful o'er the moss; Whither decoyed by the fantastic blaze, Now lost and now renewed, he sinks absorbed, Rider and horse, amid the miry gulf – (1150-56)

Long before the wretch is literally "absorbed" in the "miry gulf," he is absorbed by the *ignis fatuus*. "Decoyed by the fantastic blaze," the wretch fails to distinguish between a false light and the "directive ray / From some cottage streaming or airy hall" (1149). Although the wretch's first error appears to be an inability to distinguish between internal fears, or "pale fancies," and the external world, his encounter with the *ignis fatuus* suggests that his error is an equally "impatient" misidentification of the "flame deceitful" with a guiding light. The "impatient" wretch too quickly believes the light, not fantastic, but domestic. He does not follow the *ignis fatuus* because of its fantastic nature, but because it is a "decoy," a false version of the "directive ray" from "cottage streaming or from airy hall"; he misinterprets the strange as the familiar. If his first error consists in projecting internal fancies onto outward appearances, his second consists in too quickly jumping from outward appearances to internal belief. The wretch's mistake is, in both cases, a problem of excessive belief, of being both absorbed by the

phenomenon and absorbed in his own thinking. This inability to distinguish between the internal and the external world results in a fitting demise: his figurative absorption leads to his literal end as he "sinks absorbed . . . amid the miry gulf" (1155-56).

Thomson envisions the man's family thrown into a similar state of deranged belief over the disappearance of their husband and father: "from day to day, his pining wife / And plaintive children his return await, / In wild conjecture lost" (1157-59).xv The family's state of "wild conjecture" stands in marked contrast to the philosopher's meditative, "unfixed" state of mind. Here, conjecture suggests not a state of open-mindedness or philosophical hypothesizing, but rather a deep investment in specific, if transient, beliefs. The family may "his return await," but they do so having already lost him forever in their "wild conjecture." Just as the ambiguity of the adjective "full" marked the difficulty of distinguishing between the wretch's internal states and external perceptions earlier in the passage, so here the syntactical ambiguity of the word "lost" does a similar kind of work. In addition to being a statement about the wretch's initial error (he lost his way as a result of his wild conjectures), the phrase also suggests that the family is lost in their wild conjectures about his fate and that, despite awaiting his return, they have already lost him in conjectures about his demise. The man is lost, the family is lost, and the family imaginatively loses the man repeatedly through various forms of excessive belief. Like the credulous crowd gazing at the aurora borealis, they are the victims of unrecognized epistemological errors.

In contrast to these wild conjectures, Thomson ends the passage by abruptly breaking the line and radically changing the reader's imaginative direction. Thomson disrupts the apparent conclusiveness of the final phrase "in wild conjecture lost," by setting off on a new, starkly different trajectory halfway through the line:

At other times, Sent by the better genius of the night, Innoxious, gleaming on the horse's mane, The meteor sits, and shows the narrow path That winding leads through pits of death, or else Instructs him how to take the dangerous ford. (1159-64)

Suddenly shifting from the effects of the deceitful *ignis fatuus* Thomson introduces the closely associated figure of the *ignis lambens*. Unlike the *ignis fatuus*, perpetually out of reach and dancing like wild conjectures, now here and now there, the *ignis lambens* "sits," and shows a "narrow path." Although the "him" in the final line could refer to the wretch's horse, the repetition of various masculine pronouns and possessive adjectives in the preceding lines (1150, 1155, 1157, 1158) suggests that it refers to the rider as well. Deploying the *ignis lambens* to instruct the wretch, Thomson effectively resurrects him from the mire. Having done so, he abruptly begins the next section with a description of dawn: "The lengthened night elapsed, the morning shines / Serene in all her dewy beauty bright / Unfolding fair the last autumnal day" (1165-67). Thomson's abrupt retrieval of the wretch and the sudden shifts he makes within the final lines of the passage differ in significant ways from the pathological variety of transient belief evident in the "wild conjecture" of the grieving family. Thomson's vital use of "perhaps" seeks to induce a particular state of epistemological openness.

While interpreting these two passages, I have made frequent reference to abrupt shifts, transitions, and conceptual contrasts – in other words, to Thomson's attention to changes in physical, perceptual, and psychological states. Having looked closely at the details of each section, I now want to consider their overall structure and the relationship of this structure – the joints, shifts, and breaks – to the central ideas we have identified in the passages: the appeal and danger of absorptive reading. Here I wish to argue that Thomson not only describes positive and negative reading practices as models for much more general epistemological processes but also explores poetry's ability to call attention to and intervene in those processes. Thomson's poem does so by encouraging moments of absorptive reading, while calling attention to and disrupting total absorption through a controlled deployment of what we might call "unfixing" mechanisms that create a form of mobile attention. Simply put, Thomson shifts rapidly between striking images that announce themselves as images. Phrased more abstractly, Thomson appears to offer knowledge for the sole purpose of unleashing uncertainty and flux on the deceptively stable and certain. It is in this way that the poem performs its work as an epistemological exercise in mobile attention.

The poem's own liberating and generative shifts between states stands in contrast to images of unhealthy absorption in the passages. The very figure of the "crowd" is an image of individuals melded into a single entity through which "from look to look" contagion passes. Just as the crowd constitutes a negative, absorptive formlessness, so too does Thomson's description of the night emphasize its ability to overshadow distinctions, to drown out particulars, and to cast the world into a muddled gloom: "Now black and deep the night begins to fall / A shade immense" (1138-39). The multifarious objects visible by day lose their distinction within the capacious immensity of this "shade." Like the crowd, night for Thomson is a figure for a threatening lack of separation in which "order confounded lies" and "distinction [is] lost" in "One universal blot" (1141-43). As the final noun "blot" suggests, Thomson may have in mind here a threat that not only exists in the world but also in the work of writing. Just as night threatens to drown out distinctions, so the poem could subsume the reader in its "universal blot." Thomson makes the identification between the reading of the world described in the poem and the act of reading the poem itself explicit when he deploys the verb "scan" to describe the crowd's act of observation: like the readers of the poem "they scan the visionary scene" (1122). Thomson maps the threat of an absorptive reading of the world onto the practice of reading the poetic text.

In opposition to this subsuming force, both in the world and in the act of reading poetry, Thomson deploys a careful series of breaks, shifts in register, and syntactical transitions in order to redirect the reader's attention and counter the absorptive force of his poem's images. One of the most visible of these shifts is Thomson's introduction of the "man of philosophic eye." As I discussed above, this figure interrupts the crowd's descent into sheer panic just at the moment that it threatens to undermine the very foundation of nature's law, when "even nature's self / Is deemed to totter on the edge of time" (1131-32). Thomson stops this impending fall (yet another boggy threat, this time threatening the very evenness of nature) by redirecting the reader's attention with the abrupt claim: "Not so the man of philosophic eye" (1133), and metrically emphasizes this narrative halt with the startling initial trochee. The figure's philosophic "eye" distinguishes him from the crowd and marks his independence as an individual subject or *I* who embodies a mode of reading that remains independent of that which it surveys.

Thomson's interest in cultivating a particular reading that will allow his audience to remain cognitively mobile is manifest in other moments where breaks or transitions redirect the

reader's attention. Thomson's description of the "benighted wretch" balances the description of a dangerous absorption with a series of transitions enabling a philosophical gaze, a view "yet unfixed" on the engrossing scene. Having introduced the wretch, Thomson offers a series of imaginative options beginning with the conjecture that "Perhaps . . . the wild-fire scatters round" (1150-52), before suggesting, "Or, trails a length of flame deceitful o'er the moss" (1152-53), then moving to a view of the wretch's family "in wild conjecture lost" (1159), before finally shifting once again to an entirely different scenario: "at other times," the meteor "instructs him how to take the dangerous ford" (1159-64; italics added). These phrases function as fulcrums that shift the reader's imaginative process. Each calls attention to the poet's ability to control the reader's attention, break the reader's investment in each descriptive scenario, and cultivate a degree of imaginative mobility. Thomson emphasizes the conceptual power of these transitions in the final stage of the series. The introduction of the phrase "at other times," which frees the wretch from his boggy grave and sends him on his way, breaks into the line of verse and interrupts the mourning family's (and the reader's) terrible imaginings: "While still from day to day, his pining wife / And plaintive children his return await, / In wild conjecture lost. At other times / Sent by the better genius of the night" (italics added). Thomson is, of course, that "better genius" who in the role of poet furnishes both the wretch and the reader with the guiding light that will allow them to escape a dangerous absorption and "instructs" them how to take their way. Occurring on a number of levels, all of these shifts effectively forestall the danger of remaining in any one position in the text and allow for movement towards the final lines in which the benighted wretch is imaginatively retrieved. In doing so, Thomson links the fate of the wretch to the fate of the reader, who "decoyed by the fantastic blaze" must find a way to take the "dangerous ford" and keep moving towards home. Having advanced the "man of philosophic eye" as an ideal model for reading a misty and mysterious world in which appearances and mental states are equally amorphous, Thomson presents the reader with a text designed to cultivate a detached and introspective mode of reading. In this way, Thomson's poem inflames a desire to believe, acknowledges the allure of absorption, and tempers those drives with a carefully managed poetic exercise that cultivates in his readers the ability to maintain an uneasy - an "unfixed" - state of suspended judgment.

Thomson's use of the *ignis fatuus* runs counter to the way many of his contemporaries understood and praised his verse as a model of poetry enlightened by science. In An Essay on the Application of Natural History to Poetry, Aikin encourages poets to make use of the novelty afforded by scientific subjects to revive an atrophied poetics, and he champions Thomson as the forerunner of this mode. Science, for Aikin, promises to restore the fertility of the poetic ground: "While the votary of science is continually gratified with new objects to his view, the lover of poetry is wearied and disgusted with a perpetual repetition of the same images, clad in almost the same language."xvii Aikin's essay does not, however, take into account the transmutation scientific objects undergo in their poetic appropriation and revision. What attracts the poet to the ignis fatuus is not the same thing that attracts the natural philosopher. "The scientific passages" of Thomson's poem, writes Ralph Cohen, "convey the extent and limits of knowledge, the variety of the world that is scientifically valid and the unexplained and perhaps unexplainable mysteries." Furthermore, as Cohen explains, the poet, "while the distinguishing between the scientifically informed and the scientifically ignorant" nonetheless "realizes the limitations of all knowledge.", while Thomson draws upon the language of putrid matter and unctuous vapors, he blends that language with folkloric traditions and focuses on the affective responses to, rather than merely the chemical properties of, the phenomenon. Foregrounding the composite nature of

the phenomenon as both a physical object and an object of fancy, poetic treatments of the *ignis fatuus* call attention to and meditate upon the poet's own ability to construct powerful emotional and imaginative responses in readers. Springing from dead matter, this poetry is more than that dead matter, more (to return to Milton) than mere "unctuous vapours," because it has been poetically "kindled ... to a flame." Like the *ignis fatuus*, Thomson's lines seem to revel in the transitory, emotional, and imaginative power they are able to produce as a result of the breakdown of natural phenomena.

III. Goldsmith

Oliver Goldsmith's 1766 poem "Edwin and Angelina" offers a similar exploration of the poet's power to redirect the imagination and the poetic potential of epistemological unease. Unlike the meditative pace of Thomson's blank verse, which invites philosophical reflection on unifying principles, Goldsmith's use of the ballad form, with its metric rapidity, is more conducive to speedy apprehension and culturally associated with common credulity. It is against this formally induced impulse toward credulity and (as we will see) incorrect assumptions that the poet stages a series of corrective shifts that redirect the imagination. It is perhaps no surprise, given these concerns, that the *ignis fatuus* should appear as the initial and representative figure in a poem structured around shifting states, false assumptions, the dynamics of belief, and the experience of not-knowing.

The first two stanzas of the ballad are spoken by a figure who, wandering in the wilds, asks a "gentle Hermit" for a guiding hand to "where you taper cheers the vale / With hospitable ray" (3-4). The hermit responds in the third stanza with a correction:

"Forbear, my son," the Hermit cries, "To tempt the dangerous gloom; For yonder faithless phantom flies To lure thee to thy doom." (9-12)

The hermit's correction – warning that the seemingly "hospitable ray" is in fact a delusive "faithless phantom" or *ignis fatuus* that must be ignored – begins the true action of the ballad as the hermit leads the wanderer to his home "far in a wilderness obscure . . . / A refuge to the neighboring poor/ And strangers led astray" (37-40). The hermit leads the wanderer, in other words, away from the light, into the darkness of a "wilderness obscure." Having arrived at the hermit's refuge, the "stranger's woe" (58) soon becomes apparent and the speaker observes that "grief was heavy at his heart / And tears began to flow" (59-60). The stranger's expressions of grief in turn elicits the hermit's diatribe against fickle friendship, fortune, love, and women – a diatribe that calls forth a "rising blush" (83) from the stranger, who is subsequently unmasked as a woman. The female wanderer tells the hermit that she spurned a suitor, Edwin, who then disappeared and is presumed to have died of grief, and whom, in retrospect, she realizes she loved. After hearing her story, the hermit reveals himself to be the very same Edwin, and the lovers are reunited.

The narrative development of "Edwin and Angelina," as we can see, depends on a number of shifts, oscillations between moments of misrecognition and recognition. The entire

poem might be described as a series of turns, and the word itself permeates the ballad from the first words, "*Turn*, gentle Hermit of the dale" (1; italics added), to the hermit's correction ("then *turn* tonight and freely share/ Whate'er my cell bestows" [17-18; italics added]), and again from his admonition ("Then pilgrim, *turn*, thy cares forgo" [29; italics added]) to the final climax of recognition. At this point, "the wondering fair one *turned* to chide" the hermit for passionately embracing her – only to be corrected by Edwin's injunction:

"Turn, Angelina, ever dear, My charmer, turn to see Thy own, thy long-lost Edwin here, Restored to love and thee." (145-48; italics added)

The dizzying repetition of the act of turning constitutes the affective thrust of the ballad. In making the repeated experience of disorientation the central experience of reading, Goldsmith calls attention both to the ease with which false assumptions are made throughout the poem and to the way these assumptions lead inadvertently toward resolution. In other words, the turns that move the poem forward are not always correctives, but rather errors that lead the reader home, paradoxically by leading him astray.

The hermit's remark about the wanderer's sex is one of many misprisions that nonetheless move the poem toward resolution. The hermit's first words implant the error that generates the poem's narrative structure and affective potential, opening a space of misrecognition into which readers are invited – like the hermit and his guest, who some "lingering hours beguiled," – to pass some time in a state of not-knowing. The hermit's first words, "Forbear, my son," are intended to redirect the wanderer from the delusive light of the ignis fatuus that threatens to "lure [wanderers] to [their] doom," but the words serve simultaneously as a hook for the reader's own misapprehension of the wanderer's sex. As such, the hermit's authority coincides with the very object against which he is warning the wanderer. The hermit's "Forbear, my son" is itself an *ignis fatuus* that, in seeming to lead, leads astray. Goldsmith highlights the power of that misdirection by elevating the language of sexual misrecognition from the hermit's initial speech to the speaker's authoritative perspective in stanzas nine through fourteen. The speaker, as if directed by the assumption contained in the hermit's hail, "Forbear, my son," notes of the wanderer that "grief was heavy at his heart" (59), and that "his rising cares the Hermit spied" (61; italics added). The speaker, in other words, incorporates and perpetuates the character's initial mistake and mobilizes that mistake for its poetic potential, basing the poem's narrative development and concentrating its affective power on the fiction of that initial misapprehension.

In both Thomson and Goldsmith, the commission of mistakes and the palpability of error becomes the generative force behind an uneasy poetic pleasure grounded in the experience of not-knowing. While both Thomson and Goldsmith initially appear to draw a distinction between the poem's work and the false light of the *ignis fatuus*, the phenomenon ultimately comes to stand as a figure for the poem itself and the work of the poet: a work that seems to lead home while it leads astray, yet by leading astray leads home.

IV. Collins

While Goldsmith and Thomson take a muted pleasure in the disorienting effects of epistemologically difficult phenomena, Collins explicitly yearns for a retrieval of the mystery and magic that seems to have vanished from poetry and, by extension, from life over the course of modernization. Constituting a direct response to the changes Wharton describes in the complaint that "we have parted . . . with fictions that are more valuable than reality," Collins mourns and seeks to remedy this loss. In doing so, his poetry helps us to see – especially when read alongside the subtler examples offered by Thomson and Goldsmith – that poets gave these epistemological transitions and dilemmas a prominent role not only in their verses but also in their conception of poetry's broader purpose. In an effort to keep alive what seemed to be shrinking from vision in the general cultural turn toward reason, Collins intentionally plumbs the depths of decayed modes and seeks the poetic fertility of boggy northern wastes. Attempting to capture extreme emotional states, Collins's poetry makes explicit the epistemological uneasiness found in muted form among his contemporaries. Rather than representing a rupture with preceding treatments of knowledge and theories about poetry's purpose, a radical break that looks forward to late eighteenth-century Romantic modes, Collins's poems in fact express longstanding epistemological preoccupations.

In his "Ode to Fear," Collins attempts to invoke Fear out of a desire for vivid experience and inspiration. "Dark Power," he writes, "with shuddering meek submitted Thought / Be mine, to read the Visions old, / Which thy awakening Bards have told" (53-55). "The ambiguity of Collins's syntax – "shuddering meek submitted thought" could describes either Fear's submission to the poet or the poet's submission to fear – reveals the complexity of the poet's power, the authority to invoke a power to which he ultimately wishes to submit. Collins bemoans his "blasted view" (56), which seems to foreclose the possibility of feeling true fear, while at the same time he does not wish to be completely under the power of Fear:

Ne'er be I found, by thee o'eraw'd In that thrice-hallowed eve abroad, When ghosts, as cottage-maids believe, Their pebbled beds permitted leave, And goblins haunt, from fire or fen, Or mine, or flood, the walks of men! (58-63)

Torn between the desire to experience Fear's power and the desire to remain in control, Collins's poem oscillates between invitation and refusal, bringing Fear close but never so close that it is fully present. Poetry's capacity to bring emotion near while simultaneously holding it at bay, to negotiate distance and intimacy, is also on display in Collins's "Ode on the Popular Superstitions of the Highlands, Considered as the Subject of Poetry." If the "Ode to Fear" expresses a desire to bring Fear closer and yet keep it ever more distant, by ostensibly locating poetic inspiration in a distant geographic locale, the "Ode on the Popular Superstitions of the Highlands" suggests that the epistemological states these distant scenes might produce are, in reality, nearer at hand. If in the first case the poetic medium emphasizes distance, in the latter it collapses it.

Of course, this claim that Collins's "Ode on the Popular Superstitions of the Highland" illustrates that one need not search the geographic peripheries of the British Isles to find

epistemological disruption runs counter to Collins's ostensible argument in the text. Collins expresses his envy that Henry Home (the poem's addressee) will soon be traveling in Scotland, "fancy's land" (2.2), where he will be sure to find and hear of "scenes . . . which, daring to depart / From sober, are still to nature true, / And call forth fresh delight to fancy's view" (12.1-3). "Xiiii Offering a catalogue of phenomena and beliefs that promise to delight the fancy, Collins focuses on the *ignis fatuus* in the sixth stanza as a particularly suitable subject for poetry. Upon its posthumous publication in the *Transactions of the Royal Society of Edinburgh*, Henry Mackenzie provided an additional eight lines to the beginning of stanza six to fill a gap in the manuscript. Read together, these initial eight lines and Collins's subsequent nine, comprise a kind of folkloric pastiche in which the *ignis fatuus* leads a "luckless swain . . . / . . . late bewilder'd in the dark" (7.1-2) into the "unrustling reed" (6.13), where the "wily monster" (6.14) known as the Kelpie seizes him. Mackenzie describes the *ignis fatuus* as a "fiend" (6.1) who waits for victims:

Silent he broods o'er quicksand, bog, or fen, Far from the shelt'ring roof and haunts of men, When witched darkness shuts the eye of day, And shrouds each star that wont to cheer the night; Or, if the drifting snow perplex the way, With treach'rous gleam he lures the fated wight, And leads him flound'ring on, and quite astray. (6.1-8)

In Mackenzie's lines, the fiend assumes different forms. Initially embodied as an *ignis fatuus* hovering "o'er quicksand, bog, or fen," the fiend then takes the form of gleaming snow. In Collins's final nine lines, the verses focus once more on the disorienting effects of the *ignis fatuus*:

What though far off, from some dark dell espied His glimm'ring mazes cheer th'excursive sight, Yet turn, ye wand'rers, turn your steps aside, Nor trust the guidance of that faithless light; For watchful, lurking 'mid th' unrustling reed, At those mirk hours the wily monster lies, And listens oft to hear the passing steed, And frequent round him rolls his sullen eyes, If chance his savage wrath may some weak wretch surprise. (6.9-17)

Collins's warning about the dangers that "cheer th'excursive sight" are by now familiar, as is the trope of the "luckless swain." As a central figure in a poem about the need to wander and the benefits of travelling in the Highlands, however, the *ignis fatuus* serves as both invitation and warning.

Just as the *ignis fatuus* offers an invitation from which one must "turn . . . turn your steps aside," so Collins's ode unleashes two contradictory forces. On the one hand, Collins suggests that one must leave London, or England more generally, in order to experience poetic inspiration from objects that seize the fancy; in other words, one must "dare to depart" from the location of

"sober truth" for a geographic location that will provide "fresh delights." On the other hand, Collins uses the space of the poem as just such a location, a contained space where the geographically distant objects of inspiration have been brought home, so to speak. Collins emphasizes the poem's capacity to collapse distance in the very act of acknowledging it by beginning the final stanza of the Ode with the act of hailing, an action that simultaneously recognizes and bridges distance. The line reaches over a distant geographic terrain onto the most intimate interior space, the "soul," exclaiming, "All hail, ye scenes that o'er my soul prevail" (13.1). Indeed, the first quatrain of the final stanza uses the act of hailing to make present what is repeatedly recognized as distant:

All *hail*, ye scenes that o'er my soul prevail, Ye "spacious" firths and lakes which, *far away*, Are my smooth Annan fill'd, or past'ral Tay, Or Don's romantic springs, *at distance*, *hail*! (13.1-4; italics added)

Note, in particular, the way that Collins encloses "far away" and "at distance" between the hails that begin and end the lines. While Collins claims that one needs to depart, his poem, in effect, nullifies that claim insofar as it brings what is distant home. Moreover, Collins's "Ode on the Popular Superstitions of the Highlands" acknowledges that the desire for "fresh delights," and the more general dissatisfaction with "sober truth" that produces it, still exists in a land from which fancy has purportedly fled.

Notes

ⁱ Edward Young, *Conjectures on Original Composition*, ed. Edith J. Morley (Manchester: Manchester University Press, 1918), 18.

ⁱⁱ Thomas Warton, *The history of English poetry, from the close of the eleventh to the commencement of the eighteenth century,* vol. 2 (London, 1774), 463.

iii Warton, 463.

^{iv} Geoffrey H. Hartman, "False Themes and Gentle Minds," in *Beyond Formalism: Literary Essays 1958-1970* (New Haven: Yale University Press, 1970), 285.

^v John Keats, "Lamia," in *Keats's Poetry and Prose* (New York: W. W. Norton & Company, 2009), 2.231-37.

vi See John Aikin, *An Essay on the Application of Natural History to Poetry* (Warrington, 1777); and Thomas Percival, "On the Alliance of Natural History, and Philosophy, with Poetry," in *Moral and Literary Dissertations* (Warrington, 1784).

vii James Thomson, "Autumn," in *The Complete Poetical Works of James Thomson*, ed. J Logie Robertson (London: Oxford University Press, 1908).

viii Kevis Goodman, *Georgic Modernity and British Romanticism: Poetry and the Mediation of History* (Cambridge: Cambridge University Press, 2004).

ix Goodman, 40.

^x Goodman, 54. Importantly, Goodman's reading of Thomson's poetic meditation ultimately stresses its ability to register the experience of history precisely because the poem fails to temper it completely. That is to say, Goodman is interested in what mediation allows in as much as in what it keeps out, a balance that seems to make all the difference.

xi The similarity between the appearance of the *aurora borealis* and armies was frequently remarked upon in seventeenth- and eighteenth-century treatments of the phenomenon. For example, William Whiston, writing an account of the "surprizing [sic] meteor," recounts: "There did not want those who spread it about that what we saw in no other form than that of a vapour, was the appearance of Armies in Battel-Array, Marching, and Fighting. That Guns, Bullets, Shot, Spears, and other such Things, which I am ashamed so much as to name, were seen at the same Time." William Whiston, *An account of a surprizing meteor, seen in the air, March the 6th, 1715/16, at night* (London, 1716), 14.

xii My thanks to Alexander Covalciuc for pointing out that the word "subversed" in line 1130 is particularly apt not only insofar as it reminds Thomson's readers that this passage is about poetry but also insofar as it announces the way in which some fundamentally disruptive work is taking place under the surface of (or sub-verse) the poetry itself.

xiii Reed, *Romantic Weather*, 51. Reed writes: "Thomson is able to rely on the combined forces of God and Newton in the knowledge that order would take care of itself. This solution affords Thomson a considerable advantage: he gains by it the freedom to allow chaos, flux, and ambiguity into his poem in way that leaves an overall impression of aesthetic fragmentation, yet without violating his faith in order or his conservative politics, and coexisting with his sometimes obsequious encomia to prosperity and patriotism" (50-51). I wish to emphasize the uneasiness that this dynamic nonetheless produces, however secure its ultimate conclusions.

xiv Ralph Cohen, *The Unfolding of* The Seasons (Baltimore: Johns Hopkins University Press, 1970), 234-35. See also Cohen, *The Art of Discrimination: Thomson's The Seasons and the Language of Criticism* (Berkeley: University of California Press, 1964).

^{xv} Here Thomson seems, once more, to draw upon Milton, who describes the fallen angels "in wandering mazes lost" (*Paradise Lost* 2.561), once more making domestic and familiar what in Milton is sublime and celestial.

- xviii Cohen, 226-27. Cohen notes that theological belief enables this epistemological openness: "Although the scientist can discover order and beauty where the uniformed find only chaos and terror, he nevertheless accepts indeed, welcomes an act of faith in God's goodness realizing his knowledge is limited" (227).
- xix Poetry's capacity to create powerful emotional and imaginative responses in readers is central to Collins's poetry, especially his "Ode to Fear," discussed below.
- xx Oliver Goldsmith, "Edwin and Angelina," in *The Poems of Thomas Gray, William Collins, and Oliver Goldsmith*, ed. Roger Lonsdale (London: Longman, 1969).
- other key assumptions, mistakes, and deceptions compose the narrative structure: Angelina's unrecognized or pretended lack of affection for Edwin when he courted her; the other suitors who are said, reviving the *ignis fatuus* theme, to have "feigned a flame" (108); Angelina's assumption that Edwin had "sought a solitude forlorn,/ In secret, where he died" (135-36). Goldsmith appears to have emphasized the error of the final mistake by revising the text to state explicitly "where he died" instead of the "ne'er was heard of more, of the original version/manuscript.
- xxii William Collins, "Ode to Fear," in in *The Poems of Thomas Gray, William Collins, and Oliver Goldsmith*, ed. Roger Lonsdale (London: Longman, 1969).
- xxiii William Collins, "Ode on the Popular Superstitions of the Highlands," in *Transactions of the Royal Society of Edinburgh*. vol. 1 (Edinburgh, 1788).

xvi These passages are not the only instances of Thomson's interest in shifts and the effects of constant change. Indeed, the seasonal structure of the poem emphasizes the constancy of larger patterns of motion and mobility.

xvii Aikin, 2-3.

Chapter Four

The Lesson of the *Ignis Fatuus*: Pedagogical Texts and the Poetry of Barbauld and Darwin

I. Caveats and Confidence

If the Romantic poets I will discuss in Chapter Five ultimately convert the mid-century awareness of epistemological unease into an engine of insight, shed much of the ambivalence we have seen in Thomson, Goldsmith, and Collins, and espouse a notion of truth increasingly distinct from that of scientific discourse, the poets I discuss in this chapter illustrate how that transition began within the context of an increasingly consolidated scientific authority and a growing cultural confidence in empirical methodology. This transition within natural philosophy from the late seventeenth-century awareness, or rather insecurity, about the reliability of empirical findings to the relative assurance – the confidence – of the later eighteenth century is visible in the way that the explicit discussions of epistemological limits and unease found in the works of Bacon and Sprat are relegated to the status of caveats in more specialized texts a century later. Take, for example, Buffon's statements concerning the ultimately provisional nature of experimental data, which remains true only so long as a possible alternative fails to appear. In *The Natural History of Birds*, discussing debates over the possibility that some swallows might hibernate by submerging themselves under water (rather than migrating), Buffon acknowledges that while he does not endorse this theory he is unable to dismiss it categorically, noting that "it is sometimes imprudent to judge of a particular fact by what are called the general laws of nature; because these, being founded on observation, are true only so far as they comprehend all the facts." To be clear, it is not that natural philosophers ceased to have epistemological doubts, but that the clarity with which these doubts could be seen was occluded by the fact that they now occurred primarily within the context of more specialized and elaborate projects – buried, so to speak, under the weight of accumulated data. Fundamental methodological reflections, and the epistemological questions those reflections raised, were no longer the primary goal of these natural historical texts. While Buffon's recognition of an epistemological dilemma loses some of its force within the context of a voluminous text packed page-by-page with facts – what, after all, are we supposed to do with his awareness of uncertainty in this context? – it nonetheless points to an undercurrent of anxiety that remains present, if muted, throughout the period. Buffon's admittedly minor epistemological caveat is akin to other statements expressing the disjunction between a seemingly endless accumulation of facts and our ability to understand the world.

The popularization – or rather the dissemination – of knowledge only widened the divide between a seeming increase of information (the sense that the world was revealing more and more of its mysteries) and lingering epistemological questions. While natural philosophers might continue at times to note the ultimately tentative nature of their claims, those claims nonetheless entered the public sphere as though they were laws stripped of caveats, qualifications, and other marks of epistemological complexity. If natural philosophers remained at times uncertain, the knowledge they produced was greeted with increasing confidence. Something of this popular certainty is evident in the proliferation of pedagogical texts that disseminated the findings of natural philosophers. These texts, with a stern confidence in their own demystifying educational

project and methodology, are an extreme version of the cultural status of scientific truth against which poets would come to formulate an increasingly distinct notion of poetic truth. Late eighteenth-century poetic epistemology took shape against the proliferation of knowledge and the anxieties that the increasingly sophisticated sciences both produced and obscured. The idea the world has changed as a result of this accumulation of knowledge is most famously expressed, albeit in a different form, in the *Defense of Poetry*, where Shelley claims that the poetry in our "systems of thought is concealed by the accumulation of facts and calculating processes" and that "we want a creative faculty to imagine that which we know" for "our calculations have outrun our conceptions." Shelley's idea of poetry as something that can knit together a multitude of disparate facts presupposes the existence of an uncertain world. If for Shelley poetry is a physic that can unify a world of empty, disconnected facts, it is also a diagnostic recognition of what we do not yet know. Treatments of the figure of the *ignis fatuus* offer a glimpse of how an increasingly distinct notion of poetry as epistemology unfolded, and they show the development of a poetic truth that resembled nothing so much as an embrace of the unknown.

II. Pedagogical Texts: Learning from the *Ignis Fatuus*

I wish to make two points about the pedagogical treatments in the following pages. The first I have already suggested: these texts use the phenomenon as a test case for correcting false or superstitious notions. As such, these treatments serve as evidence for the growth of empirical science's cultural credit in the two centuries since Bacon. These pedagogical treatments of the phenomenon are vivid representations of the way that the epistemological nuances of the New Science, about which Bacon had been extremely clear in his discussion of the importance of the suspension of judgment, are, by the late eighteenth century, no longer central concerns. As early as the late eighteenth century, natural philosophy, as Paul Feyerabend has written of "the science of today," was "very different from the science of 1650." Instead of insisting on a circumspect epistemological stance towards theories of causation, late eighteenth-century pedagogical texts seek to disabuse children of their false notions through an insistence on the obviousness of philosophically acceptable causes. In other words, late eighteenth-century pedagogical texts illustrate an early phase in the consolidation of scientific knowledge that Feyerabend has described as the formation of an ideology within which "scientific 'facts' are taught at a very early age and in the very same manner in which religious 'facts' were taught." The second point I wish to make is that even in selecting the *ignis fatuus* as an example of wrong-headed thinking to be corrected, these pedagogical texts nonetheless mark a continued cultural fascination with the phenomenon. In other words, these texts inadvertently lean towards the dulce of the Horatian dictum (dulce et utile) in their attraction to the entertaining mysteries of the ignis fatuus. Each of the following examples ultimately serves to illustrate how this unstable balance between pleasure and instruction mirrors a more fundamental epistemological dynamic; pleasure functions as bait for instruction just as initial expression of doubt provides the opportunity for subsequent expressions of certainty. In this chapter I consider four pedagogical texts before examining instances of this pedagogical purposefulness in the poems of Anna Letitia Barbauld and Erasmus Darwin and considering what happens when pedagogical purposefulness goes astray in their poetry. Doing so is necessary in order to understand the context within which Robert Burns and the later Romantic poets I turn to in Chapter Five use the figure as a way of thinking through and communicating a distinctly poetic epistemology.

William Granger's *The Wonderful Museum* provides a valuable example of the way the ignis fatuus functions within the economy of pleasure and instruction found in late eighteenth and early nineteenth-century pedagogical texts. Published between 1802 and 1808, The Wonderful Museum is by and large a reprint of an earlier anonymous publication, An Historical Miscellany of the Curiosities and Rarities in Art and Nature, which appeared between 1794 and 1800 and was a precursor to the better-known Kirby's Wonderful and Eccentric Museum. Drawing together short articles on subjects ranging from earthquakes to the oldest living person, The Wonderful Museum's stated intention was useful entertainment, or more accurately useful knowledge presented as entertainment. "To excite curiosity and at the same time assist the understanding;" Granger explains in the Preface "are the chief objects of this undertaking; it is humbly presumed, a work which both instructs and entertains is truly deserving the patronage of the public." Gesturing toward Horace's dictum in the Ars Poetica that "the man who combines pleasure with usefulness wins every suffrage, delighting the reader and also giving him advice," The Wonderful Museum intends, in its own words, to "instruct and entertain" by baiting the educational hook with novelty, curiosity, and pleasure. VII The author is quick – one might say too quick – to counter charges of marvel-mongering: "Some may imagine," he writes, "that the Marvelous tends to deceive; this is not our object – we shall insert nothing but what comes from the best authorities, and even then we do not desire to *force* the belief: by such relations we hope to effect many salutary purposes." Reading through the text, however, the ratio of dulce to utile often appears to shift as educational utility comes to function as permissive cover for the pleasurable consumption of curiosities. ix The short treatment of the *ignis fatuus* is a good example of the way in which *The Wonderful Museum*'s stated intention of "assisting to understand" occurs largely through a leisurely indulgence in error followed by sententious correction.

As an example, *The Wonderful Museum*'s article "The Singular Phenomena of the Ignis Fatuus, commonly called Will o' the Whisp, or Jack-a-Lantern," appears after an "Anecdote of Cornish Longevity" and precedes an article of advice about avoiding lightening and accounts of "Miraculous Escapes from Death." The article begins by focusing on the fantastic tales surrounding the phenomenon "to which the credulous vulgar ascribe very extraordinary and mischievous powers." It quickly dismisses these views, however, by turning to the accounts of "philosophic observers," whose observations provide the basis for scientific explanation. The initial, corrective shift from the "credulous vulgar" to the "philosophic observers," from entertaining fictions to factual explanations and back, recurs throughout the entry and the text as a whole. For instance, when addressing associated luminous phenomena, the article begins to shift once more from the sober language used to recount philosophic observations to more enthusiastic rhetoric that appears to credit dubious vulgar accounts:

In general these lights are harmless, though not always; for *we have accounts* of some luminous vapours which would encompass stacks of hay and corn, and set them on fire; so that they became objects of great terror and concern to the country people. Of these *it was observed*, that they would avoid a drawn sword, or sharp-pointed iron instrument, and that they would be driven away by a great noise; both which methods were made use of to dissipate them; and *it was likewise observed*, that they came from some distance, *as it were on purpose to do mischief.*^{xi}

As the language shifts from "we have accounts" to "it was observed," the level of credit granted to a fiendish explanation increases, culminating in the suggestion that the phenomenon appeared to act with mischievous intentionality, "as it were on purpose to do mischief." It is only some pages later that the reader encounters an electrically based explanation of the phenomenon that is able to "account for" these "accounts" and disabuse the reader of the erroneous but entertaining surmise that the phenomenon is intent upon "mischief." xiii

Just as *The Wonderful Museum* seems to revel in the mystery surrounding the phenomenon only to insist, ultimately, on natural causes, so other pedagogical texts of the period also employ a decisively corrective technique. Recall my brief discussion in Chapter One of the adoption of the ignis fatuus as a general pedagogical case in the works of Christopher Sturm and Olinthus Gregory. In that chapter, I pointed to Sturm and Gregory's texts as a kind of terminus for natural historical discussions of the phenomenon, the moment at which the ignis fatuus (no longer a concern for serious natural philosophers) began to flourish within the niche provided by the growing body of pedagogical literature written for women and children that insisted on, and intended to instill, an understanding of the world according to natural principles. XIII Consider the widely popular works of Sturm, compiled and reprinted in 1798 by Eliza Andrews as Beauties of Sturm, in Lessons on the Works of God, and of his Providence. Rendered familiar to the Capacities of Youth. XIV Sturm makes clear that he intends his treatment of the phenomenon as an almost medicinal draught to correct benighted minds. "How much we torment ourselves by vain terrors," writes Sturm, "which have no foundation but a disordered fancy. We might spare ourselves many fears, if we would take the trouble to examine the objects which frighten us and seek for their natural causes."XV Similarly, Olinthus Gregory's work presents itself not only as a purely instructive text, but also as a decisively corrective one. The full title of Gregory's 1793 text is worth noting: Lessons, Astronomical and Philosophical, for the Amusement and Instruction of British Youth: Being an Attempt to Explain and Account for the Most Unusual Appearances in Nature, in a Familiar Manner, from Established Principles. xvi The title functions as a microcosm of the epistemological dynamics at play in these works. Gregory's title not only employs the familiar Horatian dictum ("Amusement and Instruction") as its aims, but also directs the work to those most in need of instruction; the "British Youths" that can only be reached via Gregory's self-proclaimed "familiar manner." "Gregory's acknowledgment that "Unusual Appearances" will be "Explain[ed] and Account[ed]" for using "Established Principles" gestures toward the firm consolidation and increasingly widespread cultural authority of scientific knowledge by the late eighteenth century that I have been describing.

Gregory's *Lessons* is overtly hostile to folk nonsense. "Too numerous by far," Gregory writes, "are the stories of ghosts and apparitions, hobgoblins and specters, which are handed down from one generation to another, by the great weakness and folly of some parents and nurses, whose whole intention one would imagine is, to make their children susceptible to the impression of fear." In Lesson XXII, "On the Ignis Fatuus," Gregory states that his intention is to "convince" those "so miserably misinformed" by misguided tales that "these horrible Jack o' Lanthorns, are far from having anything supernatural about them: on the contrary their cause, and the effects they produce, may be accounted for in a very natural and easy manner." The *ignis fatuus* becomes, for Gregory as for Sturm, representative of a whole class of phenomena that attract erroneous notions and an object lesson for "the great importance of being educated without having any superstitious or childish prejudices engrafted in the mind."

It must be noted that both Gregory and Sturm's accounts are quite careful when it comes to ascribing a specific cause to the phenomenon, even though they insist on "natural causes" and

"established principles." In short, they insist on natural causes, but retreat from adducing a *specific* natural cause:

The appearance of [the phenomenon] usually observed, sufficiently evince that it is an ignited vapour: for inflammable air has been found to be the most common of all the factitious airs in nature; and as it is known to be frequently produced from the putrefaction and decomposition of vegetable substance in water, with which marshes, bogs, &c. abound, it may be reasonably inferred that when this inflammable air rises, it will be speedily kindled, and being wafted about near the surface of the earth, will cause the appearance which creates so much unnecessary alarm. xx

Gregory's circumspect phrases ("sufficiently evince," "reasonably inferred") make it clear that one's acceptance that the phenomenon "may be accounted for in a very natural and easy manner" depends upon a prior acceptance of natural philosophical principles and rules of inference. That is to say, Gregory does not in fact solve the puzzle of the phenomenon's cause so much as insist on the deeper, more fundamental principles (the "Established Principles" of his title) to which the phenomenon forces one to have recourse. Sturm, similarly, retreats from establishing absolute causes for the *ignes fatui*, writing instead that "the places where they are generally seen may give rise to probable conjectures," and that "if the manner of their being produced is still doubtful, we are certain, at least, that they proceed from natural causes, and consequently are not obliged to have recourse to superstitions."xxi In seeking to eradicate vulgar superstitions surrounding the phenomenon, both Gregory's and Sturm's treatments highlight the way that these pedagogical texts – even as they recognize some epistemological limitations – insist upon fundamental, established principles; they tempt curiosity with the pleasure of that which "is still doubtful" only to lead the reader toward an acceptance of that which is "certain, at least." In doing so, these authors employ entertaining doubt only as a means of instilling and insisting upon a fundamental certainty.

A final example of the pedagogical dynamics at play in these treatments of the *ignis* fatuus provides a striking illustration of the way that the particular natural historical object was used to teach much more fundamental principles than may appear at first sight. We might even say that the *ignis fatuus* was used almost as a means of misdirection for this purpose; it was something that would interest and distract the reader's attention from a deeper process of epistemological indoctrination. It is a good example, in large part, because it is so crude that it reveals the dynamics at play in the far more sophisticated instances we have considered above. As the title makes clear – Exercises, Instructive and Entertaining. In False English; Written with a View to Perfect Youth in their Mother Tongue, as Well as To Enlarge their Ideas in General (1787) – while the text's primary focus is on correcting "false English," its secondary "view" is to have an impact on youthful readers' deeper understanding of the world, on their "Ideas in General." The short section titled "Of the Ignis-Fatuus, Jack-with-a-Lanthorn, or Will-with-a-Wisp" is worth quoting at length for the way it delivers a lesson in natural historical principles under the guise of a grammar exercise. I have retained the original spelling:

Ignus-Fatuus, is a king of Light, supposed to bee of an electric Nature, appearing frequently in Mines, marchy places and near stagnated Waters. – It were formerly thought, and am still, by the superstitious, believed to have something Ominous in it Nature, and to presage Deth and other Misfortunes. – There has be instances off People

being decoy'd by these Lights into marchy Places, where them has perished; when the Name of Ignus-Fatuus, Will-with-a-Wisp, and Jack-with-a-Lanthorn; as if this appearance was a evil Spirit who took delight in doing Mischief off that Kind. xxii

Despite the seeming weakness of its claim that the phenomenon is "supposed to bee of an electric nature," the intent of the passage is clear. Whatever its precise cause, the superstitious notions surrounding the *ignis fatuus* are just as erroneous as the grammar and spelling with which the passage is written. In addition to excising the written errors of the passage, students were expected to correct any outdated, backwards, and potentially dangerous misconceptions they may have held about the natural world. While their nursemaid or grandmother may have pronounced "of" as if it were spelled "off," and held absurd notions about lights hovering about "marchy places," students were expected to root out the deeper epistemological error along with the others. "xxiiii

III. Barbauld

Like James Thomson, Anna Letitia Barbauld garnered praise for the accuracy of her natural historical detail. XXIV In addition to her poetry, Barbauld wrote a number of pedagogical texts, for instance Lessons for Children, of Three Years Old and Hymns in Prose for Children, and collaborated with her brother John Aikin on the publication of the six-volume educational text, Evenings at Home; or The Juvenile Budget Opened, Consisting of a Variety of Miscellaneous Pieces, for the Instruction and Amusement of Young Persons. XXV Just as Barbauld's brother John had championed Thomson in his 1777 Essay on the Application of Natural History to Poetry, so too their friend Thomas Percival praised Barbauld in his 1784 "Miscellaneous Observations on the Alliance of Natural History and Philosophy with Poetry." Percival follows Aikin closely in terms of his central argument, but includes many more examples, accurate and inaccurate (from a natural historical perspective) alike. Percival includes Barbauld's "A Summer Evening's Meditation" in his discussion of the poetic potential of astronomy. "The system of philosophy, which is now received" writes Percival, "independent of its superiority in point of truth, infinitely exceeds in extent, elevation and grandeur that of the ancients. . . . Astronomy, in particular, furnishes such magnificent ideas, and boundless views, that imagination can hardly grasp, much less exalt or amplify them." Of the many quotations from Barbauld's "A Summer's Evening Meditation" Percival cites as evidence of the sublimity of astronomical reflections, Barbauld's description of stars appearing in the night sky deserves closer attention. "Tis now the hour," writes Barbauld, "When Contemplation, from her sunless haunts . . . / Moves forward; and with radiant fingers points . . . / Where, one by one, the living eyes of heaven / Awake" (17-26). xxvii Barbauld's description soon becomes disorienting as these lights begin to move:

> quick kindled o'er the face of ether One boundless blaze; ten thousand trembling fires And dancing lusters, where th'unsteady eye, Restless and dazed, wanders unconfin'd O'er all this field of glories. Spacious Field! (26-30)

While the lines function as a sublime description of astronomical phenomena, Barbauld's description relies for its figure on an example unsanctioned by Aikin's or Percival's categorical demand for poetry's basis in truth.

Barbauld couches her sublime description of the skies in an extended metaphor that compares the perception of the starry heavens to the disorienting appearance of *ignes fatui*. The figure "Contemplation" leads the reader to the appearance of the stars and, in doing so, suggests the contemplative state of mind with which the phenomenon and its verse description are to be approached. Contemplation "moves forward" from "sunless haunts," an unenlightened space bereft of established knowledge – a place of not knowing – where belief has only the semi-permanence of a specter. It is from this dark location that Contemplation points out the appearance of the stars: "the living eyes of heaven / Awake, quick kindled o'er the face of ether." The stars burst forth as lights "quick kindled," like the spontaneous appearance of *ignes fatui*. Just as the erratic motions of the *ignes fatui* encouraged belief in a demonic force behind their appearance and movement, so here Barbauld's emphasis on the movement of the lights ("trembling fires" "dancing lusters") invests them with a degree of life and hints at the existence of demonic sprites. The final lines complete the metaphor by transposing the heavenly ether into a "spacious field" where these lights are to be seen dancing, celestial, but a "field" nonetheless.

Not only does Barbauld liken the appearance of the stars to the spontaneous, quick kindling of trembling and dancing fires over a spacious field, so, too, she compares the affective and cognitive effects of the two phenomena on the viewer. Just as the ignes fatui in the poetry of Milton and Thomson lead night wanderers astray, so too, in Barbauld, the astronomical fires greet an "unsteady eye" (28) that "restless and dazzled, wanders unconfin'd" (29). Barbauld stops the metaphor just on the cusp of danger, just before the viewer is pulled into a murky, celestial abyss. In subsequent lines, Barbauld qualifies her initial representation of the lights as disorienting ignes fatui by refiguring them as benign guides. "From what pure wells / Of milky light, what soft o'erflowing urn/ Are these lamps so filled?" (35-37), Barbauld writes, as if she were trying to draw a distinction between lights that emanate from "pure" sources and those that emanate from impurities, putrefaction, and unctuous vapors. If in the earlier lines the "restless," "dazzled," "unsteady eye" risks going astray as it "wanders unconfined" while gazing at the "trembling fires," here, in lines 35-39, Barbauld minimizes the sense of danger by insisting that the lights are "friendly lamps, / For ever streaming o'er the azure deep" (37-38). Barbauld is at pains to insist in her reworking of the initial comparison that these "friendly lamps," produced from "pure wells" that "point our path, and light us to our home" (39). Despite the fact that Barbauld ultimately insists upon the benign nature of the lights, the passage's initial cognitive disruption with its concomitant, but mild, threat remains. The very fact that these lights ultimately "light us to our home" stands as a troubling reminder that one might go astray.

While Barbauld's use of the *ignis fatuus* plays only a minor role in the poem, I want to suggest that its presence is indicative of larger issues in the poem, and by extension, of the poem's liberation from Aikin's and Percival's prescriptions. The *ignis fatuus* metaphor, like the poem as a whole, emphasizes cognitive disorientation, the disruption of the understanding due to perceptual limitations and error. In her poem Barbauld's emphasis is not on accurate astronomical observation but on the ability of astronomical phenomena to overwhelm the perceptual faculties. As the poem ends, Barbauld retreats from the overwhelming and cognitively disruptive meditation and draws back from the very work of the poem. "But now my soul," Barbauld writes as the poem comes to a close, "unus'd to stretch her powers / In flight so daring, drops her weary wing, / And seeks again the known accustom'd spot" (112-14). Barbauld returns

to the "known accustom'd spot," and to the cognitively manageable, as if to a safe haven. This is a space, however, *outside* of the poem. The lingering effects – awareness of the unknown and of the limits of knowledge – of Barbauld's verses nonetheless remain. The final lines of the poem emphasize that the poem is not an engine that creates knowledge, but rather a mechanism for drawing attention to the limits and failures of human understanding. The poet positions the moment of knowledge beyond life and beyond words:

The hour will come
When all these splendours bursting on my sight
Shall stand unveil'd, and to my ravish'd sense
Unlock the glories of the world unknown.
(119-22)

Barbauld's interest in the sublime is an interest in its destruction of the ability to know, in its revelation of a "world unknown." The poem is not interested in truth or in the neat accuracy of natural historical description; rather, it seeks to create and revel in the affective and cognitive experiences that disrupt epistemological security.

IV Darwin

In his recent work on Erasmus Darwin's poetry, Martin Priestman writes:

In the context of English Literature studies, what has been above all lacking in assessing Darwin's work has been a strong **positive** evaluation of the Enlightenment vision as something big and confident, to set against the all-absorbent powers of the word 'Romanticism,' which not only draws all the works contemporary with a few favored poets into its orbit, but then implicitly finds most of it wanting by comparison." xxviii

As will become clear in the reading of Darwin I offer below, I want to question Priestman's attempt to shelter Darwin from the disdainful gaze of an abstract "Romanticism" in the strong arms of a "big and confident" "Enlightenment," but not for reasons that might be expected. It is precisely by characterizing the British Enlightenment as "big and confident" that Priestman is able to posit and maintain what he recognizes as a binary opposition with Romanticism. Part of what I offer in my reading of Darwin, and over the course of these final chapters, is an alternate understanding of the British Enlightenment and the Romantic movement that develops out of the epistemological circumspection of Bacon's methodology, an Enlightenment at its most genuine when guarding against the very danger of "big[ness] and confiden[ce]." Uncovering the traces of this skepticism within the seventeenth and eighteenth-century British Enlightenment allows us to see Romanticism not as a radical departure or retreat from earlier orientations toward knowledge, but as a continuation in an alternate form of a particular mode of knowing that, though it once played a far more explicit role in the methodological meditations of the New Science, by the nineteenth century had largely faded from sight. This diminished recognition of the more nuanced epistemological stance originally so vital to the development of the New Science may be said to have instigated the idea that "Science" and "Enlightenment" were always something "big and confident" rather than what they were – frequently focused on the minute rather than

the grand and doggedly insistent about the need to exercise epistemological modesty. That is to say, we must guard against the possibility that our understanding of the Enlightenment has been shaped in large part by a nineteenth-century perspective that mischaracterizes or ignores some of its most important epistemological underpinnings. My claim takes issue with the idea of a neat epistemic shift by pointing out the way that late eighteenth-century natural philosophers, or at least many of those discussed in this examination, were attentive to what remained problematic, messy, unexplained, and difficult to categorize. According to my larger argument, what we call Romanticism is rather a continuation or preservation of an epistemological self-consciousness that was once a vital part of the British Enlightenment, but which decayed in the process of each scientific discipline's elaboration. My goal, in other words, is to make the continuities between the Enlightenment and Romanticism more legible by unearthing their shared continuous epistemological stance. Our picture of Romanticism will look more like the Enlightenment when we see that our image of the Enlightenment is more Romantic than we often suppose.

At first glance, Erasmus Darwin's poetry might seem, like the pedagogical texts discussed earlier, wedded to the notion of didactic utility. The precise nature of Darwin's pedagogical intention and its relation to poetry has been debated ever since Darwin famously announced his intention to "inlist Imagination under the banner of Science" in the Advertisement to The Botanic Garden. xxix Science's "banner" is, of course, a martial metaphor that relegates "imagination" the role of foot soldier – rather than spectator or foe – in the progress of science's conquests. Darwin's ideas concerning the relationship between imagination and knowledge and, more specifically, about poetry's relationship to knowledge, have been a target of criticism and a topic of debate since the 1790s. In particular, critical debates have focused on the precise degree to which imagination was subordinated to the task of mere instruction and the precise extent to which Darwin employs poetry as a means of articulating and presenting natural philosophical materials. Darwin's prefatory claim about enlisting "imagination under the banner of science" initiated what Noel Jackson has recently argued is "a long-standing view of his aesthetics as essentially anti-aesthetic." According to Jackson, the misconception that Darwin subordinated poetry's role to science has blinded critics to the radical potential of Darwin's project; his selection of poetic means is a tacit recognition of a potentially (politically) radical "endorsement of pleasure as both the ground and the end of human action," and the possibility that "imagination, and the affects associated with it, might resist 'inlist[ment] . . . under the banner of Science." Indeed, as Jackson points out, both the Anti-Jacobin and Coleridge criticized Darwin for having what Coleridge diagnosed as "too much poetry" in his philosophical poems and for "having given free rein to his poetic fancy," as the Anti-Jacobin was to claim, xxxiii In other words. Darwin's own martial metaphor oversimplifies the complex dynamics between imagination and the production of knowledge operating in his text.

Just as Jackson wishes to correct a long-standing misconception of Darwin's poetics as anti-aesthetic, so Robert Ross seeks to complicate the seemingly simple didactic intention of Darwin's poem by pointing out the epistemological nuances raised by Darwin's use of the Eleusinian mysteries and, more specifically, the role of the hierophant as a model for his poetic work. As a model of instruction, the Eleusinian mysteries complicate the notion that Darwin's poetry simply sweetens what was frequently thought of as the poetry's "blatant didacticism." Instead, the mysteries offer a more complex notion that sees poetry as an important means of maintaining a tentative, circumspect relation to knowledge – a notion that shares a number of key epistemological features with poets not normally grouped with Darwin.

Darwin justifies his use of allegory and figurative machinery in the apology to *The Botanic Garden* by an historical analysis of the rise of myth that builds on Francis Bacon's *The Wisdom of the Ancients*. "Many of the important operations of nature were shadowed or allegorized in the heathen mythology," Darwin writes:

Egyptians were possessed of many discoveries in philosophy and chemistry before the invention of letters; these were expressed in hieroglyphic painting of men and animals; which after the discovery of the alphabet were described and animated by the poets, and became the first deities of Egypt, and afterwards of Greece and Rome. **xxxv*

Thus, for Darwin, such figures are not merely "proper ornaments to a philosophical poem," but rather figures that can be retranslated back into surprisingly accurate physical observations. It is this work of translation that first implies the link between Darwin's poetic personae and the hierophantic priest of the Eleusinian mysteries, whose role was to bridge the divide between allegorical forms and their embedded knowledge of the natural world by an act of translation. Darwin's most direct discussion of the mysteries appears in his preface to *The Temple of Nature*, where he announces that the poem, "which is here offered to the public, does not intend to instruct by deep researching of reason; its aim is simply to amuse by bringing distinctly to the imagination the beautiful and sublime images of the operations of nature." Despite his claim "simply to amuse," Darwin highlights the didactic tendency in his text when he writes that the "machinery of the poem" arises from the forms of the ancient myths and the Eleusinian mysteries. "In these Eleusinian Mysteries," writes Darwin, "the philosophy of the works of Nature, with the origin and progress of society, are believed to have been taught by allegorical scenery explained by the hierophant to the initiated."

We might think that Darwin's goal is simply to strip these mysteries of their obscurity by grounding each allegorical figure in the physical universe. Although in one sense Darwin's project is to translate some of these figures back into natural phenomenon, Ross points out that the very engagement with these notions of translation functions as an acknowledgment of epistemological limitations. "Ideas," he writes, "are treated hieroglyphically because any symbolic language is perforce arbitrary and half-knowledge; and hieroglyphic metaphor and allegory most closely approximate real patterns of thought by preserving, instead of ignoring, the mysterious abyss between perception and knowledge." In what at first glance appears to be a surprising application of Keats's notion of negative capability, Ross argues that Darwin remained content with "half-knowledge." Although we will want to question the distinction between Darwin's acknowledgement of "half-knowledge" and the notion that, like Keats's "Man of Achievement," he remains content with such half-knowledge, Ross's reading of Darwin nonetheless reveals two sides of the Eleusinian mysteries model: the way in which it claims both to reveal certain mysteries of the world and to leave others untouched at the same time. xl Indeed. Ross notes that beyond the "charming 'vestibule of that delightful science' are the dark mysteries of the inner sanctum of nature."xli In other words, despite its overtly didactic intentions and claim simply to amuse, Darwin's Botanic Garden is built upon an epistemologically complex model in which only partial knowledge is possible. It will not be surprising, in light of the texts we have explored, that these epistemological tensions and complications are therefore particularly visible in Darwin's brief treatment of the ignis fatuus.

Darwin arranges each canto and subsection of *The Economy of Vegetation* according to classes of analogous phenomena. For instance, Canto One invokes the so-called "Nymphs of

Fire," and each subsection of the Canto addresses some related agent of light, heat, etc. Darwin's decision to begin with light and heat not only suggests a natural-philosophical alternative to the theological notion of cosmic genesis from the divine "Fiat Lux," but also echoes and perpetuates a looser form of the representative project on "heat" Bacon outlines in the *Novum Organon*. The particular section of Canto One of interest to us here encompasses the following topics:

Heat confined on Earth by Air. Phosphoric lights in the Evening. Bolognian Stone. Calcined Shells. Memnon's Harp, Ignis Fatuus, Luminous Flowers, Glow-worms. Fire fly. Luminous Sea-insects, Electric eel [and] Eagle armed with lightening. xlii

Darwin's use of "analogies" to group associated phenomena betrays a more nuanced epistemological stance than such a categorization might at first suggest. Darwin is, of course, at pains to articulate his desire to identify analogous phenomenon accurately, and points this out most directly in the "Apology," where he claims that "the general design of the following sheets" is to lead the "votaries" of science "from the looser analogies, which dress out the image of poetry, to the stricter ones which form the ratiocination of philosophy."xliii It is important to note that philosophical "analogies," while "stricter" and certainly deserving of more confidence than their "looser" poetic counterparts, fall short of arriving at certainty. If Darwin's goal is to lead readers to a "stricter" application of analogical thinking in order to inculcate an appreciation for the ratiocination of philosophy, the method is still fundamentally analogical. Considering how we know what we know, Darwin suggests that the distance between poetry and philosophy is not wide enough to imply a difference in kind. In the absence of an absolutely certain knowledge of causes. Darwin links similar phenomena and lets the force of analogy suggest likely candidates for their shared cause. In doing so, Darwin's text flirts with assigning specific causes even as it simultaneously avoids endorsing a single explanation. This dual impulse within *The Botanic* Garden is evident both in Darwin's expression of uncertainty and, at times, in those moments of self-contradiction when he undermines the stability of knowledge that the text purports to produce.

Having suggested some of the epistemological implications of Darwin's use of analogy as a primary means of philosophical investigation as well as poetic composition, I turn now to an examination of the complications that arise within the specific, representative case of the *ignis* fatuus. Invoking the "Effulgent Maids" in the fourth section of the First Canto, Darwin offers a catalogue of luminous phenomena in which the *ignis fatuus* occupies a central and strange position. Darwin's reference to the phenomenon occurs quite briefly, in two lines of poetry, but the apparent simplicity of this presentation is belied by the long, complicating note that Darwin appends to the verses. The lines in the main text are direct and unassuming – "You with light Gas the lamps nocturnal feed, / Which dance and glimmer o'er the marshy mead" (1.189-190) – and imply that gaseous exhalations cause the phenomenon of the nocturnal lamps or *ignes fatui*. The "efflugent maids" "feed" the nocturnal lamps with gas that is "light" in two senses (weight and luminescence), an ambiguity that links the visible phenomenon and its material cause in a single word. The bifurcation between these two senses of "light" betrays the fact that, while the lines may well have assigned a cause for the phenomenon, they have not explained the precise way that the cause operates. "Light gas" becomes "light gas" through a process that, as the tautology makes clear, both escapes perception and defies explanation (at least in Darwin's description). In a surprising reversal of the order we might expect from these lines, the first line establishes a physical cause (of sorts) for the phenomenon, while the second merely describes its

physical appearance and common geographic environment in a subordinate clause. Scanning the lines, the reader is introduced first to the cause of the phenomenon and then to the appearance of the phenomenon. It is an order that might lead one to view the poem according to a didactic model in which the pupil-reader learns how the world works – unweaving the rainbow, to borrow Keats's familiar phrase^{xliv} In introducing the purported cause before the phenomenon itself, Darwin seems to break the *ignis fatuus* apart before it even appears.

Had these lines been the extent of Darwin's engagement with the phenomenon, we might have classed them with the simplistic pedagogical texts discussed earlier in this chapter. However, Darwin undermines the apparent solidity of these simple lines by appending a far more complicated note as is his wont throughout his poetical works. In the first sentence of the note, Darwin makes the following observation: "The ignis fatuus or Jack a lantern, so frequently alluded to by poets, is supposed to originate from the inflammable air, or hydrogen, given up from morasses."xlv Before continuing, it is worth pausing here to consider the way the first sentence has already raised complications. Rather than refer to natural philosophical descriptions of the phenomenon, descriptions with which he must have been familiar, Darwin chooses to call the reader's attention to the phenomenon's poetic ubiquity. His observation that the phenomenon is "frequently alluded to by poets" is an extremely rare if not unique contemporary recognition of its widespread presence in poetry. What Darwin makes of this popularity we are left to wonder, because Darwin immediately couples this literary aside with the explanation that the phenomenon arises from "inflammable air, or hydrogen," glossing his use of "light gas" in the verse. We should note, however, that whereas the verses assign a cause – the lamps are fed by light gas – here in the note Darwin adopts a more circumspect stance by introducing the gaseous causal theory with the word "supposed," a careful acknowledgement that we are dealing with theory rather than certainty. The phenomenon is "supposed to originate from the inflammable air, or hydrogen, given up from morasses; which being of a heavier kind from its impurity than that obtained from iron and water, hovers near the surface of the earth, and uniting with the common air gives out light by its slow ignition."

If Darwin complicates the simple causal explication of the phenomenon by qualifying it in this way, he deepens the degree of uncertainty surrounding the phenomenon in the next section of the note by casting doubt upon its very existence. "Perhaps," writes Darwin, exacerbating the doubt, "such lights have no existence, and the reflection of a star on watery ground may have deceived the travellers, who have been said to be bewildered by them?" Darwin's query calls the basic claim of the poetic lines into question, contradicting not just the explanation provided therein but the very existence of the phenomenon. The next sentence of the note deepens the divide between the supposed explication of the phenomenon (hydrogen) and the possibility that such lights are merely the "reflection of a star on watery ground." Darwin follows this expression of doubt with the statement that "if the fact was established it would much contribute to explain the phenomenon of northern lights," Given this sequence of sentences, what exactly is the antecedent of "the fact"? Is "the fact" the earlier section's suggestion that the phenomenon is caused by gaseous exhalations, or the possibility that the lights have no existence outside of a misperception of celestial reflection? Because of this ambiguity, it seems most likely that Darwin's intention is to suggest that establishing "the fact" of the phenomenon's very existence would contribute to an explanation of the phenomenon of northern lights insofar as it would function as a legitimate analogous phenomenon. According to this interpretation of the sentence, "fact" only refers to the factual existence of the phenomenon, not any hope for

certainty about its causes. Darwin suggests that the lines as well as the note may well be written about a non-existent or merely poetic phenomenon, a false light.

The note devolves into a kind of longing for the most basic kind of knowledge about its subject – whether or not it exists. Darwin gives personal voice to this more abstract epistemological longing in the last sentence of the note, explaining finally, "I have travelled much in the night, in all seasons of the year, and over all kinds of soil, but never saw one of these Will o' wisps." As a physician, Darwin indeed traveled extensively; Priestman and others (citing Darwin's own estimates) put the distance at 10,000 miles a year. xlvi His nightly peregrinations were such an important part of his work, and the distances covered so vast, that he constructed a special vehicle for the purpose. xlvii It may have been within this very carriage, while traveling along the roads at night, that Darwin composed many of the couplets of his Botanic Garden. xlviii The syntactical extension of language in the note gives form to Darwin's longing to see and, on a deeper, epistemological level, to know the phenomenon. Beginning with the claim of frequency, Darwin states that he has "traveled much in the night." Remarking that these frequent trips occurred "in all seasons of the year, and over all kinds of soil," Darwin expands both the temporal and the geographic reach of his search. We are left with an impression that Darwin spent significant amounts of time peering out into the darkness, keeping an eye out for the phenomenon. His longing to see the phenomenon, a longing that marks an implicit interest in the importance of epistemological uncertainly, is not only reflected in the syntactical extension of the line, but also in Darwin's decision to switch from the term *ignis fatuus* to "will o' wisp" in the conclusion to the note. As I noted in Chapter One, while the Latin *ignis fatuus* invested the phenomenon with a sense of scientific validity, the term "will o' wisp" carried with it notions of folk belief and superstition. Darwin's substitution in the final moment of the note seems to mark two impulses. First, it appears to function as a way of dismissing the phenomenon as unimportant and illusory; "I have not seen an ignis fatuus," Darwin implies, "therefore it is a mere 'will o' wisp.'" However, paired with the extended syntax and the way the note seems to oscillate between possible explanation and mystery, Darwin's choice of the term "will o' wisp" also betrays an attraction to the mysterious phenomenon, an attraction stemming in part from its provocative epistemological disruptiveness.

In either case, Darwin's treatment of the phenomenon remains problematic insofar as it proffers then retracts explanations, positing the existence of the phenomenon only to leave the very fact of its existence undetermined. This conflict, and the epistemological disruption it represents, is particularly salient if we look beyond the verse-note pairing on the *ignis fatuus* in Canto One and consider the status of the phenomenon within the peripheral textual apparatus. Recall, first, that the phenomenon is listed in the summary "Argument" of Canto One as "Ignis Fatuus." However, in the first edition's index to the content of the notes the reference reads "Ignis Fatuus doubtful." That is to say, while the "Argument" points readers to the poetic lines describing the "Ignis Fatuus," the index to the notes undermines the poetic lines by listing the phenomenon as "doubtful." The textual apparatus suspends the reader between conflicting claims about the very existence of the phenomenon. In doing so it mimics the deeper, epistemological questions that the phenomenon raises for Darwin, its troubling of the apparent confidence with which Darwin investigates the world. If it is true, as Priestman maintains, that Darwin frequently gazes on the world with a confident eye, secure in his sense of vision's capacity to encompass and explain, it is also true that, here at least, Darwin is guite aware of limitations, failures, and lingering questions. While he spends a great deal of time in *The Botanic Garden* explaining what

the inquiring eye can discover about the natural world, in this case he seems acutely aware of the amount of time he has spent fruitlessly peering out into the darkness of the landscape.

The tension within the textual apparatus of Darwin's poem encapsulates the epistemological tension within his project more generally: his desire to investigate the natural world, the impulse to see analogies and connections of all kinds, the risk (recall Bacon) of falling prey to "anticipations" or arriving at hasty conclusion, and an active engagement with phenomena that prompt epistemological uncertainty. While we must acknowledge the way that Darwin's epistemology differs from Keats's negative capability, insofar as it is far more explicitly grounded in a Baconian suspension of judgment deployed in the service of scientific progress and with full confidence in the final coherence that unifies the natural world, I hope that this reading of Darwin has shown that he does display a capacity for "half-knowledge," an ability to dwell "in uncertainty." Even though he does not necessarily appear content with this epistemological state (an acceptance that will ultimately be vital to Keats's notion of negative capability), Darwin nonetheless acknowledges and values uncertainty.

Thus, if Darwin seems at first glance like an easy target for William Wordsworth's accusation in "The Tables Turned" that in the face of nature's gifts "Our meddling intellect / Mishapes the beauteous form of things: / We murder to dissect" (26-28), Darwin is clearly aware of the potentially self-defeating violence of aggressive inquiry. While he may not, perhaps, share in Wordsworth's notion in "Expostulation and Reply" of a "wise passiveness" (24) that does not go "seeking" (28), Darwin notes the potential destruction of "beauteous form" in the pursuit of knowledge. If I seem to have overstated the way that Darwin's treatment of the *ignis fatuus* functions as a meditation on the desire to know and the failures or limitation of knowledge – functions, in other words, as an epistemological aside within the larger text – consider the lines and the note that immediately precede the *ignis fatuus* section in which Darwin describes and recounts the history of Memnon's Lyre. Reflecting on the principle by which light has the capacity to exercise physical force and effect objects in different ways, Darwin describes how "the sacred Sun in Memnon's fane, / Spontaneous concords guired the matin strain; / – Touch'd by his orient beam, responsive rings / The living lyre, and vibrates all it's [sic] strings" (1.183-86). Loosely assigning an explanation concerning the function of Memnon's lyre by linking it, via analogy, to other instances of light effecting physical changes in objects, Darwin quickly drops the figure of the lyre to turn to the even briefer treatment of the *ignis fatuus*. However, while Darwin glides past the lyre in the verses by loosely connecting it to similar phenomenon, he attaches an extended note on the lyre that explains in greater detail the possibility that the "sun's light possesses a mechanical impulse" and lists several instances of light's "mechanical impulse." He ends his note, however, with an historical aside:

The Statue of Memnon was overthrown and sawed in two by Cambyses to discover its internal structure, and is said still to exist. See Savary's Letters on Egypt. The truncated statue is said for many centuries to have saluted the rising sun with cheerful tones, and the setting sun with melancholy ones. lii

Darwin, delving into the content of his own poetic line in the process of writing the note, ends the note with a reflection on the curious dissection that Wordsworth would call "murder." According to this reading, we might see Darwin as a version of Cambyses, sawing the statue in half to discover its mechanism. Given Darwin's impartial tone in the note, it doesn't seem that he would be terribly offended by the comparison; he does not, after all, explicitly condemn

Cambyses's actions. Indeed, far from being destroyed by the process of investigation, Darwin reports that the musical mechanism of the lyre is said to have survived Cambyses's potentially destructive curiosity, the statue is "said still to exist." Darwin may, however, have the luxury of not needing to condemn Cambyses's method of inquiry precisely because his own work of dissecting phenomenon occurs within a merely textual field. If Darwin identifies with Cambyses it is because Cambyses's actions function as a loose analogy for inquiry in general rather than as an actual model for emulation. The figure of Cambyses and his cutting apart of the lyre is able to function ambivalently both as a model of inquiry and as warning about the destructive potential of the desire to understand precisely because of the loose nature of the analogies that bind together the objects in Darwin's text. Analogies work by drawing together (if only temporarily or erroneously) whereas dissection permanently rends objects apart. Speaking in more general terms and returning to my preliminary remarks on his method, Darwin's methodology seeks to know the world through loose and strict forms of analogy and constitutes a science that differs substantially from the more aggressive nature of anatomy. Darwin's use of the accumulative work of analogy and comparison, as opposed to dissection may not in the end be so very different from that "wise passiveness," receptive, as Wordsworth writes, to those "Powers / Which of themselves our minds impress." lin

Notes

ⁱ George Louis Leclerc, comte de Buffon, *The Natural History of Birds*. Vol. 6 (London, 1793), 470-71.

ii Percy Bysshe Shelley, "A Defense of Poetry," in *Shelley's Prose*, ed. David Lee Clark (Albuquerque: University of New Mexico Press, 1954), 293.

iii Feyerabend, 157.

iv Feyerabend, 157.

William Granger, The New Original and Complete Wonderful Museum and Magazine Extraordinary (London, 1802). Anonymous, An historical miscellany of the curiosities and rarities in nature and art. Comprising new and entertaining descriptions of the most surprising volcanos, caverns, cataracts, whirlpools, Waterfalls, Earthquakes, Thunder, Lightning, And Other Wonderful And Stupendous Phenomena Of Nature. Forming A Rich And Comprehensive View Of All That IS Interesting And Curious in every part of the habitable world. . . . 5 Vols. (London, 1794-1800). R. S. Kirby, Kirby's Wonderful and Eccentric Museum. 6 Vols. (London, 1820).

vi Granger, i.

vii Horace, "Ars Poetica," in *The Norton Anthology of Theory and Criticism*, ed. Vincent B. Leitch (New York: W. W. Norton & Company, 2001), 132. In the original, Horace's claim reads

[&]quot;Omni tulit punctum qui miscuit utile dulci, lectorum delectando pariterque monendo." Granger, Wonderful Museum, i.

viii Granger, i.

ix The copy of Granger's text that I examined in the Bancroft Library contained an illustrated advertisement for an early nineteenth-century flea circus very neatly pasted onto the endpapers. See Appendix (fig. 35). The early owner's addition of this advertisement into the volume essentially calls the text's pedagogical intentions into doubt.

^x Granger, 382.

xi Granger, 386; Italics added.

xii "On the same principle [of electricity] we may account for these mischievous vapours which set fire to the hay and corn stacks, but were driven away by presenting to them a pointed iron instrument, or by making a noise" (Granger, 389).

xiii Scientists did, of course, continue to investigate related phenomena well into the nineteenth century. See Nathaniel Hulme, "Experiments and Observations on the Light Which Is Spontaneously Emitted, with Some Degree of Permanency, from Various Bodies." *Philosophical Transactions* 90 (1800): 161-87.

xiv Christopher Christian Sturm, Beauties of Sturm, in lessons on the works of God, and of His providence. Rendered familiar to the capacities of youth. By Eliza Andrews, Author of Allegorical Miniatures, the Brothers, &c. (London, 1798). Eighteenth Century Collections Online. Web. 6 May 2015. Eliza Andrews's Beauties of Sturm provides excerpts from the longer Reflections on the Works of God, and of His Providence, Throughout All Nature, for Every Day in the Year. Translated First from the German of Mr. C.C. Sturm, into French; and now from the French into English. 3 Vols. (Edinburgh, 1788). Reflections went through seven editions before 1800.

xv Sturm, 229.

xvi Olinthus Gregory, Lessons, Astronomical and Philosophical, for the Amusement and Instruction of British Youth: Being an Attempt to Explain and Account for the Most Unusual Appearances in Nature, in a Familiar Manner from Established Principles. The Whole Interspersed with Moral Reflections. 2nd ed. (London, 1799).

xvii Gregory, 137.

xviii Gregory, 138. Gregory provides the section on the *ignis fatuus* with an epigraph from Milton to emphasize the connection between the phenomenon and vulgar superstitions.

xix Gregory, 140.

xx Gregory, 139.

- xxii Anonymous, Exercises, Instructive and Entertaining. In False English; Written with a View to Prefect Youth in their Mother Tongue, as Well as To Enlarge their Ideas in General, and Give them a Relish for what is Ornamental, Useful and Good (Leeds, 1787), 74. Unsurprisingly, Exercises quotes Horace on its title page: "Omni tulit punctum, qui miscuit utile dulce."
- xxiii For another late eighteenth-century use of the phenomenon in a pedagogical text, see John Tusler, *A Compendium of Useful Knowledge, Containing a Concise Explanation of Everything a Young Man Ought to Know* (London, 1784), 53. Pedagogical texts continued to reference the phenomena well into the nineteenth century. See, for example, R. E. Peterson, *Peterson's Familiar Science; or the Scientific Explanation of Common Things* (Philadelphia, 1857), 227-8.
- xxv Anna Letitia Barbauld, Lessons for children of three years old. part I, vol. 1 (Dublin, 1779); Anna Letitia Barbauld, Hymns in prose for children. By the author of Lessons for children (London, 1781); John Aikin and Anna Letitia Barbauld, Evenings at home; or, the juvenile budget opened. Consisting of a variety of miscellaneous pieces. . . . 6 Vols. (London, 1792-96).
- xxvi Thomas Percival, "Miscellaneous Observations on the Alliance of Natural History and Philosophy with Poetry," in *Moral and Literary Dissertations* (London, 1784), 237-8. Barbauld is quoted in Percival pp. 242-3.
- xxvii Anna Letitia Barbauld, "A Summer's Evening Meditation," in *Anna Letitia Barbauld: Selected Poetry and Prose*, ed. William McCarthy and Elizabeth Kraft (Peterborough: Broadveiw, 2002).
- xxviii Martin Priestman, *The Poetry of Erasmus Darwin: Enlightened Spaces, Romantic Times* (Farnham: Ashgate, 2013), 32. The emphasis on "positive" is Priestman's and, as a measure of the importance he places on this point, the only such bold emphasis in his text. Priestman seeks to "restore the big word 'Enlightenment' as a counterbalance . . . [to] 'Romanticism,'" but in doing so replicates the oversimplified binary he explicitly critiques when he writes that "literary and artistic works tend to be relentlessly absorbed and colonized by certain 'big' words, if they occupy anything like the same time-frame . . . Erasmus Darwin's work precisely coincides with the time-frame of early Romanticism, which has only been able to absorb it negatively, as a dreadful example of how not to write" (12). Priestman notes elsewhere that the "robust skepticism and, often, radicalism" of the British Enlightenment is frequently neglected in our understanding of the period, but it seems clear, in part because of its pairing with "radicalism," that the "robust skepticism" Priestman has in mind here is more an offensive critical stance towards authority than an internal, epistemological circumspection (11). My goal is to make more explicit those "continuities across the centuries" that Priestman acknowledges complicate Foucault's model, a model that is, as Priestman notes, "too neat" (217).

xxi Sturm, 228.

Economy of Vegetation (London, 1791), v. The "Advertisement" first appeared with the publication of *The Loves of the Plants* (Book Two of *The Botanic Garden*) in 1789. Darwin subsequently published Book One, *The Economy of Vegetation*, in 1791. All subsequent quotations refer to *The Economy of Vegetation* unless otherwise noted.

xxx Noel Jackson, ""Rhyme and Reason: Erasmus Darwin's Romanticism." *Modern Language Quarterly* 70:2 (June 2009): 174.

xxxi Jackson, 176 and 177, respectively.

xxxii Jackson, 186.

xxxiii Robert N. Ross, "'To Charm Thy Curious Eye': Erasmus Darwin's Poetry at the Vestibule of Knowledge," *Journal of the History of Ideas* 32 (1971): 379-394. See Irwin Primer, "Erasmus Darwin's *Temple of Nature*: Progress, Evolution, and the Eleusinian Mysteries," *Journal of the History of Ideas* 25 (1964).

York: Garland Publishing, 1978), xiv. Reiman uses this phrase to express later Romantic reactions to Darwin, especially Shelley, who, as Reiman points out, explicitly states "didactic poetry is my abhorrence" (xiv). On Romantic responses to Darwin, see Desmond King-Hele, *Erasmus Darwin and the Romantic Poets* (London: MacMillan, 1986).

xxxv Darwin, vii.

xxxvi Erasmus Darwin, "Preface," in *The Temple of Nature; or, The Origins of Society: A Poem, with Philosophical Notes* (London, 1803), not paginated.

xxxvii Darwin, "Preface," The Temple of Nature, not paginated.

xxxviii Ross, 382.

xxxix I discuss Keats's concept of negative capability at length in Chapter Five. Keats's famous sentence on "what quality went to form a Man of Achievement, especially in Literature" reads as follows: "I mean *negative capability*, that is when a man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact & reason." John Keats to George and Tom Keats, January 5, 1818, in John Keats, *Keats's Poetry and Prose*, ed. Jeffery N. Cox (New York: W. W. Norton & Company, 2009), 109.

^{xl} Ross helps in pointing out the way the Eleusinian model complicates knowledge and Darwin's acceptance of "half-knowledge." Ross ultimately connects Darwin's version of Keats's negative capability to Darwin's confidence in the ultimate "coherence of the universe" (394). In other words, Ross is right about Darwin but weakens the more radical skepticism of Keats's concept

when he notes that Darwin's "Mental flexibility . . . is possible for Darwin because that coherence . . . is not a function of any philosophy but rather inheres in things themselves" (394). In other words, Darwin's ability to entertain half-knowledge is founded on the strength of his confidence in ultimate coherence, on the "Ordered System," the balance of which the *ignis fatuus*/poet upsets.

xli Ross, 384.

xlii Darwin, The Botanic Garden, xi.

xliii Darwin, The Botanic Garden, v.

xliv John Keats, "Lamia," in *Keats's Poetry and Prose* (New York: W. W. Norton & Company, 2009), 2.231.

xlv Darwin, The Botanic Garden, 18.

xlvi Priestman, 1. See also Desmond King-Hele, *Erasmus Darwin: A Life of Unequalled Achievement* (London: Giles de la Mare, 1999), 64.

xlvii Desmond King-Hele, *Doctor of Revolution: The Life and Genius of Erasmus Darwin* (London: Faber & Faber, 1977), 63-65. Jenny Uglow, *The Lunar Men: Five Friends Whose Curiosity Changed the World* (New York: Farrar, Straus and Giroux, 2002), 93.

xlviii Recall my discussion of the limitation surrounding the phenomenon in Chapter One. We must consider that the most likely witnesses of a phenomenon occurring in undeveloped areas of England would not be the learned natural philosophers, but the vulgar peasant, whose reports would not be documented. The travelling physician is in a unique position (as Darwin seems to recognize). I take up the impact of geography and social status in my discussion of John Clare in Chapter Five

xlix Darwin, *The Botanic Garden*, 211. This feature is retained in many subsequent editions.

¹ William Wordsworth, "The Tables Turned," in *William Wordsworth*, ed. Stephen Gill (Oxford: Oxford University Press, 1984).

li Wordsworth, "Expostulation and Reply," in William Wordsworth.

lii Darwin, "Additional Notes: Note VIII. – Memnon's Lyre," in *The Botanic Garden*, 17.

liii Wordsworth, "Expostulation and Reply," in William Wordsworth, Line 22.

Chapter Five

"Come then my guardian spirit!": Getting Lost in the Poetry of Burns, Keats, and Clare

That Bards are second-sighted is nae joke,
And ken the lingo of the sp'ritual folk;
Fays, spunkies, kelpies, a', they can explain them,
And e've the vera deils they brawly ken them.

- Robert Burns

I Burns

In his glossary to the 1787 edition of his poems, Robert Burns provides two adjectives and two synonyms for the term spunkie, defining it as "mettlesome, fiery, will-o'-the wisp, ignis fatuus." ii The spunkie is both "mettlesome" – it interferes in the actions of others by disrupting their intentions – and "fiery," both in the literal sense of combustion and in the figurative sense of witty playfulness. Burns pairs these two adjectives describing the disruptive nature of the phenomenon with two synonyms – "will-o'-the wisp, ignis fatuus" – that mark its presence in folklore and scientific discourse, respectively. Not only does the figure of the *ignis fatuus* appear throughout Burns's poetry as a playful, if troublesome, presence, but the phenomenon is also Burns's figure for his own authorial practice and the work of poetry itself. iii It is a measure of how far we have come when we recall that Burns proudly takes as a personal pseudonym the very phenomenon that Milton used to figure the deceptive serpent in his confrontation with Eve. Writing in a 1793 letter to Robert Ainslie, Burns playfully refuses to "answer" a previous missive from Ainslie with the remark that he "never could answer a letter in [his] life." With escalating impishness, Burns continues: "I have written many a letter in return for letters I have received; but then they were original matter – spurt away! Zig here; zag there; as if the devil that, my grannie (an old woman indeed) often told me, rode on will-o'-wisp, or, in her more classic phrase, Spunkie, were looking over my elbow." His humor kindled by this recollection of an attenuated folk belief – Burns's aside that his "grannie" was "an old woman indeed" emphasizes how distanced it has become – Burns, seemingly carried away in the very manner he describes, takes his meditation on letter writing to another level:

Happy thought that idea has engendered in my head: Spunkie, thou shalt henceforth be my symbol, signature, and tutelary genius! Like thee, hap-step-and-lowp, here-awa-there-awa, higglety-pigglety, pell-mell, hither-and-yon, ram-stam, happy-go-lucky, up-tails-a-by-the-light-o'-the-moon, has been, is, and shall be, my progress through the mosses and moors of this vile, bleak, barren wilderness of a life of ours. Come then, my guardian spirit! like thee, may I skip away, amusing myself by and at my own light; and if any opaque-souled lubber of mankind complain that my elfine, lambent, glimmerous wanderings have misled his stupid steps over precipices, or into bogs; let the thick-headed Blunderbuss recollect, that he is not Spunkie; that

Spunkie's wanderings could not copied be: Amid these perils none durst walk but he."

It is precisely because credence in the folk belief has waned considerably that Burns is able to think it a "happy thought," fit for poetic appropriation. Seizing the figure of the spunkie as his "tutelary genius," Burns launches into another appropriation of sorts by piling up descriptive phrases and colloquial terms, "hap-step-and-lowp, here-awa-there-awa"(etc.), with jubilant effect. No longer accompanied by the truly dangerous "devil" his grannie told him "rode on will-o'-wisp," the phenomenon is available as a figure for the poet himself. It is because the devil has, in a sense, dismounted that the poet is able to ride the will-o'-the-wisp. Following through on his jesting promise to adopt the figure as his "signature," Burns ends his letter with answerable style, "Yours, Spunkie."

Burns revives and develops the conceit he originally chances upon in his letter to Ainslie in his poem "To Robert Graham of Fintry Esqr.," in which he elevates spunkie from personal pseudonym to a figure for poetry itself. Before turning to the relevant passages of the poem, it is important to note that Burns's epistle is a request for support from Graham that amounts, in effect, to a defense of poetry. Burns couches his request within a mock-genesis story about both the process and ends of creation. In doing so, he humorously places Graham in the position of a Deity, able to create the world before him. Burns's use of the figure takes place within this hyperbolic praise of his benefactor. The true manifestation of Graham's power, Burns claims, would be to create something superfluous, something in excess of what is necessary in the world:

The ordered system fair before her stood, Nature, well-pleased, pronounced it very good; Yet, ere she gave creating labor o'er, Half-jest, she tryed one curious labor more. – Some spumy, fiery, ignisfatuus [sic] matter, Such as the slightest breath of air might scatter, With arch-alacrity, and conscious glee, (Nature may have her whim as well as we; Her Hogarth-art perhaps she meant to show it) She forms the thing and christens it – A Poet. (21-30)

Burns's use of the figure within the context of a solicitation reveals how the uselessness of the poet becomes a metric by which to measure the rest of creation (and creative power). The poet's uselessness makes his existence exceptional; but it is precisely in being exceptional that the poet becomes a measure of the world. This is the nature of Nature's "half-jest." The poet is the last, best creation of Nature. The poet is waste distilled into luminescence: "some spumy, fiery, ignisfatuus matter." Burns's sportiveness with the *ignis fatuus* stands in opposition to the treatment of the phenomenon in the late eighteenth-century pedagogical texts we looked at in Chapter Four. When Burns seizes the phenomenon as a mark of poetic purposelessness, he is actually wresting it from the grip of texts that use it in an explicitly purposeful, pedantic way. For, whereas these pedagogical texts use the phenomenon as a lesson in philosophic reasoning and as a general tool for correction, Burns revels in the zig-zag, higgity-piggity playfulness of the phenomenon.

II. Keats

As discussed in Chapter Four, Darwin's note on the dissection of Memnon's lyre foreshadows, albeit with far greater ambivalence about whether the act is merely destructive or partially justified, John Keats's well-known statements on the "unweaving" of the rainbow. Keats first voiced his complaint about the destructive potential of explanation in the company of fellow poets during the "immortal dinner" of December 28, 1817 hosted by Robert Haydon, at which he is reported to have proposed a toast damning Newton for having "destroyed all the Poetry of the rainbow by reducing it to a prism" (a toast from which, Haydon reports, Wordsworth abstained). "I Three years later, Keats furnished a more elegant version of his rumored toast about the destructive potential of scientific explanation near the end of "Lamia":

Do not all charms fly
At the mere touch of cold philosophy?
There was an awful rainbow once in heaven:
We know her woof, her texture; she is given
In the dull catalogue of common things.
Philosophy will clip an Angel's wings,
Conquer all mysteries by rule and line,
Empty the haunted air, and gnomed mine –
Unweave a rainbow.
(2.229-37)^{viii}

We must be careful, at the outset, not to oversimplify Keats's disappointment in natural philosophy. However disenchanting the destructive capacity of philosophy's cold touch may be, it does not necessarily constitute the wholesale rejection of science or the pursuit of knowledge. Unfortunately, many critics have engaged in such a simplification by accusing Keats of an antiscientific philistinism that fails to do justice to the complexity of his unease. ix Richard Dawkins's Unweaving the Rainbow: Delusion and the Appetite for Wonder, for example, uses Keats's phrase in its title and makes of the poet a straw man, a target for a resurgent scientism that, in seeking to promote a richer portrait of science by insisting on the role of wonder and imagination, does so in part by diluting or disregarding the epistemological complexity of poetic unease, casting it aside as mere misguided anti-scientism. In doing so, such treatments perpetuate C. P. Snow's two-cultures hypothesis (first advanced in 1959) under the very guise of attempting to make science more human by grounding it in wonder. xi Nor should Keats's discomfort at the destructive potential of explanation be understood as a youthful error to be outgrown in some process of maturation whereby earlier childish infatuations are set aside. Indeed, one of the primary goals of my treatment of Keats is to challenge the widely accepted, but dangerously simplistic, belief in a radical difference between the early Keats of *Endymion* and the later Keats of "Lamia" and "Hyperion," and argue instead for a fundamental consistency in his epistemological orientation and theory of poetry.

The passage from "Lamia" I quoted above is not, of course, a simple expression of unease with the work of scientific explanation as such; while it gives expression to this unease, it does so in a context that threatens to undermine the validity of its concern. Keats's dismay at the destructive power of "cold philosophy" comes at precisely that moment in the poem in which the illusions that Lycius has thus far enjoyed are dissipated by the "bald-headed philosopher" (2.245)

who "had fix'd his eye" (II, 246) upon Lamia (Lycius's lover), "brow beating her fair form" (2.248) to the point that she reverts to her serpentine shape before suddenly vanishing. Thus, while the reader temporarily shares with both the speaker and Lycius a resistance to the destruction of beautiful phenomena (according to the analogy with the rainbow), once the critical eye of the philosopher has unmasked these deceptions for what they are (Lamia is a serpent) the poem ends with a sense that these illusions constitute a real threat, that the pleasing world of rainbows may in fact be a land of dangerous delusions. Are we to understand Keats as an advocate of illusion or as an advocate of a cold philosophy that rescues us from those mistaken notions? In this chapter, I attempt to show that Keats stands somewhere between these two positions and that we need to understand Keats's meditations on imagination and cold philosophy as an epistemological inquiry that is as concerned with the danger of illusion's deceptive power as it is with philosophy's reductive explanatory certainties. "Lamia" is part of a broader epistemological inquiry that turns to poetry as a medium uniquely suited not only to pursue this investigation but also, in doing so, to establish a mechanism by which to enact and maintain a delicate epistemological stance.

"There grew up," writes C. J. Wright, "in the aftermath of the Romantic Movement a reaction against and hostility to Science, out of fear it would destroy that element of magic necessary for religion and art to enhance the prosaic nature of everyday life."xii Wright's reduction of the late Romantic unease with scientific explanation to a reaction against the boredom of the prosaic denies to late Romantic writers, and to Keats in particular, a depth of thought motivated by a sophisticated epistemological unease about the very nature of reality, about what can and cannot be known with certainty, as if only an existential boredom or horror at bare, material reality were capable of producing such a reaction. Wright makes these accusations about late Romantic hostility toward science, having taken as his primary focus the Romantic interest in optical phenomenon. xiii "A number of factors increase the interest in optics" during the late eighteenth century, Wright explains, and "one, paradoxically, was the uncertainty surrounding many of its fundamental laws."xiv The fact that late eighteenth-century interest stems from uncertainty does not seem to me merely paradoxical, but key. In a claim that looks towards Dawkins's more recent text, Wright insists that "the scientific explanation of wonderful phenomena need not rob them of their ability to inspire awe."xv While this may be true, it does not quite capture the full extent of Keats's discomfort with scientific explanation, which stems largely from the fact that its cold certainty threatens to sever continued engagement with the object. Looking at the seventeenth and eighteenth-century development of poetic epistemology provides a richer historical context for a discussion of the discomfort Wright too narrowly limits (both in terms of his chronological scope and his understanding of epistemological substance) when he claims that by the second quarter of the nineteenth century "the divide which had opened in the early nineteenth century between the sciences and the arts was inexorably widening." As I have suggested earlier, not only is this too narrow a historical focus with which to analyze the dynamics between developing scientific and poetic discourses; it is also a narrow focus that risks oversimplification, that reduces a far more complex relation between poetry and science to a story about poetry's frantic, childish retreat.

The stakes for understanding Keats's epistemological stance are high, I will argue, because it is ultimately upon this foundation that he erects his theory of poetry. That we can only grasp fragments of this theory – Keats never drafts a cohesive defense along the lines of Shelley – is, in part, a natural outgrowth of his resistance to certainty and resolution. Indeed, Meg Harris Williams has noted that Keats is like Milton in this respect: "the absence [in both authors] of a

deliberate, crystalized theory [of poetry] derives from the same antipathy towards capturing the uncapturable truths, expressing the inexpressible, that Keats condemns in 'irritable reaching after fact and reason,' or the impossibility of 'coming at truth' through 'trying at it.'" While Keats's letters offer glimpses into his thoughts on poetry, even as they confirm the absence of a unified theory, it is in the poems themselves, torn as they are between the competing forces of illusion and reality, fiction and truth, that we must search for a vibrant stasis, a resolution not strictly necessary but critically satisfying. As Williams reminds us, both Keats and Milton "regard poetry as a field of exploration which contains in miniature all the essential aspects of reality somewhere between the poles of 'true' and 'false' art, within which the poet has to experiment and forge his own identity." In the following pages I will describe the way that Keats, motivated in part by a deep skepticism, negotiates unstable mental terrain, and identifies poetry as the best way to maintain what he sees as a necessary, though difficult, stance. Poetry is able to maintain this position, for Keats, because it occupies the murky middle ground between truth and fiction and, more importantly, because it calls attention to the vitality that inheres in this middle state.

In *The Hoodwinking of Madeline and Other Essays on Keats's Poems*, Jack Stillinger stages the debate over Keats's epistemological stance in its starkest terms. According to what Ronald Sharp has called Stillinger's "chronological schema," Keats developed out of an early infatuation with the dreamer. **viii If, as Stillinger claims, in the early poems Keats expresses sympathy for a dreamer who "ultimately turns his back not merely on the pains of life, but on life altogether," later (in 1819, beginning with "The Eve of St. Agnes") the dreamer "is condemned."*** Stillinger's assertion that Keats's turn to reality necessarily entails a discomfort with "hoodwinking" in the "Eve of St. Agnes" stands as the clearest statement of his overarching claim about Keats's development from youth to maturity:

If the major concern of these later poems is the conflict between the actual and the ideal, the result is not rejection of the actual, but rather a facing-up to it that amounts, in the total vision, to affirmation. It is a notable part of Keats's wisdom that he never lost touch with reality, that he reproved his hoodwinked dreamers who would shut out the world, that he recognized life as a complexity of pleasures and pains, and laid down a rule for action: achievement of the ripest, fullest experience that one is capable of.^{xx}

Even if we grant, as I am willing to do, Stillinger's premise that a conflict between the "actual and the ideal" is "the major concern of these later poems," I am not so convinced that Keats found the resolution Stillinger suggests. While Keats may have "never lost touch" with reality, he also never lost touch with the ideals toward which the imagination provided a path. What Stillinger characterizes as resolution should, more accurately, be characterized as a tense and productive impasse, a "being in uncertainties," in Keats's own phrase, which we can now recognize as a Romantic version of the original, Baconian suspension of judgment.

Endymion figures the search for knowledge as the pursuit of light through occluding atmospheres of confusion. While the shepherd King Endymion's search for Cynthia draws him from the heavens to the depths of earth and sea, he always seems to be "wandering in uncertain ways" (2.48). **Xii* Keats maps Endymion's mental uncertainty – his fluctuating sense of what he knows, what he believes, and what he has experienced in the wake of his initial encounter with Cynthia, the "Known Unknown" (2.734) – onto a physical landscape characterized by

atmospheric distortions through which Endymion must wander. xxii If Endymion stands in darkness and Cynthia (the moon) is a figure of light, the pursuit unfolds as a series of encounters with various objects that reflect, refract, distort, display, illuminate, and occlude. As Endymion sets out in search of Cynthia, he travels through numerous mists and vapors, finding himself attracted along the way to various luminous objects. Indeed, even Cynthia's first appearance is characterized by the very transience and fluctuation that recurs throughout the poem. Describing his first perceptions of Cynthia to his sister Peona, Endymion recounts how she first appeared behind a veil of clouds, appearing, disappearing:

And Lo! From opening clouds, I saw emerge The loveliest moon, that ever silver'd o'er A shell for Neptune's goblet: she did soar So passionately bright, my dazzled soul Commingling with her argent spheres did roll Through clear and cloudy, even when she went At last into a dark and vapoury tent. (1.591-97)

Endymion's first visual experience of the moon in Book One sets up the pattern of pursuit that structures each subsequent book. Cynthia's brightness cannot be separated from the mists through which she emerges and into which she disappears. The motif of light and occluded light recurs throughout a pursuit that is characterized by doubts of all kinds, not only about which path to pursue but also about the object of pursuit itself. Endymion remains consistently befuddled, unsure if the light he pursues is the object he seeks. In a poem concerned with the pursuit of a luminous object through uncertain terrain, it is unsurprising that Keats should seize on the figure of the *ignis fatuus*, adding it to the multitude of lights that Endymion encounters on his way.

While at first the most explicit reference to the *ignis fatuus* in the text is apparently negative, I will contend that it, like other luminous objects in the text (for which it might stand as a representative example) is in fact a medium that, paradoxically, enables his journey, rather than simply forestalling, or delaying, or hampering it. Noting the role of the phenomenon in *Endymion*, Mark Sandy has remarked that "for Keats, these elusive fictions fluctuate between hope and despair, acting as spots of light which, like will-o'-the-wisp, dart through the murky air to be madly pursued as a guiding 'lantern' that will, arbitrarily, light the way." I would take Sandy's claim further, by arguing that the oscillations of the *ignis fatuus* in *Endymion* stand as a testament to what the text has to say about the value of epistemological uncertainty. While Keats's use of the figure of the *ignis fatuus* may initially appear to be the very epitome of dangerous delusions, it ultimately functions as a vital pivot within the narrative, a moment that allows for epistemological reflection and catapults Endymion out of despair.

Endymion, who embraces Cynthia only to lose her subsequently, sets out to search for her in Book Two by descending into "the hollow, / Silent mysteries of earth" (2.213-14). Finding himself in darkness, light reflecting off a "faint eternal eventide of gems" (2.225), Endymion is guided by lights "out-shooting sometimes, like a meteor star" (2.229) until he "descried an orbed diamond" (2.245) that illuminates the chamber "like the sun" (II, 246). Passing by this false Cynthia, Endymion continues to search until, "weary," he sits down "before the maw / Of a wide outlet, fathomless and dim, / To wild uncertainty and shadows grim" (2.271-73). It is at this

point, when Endymion finds himself in the depth of darkness, that Keats describes his greatest moment of despair:

There, when new wonders ceas'd to float before, And thoughts of self came on, how crude and sore The journey homeward to habitual self! A mad-pursuing of the fog-born elf, Whose flitting lantern, through rude nettle-briar, Cheats us into a swamp, into a fire, Into the bosom of a hated thing. (2.274-80)

Keats uses the *ignis fatuus* to describe a moment of self-consciousness, of a mind turned away from the outside world and inward – "homeward" – to one's "habitual self." Leaving behind his pursuit in the exterior world, Endymion turns inward and sinks into a morass of isolation and despair. At this point Keats breaks the stanza and begins anew: "What misery most drowningly doth sing / In lone Endymion's ear, now he has raught / The goal of consciousness? Ah, 'tis the thought, / The deadly feel of solitude" (2.281-84). In his note on the text, Jeffery N. Cox notes that the first printed version of *Endymion* read "caught," rather than "raught," which appears in the fair copy. xxv The printed version's "now he has *caught* / The goal of consciousness" picks up the figure of the *ignis fatuus* from the previous stanza and suggests that Endymion has somehow "caught" the "flitting lantern." While this sudden descent into despair upon reaching the "goal of consciousness" seems at first a purely negative moment, a "swamp" in which Endymion will most certainly drown, the experience in fact becomes a pivot that allows Endymion to turn back from the depths and continue his pursuit of Cynthia. Endymion may have "caught" or "raught / The goal of consciousness," but doing seems to have both cheated him into a swamp and propelled him out of it as well. Indeed, a few lines later, asking whether he must "patient stay, / Tracing fantastic figures with his spear" (2.293-94), Endymion answers with an emphatic "No. . . why should I tarry here?' " (2.295) and arises to leave: "No! loudly echoed times innumerable. / At which he straightway started" (2.296-97).

If it seems that this pivot away from the *ignis fatuus* is a simple turning away from a phantom, rather than a more complicated transition through the pursuit of it, we must take note of the different valences that accrue to phantoms and false forms in the text as a whole. They are, variously, dangers that lead astray, lights that lead one to truth, and, most bewilderingly, decoys that enclose the very object Endymion seeks. Many critics have remarked, often disparagingly, that Endymion's is a tortured path, the windings of which subject the reader to a similar experience of digressions, uncertainty, and shifting grounds. While many contemporary critics condemned Keats's use of romance and its seemingly directionless series of digressions, a few praised the effect. Thus P. G. Patmore described *Endymion* as a poem in which "we may wander about and delightedly lose ourselves." Wandering in the text, however, is more than simply a pleasure; it is also a trial. Throughout *Endymion* Keats represents wandering as both a pleasure and a discomfort, as a form of drowning and deliverance, a representational dynamic that is key to the poem's epistemological stance and its meditations on the nature of poetry. "Endymion's continued struggle to settle on fixed or grounded situation," Shahidha K. Bari writes in *Keats and Philosophy*, is "manifest in the poem's errant hero, itinerant narrative and wayward

form." Bari argues that the poem's formal structure mimics its broader conceptual interest in doubt:

The poem articulates Keats's own uncertainty about what it means to belong to any one place or to identify as any one thing. More specifically, *Endymion* allows Keats to explore, with due uncertainty, the very idea of security: the poem exposes identity as volatile, commitment as capricious, and the ground beneath our feet as unsure.

The sense that we are on "unsure" ground is nowhere more evident than in those moments when our understanding of what constitutes a delusive "phantom" abruptly shifts. We've already seen how the "fog-born elf," despite its initial appearance as a figure of deception, in fact precipitates Endymion's return to the pursuit of Cynthia, sending him so deeply into the "bosom of the hated thing" that he is propelled back into the world and toward his goal. Later, in Book Four, Endymion, having embraced the corporeal Indian maiden, announces his rejection of all earlier delusions and aspirations, unaware (like Edwin in Goldsmith's "The Hermit") that the maiden is Cynthia in yet another form. Endymion, in other words, embraces delusion most fully at the moment he seeks to cast it permanently aside by exclaiming that he will never again "be by phantoms duped" (4.629), by claiming that he has learned from the experience of having "clung / To nothing, lov'd a nothing, nothing seen / Or felt but a great dream!" (4.636-38). Thinking himself free of delusions and finally grounded in a firm, material reality, Endymion declares:

Gone and past
Are cloudy phantasms. Caverns lone, farewel!
And air of visions, and the monstrous swell
Of visionary seas! No, never more
Shall airy voices cheat me to the shore
Of tangled wonder, breathless and aghast.
Adieu, my daintiest Dream!
(4.650-56)

Endymion makes the triumphant announcement that he is free of "cloudy phantasms" and turns his attention to "my sweetest Indian" (4.648) who "redeemed hast [his] life from too thin breathing" (4.649-50) only to discover that the Indian is Cynthia in yet another form, a strange phantom of flesh and blood. Keats ends the scene with a wonderfully ambiguous line that once again draws our attention to the way the poem constantly undermines states of certainty not only through visual but also verbal ambiguity. "Say, is not bliss within our perfect seizure?" asks Endymion, "O that I could not doubt!" (4.720-21). Endymion's claim that "bliss" is within reach is troubled by both its formulation as a question and the alternate senses of the second line, which turns "O that I could not doubt" from an expression of certainty into a complaint about the inability to abstain from doubting. It is no wonder that Endymion, continually shuttled between various phantoms and false forms throughout the text, should discover that the object which appears most real is in fact just another transient form, and that his discovery should suffer from a semantic ambivalence that converts his clearest expression of epistemological security into a cry of epistemological unease.

It is also fitting that, in a poem characterized by its long, wandering pursuit, the final union between Endymion and Cynthia should occur only at the end, as the two "vanish'd far

away!" (4.1002). Keats leaves the reader with Endymion's sister Peona only to guess at what the final union must look like; it is union beyond the conception of what Cynthia, just prior to departing, calls the "mortal state" out of which Endymion (but not Peona or the reader,) has "by some unlooked for change" been "spiritualized" (4.992-93). While Endymion's quest ends in a union outside the confines of the poem, the reader and Peona are left to make their way "home through the gloomy wood" in a seemingly perpetual state of "wonderment" (4.1003). As we will shortly see in some of Keats's pronouncements on the work of poetry, Keats views phantoms and other seemingly false lights not as objects of disdain to be avoided but rather as means to explore and praise poetry's epistemological potential.

The importance of uncertainty to the narrative structure, poetic form, and philosophical implications of *Endymion*, and much of Keats's poetry, becomes clearer, even if it can never be perfectly resolved, when we examine his reflections on poetry in his letters. I first want to discuss that most famous of reflections on poetry, his statement concerning "negative capability." Read by itself, the letter in which Keats introduces negative capability takes us some way toward understanding his thoughts on the epistemological stakes of poetry, but we will get further when we read this letter in conjunction with another key passage from his correspondence that has been far less frequently examined or, when examined, often misconstrued.

Keats composed his famous letter to George and Tom Keats of December 22, 1817, just after finishing the full draft of *Endymion* and while readying it for publication. *xxviii Explaining "what quality went to form a Man of Achievement especially in Literature," he describes a capacity that recalls Bacon's suspension of judgment: "I mean Negative Capability, that is when a man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact & reason." Keats singles out Coleridge for his lack of this capacity, explaining that Coleridge would "let go by a fine isolated verisimilitude caught from the Penetralium of mystery, from being incapable of remaining content with half knowledge." Keats's refusal to take the meditation any further – "this pursued through Volumes would perhaps take us no further than this, that with a great poet the sense of Beauty overcomes every other consideration, or rather obliterates all consideration" - enacts a form of the critical half-knowledge he claims Coleridge is "incapable" of possessing. Rather than a carefully articulated product of "fact and reason," Keats's notion of negative capability is the result of a momentary vision during which "several things dovetailed in [his] mind, & at once struck [him]." He introduces the theory in passing, catching at it in a way that Coleridge (according to his theory) would not, precisely because of its resistance to further analysis or concrete articulation. If Keats says no more about the importance of the ability to remain in "uncertainties, Mysteries, doubts," this is in part because the theory defies full analysis and, besides, must be instantiated in examples, rather than abstracted in the form of an articulate theory. I've already pointed to some of the ways in which Endymion gives a narrative and poetic form to the difficulty of "being in uncertainties," and in which the constant oscillations between belief, doubt, delusion, and despair, give form to Keats's notion of negative capability. The very threat that poetry might stray too far from the real or the true and become, as Stillinger would argue, a dangerous delusion against which Keats must turn is also precisely what constitutes the basis of its power to induce epistemological reflection; by calling attention to itself as a potentially misleading force, poetry becomes, paradoxically, an eminently suitable epistemological guide. This paradox is at the heart of Keats's theory of poetry, both in his early and in his later texts.

Keats wrote the second letter that I would like to set beside his statements on negative capability and *Endymion* while he was preparing for the publication of the poem in the spring of 1818. The letter to Benjamin Bailey, dated March 13, gives us both a better sense of Keats's skepticism and the way this skepticism relates to his notion of poetry. In the letter, Keats presents poetry in the starkest possible light, but then, in a shift that we will want to read as carefully as we read the pivot in Book Two of *Endymion*, he transforms these terms of disparagement into praise, turning poetry from an empty specter into an object of eminent value. Responding to the publication of Bailey's sermon, *A Discourse Inscribed to the Memory of the Princess Charlotte Augusta*, in which Bailey meditates on the hope for an afterlife, Keats remarks, "you know my ideas about Religion – I do not think it is provable," before launching into a meditation on truth and poetry. ***X** Keats's religious doubts serve as an entry point to a far broader expression of skepticism that encompasses, significantly and in unexpected ways, his theory of poetry.

Having advanced the claim that he does not consider religion "provable," Keats is quick to clarify the deeper skepticism upon which his views of religion are based. "I do not think myself more in the right than other people" he writes in an expression of humility, before phrasing the limits of his skepticism as a double negative in the subordinate clause: "I do not think myself more in the right than other people and that nothing in the world is provable." The precise claim that Keats makes in this sentence remains ambiguous. He could be claiming either that he does not think himself more in the right than other people while also clarifying that, despite this expression of relativity, some things in the world are nonetheless provable; alternatively he could be claiming that he does not think himself more in the right than other people and in fact thinks that *nothing in the world is provable*. The interpretive crux reduces to the question of whether the "and" functions in Keats's sentence as a conjunction that continues the point of the first clause or doubles back so as to clarify and delimit. In either case, the syntax of the sentence expresses the complicated twists and turns that Keats often employs when considering the stability of truth. Keats offers no further clarification as to the meaning of the second clause, and he continues his letter by expressing the "wish" that he "could enter into all your feelings on the subject merely for one short 10 minutes." Discarding the possibility that they might arrive at some mutual ground of proof, Keats is only able to express a longing for the imaginative achievement of sympathy. In other words, the line expresses an extreme form not merely of epistemological impasse but also of sympathetic, imaginative impasse: Keats is not only unable to agree with Bailey; he is unable to "enter into all [Bailey's] feelings on the subject." Recognizing this, Keats locates himself in a position of radical epistemological distance and isolation from sympathy.

It is in the wake of this sympathetic impasse that Keats turns to a typically playful and complex meditation on poetry. Arising from the depths of epistemological skepticism, the passage takes a number of significant turns that collectively transform poetry from the most bankrupt into the most valuable of epistemological mediums. "I am sometimes so very skeptical," Keats tells Bailey, "as to think Poetry itself a mere Jack a Lanthern to amuse whoever may chance to be struck by its brilliance." What if, Keats demands, poetry is "mere" will-o'-thewisp, mere illusion? Valueless? Or worse, delusional? The next line, however, begins the process by which Keats transmutes this quality of "mere[ness]" into the very source of poetry's power and value. It is not poetry alone, Keats goes on to clarify, that is "mere." Much of the world is itself "mere" as well, and poetry is what helps us to perceive this condition. "XXXI Continuing with the figure of the *ignis fatuus* – here referred to as a "Jack a Lanthern" – Keats writes: "As Tradesmen say everything is worth what it will fetch, so probably every mental pursuit takes its

reality and worth from the ardour of the pursuer – being in itself a nothing." In other words, the fact that poetry is jack-a-lantern, an *ignis fatuus*, does not prevent it from becoming an object of value, and it is its existence as such that allows us to see the way our minds create "reality and worth" in seeking it out. Consider the way that Keats goes on to categorize what he calls "Ethereal things," a categorization that comes to privilege the merest objects. "Ethereal things may at least be thus real, divided under three heads – Things real – things semireal – and no things," "xxxiiii Keats explains:

Things real – such as existences of Sun Moon & Stars and passages of Shakespeare – things semireal such as Love, the Clouds &c which require a greeting of the Spirit to make them wholly exist – and Nothings which are made Great and dignified by an ardent pursuit – which by the by stamps the burgundy mark on the bottles of our Minds, insomuch as they are able to 'consecrate whate'er they look upon.' xxxiv

Keats is quick to clarify that not only are "Nothings" "made Great and dignified" (and thus equal to "Things real") they are precisely the kinds of objects that allow one most clearly to perceive the work of the mind. **xxv** In the course of this short passage, Keats initially uses the *ignis fatuus* to express despair before coming to see it as a form of praise. **xxxv** Thinking about poetry through the figure of the "Jack a Lanthern," Keats comes to value poetry precisely for its ability to train attention on epistemology.

Since my main desire in this section has been to show not only how a deep epistemological skepticism underlies Keats's theory of poetry but also that this more capacious sense of Keats's skepticism allows us to perceive a greater degree of consistency over the course of his career, I would like to end by turning briefly to a few lines on the nature of poetry from one of his final compositions, *The Fall of Hyperion*. In the first section of Canto One, Keats opens the poem by distinguishing between the nature of poetry and delusion. **XXXVIII* While "Fanatics have their dreams, wherewith they weave / A paradise for a sect" (1.1-2), poetry, Keats writes, is different:

For Poesy alone can tell her dreams, With the fine spell of words alone can save Imagination from the sable charm And dumb enchantment. (1.8-11)

The passage is rich in words with multiple valiances. It is precisely poetry's ability to "tell" her dreams, with the dual senses of both *giving voice to* and *critically distinguishing* that makes poetry different from "dumb enchantment." Note not only the dual senses of the word "tell" but also the way this double sense is picked up by the adjective "dumb," with its sense both of muteness and mental incapacity. It is by means of a "fine spell of words," a mechanism that calls attention to itself, that poetry is able to identify enchantments and rescue the imagination. "Spell," linked by rhyme to poetry's ability to "*tell* her dreams" also participates in the passage's many semantic doublings. The "fine spell" is both a magic spell but also the spelled letters on the page – the material text itself that both produces the magic "spell" and calls attention to this production. Poetry's value, in other words, inheres in this quality of being at once mystification and an awareness of mystification, a duality that makes it a valuable medium for a suspension of

judgment and epistemological exploration more generally. Keats's conception of poetry as something that both mystifies and calls attention to mystification is akin to Kant's claim in the Critique of Judgment that poetry "plays with semblance, which it produces at will, but not as an instrument of deception; for its avowed purpose is merely one of play, which, however, understanding may turn to good account and employ for its own purpose." Kant's description of poetry as an object that one pursues without any real danger of deceit is of a piece with poetic treatments of the *ignis fatuus* in which the will-o'-the-wisp announces itself – as in Burns – as a playful, deceitful sprite. This declaration of playfulness is evident in Goethe's use of the *ignis fatuus* in the Walpurgis-Night scene of *Faust* (1808), where he incorporates a will-o'the-wisp that, when called upon by Mephistopheles to lead the way acknowledges his own "natural instability" and announces that he makes an uncertain guide: "Remember, though! The mountain is magic-mad tonight, / And if you want a will-o'-the-wisp to lend you light / You mustn't take these matters too precisely." The beginning lines of Keats's Fall of Hyperion express a similar recognition of poetry's ability at once to guide and to call its own guidance into question. In doing so, the lines clarify the fundamental consistency of Keats's theory of poetry, a theory – albeit one his readers are only able to see in fleeting, flickering glimpses – that conceives of poetry as a ground in which to wander, and as a process of wandering characterized above all by epistemological unease.

III. Clare

I fancied that if I took a step forward I should fall into a bottomless gulph which seemd garing all round me. xl

John Clare

If any of the poets discussed in this project so far ever encountered an *ignis fatuus* in real life, rather than in the pages of poesy, we have no record of the event. The ubiquitous phenomenon is first and foremost a literary figure, unknown to the poets who wrote about it beyond the borders of the written page. While treatments of the phenomenon were surprisingly common, eyewitness accounts were extremely rare. John Clare, whose manuscript stands alongside William Derham's 1729 contribution to the *Philosophical Transactions* as one of very few firsthand accounts of the ignis fatuus in the seventeenth, eighteenth, or nineteenth century, is the one exception in this dissertation. The dearth of primary accounts not just among poets but in general makes it all the more significant that Clare, in addition to composing a poem on the subject of the *ignis fatuus*, drafted an extended meditation on the philosophical and epistemological ramifications of multiple personal encounters with the phenomenon. Clare's description of his various encounters in an extended appendix to his autobiographical fragments is a powerful and at times humorous summation of the epistemological issues the phenomenon raises, and stands as a fitting end to this chapter's discussion of the way late eighteenth- and early nineteenth-century poets embraced the strange light and its destabilizing power. Before turning to his autobiographical writing, however, I want to discuss Clare's poem "Will-O'-Wisp," pointing out the ways that, while sharing some common features with earlier poetic treatments, it manipulates these features so as to give the *ignis fatuus* greater pride of place and, by extension, a more disruptive power than any earlier treatment heretofore discussed.

The first line of Clare's poem "Will-O'-Wisp" – "I've seen the midnight morris-dance of hell" – balances an almost clinical statement of observational fact ("I've seen") against the mysterious hyperbole of the object: "the midnight morris-dance of hell." **Knowing something of Clare's actual experiences through his autobiographical remains adds something to our ability to see this initial claim as more than merely a poetic conceit. The speaker's calm "I've seen" is not simply a conventional technique to bring the reader into the poem with the promise of an alluring firsthand account (although it is this as well); it is a statement of autobiographical fact. As both an invitation and a report, the simple "I've seen" is a complex intermingling of the imaginative and factual that not only imports claims of facticity into the purportedly imaginary space of the poem but also, in turn, exports something of the fantastic into the real world. The brief calm and solidity of the words "I've seen" is like the false stability of a step that precipitates a fall; the simplicity of the first two words offers a treacherous objectivity that launches the reader into the frantic forward momentum that follows:

I've seen the midnight morris-dance of hell On the black moors while thicker darkness fell, Like dancing lamps or bounding balls of fire, Now in and out, now up and down, now higher, As though an unseen horseman in his flight Flew swinging up and down a lamp alight; Then fixed, as though it feared its end to meet, It shone as lamps shine in a stilly street; Then all at once it shot and danced anew, Till mixed with darkness out of sight it grew. (1-10)

Some trace of the clinical "I've seen" remains in the speaker's explicit use of simile as a descriptive tool. Using familiar analogies, the speaker likens the phenomenon to "dancing lamps or bounding balls of fire," to a "horseman" carrying a light, and to "lamps . . . in a stilly street." These descriptive similes, essentially a catalogue of visual analogues familiar from earlier poetic and scientific treatments, would seem to grant the speaker a degree of calm circumspection both insofar as the similes draw on well-worn poetic tropes and because, in doing so, they make comparisons with familiar objects (i.e., lanterns and lamps). Clare, however, subverts this descriptive mode's identification with natural philosophical explanation by subordinating each simile to the simple claim in the first line that what he has seen is "the midnight morris-dance of hell." In other words, although the speaker uses familiar analogies to describe the phenomenon, each natural explanation (lantern, ball of fire) is merely a visual simile for a supernatural phenomenon. It may look "like dancing lamps" or "like balls of fire" but Clare's speaker is clear that what he has seen was not natural.

Clare's sly disruption of the assumptions that often underlie the descriptive protocols at play in treatments of the *ignis fatuus* also undermines the palpable distinction we have encountered in previous poetic treatments between the educated speaker and the various benighted wretches who lose their way. If Thomson's speaker, for example, maintains a philosophic gaze that contrasts with the gullible ignorance of the panicked crowd or the "benighted wretch," Clare's speaker gives voice to that wretch's experience and, in so doing, gives expression to a scientifically unorthodox and far more epistemologically disruptive

interpretation of the phenomenon. Clare marks this divergence from earlier poetic treatments by investing Thomson's stranded wanderer with the quiet nobility of a "simple shepherd" who "under fear's eclipse / Views the dread omen of these will-o'-wisps, / And thinks them haunting spirits of the earth" (11-13). With the first line of the introductory passage, Clare validates the simple shepherd's belief that the lights are, if not specifically "haunting spirits of the earth," some similarly supernatural phenomenon. Keeping the speaker's subtle endorsement in mind allows us to see the similarity between the similes in the ten introductory lines and the language used in the remaining thirty-six lines to describe what the simple shepherd sees on the moor.

Given the speaker's introduction, we must read the description of the shepherd's experience and his interpretation as something other than a condescending critique of his misprision. Clare's remark that the shepherd is said to "think them haunted spirits" with "souls of midnight and with heads of fire" (15), "blazing like burning crackling wisps of straw" (17), does not ultimately mean that the speaker thinks the shepherd mistaken in his belief. Indeed, in Clare's extended description of what the shepherd sees, the phenomenon acts in ways that defy the familiar scientific explanations (a feature of Clare's autobiographical treatment as well). For example, the shepherd sees the light "shine and bound o'er moor and mire" (16), and imagines it a "lanthorn" held by murderers, until, upon coming nearer, he sees the "imagined lanthorn, light and all, / Without a plash" (25-26) fall from the "meadow bridge's very wall" (21) into the water before reappearing and "for furloughs off . . . simmer[ing] up and down, / a will-o'-wisp" (29-30). It is the strangeness of the light's movement, its rapid progress across the moor, its still presence upon the bridge, its sudden and silent descent into the dark water below, and its reappearance, moving up and down in the distance, that send the peasant "breathless to the town" (30) in a state of deep epistemological anxiety. "Existing like a doubt of life or death," the shepherd hastens:

Until the sight of houses cures his fears
And fireside voices greet his happy ears.
And then he rubs his hands beside the fire,
And quakes, and tells how over more and mire
The Jack – o' – lanthorn with his burning tails
Had like to led him; and he bites his nails
With very fear to think out how the blaze
Had like to cheat him into dangerous ways:
How that he thought he heard some people stand
As likely thieves with lanthorn in their hand,
When in a moment – yet he heard no fall –
Down went the lanthorn from the arches' wall
Into the flood; and on that brig alone
How his heart seemed as growing into stone.
(32-46)

Abruptly – like the light disappearing without sound "into the flood"— the poem ends. In doing so, the poem produces in the reader something analogous to the effect of the phenomenon on the shepherd; it is meant in some sense to make the reader's heart seem "as growing into stone," to make the reader experience a state of uncertainty while standing alone in the act of reading, looking into the dark waters of the poem's abrupt end.

Clare's poem relies on repetition to produce many of its effects, returning again and again to the phenomenon as though turning over a lingering problem. The poem can be divided into three basic sections, each containing the same basic elements: the speaker's detailed introduction of the phenomenon (1-10), his description of the simple shepherd's encounter with the phenomenon (11-34), and finally his account of the simple shepherd's description of encountering the phenomenon (35-46). The most striking feature of this tripartite structure is how little difference there is between each part. It is a repetition that produces a sense of uncomfortable stasis rather than of progressive movement. The later iterations do not shed more light on the subject. Rather, they train the reader's gaze on the literal and metaphoric darkness that surrounds the experience recounted multiple times in the poem.

The poem's repetitive structure calls our attention to more specific moments of repetition in the poem and the way the poem functions not in the corrective mode we have encountered in some earlier poetic treatments but in an essentially accumulative, additive mode, which emphasizes rather than diminishes the shepherd's perspective. In particular, Clare employs variations of the verb "grow" at two crucial moments in the poem. In the final line of the poem the shepherd recounts how as he stood alone on the bridge and watched the light soundlessly disappear: "His heart seemed as growing into stone." Clare's use of a verb for organic development to describe the transmutation of flesh into inorganic material strangely inverts our notions of development; it is a maturation couched in the language of death, a regression phrased as an advance. The importance of this inversion becomes clearer when we note how a similarly counter-intuitive use of the verb "grow" occurs at the end of the speaker's introductory lines. Recall that the speaker's description of the will-o'-wisp ends with an image of its retreat: "Till mixed with darkness out of sight it grew" (10). The curious use of the verb implies that the phenomenon's retreat is in fact an approach; it disappears only in the sense that it becomes ever present. Clare is careful to avoid saying that the light disappears, (opting instead for "mixed with darkness") and, importantly, alters the more conventional "out of sight it drew" to "out of sight it grew," a change that makes us imagine the light as suddenly acquiring the gigantic proportions of an all-encompassing darkness.

In an early autobiographical fragment Clare attempts to describe the way his understanding of the world oscillates between belief and disbelief. As Jonathan Bate notes, "Like most children, Clare had a more complex imaginative life when alone than when in company. Among his friends, he professed a disbelief in ghosts, witches, and rural superstitions" but found himself susceptible to these notions when alone. xlii In the early autobiographical fragment Bate cites, Clare reflects: "when I was alone in the night my fancys created thousands and my fears was always on the look out." Describing a personal experience that he may have drawn upon in his poetic treatment of the will-o'-wisp, Clare recounts that he "was terribly frightened on seeing a will o wisp for the first time and though my fears grew less by custom for there are crowds about our fenny flats yet I never could take them on the credit of philos[oph]y as natural phenomenons [sic] at night but always had a suspicion of something supernatural belonging to them." Clare's ambivalence about the phenomenon, his inability to "take them on the credit of philos[oph]y," is, I hope to have shown, also evident in the way he collapses the viewpoints of speaker and shepherd in "Will-O'-Wisp." The extended treatment of the subject in his autobiographical notes on the will-o'-wisp makes the stakes of Clare's position and its epistemological ramifications clearer. Because it bears on Clare's treatment of the phenomenon in his poem, helps to clarify some of the phenomenon's implications, and, as I noted above,

represents one of the only extant first person accounts, I will move carefully through Clare's two-page treatment. In doing so, I wish to make two main points. The first is straightforward: Clare launches a fairly sophisticated attack on accepted philosophical explanations of the *ignis fatuus* and frames his own position as one of epistemological openness. The second, more complex point I wish to make is that Clare's description of the phenomenon suggests that the will-o'-wisp is not merely the possible result of some visual distortion but a phenomenon that actively distorts the world that surrounds it. According to Clare, the *ignis fatuus* disrupts the viewer's ability to see the world by turning that world into darkness.

In an introductory phrase that mirrors the first words of "Will-O'-Wisp," Clare announces: "I have often seen these vapours or what ever philosophy may call them." Later in the passage Clare will return for a more careful attack on the "vapour" explanation he peremptorily dismisses here. His offhanded attack on philosophical nomenclature, "vapours or whatever philosophy may *call them*" (italics added), seems to be a criticism of the way philosophical encounters with the *ignis fatuus* occur on the page, in the realm of words. Philosophy knows the phenomenon only through words, through what it chooses to "call" or name it in its attempts to order and subordinate. Clare, on the other hand, has experienced the phenomenon directly, and the result is that he does not know precisely what to call it. Having often seen "these vapours," Clare writes: "I never witnessed so remarkable an instance of them as I did last night which has robd [sic] me of the little philosophic reason[in]g which I had – about them I now believe them spirits but I will leave the facts to speak for themselves." According to Clare's statement, "philosophic reason[in]g" is not so much an innate ability as a simple possession that can be taken away (in the same way that a mistaken belief can be taken away or corrected). Sarah Houghton-Walker has pointed out that in his accounts of "whisps" Clare makes an effort "to rationalize, to understand them as phenomenon easily explained by science" but finds that "his mind seems instinctively to pull away from attempts scientifically to account for the whisps."xlv While I want to suggest here that the epistemological disruption that results from Clare's encounter with the will-o'-wisps is far too sophisticated to be characterized merely as an instinctual "pull[ing] away" from scientific explanation, I agree with Houghton-Walker's assessment that in these moments Clare manifests "a strange combination of acceptance with curiosity," a mixture of "credulity and incredulity," and a willingness to reside, in Houghton-Walker's fine phrase, "on [the] cusp of faith and doubt." In place of philosophic reasoning, Clare substitutes a belief that the lights are spirits. He is careful, however, not to press this claim and, using a method that unexpectedly arrays "facts" against philosophic reasoning, he uses observations to undermine dominant philosophical explanations and thus leaves the precise nature of the phenomenon undetermined – an open question.

The power that Clare's encounter with the will-o'-wisp has to destroy what he earlier calls the "credit" of philosophy becomes even clearer when he informs us that he originally set out in search of the phenomenon with the precise intention of debunking superstitious interpretations. Clare explains that "there had been a great upstir in the town about the appearance of the ghost of an old woman who had been recently drownd in a well – it was said to appear at the bottom of neighbour Billings close . . . and the noise excited the curiosity of myself and my neighbour to go out several nights together to see if the ghost would be kind enough to appear to us and mend our broken faith in its existence but nothing came." Setting out with playful curiosity to "mend [his] broken faith," Clare soon finds himself "robd" of his "philosophical reasoning" instead. Witnessing "a light in the north east over eastwell green" which he first takes to be a "bright meteor," Clare registers his increasing surprise at the fact that

the light "presently became larger and seemd like a light in a window" before "it then moved and danced up and down and the glided onwards as if a man was riding on hors [sic] back at full speed with a lanthorn light." In framing the encounter in this way, Clare reverses the sequence of reactions we have usually seen in treatments of the phenomenon. Rather than first thinking it a spirit and subsequently correcting that mistaken belief, Clare sets out believing it a simple vapor only to come away believing it a spirit; more accurately, Clare seems to leave the experience not knowing quite what he believes.

According to the account, Clare and his companion soon saw another light arise that chased and ultimately "mingled" with the other. "We stood wondering," writes Clare, "and gazing for a while at the odd phenomenon and then left the will o wisp dancing by itself." Having recounted his observation, he begins his attack on philosophical reasoning. He does so first by pointing out that "what was rather odd for their appearance" was that "the wind blew very briskly it was full west." Unable to reconcile the movement of the light with the force of the prevailing wind, Clare begins to interrogate the standard explanation of the phenomenon:

Now these things are generally *believd* to be vapours rising from the foul air from bogs and wet places were they are generally seen and being as is said lighter then the common air they float about at will—now this is all very well for *Mrs Philosophy who is very knowing* but how is it if it is a vapour lighter then the air that it coud face the wind which was blowing high and always floated side ways from north to south and back. **Iviii**

Clare demotes philosophy from the status of a credible authority to a know-it-all housewife, no more worthy of automatic acceptance than the familiar tales told by women in the village. Clare implies that "Mrs Philosophy" is as credit-worthy as "the old alewife at the Exeters arms behind the church (Mrs Nottingham)," a woman who, Clare notes, "often says that she had seen from one of her chamber windows as many as fifteen [will o wisps] together dancing in and out in a company as if dancing reels and dances on east well moor." By implicitly equating "philosophy" and an "old alewife," Clare suggests that philosophy is as insistent in its expressions of certainty. While being quite firm in his rejection of the common philosophical explanation (vapours), on the basis that "the wind afected it nothing," Clare is careful not to be so "very knowing" in his own account. Instead, he suspends judgment: "I leave all as I find it I have explained the facts as well I can."

If the first half of Clare's treatment makes clear the way a particular encounter calls into question his credit in philosophical reasoning and opens other possibilities, the second half, in which he recounts another encounter with the strange lights, frames this epistemological disorientation as a physical experience in which the phenomenon radically alters his ability to perceive the world. His description of this experience is worth quoting at length:

I saw one as if meeting me I felt very terrified and on getting to the stile I determi[n]d to wait and see if it was a person with a lanthorn or a will o whisp it came on steadily as if on the path way and when it got near me within a poles reach perhaps as I thought it made a sudden stop as if to listen me I then believe it was some one but it blazed out like a whisp of straw and made a cracking noise like straw burning which soon convined me of its visit the luminous haloo that spread from it was of a mysterious terrific hue and the enlargd size and whiteness of my own hands frit me the rushes appeard to have grown up as large and tall as walebone whips and the bushes seemd to be climing the sky every

thing was extorted out of its own figure and magnif[i]ed the darkeness all round seemd to form a circular black wall and I fancied that if I took a step forward I shoud fall into a bottomless gulph which seemd garing all round me so I held fast by the stile post till it departed away when I took to my heels and got home as fast as [I] could so much for will o whisps.

Once more, Clare begins with descriptions that would seem to link the sight to identifiable causes such as "a person with a lanthorn" or burning straw. In doing so, he accomplishes two things at once, indirectly claiming what these lights are not even as he seeks to establish a visual similarity. Note, however, that Clare does not deploy the familiar similes. Instead, he narrates the mental process through which an initial identification is subsequently downgraded to mere similarity. By emphasizing the period of time it takes first to produce and then to discard these mental identifications. Clare communicates the *ignis fatuus*'s disorienting effect in more detail than in previous descriptions. "The luminous haloo" very quickly distorts Clare's perception of his hands, turning those most familiar of appendages into strange and frightening objects. In other words, the experience is one that modifies Clare's perception of his physical body, distancing him from it in the same way that the experience of these encounters calls into question the solidity of his beliefs and focuses his attention on his mind's perceptive capacities, ultimately distorting not only his hand but also faith in his senses. In this moment, the very hands with which he is able to grasp the world are turned into unfamiliar objects that evoke fear in him. The phenomenon's effect on Clare's visual perception spreads out from his hands and begins to distort the world around him, enlarging the "rushes" and "bushes" till "everything was extorted out of its own figure." Clare's possibly inadvertent substitution of "extort" for "distort" echoes his use of the verb "rob'd" at the beginning of the passage. These substitutions, or rather misapplications, suggest that an active force is at work – perhaps a force with demonic intention - in the visual disruptions Clare describes. The will-o'-wisp does not simply undermine philosophical reasoning, it steals philosophical reasoning away; it does not simply distort the world, it "extorts [every thing] out of its own figure" (italics added). The sense that the world is shifting before Clare's eyes is mirrored in his metamorphosing syntax as one grammatical unity merges with the next in the relative absence of punctuation. Consider, for instance, the way that the sentence pivots on the word "magnified." While at first "magnified" completes the phrase "every thing was extorted out of its own figure and magnified," it can also function as the initial word (modifying "darkness") of the subsequent phrase: "magnified the darkness all round seemd to form a circular black wall." Just as Clare's syntax and punctuation in the unpolished prose of this autobiographical fragment blends the divisions between sentences and evokes a sense of frantic disorientation, so the phenomenon appears to undermine the clarity of relations between Clare, his body, and the world itself.

Perhaps the most striking contribution that Clare makes to the long history of treatments of the subject is his observation that the "gulph" which threatens to separate him from the world is a necessary consequence of encountering the phenomenon. Clare's careful description of the experience of seeing the *ignis fatuus* suggests that the familiar threat – that the phenomenon may lead one into the mire or cause one to fall – is based on an under-acknowledged aspect of such encounters with the phenomenon. The threat of falling into a "gulph" that is an integral part of folk notions concerning the phenomenon may not necessarily be the consequence of chasing the phenomenon, but rather something that results from simply observing it from a distance. To look at the light of the *ignis fatuus*, according to Clare, is, counter-intuitively, to have darkness

"magnified": "all around seem' to form a circalar black wall and I fancied that if I took a step forward I should fall into a bottomless gulph which seemed garing all round me." Rather than illuminating the world with its light, the *ignis fatuus* surrounds Clare with "a circalar black wall" – the living experience of Joseph Priestley's observation that "the greater the circle of light, the greater is the boundary of the darkness by which it is confined." A light-induced blindness precipitates Clare's feeling that he is on the brink of falling. Like his use of "extorted," Clare's use of "garing" conflates a number of significant concepts. Garing, from "gaure," defined as "to stare, gape, gaze in wonder or astonishment," connects the sense of a "gulph" opening before him with his own act of gaping in amazement. As such, "garing" conflates the exterior "gulph" or gulch that might be said to "gape" around him with the inner experience of awe at the sight of the circular black wall. In this way, "garing" marks one way that the experience undermines the boundary between the exterior world and Clare's subjective experience of the world, leaving him holding "fast by the stile post," watching the will-o'-wisp "till it departed away."

Notes

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An' aft your moss-traversing *spunkies*Decoy the wight that late an' drunk is:
The bleezan, curst, mischieveous monkies
Delude his eyes,
Till in some miry slough he sunk is,
Ne'er more to rise.

(73-78)

ⁱ Robert Burns, "The Brigs of Ayr, as Poem," in *The Poems and Songs of Robert Burns*. vol. 1 ed. James Kinsley (Oxford: The Clarendon Press, 1968), lines 73-76.

ⁱⁱ Robert Burns, *Selected Poems*, ed. Carol McGuirk (New York: Penguin Books, 1993), 323. All quotations of Burns's poetry refer to this edition unless otherwise noted.

iii Burns also incorporates the phenomenon in his "Address to the Deil":

^{iv} Robert Burns to Robert Ainslie, April 26, 1793, in *The Poetical Works of Robert Burns* (Chicago: Belford, Clark & Co, 1884), 489.

^v Burns to Ainslie, April 26, 1793, 489-90.

vi Robert Burns, "First Epistle to Robert Graham of Fintry Esqr., with a request for an Excise Division," in *The Poems and Songs of Robert Burns*.

vii Robert Haydon, quoted by Cox in *Keats's Poetry and Prose*, 427. Jeffery N. Cox refers to this dinner in his note to "Lamia" in *Keats's Poetry and Prose*, 427 n.6. For a detailed treatment of

the dinner, see Penelope Hughes-Hallett, *The Immortal Dinner: A Famous Evening of Genius and Laughter in Literary London, 1817* (New York: New Amsterdam Books, 2002).

viii John Keats, "Lamia," in Keats's Poetry and Prose.

ix See my discussion of C. J. Wright, below.

^x Richard Dawkins, *Unweaving the Rainbow: Delusion and the Appetite for Wonder* (Boston: Houghton Mifflin Company, 1998).

xi See C. P. Snow, *The Two Cultures* (Cambridge: Cambridge University Press, 2012).

xii C. J. Wright, "The 'Spectre' of Science: The Study of Optical Phenomena and the Romantic Imagination," *Journal of the Warburg and Courtauld Institutes* 43 (1980): 186.

xiii Although it seems intimately related to the phenomena he discusses, Wright does not take up Romantic treatments of the *ignis fatuus*.

xiv Wright, 189.

xv Wright, 199.

xvi Meg Harris Williams, *Inspiration in Milton and Keats* (London: The Macmillan Press, 1982), 200.

xvii Williams, 197-98.

xviii Ronald A. Sharp, *Keats, Skepticism, and the Religion of Beauty* (Athens: University of Georgia Press, 1979).

xix Jack Stillinger, *The Hoodwinking of Madeline and Other Essays on Keats's Poems*. (Urbana: University of Illinois Press, 1971), 93.

xx Stillinger, 93.

xxi Keats, Endymion, in Keats's Poetry and Prose.

xxii See Keats's use of atmospheric metaphor for the epistemological unease that he claims characterizes "human life": "We are in a Mist – We are now in that state – We feel the 'burden of the Mystery" (Keats to J. H. Reynolds, May 3, 1818, in *Keats's Poetry and Prose*, 245).

xxiii There are numerous moments when lights lead Endymion, only some of which I discuss here. See also Glaucus, recounting his search for Scylla: "I came to a dark valley" in which "I approach'd a flame's gaunt blue, / That glar'd before me through the thorny brake. / This fire, like the eye of Gordian snake, / Bewitched me towards" (3.490-95).

xxiv Mark Sandy, *The Poetics of Self and Form in Keats and Shelley* (Aldershot: Ashgate, 2005), 39. Sandy goes on to remark that "the oscillating movement characterizes Endymion's dream of immortal union with Cynthia" (39). While Sandy seems to conflate the *ignis fatuus* with the related, maritime phenomenon of Castor and Pollux, he correctly assesses its function as an ambivalent guide. Sandy notes the recurrence of the figure of the *ignis fatuus* in the letter to Bailey that I discuss in detail below.

xxv Cox in Keats's Poetry and Prose, 177, n. 8.

xxvi Quoted in Shahidha K. Bari, *Keats and Philosophy: The Life of Sensations* (New York: Routledge, 2012), 91.

xxvii Bari. 98.

xxviii Cox points out that, traditionally, this letter been mistakenly dated with the year 1818, but in fact "must have been written beginning December 21, 1817" (107 n.1). This correction places the letter, as I point out above, within Keats's work on *Endymion*. It also places it a mere three months *before* the March 13, 1818 letter to Benjamin Bailey I discuss in detail below.

xxix John Keats to George and Tom Keats, January 5, 1818, in *Keats's Poetry and Prose*, 109.

xxx John Keats to Benjamin Bailey, March 13, 1818, in *Keats's Poetry and Prose*, 131. See Cox's note in *Keats's Poetry and Prose*, 115, n. 8.

xxxi The value seems to inhere in large part, as we will see below, in the fact that poetry announces its status. For another version of the jack-a-lantern or *ignis fatuus* announcing itself as an *ignis fatuus*, see P. B. Shelley's translations of Goethe's *Faust*.

xxxii Keats to Bailey, March 13, 1818, 131.

xxxiii Note that Keats curiously, and suggestively, classifies "Things real" under the heading "Ethereal Things."

xxxiv Keats to Bailey, March 13, 131. See also Keats's related thoughts on the imagination: "The imagination may be compared to Adam's dream – he awoke and found it truth" (John Keats to Benjamin Bailey, November 22, 1817, in *Keats's Poetry and Prose*, 102).

value of C. Goellnicht takes Keats's expression "stamps the burgundy mark on the bottles of our Minds" at face value "to mean produces the best poetry or artistic beauty" (*The Poet-Physician: Keats and Medical Science* [Pittsburg: University of Pittsburg Press, 1984], 74). So too, Regina Hewitt writes that according to Keats the "mind turns 'Nothings' into significant symbols, and minds themselves develop (physically and socially like the juice maturing into the chemically different and culturally privileged wine) by the reflexivity of this process" (*The Possibilities of Society: Wordsworth, Coleridge, and the Sociological Viewpoint of English*

Romanticism [Albany: New York State University, 1992], 155). I would like to suggest that "stamps the burgundy mark" is not free from the anxieties associated with counterfeiting. The "stamp" makes a claim about the quality of the contents, providing a kind of proof that the contents themselves cannot establish. In other words the "stamp," in purporting to verify the product, serves to verify the need for verification in a mode of self-reflective circumspection Keats would recognize in his own tortured meditation on the value of poetry.

keats ends this entire meditation by claiming: "Now my dear fellow I must once and for all tell you I have not one Idea of the truth of any of my speculations – I shall never be a Reasoner because I care not to be in the right, when retired from bickering and in a proper philosophical temper" (Keats to Bailey, March 13, 1818, in *Keats's Poetry and Prose*. 131). Another of Keats's well-known statements on the nature of the poet reiterates this epistemological position. The poetical character, Keats writes, "enjoys the light and shade . . . what shocks the virtuous philosopher, delights the camelion [sic] Poet. It does no harm from its relish of the dark side of things any more than from its taste for the bright one; because they both end in speculation" (John Keats to Richard Woodhouse, October 27, 1818, in *Keats's Poetry and Prose*. 295).

xxxvii John Keats, The Fall of Hyperion, in Keats's Poetry and Prose.

xxxviii Immanuel Kant, The Critique of Judgement, trans. James Creed Meredith (Oxford: The Clarendon Press, 1989), 192. Kant states that poetry "shows its hand" (193). For a discussion of Keats's relation to Kant's aesthetic theory and a discussion of poetic usefulness, see Tilottama Rajan, "Keats, Poetry, and the 'Absence of Work," Modern Philology 95.3 (1998): 334-351. In particular, note the passage that connects Keats's poetic concerns with the larger shifts under examination in this project. Rajan writes that Keats's poetry expresses anxiety "about his place in poetry and about poetry's place in the world" (336). In reference to the latter anxiety, she notes that Keats was writing amidst "the growing aestheticization of 'poetry' between the late eighteenth and the late nineteenth centuries. During this period 'literature,' which had more generally included writing or letters (including philosophy and history), was gradually narrowed to mean imaginative writing, and this new category was further subdivided so as to separate poetry . . . from prose." The resulting "specialization of poetry," Rajan remarks, led it "to become increasingly marginal" (336-37). She suggests that Keats was grasping for, but not fully comfortable with the ideas of German aesthetics. "Kant's third critique" Rajan writes "describes aesthetic judgment as reflective rather than determinant and tacitly makes the aesthetic a paradigm for 'judgment' or thought in general. While determinant judgment interprets objects in terms of a priori concepts or discursive formations, reflective judgment generates a rule from a particular case for which there is no rule. Aesthetic judgment thus involves a form of negative capability, whether as an acceptance of new epistemic material, or as an 'openness to being' that Martin Heidegger later calls 'cura" (340). Rajan's primary concern is to claim that Keats's attempts to turn to history are disrupted by an inability to get poetry to do work, and an underdeveloped sense of the powerful notion of "play" articulated by Kant and, later, by Schiller. I disagree with this point insofar as I see the playfulness of the aesthetic judgment as a key feature of Keats's poetry, though it is a darker form of playfulness than we see elsewhere. One reason Keats struggles to do "work," according to Rajan, is that Keats's aesthetics are increasingly dominated by a disruptive notion of sublime rather than preoccupied with notions of the beautiful around which Schiller was able to justify the social relevance and constructiveness of the aesthetic: "the Kantian sublime is a discourse of sublimation, an economizing of the negative, that remains quite distinct from the unusable negativity explored by Keats" (348 n.35). While Keats's poetry may indeed be "unusable" as a constructive mechanism for social work, it functions as a useful tool of epistemological disruption and inquiry.

xxxix Johann Wolfgang von Goethe, *Faust: Parts One and Two*, trans. Charles E. Passage (Indianapolis: The Bobbs-Merrill Company, 1965), 136. This scene from Goethe's text was subsequently adapted into English by P. B. Shelley (Composed Jan. 1822, posthumously published). See P. B. Shelley, *The Faust Draft Notebook* (London: Routledge, 1997), xxviii. See also the Appendix (fig. 25).

Joyful list'ning, while the fire burnt bright,
Some neighbouring labourer's superstitious tale,
How 'Jinny-burnt-arse,' with her wisp alight,
To drown a 'nighted traveller once did fail,
He knowing well the brook that whimper'd down the vale."
("The Village Minstrel," in *The Poems of John Clare*, vol. 1. lines 61-65.)

xl John Clare, "The Will O Whisp or Jack A Lanthorn," in *John Clare: By Himself*, ed. Eric Robinson and David Powell (Ashington: Carcanet Press, 1996), 252.

xli John Clare, "Will-O'-Wisp" in *The Poems of John Clare*, vol. 2., ed. J. W. Tibble (London: J. M. Dent & Sons Limited, 1935), 55. Clare includes descriptions of hearing tales of the phenomenon, under the local name "Jinny-burnt-arse," as a child, in his description of the rural poet's development in stanza seven of his 1821 poem "The Village Minstrel":

xlii Jonathan Bate, John Clare: A Biography (New York: Farrar, Straus and Giroux, 2003), 32.

xliii Clare, "Autobiographical Fragments," in *John Clare: By Himself*, 45. See also Clare's descriptions of the phenomenon, elsewhere, in which he describes the very scene recounted in his poem: "crossing the meadow one dark sunday night I saw when coming over the Nunton bridge a light like a lanthorn standing on the wall of the other bridge I kept my eyes on it for awhile and hastened to come up to it – but ere I got half over the meadow it suddenly fell and tumbled into the steam – but when I got to the bridge I looked down it and saw the will o whi[s]p vapour like a light in a bladder whisking along close to the water as if swimming along its surface but what supprised me was that it was going contrary to the stream" (46).

xliv Clare, John Clare: By Himself, 251; italics added.

xlv Sarah Houghton-Walker, John Clare's Religion (Farnham: Ashgate, 2009), 74-75.

xlvi Houghton-Walker, 74 and 76, respectively.

xlvii Clare, Clare By Himself, 251.

xlviii Clare, Clare: By Himself, 251-252; italics added.

xlix Clare, Clare: By Himself, 252.

¹ Note that "hands," in addition to being the body part most susceptible to distortion, are symbolically richer than many of the other parts of the body he might have noticed, for instance, his feet. The "hand," a familiar metonym for a person, takes on additional meaning in the case of a poet and even more so in the case of a laboring poet. To say that he was "frit" by his own hands, is to recognize that this is an experience that disrupts more than mere vision and undermines some fundamental notions of identity.

^{li} I should note, of course, that similar punctuation and syntax occur throughout Clare's prose writings.

lii Joseph Priestley, Experiments and Observations on Air, xix. Note that Priestley's next sentence is nonetheless positive: "But, notwithstanding this, the more light we get, the more thankful we ought to be . . . in time the bounds of light will be still further extended" (xix). Later in his "Preface," Priestley writes: "The curiosity and surprize [sic] of young persons should be exercised as soon as possible; nor should it be much regarded whether they properly understand what they see, or not. It is enough, at the first, if striking facts make an impression on the mind, and be remembered. We are, at all ages, but too much in haste to understand, as we think, the appearances that present themselves to us. If we could content ourselves with the bare knowledge of new facts, and suspend our judgment with respect to their causes, till, by their analogy we were led to the discovery of more facts, of a similar nature, we should be in a much surer way to the attainment of real knowledge" (xxix-xxx).

liii Oxford English Dictionary Online, s.v."† gaure, v.," accessed 1 April 2015.

Epilogue

"Will-o'-the-wisps being abolished, poetry is at a stand"

The epistemological dynamics that we have seen in Keats's poetry, and the larger scientific-cultural changes that gave rise to them, caught the attention of at least one early reviewer. In his review of *Lamia, Isabella, The Eve of St. Agnes and Other Poems* (1820), Leigh Hunt praises Keats's poems but takes him to task for suggesting, in "Lamia," that the scientific eye of "the bald-headed philosopher" triumphs over the poetic illusion that Lamia represents, forever dispelling a vital mystery. "We wish" writes Hunt, that Keats "had not appeared to give in to the common-place of supposing that Apollonius's sophistry must always prevail, and that modern experiment has done a deadly thing to poetry by discovering the nature of the rainbow, the air, &c." Hunt is careful to note that the poet has only "appeared" to give credence to this "common-place," assuming Keats has a deeper appreciation for the power of poetry. In an effort to clarify his precise claim concerning Keats's apparent concession to the "common-place" notion "that the knowledge of natural history and physics, by showing us the nature of things, does away with the imaginations that once adorned them" – that poetry must, in other words, retreat in the face of scientific advance, Hunt writes:

This is a condescension to a learned vulgarism, which so excellent a poet as Mr. Keats ought not to have made. The world will always have fine poetry, as long as it has events, passions, affections, and a philosophy that sees deeper than this philosophy. There will be a poetry of the heart, as long as there are tears and smiles: there will be a poetry of the imagination, as long as the first cause of things remains a mystery.ⁱⁱ

Hunt's remarks here became the basis for a later reflection about the relationship between poetry and science in an essay, "Fiction and Matters of Fact" (1825), in which Hunt argues explicitly for the enduring value of poetry in a world increasingly dominated by what he calls the "mechanical understanding." In this later essay, Hunt points out that poetry, insofar as it deploys explicit conjecture in order to explain diverse natural phenomenon, continually posits the absence of stable, certain first causes. In other words, poetry's spurious notions – its surmises we might say – testify to the existence of epistemological lacunae. In the course of his argument, Hunt relies on a distinction between the world of empirical phenomena ("the world we can measure with line and rule") and the affective mind upon which perceptions register (the world that we feel with our hearts and imagination"). iv Criticizing what he sees as the neglect of the world "that we feel," Hunt claims that for a person "to be sensible of the truth of only one of these, is to know truth but by halves." Not only does an overly narrow focus on the measurable world blind one to the operations of more ephemeral, though no less important, forces like the imagination and the feelings; it also threatens to mask gaps in knowledge. A focus on the measurable world leaves one blind to that which escapes measurement. "Matter of fact" Hunt explains "is our perception of the grosser and more external shapes of truth; fiction represents the residuum and the mystery." Hunt's treatment of these seemingly opposite forces goes some way towards explaining the "remarkable" fact – remarkable because it seems counter-intuitive – that over the course of the eighteenth and early nineteenth centuries "the growth of science, and the reappearance of a more poetical kind of poetry, have accompanied one another," a development that my own project has traced. vi

Hunt contends that poetry and other forms of imaginative writing are under attack by an ever more powerful scientific discourse (accompanied by an increasing number of discoveries):

But, says the mechanical understanding, Modern discoveries have acquainted us with the cause of lightening and thunder, of the nature of optical delusions, and fifty other apparent wonders; and therefore there is no more to be feigned about them. Fancy has done with them, at least with their causes; *and witches and will-o'-the-wisps being abolished, poetry is at a stand.* The strong glass of science had put an end to the assumptions of fiction. vii

In the face of this threat Hunt insists that poetry is still very much alive. Attacking what he sees as the oversimplification of the relation between discourses in the formulation "will-o'-the-wisps being abolished, poetry is at a stand," Hunt appears to grant poetry a far more powerful role than that of the mere purveyor of false notions. By pointing out the continued existence of the unknown within the material world, the mystery that remains in the "first cause, not the second," poetry seems to check an increasingly dominant science, to delimit a series of epistemological boundaries that science threatens to violate. Viii It comes as no surprise, then, that in the course of the essay Hunt cites Bacon's claim that "a little philosophy . . . takes men away from religion; a greater brings them round to it." Reworking Bacon's statement into a more explicit form, Hunt claims that the same principle pertains to the dynamic between "the reasoning faculty and poetry":

We reason to a certain point, and are content with the discoveries of second causes. We reason farther, and find ourselves in the same airy depths as of old. The imagination recognizes its ancient field, and begins ranging about at will, doubly bent on liberty, because of the trammels with which it has been threatened.^{ix}

Poetry and the work of the imagination, in this view, are not superseded by scientific knowledge; on the contrary, they are what takes over when the positive knowledge we associate with science disappears, or reaches its natural limits.

If Hunt criticizes Keats for momentarily appearing to announce poetry's demise, he does so out of a conviction that Keats's poetry, and poetry in general, continues to play a powerful role. Hunt's late Romantic defense of poetry responds to what Douglas Patey has described as the consolidation of the concept of the "literary" that emerged over the course of the seventeenth and eighteenth centuries and "solidified in the Romantic period." Patey argues that the concept of the 'literary' that grew up alongside the "new notion of the 'aesthetic'" meant that by the Romantic period "the range of the 'literary' was radically contracted."xi The identification of poetry with the "aesthetic" turned it away from more capacious conceptions of literature and involved a significant reduction of the poet's role in the production and dissemination of knowledge. According to this history, the "separation of literature from knowledge . . . left poetry, in effect, with nothing to do."xii Patey argues that the turn to the aesthetic "disastrously impoverished the arts: in erecting the idea of the aesthetic with its separation of eloquence from wisdom, beauty from knowledge, the moderns trivialized literature, initiating that slow process by which in the last two centuries poetry has moved from the center to the margins of our culture." Hunt makes clear, in terms that accord with the larger argument of my own project, that poetry does not so much retreat *from* the production of knowledge in the face of scientific

developments as it delves deeper *into* a meditation on the very nature of knowledge. According to this view, poetry is not a counter-productive force merely engaged in the dissemination of error, but rather an enabling condition of the continued pursuit of knowledge, albeit a pursuit that has as its ultimate goal the recognition, or realization, of the epistemological limits of scientific inquiry. Put another way, we might say that poetry pursues "knowledge" in a space beyond the empirical limits of the mechanical understanding.

By criticizing what he sees as the oversimplification of the dynamic between science and poetry, between "fiction and matters of fact," Hunt seeks to refute what he describes as a formula in which "will-o'-the-wisps being abolished, poetry is at a stand." Hunt's reference to the "will-o'-the-wisp" is, essentially, a way of saying that poetry has better things to do than argue about the chemical composition, the reality or unreality, of such trifles. However, as I hope to have shown, poetic treatments of the "will-o'-the-wisp" are far from mere trifles insofar as they testify to poetry's active engagement with epistemology. Moreover, will-o'-the-wisps are, contrary to Hunt, far from being abolished. I would like to suggest that another way Hunt could have pursued his argument would have been to point out that will-o'-the-wisps still exist despite efforts to "abolish" them, and that the very notion of "abolishing" relies on an erroneous fantasy of absolute certainty that poetry repeatedly exposes.

Notes

¹ Leigh Hunt, "Review of Lamia, Isabella, The Eve of St. Agnes and Other Poems," in Keats's Poetry and Prose, ed. Jeffrey N. Cox. (New York: W. W. Norton & Company, 2009). 519.

ii "Review of *Lamia*," 519. Hunt's notion of "learned vulgarism" is strikingly similar to Clare's critique of "Mrs Philosophy" in the autobiographical fragment discussed earlier.

iii Originally published as "Fiction and Matters of Fact" in *The Examiner* (3 Jan. 1825). Republished in Leigh Hunt, *Men, Women, and Books*. vol. 1 (London, 1847), 6. All subsequent references are to the 1847 edition.

iv Hunt, "Fiction and Matters of Fact," 4.

^v Hunt, "Fiction and Matters of Fact," 5.

vi Hunt, "Fiction and Matters of Fact," 7. In his review of "Lamia," Hunt writes: "It is . . . remarkable that an age of poetry has grown up with the progress of experiment." Hunt also notes that "these alarms" about the demise of poetry as a result of the rise of scientific explanation "are altogether idle. The essence of poetical enjoyment does not consist in belief, but in a voluntary power to imagine" (Hunt, "Review of *Lamia*," 519).

vii Hunt, "Fiction and Matters of Fact," 6: italics added.

viii Hunt, 10.

ix Hunt, 8.

^x Douglas Lane Patey, "The Eighteenth Century Invents the Canon," *Modern Language Studies* 18:1 (1988): 18. See also Patey, "'Aesthetics' and the Rise of Lyric in the Eighteenth Century," *Studies in English Literature*, *1500-1900* 33:3 (1993): 587-608.

xi Patey, 18.

xii Patey, 28.

xiii Patey, 30.

Appendix

Visual Representations of the *Ignis Fatuus*

William Blake's reference to "vapour" in "The Little Boy Lost" is part of a long tradition of representing the *ignis fatuus*, or will-o'-the-wisp, in the poetry of the seventeenth, eighteenth, and nineteenth centuries. What makes Blake's treatment exceptional, however, is not only that it combines verbal and visual representation of the *ignis fatuus* but also that it is one of very first naturalistic visual representations of the phenomenon. Blake depicts the *ignis fatuus* as a flame rather than as a caricatured figure. This appendix provides a catalogue of visual representations of the *ignis fatuus* that supplement my treatment of the phenomenon in eighteenth-century verse. The relationship between the textual representations discussed in the previous chapters and the visual representations included in this appendix raise a number of important questions. Is there a class of what might be called "difficult objects," objects perceived on the periphery of a sense (visual objects difficult to see, auditory objects difficult to hear) that attract poetic treatment? What is the relationship between a phenomenon's resistance to scientific explanation and its availability or appropriateness as an object for poetry? Is there a similar relation between objects of sight that are difficult to represent visually and the suitability of those objects for poetic treatment?

I have argued that the ubiquity of the *ignis fatuus* in the poetry of the seventeenth, eighteenth and nineteenth centuries was due in large part to its availability as a figure for error and as a means of thinking through the incapacities, limitations, and failures of human knowledge. The *ignis fatuus* remained a powerful object because it resisted full explanation in part by resisting full representation. It was something that one could see; yet in being seen, it still resisted sight. In other words, it was both visible and difficult to see: small, faint, and transient. As such, the *ignis fatuus* was an object of sight that problematized the testimony of vision, the veracity of visual data, and the ability to communicate knowledge received by the eyes. It is no surprise then that the *ignis fatuus* holds a strange place in eighteenth-century visual culture. Curiously, for an object of sight, the phenomenon's visual representations are far fewer than its poetic iterations. Those images that do exist help explain why the *ignis fatuus* was at once an appealing and a frustrating object for the artist, an object that challenged the limits of visual representation and raised questions concerning its relation to error. The epistemological ambiguity that plays such a large part in poetic representations of the phenomenon seems antithetical to the demands of its visual articulation. Forced to choose between explicitly embodied (e.g. fig. 19) and vaguely naturalistic (e.g. fig. 14) representations of the light, visual artists were unable to capture the range of explanations and debates concerning the phenomenon in their images. As the Appendix indicates the most widespread visual use of the *ignis fatuus* during the eighteenth and nineteenth centuries was as an embodied figure in satirical prints. Furthermore, the very faintness of the phenomenon, like the indeterminacy surrounding the object's natural or supernatural categorization, challenged the mode of visual representation. Paintings, prints, and sketches of the *ignis fatuus* also serve, therefore, as meditations on the problem of difficult objects, the limitations of visual knowledge, and distinct potentials of poetic representation.

Reflecting on the relation between "intermitting" perceptions and the experience of the sublime, Edmund Burke writes that "night increases our terror more perhaps than any thing else; it is our nature, that, when we do not know what may happen to us, to fear the worst that can

happen us; and hence it is, that uncertainty is so terrible, that we often seek to be rid of it, at the hazard of a certain mischief." In this description, Burke diagnoses a natural resistance to states of uncertainty, a resistance (as Bacon pointed out) that can result in preemptory, erroneous belief. Burke implies that the natural human state is that of confident security in one's understanding of the world, any disruption of which prompts a drive to reenter that state of security. Accordingly, the sublime is a transitory state whose duration is determined largely by the nature of what one perceives and also by the mind's specific epistemological tolerances. While for Kant, the sublime object is ultimately integrated through the rational faculties, for Burke the sublime dissipates only at the "hazard of a certain mischief." Uncertainty, according to Burke, will undoubtedly lead to some kind of mischief, and the fact that Burke's sentence pivots between the word "uncertainty" and word "certain" serves to highlight the precise form this "mischief" will take. The "certain mischief" is dangerous for being, in fact, a mischievous certainty, a rush into false belief. "A light," writes Burke (in what may be a passing reference to the ignis fatuus), "now appearing, and now leaving us, and so off and on, is even more terrible than total darkness; and a sort of uncertain sounds are, when the necessary dispositions concur, more alarming than a total silence." It is the liminal quality of the light, the physical and mental inconstancy that disrupts the very perceptual mechanisms by which it might be recognized, identified, or understood, and that makes it even more terrible than "total darkness." The power of this liminal luminescence, a visual experience that nonetheless thwarts visual perception thereby producing a sublime effect on the viewer, aligns with Burke's thoughts on the particular power of words to incite sublime experiences: "As to words, they seem to me to affect us in a manner very different from that in which we are affected by natural objects, or by painting or architecture, yet words have a considerable share in exciting ideas of beauty and of the sublime as any of those, and sometimes a much greater than any of them." Famously distinguishing between the sister arts by decoupling the power of poetry from the production of mental images, Burke broadens poetry's province by snatching the scepter of the image: "Indeed, so little does poetry depend for its effect on the power of raising sensible images, that I am convinced it would lose a very considerable part of its energy, if this were the necessary result of all description." "In reality," Burke writes, "poetry and rhetoric do not succeed in exact description so well as painting does; their business is to affect rather by sympathy than imitation; to display rather the effect of things on the mind of the speaker, or of others, than to present a clear idea of the things themselves. This is their most extensive province, and that in which they succeed the best." Thomson's description of the benighted wretch is a prime example of the poet's focus on the effects of objects on another's mind rather than an "exact description" of the object itself. This seems particularly true when the object itself resists visible perception and gains particularly sublime effects by, in turn, inhibiting exact visual representation. Poetry's ability not only to engage in exact description but also to evoke the amorphous, intangibility of strange phenomenon and affective states suits it to the presentation of such objects and their effects; it is for this reason, perhaps, that the *ignis fatuus* is more frequently represented in the medium of words rather than images over the course of the British Enlightenment. Burke's final thoughts on the power of poetry stress both the weaknesses and power of poetry, a weakness that elsewhere seems only to strengthen it potential:

The truth is, all verbal descriptions, merely as naked description, though never so exact, conveys so poor and insufficient an idea of the thing described, that it could scarcely have the smallest effect, if the speaker did not call in to his aid those modes of speech that

mark a strong and lively feeling in himself. Then, by the contagion of our passions, we catch a fire already kindled in another, which probably might never have been struck out by the object described. Words, by strongly conveying the passions, by those means which we have already mentioned, fully compensate for their weakness in other respects. vi

Picking up from Burke, Gotthold Lessing makes the power of poetry over visual images even more distinct:

The saying . . . requires some modification, that a good poetical description must make a good picture, and that a poet describes well only in so far as his details may be used by the artist. Even without the proof furnished by examples, we should be inclined to predicate such limitation from a consideration of the wider sphere of poetry, the infinite range of our imagination, and the intangibility of its images. VII

The force of poetry, for Lessing, rests on its ability to represent intangible images, images that resist visual representation in a variety of ways: "The poet alone possesses the art of so combining negative with positive traits as to unite two appearances in one." The poet can include in his or her verse not only that which *is* but also that which *is not* a part of the object described. Lessing describes the difficulty of visual representations struggling to represent the non-visible and the partially visible:

[Such pictures do not] and perhaps cannot, indicate how those figures which only we who look at the pictures are supposed to see, shall be represented that the characters in the picture shall not see them, or at least shall not look as if they could not help seeing them . . . [and thereby such pictures become] in the highest degree confusing, unintelligible, and self-contradictory. ix

There are a number of ways that images of the *ignis fatuus* seek to negotiate what is and what is not visible to the figures in the drawing and the viewer of it: through composition, the placement of the light, and additional viewers. Lessing identifies one of the techniques used by painters to "indicate that a certain character is supposed to be invisible, is a thin cloud veiling the side of the figure that is turned toward the other actors on the scene" – a technique that shows up in satirical representations of the *ignis fatuus* (e.g. fig. 23). According to Lessing, painting (unlike poetry) "must accept a visible theater, whose various fixed parts become a scale of measurement for the person's acting upon it. This scale is always before the eye, and the disproportionate size of any superhuman figures makes beings that were grand in the poem monstrous on canvas."xi Lessing's key distinction between the sister arts, stemming from his reflections on the nature of images in poetry, is that poetry's focus is temporal, while painting is spatial. "Painting and poetry," Lessing writes "should be like to just and friendly neighbors, neither of who indeed is allowed to take unseen liberties in the heart of the other's domain, but who exercise mutual forbearance on the borders, and effect a peaceful settlement for all the petty encroachments which circumstances may compel either to make in haste on the rights of the other."XII The ignis fatuus seems to compel precisely this type of encroachment, thereby continuously testing the boundaries between the sister arts and the limitations of each one's power. The very flickering of the *ignis fatuus*, in addition to its movement from one place to another, introduces temporality into the spatial

relations. Movement is key to any such representation, specifically an erratic, unpredictable movement at odds with the stability of the visual image. Nonetheless, the phenomenon is visual in nature and inherently spatial in the attention it draws to the relations between itself, those who follow it, and those who view that chase. It sits, in other words, at the nexus of anxieties over the power and proper province of poetry and the visual arts.

Notes

x Lessing, 80.

xi Lessing, 78.

xii Lessing, 110.

i Edmund Burke, *A Philosophical Enquiry into the Sublime and the Beautiful, and Other Pre-Revolutionary Writings*, ed. David Womersley (London: Penguin Books, 1998), 124.

iii Burke, 124.

iii Burke, 187.

iv Burke, 193.

vi Burke, 195.

vi Burke, 198.

vii Gotthold Ephraim Lessing, *Laocoon: An Essay upon the Limits of Painting and Poetry*, trans. Ellen Frothingham (New York: The Noonday Press, 1957), 43.

viii Lessing, 60.

ix Lessing, 77.

I. Images Relating to the *Ignis Fatuus*



Fig. 5. Henry Fuseli, *Friar Puck*, Late 18th century, Oil on canvas, 111.8 x 86.4 cm, Tabley House Collection. Available from: http://www.bbc.co.uk/arts/yourpaintings (accessed May 26, 2015).

I'll follow you. We'll go in circles
Through swamps, bushes, and woods.
Sometimes I'll be a horse, sometimes a dog,
A hog, a headless bear, sometimes a fire.
I'll neigh, bark, grunt, roar, and burn,
Like horse, dog, hog, bear, fire!
(Shakespeare, *A Midsummer Night's Dream*, Act 3, Scene 1)



Fig. 6. John Boydell, (after Henry Fuseli), *Robin Goodfellow-Puck*, 1799, Engraving, 421 × 338 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015).



Fig. 7. Henry Fuseli, *Friar Puck*, 1806, Stipple engraving, 388 × 300 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015)



Fig. 8. Henry Fuseli, *The Shepard's Dream, from 'Paradise Lost,'* 1793, Oil paint on canvas, 1543 × 2153 mm, Tate. Available from: http://www.tate.org.uk. (accessed May 26, 2015).

Fairy elves,
Whose midnight revels, by a forest side
Or fountain, some belated peasant sees,
Or dreams he sees, while over-head the moon
Sits arbitress, and nearer to the earth
Wheels her pale course; they, on their mirth and dance
Intent, with jocund music charm his ear;
At once with joy and fear his heart rebounds.

(PL, 1.781-88)



Fig. 9. Detail. Fuseli, The Shepard's Dream.



Fig. 10. Henry Fuseli, *Titania Awakening*, 1789-1791 (circa), Oil on canvas, 222 × 280 cm, Kunstmuseum, Winterthur, Delaware, United States. Available from: http://www.artstor.org (accessed May 26, 2015).



Fig. 11. Detail. Fuseli, *Titania Awakening*.



Fig. 12. William Blake, *Eve Tempted by the Serpent*, 1799-1800 (circa), Water-based tempera; pen and ink outlining and highlights in gold, 27.3 × 38.5 cm, Victoria and Albert Museum. Available from: http://www.blakearchive.org. (accessed May 26, 2015).

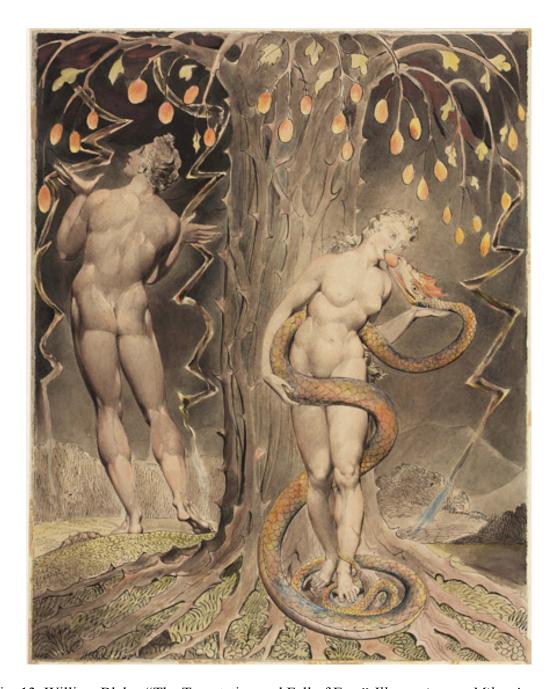


Fig. 13. William Blake, "The Temptation and Fall of Eve," *Illustrations to Milton's* "*Paradise Lost*," The Butts Set, 1808, Pen and watercolor, 49.7 x 38.7 cm, Museum of Fine Arts, Boston. Available from: http://www.blakearchive.org. (accessed May 26, 2015). Note the way the fiery crest of Blake's Serpent draws on Milton's description:

Lead then, said Eve. He leading swiftly rolled In tangles, and made intricate seem straight, To mischief swift. Hope elevates, and joy Brightens his crest, as when a wandering fire . . . (*PL*, 9.631-34)



Fig. 14. Samuel Williams, Illustration to James Thomson, *The Seasons, and The Castle of Indolence* (London, 1841).

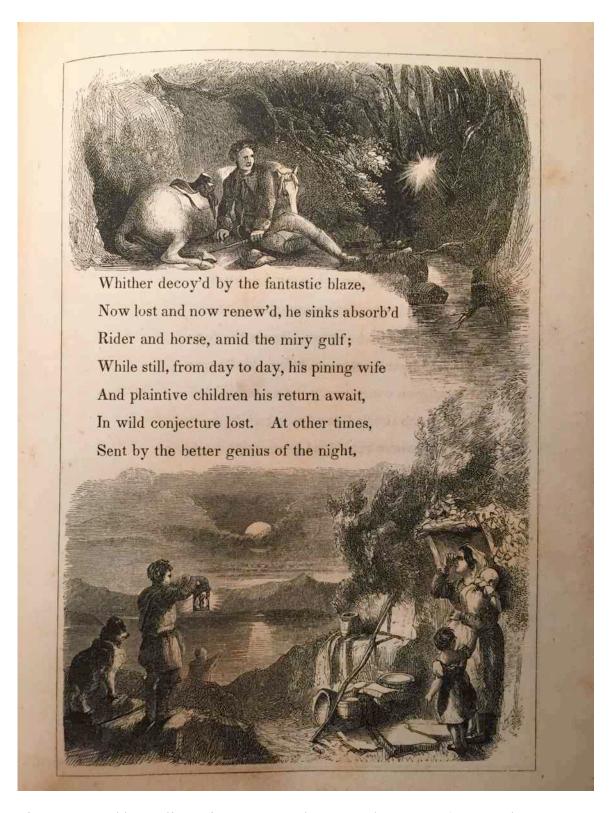


Fig. 15. E. Bookhout, Illustration to James Thomson, *The Seasons* (New York: Harper & Brothers, 1842), 229.



Fig. 16. William Blake, *L'Allegro by Milton*, Plate 5: Goblin lines 100-9, 113-14, 1816-20 (circa), Pen and watercolor, 16.3×12.2 cm, Available from: http://www.artstor.org (accessed May 26, 2015).

And he by Friars Lanthorn led.
- Milton, "L'Allegro," 104.



Fig. 17. Charles Williams, *The Ex-Minister and the Meteor*, 1804, Hand-colored etching, 356 × 267 mm, Art Institute Chicago. Available from: Art Institute Chicago, http://www.artic.edu (accessed May 26, 2015).



Fig. 18. Richard Newton, *A Political Will 'O the Wisp*, 1795, Hand-colored etching, 337 × 502 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015)



Fig. 19. Richard Newton, *A Will o' th' Wisp; or Jack o' Lantern!* 1795, Hand-colored etching, aquatint, 246 × 349 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015).



Fig. 20. George Cruikshank, *Will of the Whisps – or – Glimmerings of Reform*, 1817-1818 (circa), Hand-colored etching, aquatint, 270×367 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015).



Fig. 21. Henry Heath, *Ignis Fatuus or A Will-o the Wisp. A Sketch for a Public Exebition* [sic], 1827, Hand-colored etching, 231 × 333 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015).

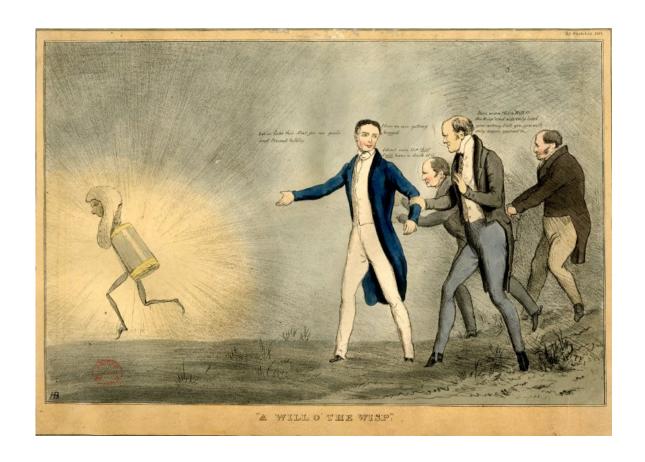


Fig. 22. John Doyle, "A Will O' The Wisp," 1831, Hand-colored lithograph, 255 × 361 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015).

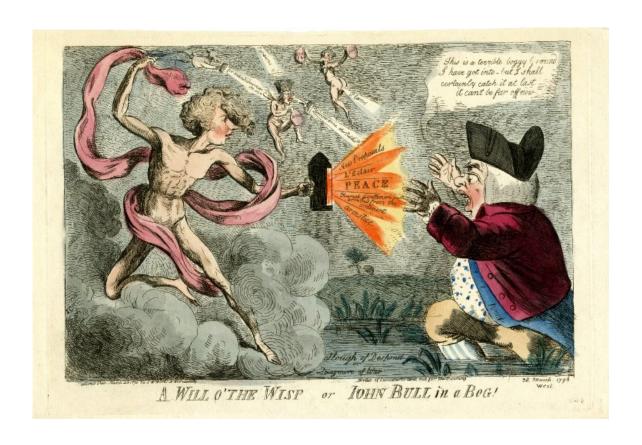


Fig. 23. Isaac Cruikshank, *A Will o' the Wisp, or, John Bull in a Bog,* 1796, Hand-colored etching, 246 × 350 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015)



Fig. 24. Samuel De Wilde, *Opposition Lights*, 1808, Etching, aquatint, 190 × 344, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015)

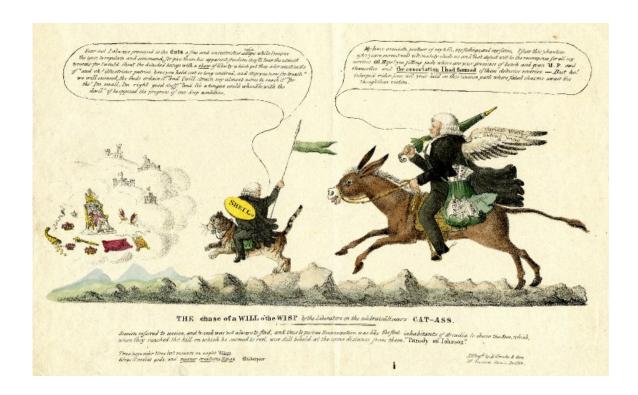


Fig. 25. Anonymous, *The chase of a will o' the wisp by the liberators on the celebrated racers Cat-Ass*, 1827, Hand-colored lithograph, 201 × 340 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015)



Fig. 26. John Doyle, *A Scene from Faust (Freely Translated)*, 1840, Lithograph, 298 × 437 mm, National Portrait Gallery. Available from: National Portrait Gallery, http://www.npg.org.uk, (accessed May 26, 2015).



Fig. 27. An Ignis Fatuus, or Will-O' The-Wisp, Illustration to Edward Polehampton, The Gallery of Nature and Art. Vol. 4. (London, 1815), 495.

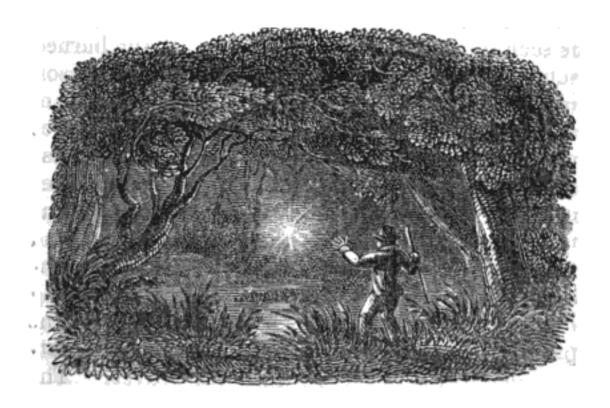


Fig. 28. Illustration to Robert Mudie, A Popular Guide to the Observation of Nature; or Hints of Inducement to the Study of Natural Productions and Appearances, in Their Connections and Relations. (London, 1832), 139.



Fig. 29. Richard Girling, Will –o-the-Wisp, 1821-1869 (circa), Etching, 126×97 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015)



Fig. 30. George Cruikshank, *Jack O'Lantern*, 1842, Etching, 240 × 150 mm, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015)



Fig. 31. Samuel Palmer, *Will o' the Wisp*, 1840 (circa), Oil on canvas, Size unknown, Location unknown. Available from: http://www.wikigallery.org. (accessed May 26, 2015).



Fig. 32. Josiah Wood Whymper, *The Ignis-Fatuus, or Will-o'-The-Wisp*, 1828-1840 (circa), Hand-colored letterpress; wood-engraving, 155 × 205, The British Museum, London. Available from: The British Museum, http://www.britishmuseum.org. (accessed May 26, 2015).

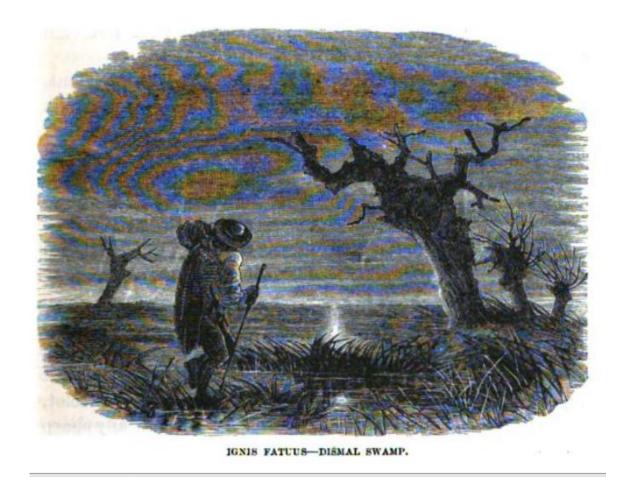


Fig. 33. *Ignis Fatuus – Dismal Swamp*, Illustration to George Hartwig, *The Aerial World: A Popular Account of the Phenomena and Life of the Atmosphere*. (New York, 1875), 323.

II. Additional Images

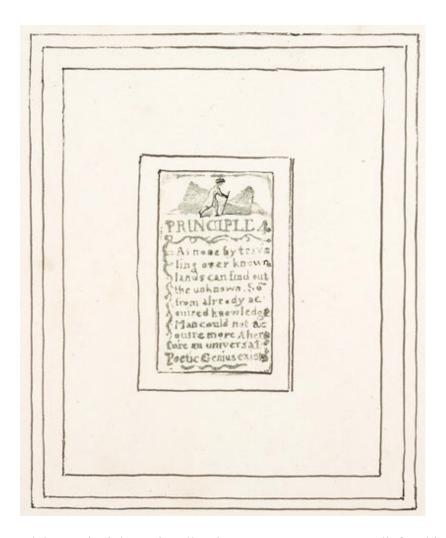


Fig. 34. William Blake, "Principle 4," in *All Religions Are One*, 1788, Relief etching, 5.2 x 3.1 cm, Henry E. Huntington Library and Art Gallery. Available from: The Blake Archive, http://www.blakearchive.org. (accessed May 26, 2015).

As none by trave
ling over known
lands can find out
the unknown. So
from already acquired knowledge
Man could not ac
quire more. there
fore an universal
Poetic Genius exists
- William Blake, "Principle 4"



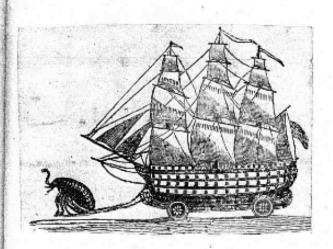


Fig. 35. Early nineteenth-century ephemera pasted onto the rear free endpaper and the rear pastedown of the Bancroft Library's copy of *An Historical Miscellany*.

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