

Idols and Insight: An Enlightenment Topography of Knowledge

Enlightenment Pathologies

IN SO MANY VISUAL AND METAPHORICAL representations in the eighteenth century, the “light” of reason gently dissipates the mists, veils, and darkness of error and superstition.¹ The foundational image of Enlightenment is seemingly benign. G. W. F. Hegel, though, likened this gentle diffusion of reason to a “penetrating infection” that silently insinuates itself in an “unresisting atmosphere.”² For Hegel, Enlightenment was pathological: the essence of Enlightenment was the fantastic desire for “pure insight, what is *universal* in and for itself.” To achieve this goal, pure insight must separate itself from the empirically concrete, from any individuality that encloses the universal content; this insight “goes beyond what is not identical.”³ The Absolute ultimately has no need of any determinate being, and so the relation between them can only be a deadly, “wholly *unmediated* pure negation.” As Hegel famously noted: “It is thus the coldest and meanest of all deaths, with no more significance than cutting off a head of cabbage or swallowing a glass of water.”⁴ With these allusions to the guillotine and the mass drownings in the Loire during the Terror in the French Revolution, Hegel suggested that Enlightenment abstraction is the work of death.⁵ As Friedrich Schlegel wrote: “In the abstract notion life eludes the grasp, and nothing remains but a dead formula.”⁶

Enlightenment as a deadly pathology: this is a persistent figure in modern thought, from conservatives like Edmund Burke and Joseph Marie de Maistre, through Romantics such as Friedrich Schiller and F. W. J. Schelling, to the historians Alexis de Tocqueville and Jules Michelet. And in the twentieth century this critique has only intensified. Writing in the wake of mass death, Max Horkheimer and Theodor Adorno resurrect the Hegelian claim that the universalizing reason of Enlightenment inevitably destroys concrete individuality. Abstraction, the “tool of Enlightenment,” “excises the incommensurable,” it “liquidates,” they say (in an echo of Nazi discourse), its own objects to achieve identity.⁷ Similarly, in Reinhart Koselleck’s “pathogenetic” tale of modernity, his postwar book *Critique and Crisis*,

the Enlightenment “succumbed to a Utopian image” of “moral totalism” that prepared the way for terror and dictatorship, instruments that would aim to “correct” a complex social reality.⁸ This narrative, itself a rediscovery of Tocqueville’s pathological analysis of Enlightenment abstraction and its role in producing what he called the *mal révolutionnaire*, or revolutionary disease, has been resurrected in recent revisionist historiography of the French Revolution and the Terror.⁹ In François Furet’s influential work, the abstract singular unity characteristic of eighteenth-century discourse achieved power in the Revolution, which meant that any difference, any concrete interest, would be defined as the enemy of the abstract nation, to be eliminated eventually by the guillotine. The “function of the Terror” was to create violently an abstract unity that never existed in fact.¹⁰

There have been, of course, many recent attempts to rehabilitate Enlightenment thought and culture by drawing out its pluralist and “unfinalized” strains. Denis Diderot, constantly invoked in this context, is the exemplary figure of a “healthy” Enlightenment. He abandoned any unifying epistemology and immersed himself in the ongoing problem of multiplicity.¹¹ He enacts an unintegrated polyphony.¹² He does not impose order; he facilitates exchange; he invokes error and the labyrinth against the straight line of reason.¹³ He imagines simultaneous multiplicity.¹⁴ But even here we can see that a place is reserved for pathological reason: Diderot’s dynamic model of knowledge is always opposed to a mechanical Enlightenment rationalism. Death still haunts the mainstream of eighteenth-century philosophy that Diderot heroically resists. Jean le Rond d’Alembert, for example, seeks out clean singularity in the complexity of life. For him, the perfect language is “dead” and unmoving, whereas Diderot stands for the vital and the living. Diderot’s encyclopedia is a “living organism,” untotaled; however, d’Alembert, his early collaborator, envisions a beautiful but “sterile” machine, perfectly and rationally ordered. Fearing the unpredictable path of the genius, d’Alembert reduces everything multiple into perfect mathematical singularity.¹⁵ And Etienne Bonnot de Condillac, like d’Alembert, “refuses” the labyrinth, cannot imagine productive error, resists the irruption of the complex and tries to reduce plurality through abstract analysis.¹⁶

This focus on eighteenth-century visions of unfinalized plurality marks earlier efforts to read the Enlightenment against Hegel. Hans Blumenberg, in *The Legitimacy of the Modern Age*, celebrates German Enlightenment figures, such as Gotthold Ephraim Lessing, who abandon the desire for pure insight into universal truth for the recognition of a “diversity of paths and points of view.” In this epistemological topography there is no privileged point from which one can correct or even define the “transgressions” of others. This “profound alteration” of thought reveals itself in the change in concepts of immortality: the “repose of the dead in the finality of contemplation of the truth . . . is transformed into a continuation of the movement of life, a striving from condition to condition.”¹⁷ Yet Blumenberg describes another Enlightenment, a pathological one exemplified by, for example, Pierre Louis Mo-

reau de Maupertuis's emphasis on understanding the universal at the expense of the living individual, a position that leads the French scientist to suggest rather chilling experiments on living populations, criminals, even children, all in the name of truth. This, for Blumenberg, can be understood as the "logical consequence of a *curiosité* that posits itself as absolute," a curiosity that "cannot produce from itself any criterion for its restriction."¹⁸ There are two Enlightenments presented then: one absolute and deadly, one open-ended and life affirming.

Barbara Maria Stafford has also discovered a dual Enlightenment. In her fascinating book *Body Criticism*, she describes in some detail an eighteenth-century visual culture that deconstructs what she considers to be the abstract rational orders of a textual philosophical discourse. The "knife" of anatomy or reason could, she says, only dissect dead "corpses" (whether real or metaphorical). At the same time, an empirical, visual approach "posited reality as a dynamic flux" that could be pursued "across variegated surfaces."¹⁹ Abstract reason was a "violent" process that eliminated the individual flaws and marks of concrete beings, and thus was blind to life itself.²⁰ So for Stafford, marginal features like the complex marbled endpapers of eighteenth-century books could symbolize "the unspeakable openness and unpredictability of life"; they could open up a reality that was inaccessible to the abstract philosophical treatises they might decorate.²¹ The abstract culture of Enlightenment attempted to eradicate all signs of individuality. It did not try to follow the multiple patterns of a "fallen" world but instead sought what Stafford has called elsewhere a "final solution."²² Jean Starobinski's reading of the images of Enlightenment culture, those "emblems" of reason, confirms this link between death and abstraction. Starobinski notes how easily Death could replace the "beneficent principles" that were at the center of the rational, regular geometries of eighteenth-century space. That "luminous globe" at the heart of Etienne Louis Boullée's abstract (and unrealized) cenotaph for Isaac Newton is succeeded by the scene of death in the precise geometric space of the future Place de la Révolution. Starobinski quotes Michelet's description of a crematorium project planned during the Terror: "It was an immense chemical apparatus which . . . would have taken a whole nation if necessary, and from the unquiet, unhealthy polluted state called life would have conveyed them through pure flame to the peaceful state of final repose."²³

For many important critics, then, a pathological rationality still lurks at the heart of Enlightenment, linking it with Terror, linking it with death. Here, I want to address directly this dark interior of eighteenth-century thought. By examining more closely the space of knowledge in Enlightenment discourse, and how metaphors of light were actually deployed within that space, I hope to reveal a far more fragile Enlightenment, and a more complex concept of truth. Rather than rediscover alternatives to abstract rationality in this period, I want to exorcise this pathogenic spirit of abstraction altogether, and in the process tentatively suggest a new connection between Enlightenment and the violence of revolutionary Terror.

The Light of Reason

The Enlightenment inherited the traditional metaphor linking the image of light with knowledge but gave it an entirely new form. The light of Enlightenment was not the dazzling mystical light of Platonic Being, nor the radiance of the Christian God, nor even the divinely inspired “natural light” of reason discussed by thinkers such as René Descartes and Nicolas de Malebranche in the seventeenth century. For the Enlightenment, the light of a *human* reason alone would dissipate the mists and shadows of past tradition and superstition.²⁴ The limitations of this illumination were acknowledged, yet this modesty was perhaps the very source of its immense power. Knowledge was limited to the sphere of human reason, but nothing *within* this sphere could elude its domination. As John Locke suggested in his *Essay Concerning Human Understanding*, even revelations were subject to criticism. “For if I mistake not, these Men receive it for true, because they presume GOD revealed it. Does it not then stand them upon, to examine upon what Grounds they presume it to be a Revelation from GOD? or else all their Confidence is mere Presumption: and this Light, they are so dazled with, is nothing, but an *ignis fatuus* [foolish fire] that leads them continually round in this Circle. *It is a Revelation because they firmly believe it, and, they believe it because it is a Revelation.*”²⁵

In many ways, eighteenth-century thought was a response to a profound intellectual crisis. The emergence of modern science had shattered the intimate connection between God, nature, and human experience. The mathematical model of natural law opened up revolutionary insights, but it also had the effect of alienating the human mind from the immediacy of nature and the very presence of the divine “signature.” Nature was no longer a book to be read but a complex text that had to be carefully translated into a series of quantitative signs in order to be understood. Of course, if reason is itself a divine gift, then this reading of nature was still a privileged act. The insights of the human mind could be a firm foundation for explanatory systems deduced from these conceptual origins. The problem, of course—one that became particularly acute by the seventeenth century—was that rigorous systems of thought (whether philosophical, political, theological, or scientific) were constantly being questioned, and their universality undermined. Agreement on first principles was noticeably lacking. Significantly, the last great efforts to salvage the deductive system tried valiantly to use this very disagreement as a new certain origin of knowledge. Descartes argued that the very instability of opinion at least guaranteed the existence of the thinking subject, which could found a new system of thought, while Thomas Hobbes similarly declared that the relativity of human sensual experience was itself a certain proposition that led to a rigorously deduced political philosophy. However, the gradual dominance of a whole new epistemological framework prepared the way for Enlightenment.

For religious “rationalists” like Descartes and Malebranche, sensory experience from the material body was considered with suspicion; it was something that

could cloud reason and was perhaps an essential limit to human knowledge.²⁶ For the experimental science of the late seventeenth century, this experience became the very origin of all knowledge. Reason had the new role of *organizing* the data of experience that contained truths. Reason did not gain insight into pure “disembodied” truths; rather, it illuminated empirical observations in order to discover a truth inherent in the operations of the world itself.²⁷ This light, as Locke once explained, does not lead us “straight and without fail” (literally, in Latin, “without error”: *sine omni errore*), but our limited intellect can gain some kind of certainty without any aid whatsoever.²⁸ The Enlightenment was in part the transformation of Newtonian scientific methodology into a comprehensive theory of mind and nature.²⁹ Enlightenment recast the foundations of knowledge: the search for “certainties,” understood as the *destination* of inquiry, was replaced by the notion of the path of probabilities.³⁰ It was possible to map out the contours of the natural world without an a priori vision of the whole.

The desire for a complete, higher truth was in fact scorned in the eighteenth century as a ridiculous product of passion. Those who sought these heights were criticized as “the men who walk in the shadows.” “Truth, for the *philosophe*, is not a mistress that corrupts his imagination, and that he believes he finds everywhere; he is contented with the ability to disentangle it where he perceives it.” The philosopher knows when to accept his ignorance and suspend judgment. The *philosophe*, hero of Enlightenment, acts only after careful reflection of the light of reason: “He walks in the night, but he is preceded by a torch.”³¹ The “general instrument” of logic—the process of ordering our thoughts and sensations—was the “torch that must guide us” in the wilderness of uncertainty, d’Alembert explained.³² Strangely enough, though, this philosopher seems to be walking *backward*. This torch does not illuminate anything really new; it casts its light only on what we have already experienced. This meant that moving forward was no easy task. In fact, d’Alembert once described the search for knowledge as a kind of productive *blindness*. If Locke had earlier described the mind as a “dark closet,” d’Alembert goes further and says that the mind is like a criminal in a dark cell, who vainly spins around looking for an exit, wildly trying to widen some “narrow and tortuous cracks” in the thick wall that let in a feeble light. The mind should, d’Alembert notes, accept its blindness and carefully attend to the objects it can know by touch. And even then great care must be taken, or these objects scattered on the floor might injure this epistemological prisoner. D’Alembert cites with approval the Indian philosopher who said he owed his wisdom to the blind, for they “never step without being assured of the solidity of the earth.”³³ As another Enlightenment philosopher put it, only the blind man knows his way in the fog.³⁴

The problem evaded here is the fact that in any new space every step is a risk. We may put our experiences in order with the torch of reason, but this torch hardly lights the way ahead. The blind man is never assured of the solidity of the earth until he actually ventures a step forward. And, it must be noted, the fear of being

lost forces us to keep moving despite the lack of knowledge. “Lost in an immense forest during the night, I have only a small light to guide me,” the lamp of reason, that is, that theology attempts to stifle.³⁵ But what Diderot once called the “secret horror” of the forest denies, it seems, a complacent suspension of judgment even when the path is not fully illuminated.³⁶ “Night conceals shapes, makes sounds horrible; even if it was only a leaf in the middle of a forest, it puts imagination into play, imagination that makes the guts quiver profoundly.”³⁷ In this context, can we blame the traveler (or even d’Alembert’s prisoner) for trying to follow the faint light that penetrates our experience from outside? This predicament is something Paul Henri Thiry, baron d’Holbach once remarked on. He said that errors were not so much obstacles to the light of reason that could be identified and removed with relative ease. Instead, errors were, he suggestively noted, more like “ghosts” or apparitions of truth that lead us from the proper path of experience. Lost in the dark, afraid, the mind is led into error; because here error imitated truth, somewhat like “those misleading lights travelers encounter during the night,” what in French are called *feux follets*, or foolish fires, Locke’s *ignis fatui*.³⁸ As the *Encyclopédie* explains, these phosphorescent particles generate their light in the same manner as the sun.³⁹ Wandering in the “forest,” described as a “shadowy labyrinth” of “winding paths,” and drawn by flashes of illumination in the darkness, this “perfidious phosphorous,” can we ever know how to distinguish the difference between the light of reason and the deceptive appearance of error?⁴⁰ The *Encyclopédie* article on the philosopher hardly helps. He will, it is said, simply be able to distinguish accurately the true, the false, the doubtful, and the deceptive.⁴¹ So this emblematic traveler will not be led astray by *feux follets*, which are known in German as *Irrlichter* (or err-lights), and in English as “will-o’-the-wisps,” a wisp being lighted hay—a torch in other words.

But the acknowledged limitation of the human mind made this trailblazing figure rather problematic. Truth was usually defined in Enlightenment philosophical discourse as the conformity of our judgments with the *reality* of things. (This definition is repeated endlessly in eighteenth-century texts and appears in the *Encyclopédie* article on truth.) This is however a bit confusing. The problem with apparitions is that they lead us astray precisely because they are, as the *Encyclopédie* article on ghosts says, “images that make us imagine corporal bodies outside of us that are not at all there.” These images, a complex product of both light and shadow, cannot simply be dissipated by light alone.⁴² The terror of being lost in the dark forest induces us to follow, despite the risks. And in the metaphorical landscape, the error looks like truth and thus resists the power of reason. This complication leads to an even more difficult position. As d’Alembert will relate, in his quintessential Enlightenment text, the *Preliminary Discourse to the Encyclopedia*, in our exploration of the epistemological wilds truth itself may be a source of deception. Since we are never entirely sure where we stand, or where we are going, it is hard to tell the luminous path from the deceptive one. He writes that, epistemologically, there is

an immense distance where the Supreme Intelligence seems to have wanted to deceive human curiosity, as much by the innumerable clouds it has spread there as by some flashes of light that seem to burst out at intervals to attract us. One might compare the universe to certain works of a sublime obscurity whose authors occasionally bend down within reach of those who read them, seeking to persuade him that he understands nearly all. We are indeed fortunate if we enter this labyrinth and do not leave the true road! Otherwise, the flashes of light intended to lead us there would often serve only to lead us further from it.⁴³

Here we can see that the light of truth and the *feux follets* are virtually indistinguishable. It was clear that d'Alembert, like so many others in this period, felt that the human mind was rarely so fortunate in finding the true road in this allegorical wilderness. In fact, in epistemological texts a common suggestion was to chart all the errors of previous travelers so as to mark out a path that at least held out the promise of truth.⁴⁴

However, it was also the case that eighteenth-century thinkers had to address yet another problem, one alluded to in this passage from d'Alembert: Here at the borders of knowledge, can we even know where we really are? How accurate are the maps we possess? Can we say that any territory is really “illuminated”?

The Labyrinth of Knowledge

Anne-Robert-Jacques Turgot's famous *Encyclopédie* article on etymology points out this difficulty. No matter how rigorous logical reasoning may be, Turgot argues, the objects of thought represented by words are not really stable, and this undermines the premise of any argument. We cannot fix our signs and ideas, in part because of a “straying” tendency that leads to error. Turgot ironically describes the dangers of metaphorical wandering with a familiar spatial image. “Metaphors, multiplied by need and by a kind of luxury of the imagination . . . have increasingly complicated the detours of this immense labyrinth, that man enters, if I may speak this way, before his eyes are open, misjudging his road with each step.”⁴⁵ The labyrinth of human knowledge itself had to be rationalized, purged of imprecision, so that the mind could move carefully forward in the equally labyrinthine topography of reality. Like the forest, itself described as labyrinthine, the labyrinth induced fear; it was linked with obscurity, darkness, perplexity.⁴⁶ To navigate the labyrinth of language and knowledge was to seek a path out of potentially dangerous territory.

This problem was addressed by Hobbes in the sensationalist sections of *Leviathan*: “The light of human minds is perspicuous words, and by exact definitions first snuffed and purged from ambiguity. And on the contrary, metaphors and senseless and ambiguous words, are like *ignis fatui* [again, the foolish fires] and reasoning upon them is wandering amongst absurdities.”⁴⁷ Like the metaphorical authority of the artificial sovereign, the function of words was to *impose* order, here on our experience, to purge it of any disruptive elements. This is something Locke argued too in the famous antirhetorical passages on language in his *Essay on Human Under-*

standing. In this epistemological context we can better understand the important role of Diderot and d'Alembert's *Encyclopédie* for Enlightenment thought. Both editors made it clear that the project was never meant to be some representation of the world; it was, rather, conceived as a "map" of knowledge itself, knowledge that was described by d'Alembert as "a sort of labyrinth, a tortuous road that the intellect enters without quite knowing what direction to take."⁴⁸ The *Encyclopédie* was, at least in theory, a highly organized knowledge machine that would demonstrate the interconnection of all forms of inquiry. The massive text would, in other words, purge the labyrinth of any senseless ambiguities, those purely human *ignis fatui*. The *Encyclopédie* would act as a guide for any individual explorer. "It is a kind of world map that is to show the main countries, their position and mutual dependence, the straight path there is from one to another, a path often interrupted by a thousand obstacles, that can only be known in each country by the inhabitants or explorers, and that can only be shown in highly detailed individual maps."⁴⁹ The question that remained was this: at the borders of knowledge, territory mapped behind you, how to proceed to a new truth? Diderot always envisioned the eventual obsolescence of the *Encyclopédie*, but the novel truths that would supplant present forms of knowledge would hardly be generated from *within* these accepted maps. And in Enlightenment thought, this idea of error is especially significant, given that it is the hidden foundation for the very concept of *progress*. For knowledge to progress, a previous truth (a coherent system of thought) must be invalidated as error by the discovery of something new.⁵⁰

There was then no doubt that any exploration of the unknown was still a radical risk. Hobbes actually explained why with great clarity. Truth and falsity, he said, are in speech alone, in human forms of knowledge. We can try to eliminate falsity by seeking out the irrational or incoherent connections within our own thought. But we should remember, he said, that these human truths purged of ambiguity were only contingent certainties, because we can never be entirely sure what we might encounter in the future. Certain truths did not, then, guarantee a straight line to knowledge. For Hobbes, error was not untruth but a name for this constant risk of failure. Locke made essentially the same point.⁵¹ But for Hobbes, there was a political version of this relationship. The sovereign must purge the body politic of anything (anybody) that disrupts the order, but this sovereign decision never guarantees the future preservation of that body. Eliminating, violently, any "incoherence" is not a direct path to political truth. Similarly, in Jean-Jacques Rousseau's *Social Contract*, the body of citizens may fail to find the sublime truth of the general will in its laws; however the one who actively disrupts the established order, the one who willingly breaks the law, must be put to death (or exiled). Politically and epistemologically, error was not eliminated in the presence of truth; rather, mistakes and ambiguities were rectified so that the path toward truth might be regained. The coherence of relations was not *directly* related to the hidden truth.

So how, according to Enlightenment philosophy, did the mind discover new

truths in a condition of uncertainty and possible error? Locke, like Hobbes, clearly showed that the path of discovery would not be found in any traditional form of universal logic. If the “hardest Task” of the mind was making and then proving new discoveries, he complained that the method of syllogism, for example, “is but the Art of fencing with the little knowledge we have, without making any addition to it.” Yet Locke, surprisingly enough, never identifies the power of discovery with the light of human reason. Only after a lengthy critique and analysis of syllogism does Locke turn to reason. He tells us, rather lyrically, that reason “penetrates into the Depths of the Sea and Earth, elevates our Thoughts as high as the Stars, and leads us through vast Spaces, and large Rooms of this mighty Fabric, yet it comes far short of the real Extent of even corporeal Being; and there are many Instances where it fails us.”⁵² Locke never in fact reveals the techniques of “penetration.” What follows this passage is an exhaustive catalog of how reason fails. Reason is constantly threatened: by the failure of ideas, the obscurity of ideas, the failure to perceive ideas, false principles, and the ambiguity of words and signs. The crucial “discovery” of a connection between two ideas, what Locke called at one point a “Revelation from God to us, by the Voice of Reason,” remains rather mysterious.⁵³ Which in the end means not only is there is no real technique for preparing this kind of revelation, there is never any clear guarantee that the perceived connection is in fact genuine.

In this framework, it might seem that “discovery” could only ever be purely accidental. And it is true that Diderot once described the “experimental” mind as, literally, blindfolded. It only stumbles on to something interesting while wandering in an erratic fashion. Following behind, it is the “rational” mind that diligently collects these precious materials and tries to fashion some kind of “torch” from them. However, this “supposed torch” is, Diderot suggests, less useful than the blind, erring movement of the experimental philosopher. This figure may not know where he is going, but he works without rest, he is constantly on the move, whereas the rational one is always weighing possibilities, and pronouncing judgments, which halts all progress.⁵⁴ We would, however, expect that the mainstream of the rational Enlightenment would seek out a more sure method of exploration. Of course, method is the key word here, and it means, literally, *meta-hodos*, or “after” the “path.” But how can a path be followed before it is marked out? It is only by rising above the dark labyrinthine wilderness that one can hope to plot a straight road somewhere.

Method

The method of Enlightenment was essentially empiricist (though what this term really means is never entirely clear), which is why Francis Bacon became citable in the eighteenth century. Invoking the same analogy between exploration

and epistemology favored by many Enlightenment philosophers, Bacon takes on the responsibility of preparing the way for future discoveries of the mind, to put, as he says, “the wanderer on the right way.” The key idea for Bacon was that exploration had to be guided by a method. Discovery would be possible if the voyage was carefully planned and executed. Simply wandering here and there would never lead to new lands, whereas a disciplined straight path would usually encounter something.⁵⁵ One had to be enlightened, but in a particular way: not “illuminated” with the truth, rather one simply required a practical sort of light to lead the way in the darkness of the unknown. “For experience, when it wanders in its own track, is, as I have already remarked, mere groping in the dark.”⁵⁶ Bacon’s inductive method of reasoned observation provides that necessary light: “The true method of experience . . . first lights the candle, and then by means of the candle shows the way; commencing as it does with experience duly ordered and digested, not bungling or erratic.”⁵⁷ This was the Bacon hailed by the Enlightenment.

The question Bacon (and the Enlightenment) had to confront, though, is how to begin this journey. For Bacon is proposing that we begin without any preconceptions, without any given organizing procedures, in order to avoid the “mist of tradition, or the whirl and eddy of argument, or the fluctuations and mazes of chance and of vague and ill-digested experience.” Bacon demands that we apply ourselves to “the opening and laying out of a road for the human understanding direct from the sense.”⁵⁸ This initial act, however, is by definition blind. Sensory experience does not in itself lead to anything. In fact, as Bacon famously noted, “The mind of man is far from the nature of a clear and equal glass, wherein the beams of things should reflect according to their true incidence.”⁵⁹ The candle can only be lit, then, when experience is somehow organized, “digested” by the mind, drawn together to form some kind of generalization that will point us in a particular direction. It is no wonder that this starting point is described by Bacon as exceedingly dangerous: the fear of being lost in the labyrinthine forest drives us forward, but the complex landscape frustrates our effort to escape:

The universe to the eye of the human understanding is framed like a labyrinth; presenting as it does so many ambiguities of way, such deceitful resemblances of objects and signs, natures so irregular in their lines, and so knotted and entangled. And then the way is still to be made by the uncertain light of the sense, sometimes shining out, sometimes clouded over, through the woods of experience and particulars; while those who offer themselves for guides are themselves also puzzled, and increase the number of errors and wanderers.⁶⁰

Complicating the difficult predicament of this traveler is Bacon’s comment that often the true path looks quite unpromising. For this reason, Bacon advises, somewhat surprisingly, that sometimes *chance* experiments are necessary modes of exploration. A wandering in the dark *can* occasionally point the way to the light. “For the *magnalia* of nature generally lie out of the common roads and beaten paths, so that the very absurdity of the thing may sometimes prove of service.” However, the implication is that this kind of radical exploration is never entirely random.

Learned experience, he went on to say, “is rather a sagacity and a kind of hunting by scent, than a science.”⁶¹ This comment illuminates the framework of Baconian inquiry. Experience must be organized to lead from mere particular experiences to the “open ground of axioms,” yet there is nothing intrinsic to these initial experiences that would lead us in the right direction. We must already be on the way for the Baconian method to be of any use whatsoever. “Our steps must be guided by a clue.” Only then can the journey be guided by the compass of method. Method only helps us keep away the infamous Baconian idols (from the Greek *eidos*, images), those empty “phantoms” that might lead us astray once we are on the path.⁶²

What exactly are these clues that make the initial steps possible? For Bacon, the ability to identify connections and analogies was given by the imagination, that nonrational and thus potentially errant faculty. Although Bacon always stressed that the imagination is dangerous, since it had the power to transgress the laws of nature, severing what is bound together and linking what is by nature apart, imagination was also necessary to begin the journey from sense to knowledge, for imagination illuminated the relations among particulars that would lead to more general axioms.⁶³ The problem now for Bacon is simply one of *timing*. The mind must not depart too quickly from particulars, lest it stray from the truth. The imagination, Bacon advised, must be tied down with weights, not given wings.⁶⁴ Error was really the errancy of haste, explained by Bacon as the consequence of “too untimely a departure and too remote a recess from particulars.”⁶⁵ Any departure, though, constitutes a risk, for what would guarantee the relationships established by the imagination? How could we distinguish phantom idols from truths, “between certain empty dogmas and the true signatures and marks set upon the works of creation as they are found in nature”? Bacon believed that a radical refashioning of the mind was imperative. “There remains but one course for the recovery of a sound and healthy condition,—namely, that the entire work of the understanding be commenced afresh, and the mind itself be from the outset not left to take its own course, but guided at every step.”⁶⁶ This guidance, clearly, was not the methodical prescription of given truths. Bacon’s aphoristic methodology encouraged the surprise, promoted the shattering of expectations, and sought out modes of augmentation and generation, rather than simply the predictable extension of given knowledge.⁶⁷

If Descartes eventually fulfilled Bacon’s injunction with his method of radical doubt, he was generally rejected by the Enlightenment for his metaphysical errors (his lapse, that is, into speculative systems). Yet his speculation on error and the paths of knowledge connect him more closely with the Enlightenment and its great English predecessor than was ever admitted in the eighteenth century. In an early text on the *Rules for the Direction of the Mind* (or in the author’s original Latin, the *imagination*), Descartes described the predicament of the human mind in topographical terms. His Rule Four states the need for a method in terms reminiscent of Bacon. He explains:

So blind is the curiosity with which mortals are possessed that they often direct their minds down untrodden paths, in the groundless hope that they will chance upon what they are seeking, rather like someone who is consumed with such senseless desire to discover treasure that he continually roams the streets to see if he can find any that a passer-by might have dropped. . . . I am not denying that they sometimes are lucky enough in their wanderings to hit upon some truth, though on that account I rate them more fortunate than diligent. But it is far better never to contemplate investigating the truth about any matter than to do so without a method. For it is quite certain that such haphazard studies and obscure reflections *blur the natural light* and *blind our intelligence*.⁶⁸

Descartes wanted to clear away these obscurities so that the natural light of our intelligence could occupy itself with its proper function: intuition and deduction. Method was to be the protective machinery that would keep at bay sources of interference. This method, Descartes explained in Rule Five, is simply the “ordering and arranging” of the objects of our attention. The point is to get back to the simplest intuitions and use these as the starting point for a careful ascent toward the truth. “Anyone who sets out in quest of knowledge of things must follow this Rule as closely as he would the thread of Theseus if he were to enter the Labyrinth.”⁶⁹ Here the difference between Descartes and the Enlightenment is clear: faced with the labyrinth, and fearful of its dangers, Descartes wants to avoid wandering and let the mind deduce the complex structure from certain key intuitions, whereas eighteenth-century thinkers simply advocated careful exploration because the method of ordering *itself* was the only road to truth. However, the predicament is strikingly similar, and the Cartesian solution will, in fact, bear more resemblance to the later theories than first seems possible.

Descartes returned to the problem of method in his most famous text, the *Discourse on Method*, where he tried to show how the mind could keep to the path, despite being in the midst of this dark labyrinthine landscape—the forest—with no clear view of the destination.

Imitating in this way those travelers who, finding themselves lost [*égaré*] in some forest, must not err turning this way and that, still less stay in one place, but should always walk as straight as they can in one direction, never changing it for weak reasons, even if it was perhaps only chance [*hasard*] that determined the choice; for in this way, even if they do not go exactly where they wish, they will at least eventually arrive somewhere, which is likely to be better than in the middle of the forest.⁷⁰

Obviously, it is “method” that will keep these travelers on the straight path and allow them to escape the dangers of the dark forest. However, Descartes realizes that maintaining this linear movement is not as easy as it may appear. Even after we have cleared away all doubts, and we find ourselves at the beginning, the first steps in the forest are still highly problematic for Descartes. The “natural light” ought to be our guide, but the problem, of course, is that this light can be obscured. As he notes elsewhere in the *Discourse*, errors can actually darken (*offusquer*) our natural light and confuse our understanding.⁷¹ The methodical path and the errant de-

tour in practice are difficult to distinguish. Descartes seems caught in the etymological labyrinth Jacques Derrida examines in his discussion of the *Discourse*. He points out that “discourse” is already a “running away,” a digression, while “method,” used by Descartes to indicate the proper path of knowledge, emerges from the Greek *methodos* (pursuit of knowledge), derived from *meta-hodos*, which, Derrida claims, means a *change* in the path that could just as easily denote perversion, seduction, or the *diverted* path.⁷²

Of course, like Bacon before him Descartes was hardly unaware of the fine line between progressive movement and errant diversion. And like Bacon, Descartes explained “error” as a kind of unconstrained wandering, a premature step into the unknown. The discussion of error in his *Meditations on First Philosophy* is framed by topographical imagery.⁷³ Error is the result of our infinite will breaking the boundaries of our understanding, making judgments where we fail to have proper information. Errors “are owing simply to the fact that, since the will extends further than the intellect, I do not contain the will within the same boundaries; rather, I also extend it to things I do not understand.”⁷⁴ Descartes gives the obvious remedy: we must never judge except in those cases where we have clear and distinct ideas. This of course seems to evade the very difficulty we are facing, for if a judgment is to have any value it must always go beyond the given, as Bacon (and his Enlightenment heirs) well knew. The will must stray from its borders at some point in order to advance knowledge. At any rate, can we ever know that something is truly clear and distinct when phantoms and *Irrlichten* capture our attention, when the very error itself blinds our intellect by darkening the natural light? Descartes looks at this point to God for a guarantee of “clarity,” and yet Locke’s critique of revelation would still hold, given Descartes’s own theory of error.

Descartes’s answer to this predicament is complex. Significantly, he admits that it is only by chance that he discovered the very truth of “method” in his epistemological and personal wanderings. He claims in one text that he no more merits any glory for having found these truths than “a passerby having encountered by chance [*bonheur*] at his feet some valuable treasure that the diligence of many others had long searched for unsuccessfully.” Although he warns against this practice in his *Rules for the Direction of the Mind*, as we saw, here he cannot help speculate as to why he was the first to discover these truths. It turns out that previous searchers had failed to maintain their discipline. Other exalted minds had, he explains, “almost always imitated those travelers who, having left the main road to take a shortcut [*prendre la traverse*], become lost among the thorns and precipices.”⁷⁵ Yet how do we know the right road to take? How do we distinguish the proper path from the mistaken shortcut? As Bacon had already hinted (and d’Alembert would later repeat) the truth is often found on the obscure, unpromising paths. The point is that it is impossible to know before one has found the prize. Descartes was, he himself admits, not aware of this path. “I will not be afraid to say that I think I have had much fortune [*heur*], to have happened on certain paths that have led me to consid-

erations and maxims from which I formed a method.”⁷⁶ In other words, Descartes was one of those engaged in “haphazard studies” that cloud the natural light; the difference was that fortune led him somewhere, took him out of darkness to the truth. This was Descartes’s answer to Bacon’s difficult problem of beginning the journey of exploration. Descartes was blessed with *heur*, which is not mere chance, a throw of the dice (*hasard*). The word *heur* (from *augurium*, or “presage”) is much more mystical, invoking ideas of omen, foresight, and clairvoyancy. Descartes is led out of the labyrinth, that dark forest of the *Discourse*, with a thread that comes from beyond: he senses the truth that can then guide him in the epistemological wilds.⁷⁷ Yet the method that Descartes introduces cannot entirely eliminate the ever present risk of errancy, as the *Meditations* clearly show. The path may be lost because the mind, in order to go anywhere, always runs the risk of straying. However, truth gives us this important clue, a possible way out of the forest. Is it a coincidence that Descartes in the *Discourse* advises those in the forest to plot a path *somewhere*, even if the choice of direction is made at random? By this circuitous route, this Cartesian topography takes us back to the Enlightenment problem of insight and deception. If the logical “method” of Enlightenment could only protect us from what Hobbes called “falsity,” how could the mind find its way in the dark unknown forest? How could this essentially posterior process of organization and abstraction ever lead to insight?

Conjecture and Enlightenment Truth

If we look first at Locke’s *Essay*, one of the most influential epistemological texts of the period, it is clear that he does allow for what we might call insight, a nonrational break out of error into truth. In fact, after outlining all the ways reason can fail, Locke notes rather remarkably that the mind can attain something he calls “intuitive knowledge,” which is, he says, “certain, beyond all Doubt, and needs no Probation, nor can have any.” Locke considers this intuition the “highest of all Humane Certainty.” The mind does not, however, acquire this kind of knowledge by reason. It is direct, immediate, sudden: “in the Discovery of, and Assent to these Truths, there is no use of the discursive Faculty, *no need of reasoning*, but they are known by a superior, and higher degree of evidence.” Locke goes on to speculate that “Angels have now, and the Spirits of just Men made perfect, shall have, in a future state, of Thousands of Things, which now either wholly escape our Apprehensions, or which, our short-sighted Reason having got some faint Glimpse of, we, in the dark, grope after.” Like d’Alembert’s prisoner, Locke’s mind, trapped in the closet, has glimpses of this sublime truth. But this inspiration comes only in flashes, “some Sparks of bright Knowledge.”⁷⁸ The mind is condemned, according to Locke, to the eternal twilight of probability.⁷⁹ Analogical connections of signs and ideas are never entirely certain. After describing all the dangers of “enthusiasm,”

the blind acceptance of knowledge, Locke significantly ends the argument of the *Essay* proper with a chapter on the multiple forms of error (or “wrong assent”), and not on truth.⁸⁰

Yet if Locke could provide no technique for producing insight, we can, if we look closely, find the hints of such a technique in later Enlightenment discourse. Condillac, for example, once noted that it “is by means of [conjectures] that all the sciences have begun, because we obscurely sense [*entrevoions*, a seeing between the lines] the truth before we see it, and evidence often comes only after tentative efforts [*le tâtonnement*].”⁸¹ The *suspicion* of truth, the sensing of the intangible clue, precedes any concrete experimental work. The Cartesian thread of *pressentiment* lurks here. D’Alembert also advised that the art of conjecture (quite literally throwing oneself into the unknown) is often as important for logic as is the art of demonstration. Although the mind should practice demonstration (without being bound by it) to train itself to recognize truth when it appears dimly or imperfectly, d’Alembert actually cautions that the habit of rigorous thought can sometimes blind the mind with its dazzling certainty:

Some ordinary eyes, too accustomed to the force of intense light, no longer distinguish the gradations of weak illumination, and see only thick shadows where others still sense some brightness. The mind that recognizes the truth only when it is directly struck by it, is well beneath the one that can not only recognize it close up but still have an intimation of it [*le pressentir*; literally, sense before] and make it out in the distance from some fleeting features [*caractères fugitifs*].⁸²

The image here is crucial. Condillac once described the “fugitive” as “one who having been forced to flee his country, errs here and there.”⁸³ If in some sense truth is a fugitive, unable to live in the limited regions of human intelligence, it is possible that it leaves its traces, some fleeting impressions. These images the perceptive mind can dimly make out. Blaise Pascal did in fact suggest something along these lines: “This is not at all the land of truth. It errs unknown among men.”⁸⁴ Enlightenment philosophers were, however, less willing than Pascal to accept the skeptical ramifications of this predicament. Eighteenth-century thought seized the connection between this erring truth and its twisting paths. As Condillac noted, “to err” can mean both to wander without any certain route and, significantly, “donner des *erres*,” to leave tracks. Hidden within this word *erres* are two etymological roots: wandering (*errare*) and traveling (*iterare*).⁸⁵ The tracks (*erres*) are traces of a past journey, which itself is often errant. These tracks are often ambiguous. Condillac explained that unlike the vestiges of something, which you can actually see and reconstruct in some form, *erres* are like all traces, mere impressions of the thing that has since passed by.⁸⁶ Truth may leave its traces, then, but the real difficulty is following them accurately. The search for truth is like a hunt, a quest that takes place in the dark labyrinthine forest, where uncertain clues (not to mention *feux follets*) may lead one astray.

As d’Alembert and Condillac sensed, truth did somehow leave its deceptive

traces in the labyrinth. The Enlightenment realized that method could never guarantee the movement of exploration, even as it enlarged and maintained the paths already laid out. Condorcet once described the eighteenth century as one “where the method of discovering truth has been reduced to an art, and so to speak, to a formula; where reason has finally recognized the road it must follow, and seized the thread that will prevent it from going astray [*s'égarer*].”⁸⁷ The Newtonian method was the Enlightenment's thread in the labyrinth. However, these “formulas,” he would significantly add, would never replace genius, which is what lights the “torch” in the first place; method can only *direct* genius and keep it on the path it has discovered. It is the genius who, in the eighteenth century, had the prescient qualities necessary to track the truth in its errant course. “He soars beyond the eagle's flight toward a luminous truth.”⁸⁸ This path of illumination, this *randonée* that the hunter followed, resisted logical analysis: its twists and turns were never entirely predictable.⁸⁹ The art of conjecture was both “necessary” and “dangerous” (especially in sciences such as medicine) for someone like d'Alembert because it relied on a comparison of concrete experiences that were never exactly alike, and mistaken semblance could easily lead to death. Conjecture, that step into the wilds of uncertainty in search of the prey, was an essential, if dangerous, component of Enlightenment epistemology.

The true Enlightenment explorer then is the genius who initiates a new adventure, who takes the risk in an effort to track a concealed truth. “In philosophical productions, the true or the false are not at all the distinctive characteristics of *genius*.”⁹⁰ The genius is someone that breaks through established knowledge in order to find something novel. “The genius . . . does not know regular progress; he puts together the most distant things and reunites the most contrary.”⁹¹ This freedom is of course dangerous, but it is a necessary freedom. “It is by permitting divergences [*écarts*] that genius gives birth to sublime things.”⁹² The movement of exploration, then, is less the conquering of open space, or the piecing together of one intricate machine, than it is a process of tracking the paths of a truth we recognize but only in a fragmentary form. These traces of truth, that “weak illumination,” are to be found not in the harsh light of rational, logical analysis but rather in the shadowy world of *analogy*, of resemblances in difference. In this Enlightenment topography, the human mind is poised between an illuminated past and a dark future, open to the obscure glow and the sudden flash of insight, but for this reason, the mind is always threatened by those very apparitions that imitate the traces of this erring prey.

Ultimately, the path to truth is the path to that ultimate vantage point, one beyond time, beyond space, beyond the confines of the labyrinthine topography that is our reality. The limit to knowledge is that divine perspective, so often invoked in Enlightenment texts. This is less a theological concept than a name for the perfect insight into all the twists and turns that mark the infinite connectivity of the universe. Far from an abstraction, divine knowledge is a function of the ability to see all the “imperceptible shadings that serve at once to separate and unite” the

entities that make up reality.⁹³ So for the Enlightenment, human knowledge was structured as an error. This was not the error of incompleteness, or the error of an imperfect abstraction. Our rational, ordered systems of knowledge were more like *images* of truth, distorted, almost anamorphic disfigurements of that intricate network of relations governing the universe. In a sense, truth both revealed and concealed itself in our imperfect forms constructed from fleeting traces. The image of order reflected a higher reality even as it violated the subtle distinctions and differences obscured by our imperfect insights. The project of Enlightenment, from this perspective, was a dual enterprise: both the elimination of all our distorting effects, and the tracing of the image of truth in new spaces of appearance. The tragedy, for the mind caught in this terrible labyrinth, or the dark impenetrable forest, was that the idol and the insight could never really be distinguished in advance.

Enlightenment Truth and Revolutionary Terror

It is, I think, difficult to derive death and political violence from a truth defined as a “sublime obscurity.” But this does not mean that we can, or even should try to, sever Enlightenment discourse from revolutionary violence. But a reading of the political discourse of the period might pursue a parallel structure of thought. Rather than see the will of the nation as a dangerous abstraction that can only ever see the concrete embodied individual as an errant enemy to be eliminated, we might seek out in the political sphere those attempts to identify and destroy all “falsity” that recognized at the same time the essentially errant condition of a community awaiting insight into its own identity. Two examples can indicate the direction of this reading.

In his massively influential prerevolutionary pamphlet *What Is the Third Estate?* the abbé Sieyès describes the role of the “patriotic writer,” someone who must, he says, proclaim the truth. For only with the truth can the political “administrator” keep to the proper path as he battles various “interests.” Sieyès writes that “this path must have been cut through to the end by the philosopher. He must have arrived at the end, otherwise he could not guarantee that this is really the path that leads there.”⁹⁴ But why should we ever trust the philosophical guide in the wilderness? How do we know that the guide has really reached the truth? There is in fact no place for blind trust, Sieyès explains. The philosopher must reveal the truth in its full strength. Then human minds, like “healthy eyes” that turn naturally to the “light,” will be drawn to this truth it cannot help but recognize when it appears. But things are not quite so simple. Significantly, this truth can never really be seen directly. Truth is, Sieyès notes, rather like the *source* of light, which appears to us only through its multiple “reflections” and “refractions,” essential aberrations of one single “direct ray.” In other words, truth can never be captured in any one lo-

cation. The philosopher must therefore recognize the continual possibility of error: “Without this ensemble [of reflections] one can never feel sufficiently illuminated, and one often believes he holds a truth, which will have to be abandoned as one contemplates further.” Enlightenment (here again literally illumination), is never a singular process. And yet Sieyès claims that the philosopher must combat errors ruthlessly. How is this possible? What Sieyès implies is that the radical deviation that marks truth’s itinerant aberration in the world must be distinguished from the specific errors and mistakes that are revealed through incoherence.⁹⁵ “Obstacles” are not as problematic as fragmentary, perhaps obscure, reflections.

What does this mean politically? For Sieyès, the common will of the nation was never given in one place; it was, he said, like the source of light, revealed only in multiple refractions. This meant that any process of discovery was subject to error. Plural voices, in the space of politics, came together to “purify” themselves and seek out the truth that would unite them.⁹⁶ But this very space had to be protected from disruption: from the forces of disintegration and from the absurdities that threatened social order. “Privilege,” for Sieyès, is one name for the error of incoherence in this context. However elusive the sublime common will might be, one can always identify the *enemy* of the common. Privilege, literally “private law,” could never be accommodated in a nation defined by *common* laws.⁹⁷ Sieyès writes:

Do not ask what place the privileged classes should ultimately occupy in the social order: that is like asking what is the appropriate place in the body of someone who is ill for a malignant tumor that weakens and torments him. It is necessary to *neutralize* it, to reestablish the health and activity of all the organs, so that these morbid combinations, which poison the most essential principles of life, will not form again.⁹⁸

This is not the elimination of “error” in the name of truth, but instead the removal of an obvious obstacle, so that the body can find its way *toward* the truth.

This distinction is clearly maintained in the discourse of the Terror. For Robespierre, the violence of Terror had a specific target: the enemy, and not the citizen. Significantly though, he never defined the “enemy” unproblematically, as some kind of obvious “error” contrary to the manifest truth of the general will. Like Sieyès, Robespierre believed that the will of the nation had to be *found* through a representational process.⁹⁹ And like Sieyès, Robespierre always acknowledged the inevitable potential for error in the legislative body as a whole; he also recognized the honest errors of individual representatives who have only been “deceived,” and admitted the many errors of the “people,” who, he said more than once, often go “astray” in times of crisis.¹⁰⁰ So for Robespierre, the errancy of the patriot had to be distinguished from the criminal deviation of the enemy. At the height of the Terror, Robespierre would warn:

misfortune to those who would dare direct against the people the terror that must draw near only its enemies! Misfortune to those who, confounding the inevitable errors of patriotism with the calculated errors of perfidy, or with the attacks of conspirators, abandons the dangerous intriguer to pursue the peaceful citizen!¹⁰¹

Of course, with truth unavailable, the identification of these two forms of “error” was inherently problematic. But not impossible: I suggest that distinguishing between what Robespierre often called “error” and “crime” was, in the end, understood less as a logical procedure than as an existential confrontation. The error of crime, like the metaphorical error of Enlightenment, often clothed itself in the figure of truth. “Nothing resembles virtue like a great crime,” Louis Antoine de Saint-Just would note.¹⁰² The idol succeeds, of course, by deception. And so the genuine insight, for Robespierre, comes not from preestablished rules of discovery, nor from the observation of easily recognized visible marks. As we have already seen in the Enlightenment texts, some intangible inner connection to truth must guide us in the dangerous territory. Robespierre asks: “Who then will disentangle all these nuances? Who will trace the line of demarcation?” In the end, he responds, it is not the general will, not the truth that must decide, rather: “Love of country and of truth.”¹⁰³ Recognition, though central here, is of course never guaranteed. Both risk and promise mark this complex space, for the love of truth can be blinded precisely in moments of fear.

Notes

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1. See the excellent analysis by Rolf Reichardt, in “Light Against Darkness: The Visual Representations of a Central Enlightenment Concept,” *Representations* 61 (Winter 1998): 95–148.
2. G. W. F. Hegel, *Phenomenology of Spirit*, trans. A. V. Miller (Oxford, 1977), 331.
3. *Ibid.*, 341. 4. *Ibid.*, 360.
5. These allusions are explained in great detail by James Schmidt in his “Cabbage Heads and Gulps of Water: Hegel on the Terror,” *Political Theory* 26 (1998): 4–32. In the same volume, see Robert Wokler, “Contextualizing Hegel’s Phenomenology of the French Revolution and the Terror,” in *ibid.*, 33–55.
6. Friedrich Schlegel, *The Philosophy of Life and Philosophy of Language in a Course of Lectures*, trans. Rev. A. J. W. Morrison (London, 1913), 72.
7. Max Horkheimer and Theodor Adorno, *Dialectic of Enlightenment* (1944), trans. John Cumming (London, 1973), 12–13.
8. Reinhart Koselleck, *Critique and Crisis: Enlightenment and the Pathogenesis of the Modern World* (Oxford, 1988), esp. 2, 165, and chap. 10.
9. Alexis de Tocqueville, *L’ancien régime et la Révolution*, in *Oeuvres Complètes*, ed. J.-P. Mayer (Paris, 1951–), 2:193–201. On this aspect of Tocqueville’s approach to the Revolution, see Harvey Mitchell, *Individual Choice and the Structures of History: Alexis de Tocqueville as Historian Reappraised* (Cambridge, 1996).
10. François Furet, “Terror,” in François Furet and Mona Ozouf, eds., *Critical Dictionary of the French Revolution*, trans. Arthur Goldhammer (Cambridge, Mass., 1989). See as

- well François Furet, *Interpreting the French Revolution*, trans. Elborg Forster (Cambridge, 1981) and his *Revolutionary France, 1770–1880* (Oxford, 1992).
11. James Creech, “Diderot’s ‘Ideal Model,’” in Jack Undank and Herbert Josephs, eds., *Diderot: Digression and Dispersion, a Bicentennial Tribute* (Lexington, Ky., 1984), 85.
 12. Thomas Kavanagh, “*Jacques le fataliste*: An Encyclopedia of the Novel,” in Undank and Josephs, *Diderot*, 162–63.
 13. Pierre Saint-Amand, *Diderot: le labyrinthe de la relation* (Paris, 1984), 61, 77.
 14. Dorothea E. von Mücke, *Virtue and the Veil of Illusion: Generic Innovation and the Pedagogical Project in Eighteenth-Century Literature* (Stanford, 1991), 46.
 15. Wilda Anderson, *Diderot’s Dream* (Baltimore, 1990), 49, 83–84, 89–90, 93–96, 108, 205–6, 257–58.
 16. Saint-Amand, *Diderot*, 64–66, 71.
 17. Hans Blumenberg, *The Legitimacy of the Modern Age*, trans. Robert M. Wallace (Cambridge, Mass., 1983), 422, 424.
 18. *Ibid.*, 409–14 (quote at 411).
 19. Barbara Maria Stafford, *Body Criticism: Imaging the Unseen in Enlightenment Art and Medicine* (Cambridge, Mass., 1991), chap. 1.
 20. *Ibid.*, chap. 2, 148. 21. *Ibid.*, 209.
 22. Barbara Maria Stafford, “From ‘Brilliant Ideas’ to ‘Fitful Thoughts’: Conjecturing the Unseen in Late Eighteenth-Century Art,” *Zeitschrift für Kunstgeschichte* 48 (1995): 356.
 23. Jean Starobinski, *1789: The Emblems of Reason*, trans. Barbara Bray (Charlottesville, Va., 1982), 80–82.
 24. See Ulrich Im Hof, *The Enlightenment*, trans. William E. Yuill (Oxford, 1994), 3–7; and Roland Mortier, “‘Lumière’ et ‘lumières’: histoire d’une image et d’une idée au XVII^e et au XVIII^e siècle,” in *Clartés et ombres du siècle des lumières: études sur le XVIII^e siècle littéraire* (Geneva, 1969).
 25. John Locke, *An Essay Concerning Human Understanding*, ed. Peter H. Nidditch (Oxford, 1975), 702. The OED defines *ignis fatuus* as a “phosphorescent light seen hovering or flitting over marshy ground. . . . When approached, the *ignis fatuus* appeared 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 travellers astray. Hence the term is commonly used allusively or figuratively for any delusive guiding principle, hope, aim, etc.”; *Oxford English Dictionary*, 2d ed., s.v. “*ignis fatuus*.”
 26. For René Descartes, see Michael H. Keefer, “The Dreamer’s Path: Descartes and the Sixteenth Century,” *Renaissance Quarterly* 49 (1996), esp. 61–62; and for Nicolas de Malebranche, see Mortier, “Lumières,” 18.
 27. For an examination of the struggle over scientific method in this period, see Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, 1985).
 28. John Locke, *Essays on the Law of Nature*, ed. W. von Leyden (Oxford, 1988), 123 (Latin text on 122).
 29. See Keith M. Baker, *Condorcet: From Natural Philosophy to Social Science* (Chicago, 1975), part 1.
 30. See Ian Hacking, *The Emergence of Probability: A Philosophical Study of Early Ideas About Probability, Induction, and Statistical Inference* (Cambridge, 1975); and Michel Foucault, *Les mots et les choses: une archéologie des sciences humaines* (Paris, 1966).

31. *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*, ed. Denis Diderot and Jean le Rond d'Alembert, 17 vols. (Paris, 1751), s.v. "philosophe." Unless otherwise noted, translations are my own.
32. Jean le Rond d'Alembert, *Essai sur les élémens de philosophie, ou sur les principes des connaissances humaines*, in *Oeuvres de d'Alembert* (Geneva, 1967), 1:180.
33. *Ibid.*, 1:148. My reading offers an alternative to Jacques Derrida's view of the traditional relationship between blindness and knowledge. See Jacques Derrida, *Mémoires d'aveugle: l'autoportrait et autres ruines* (Paris, 1990), 18–22.
34. Saint-Hyacinthe [Hyacinthe Cordonnier], *Recherches philosophiques, sur la nécessité de s'assurer soi-même de la vérité* (London [i.e., Paris], 1743), 9–10.
35. Denis Diderot, *Pensées philosophiques* in *Oeuvres complètes*, ed. J. Assézat and M. Tourneux, 20 vols. (Paris, 1897–1913), 1:159.
36. Denis Diderot, *Entretien entre Dorval et moi*, in *Oeuvres complètes*, 7:102.
37. Denis Diderot, *Salon de 1767*, ed. J. Seznec and J. Adhemar (Oxford, 1963), 165.
38. Baron d'Holbach, *Système de la nature, ou des lois du monde physique et du monde moral* (Paris, 1821), 1:v–vi.
39. *Encyclopédie*, s.v. "feu."
40. Jean-Louis Castilhon, *Essai sur les erreurs et les superstitions anciennes et modernes*, new ed. (Frankfurt, 1766), 1:9.
41. *Encyclopédie*, s.v. "philosophe."
42. *Ibid.*, s.v. "fantôme."
43. Jean le Rond D'Alembert, *Discours préliminaire de l'encyclopédie* (Paris, 1965), 36–37.
44. See for example, d'Alembert, *Essai sur les élémens*, 1:125.
45. *Encyclopédie*, s.v. "etymologie" (entry by Anne-Robert-Jacques Turgot).
46. See Denis Diderot, *Lettres à Sophie Volland*, ed. A. Babelon (Paris, 1959), 2:89.
47. Thomas Hobbes, *Leviathan*, ed. Richard Tuck (Cambridge, 1991), 36.
48. D'Alembert, *Discours préliminaire*, 125.
49. *Ibid.*, 60.
50. See Jean-Antoine-Nicolas de Caritat, Marquis de Condorcet, *Esquisse d'un tableau historique des progrès de l'esprit humain*, ed. Alain Pons (Paris, 1988). Cf. Jean Ehrard, *L'idée de nature en France dans la première moitié du XVIIIe siècle* (Paris, 1963), 2:759.
51. See Locke, *Essay*, 577–91.
52. *Ibid.*, 681. 53. *Ibid.*, 598.
54. Denis Diderot, *Pensées sur l'interprétation de la nature*, in *Oeuvres complètes*, ed. Herbert Dieckmann et al. (Paris, 1975–), 9:43.
55. Blumenberg, *Legitimacy of the Modern Age*, 389.
56. Francis Bacon, *Novum Organum*, in *The Works of Francis Bacon*, collected and ed. James Spedding et al. (London, 1870), 4:95.
57. *Ibid.*, 4:80. 58. *Ibid.*
59. Francis Bacon, *The Advancement of Learning and The New Atlantis*, ed. Arthur Johnston (Oxford, 1974), 127.
60. Francis Bacon, preface to the *New Instauration*, in *Works*, 4:18.
61. Francis Bacon, *De Augmentis*, in *Works*, 4:420, 421.
62. Bacon, *New Instauration*, in *Works*, 4:18, 19.
63. See Katherine Park, "Bacon's 'Enchanted Glass,'" *Isis* 75 (1984): 290–302.
64. Bacon, *Novum Organum*, in *Works*, 4:97.
65. Bacon, *Advancement of Learning*, 92.

66. Bacon, *Novum Organum* and *New Instauration*, in *Works*, 4:40, 51.
67. See John C. Briggs, *Francis Bacon and the Rhetoric of Nature* (Cambridge, Mass., 1989).
68. René Descartes, *Rules for the Direction of the Mind*, in *The Philosophical Writings of Descartes*, trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch (Cambridge, 1985), 1:15–16, my italics.
69. *Ibid.*, 1:20.
70. René Descartes, *Discours de la méthode*, in *Oeuvres philosophiques*, ed. Ferdinand Alquié (Paris, 1963), 2:595.
71. *Ibid.*, 2:578.
72. Jacques Derrida, “La langue et le discours de la méthode,” in *Recherches sur la philosophie et le langage*, vol. 3, *La philosophie dans sa langue* (Grenoble, 1983).
73. On Cartesian errancy see Georges Van Den Abbeele, *Travel as Metaphor from Montaigne to Rousseau* (Minneapolis, 1994), chap. 2.
74. René Descartes, *Meditations on First Philosophy*, in *Discourse on Method and Meditations on First Philosophy*, 3d ed., trans. Donald A. Cress (Indianapolis, Ind., 1993), 85.
75. René Descartes, *Recherches de la vérité*, in *Oeuvres philosophiques*, 2:1107.
76. Descartes, *Discours*, 569–70.
77. Cf. G. Nador, “Métaphores de chemins et de labyrinthes chez Descartes,” *Revue philosophique de la France et de l'étranger* 152 (1962): 37–51. Note the emphasis here on the fear associated with the labyrinth.
78. Locke, *Essay*, 683.
79. *Ibid.*, 652.
80. A short chapter on the division of the sciences ends the actual book.
81. Etienne Bonnot de Condillac, *Cours d'études IV: De l'art de raisonner*, in *Oeuvres philosophiques*, ed. Georges le Roy, 3 vols. (Paris, 1948), 1:680b. Cf. *Encyclopédie*, s.v. “hypothèse.”
82. D’Alembert, *Essai sur les élémens*, 1:154.
83. Etienne Bonnot de Condillac, *Dictionnaire des synonymes*, s.v. “fugitive,” in *Oeuvres philosophiques*, vol. 3.
84. Blaise Pascal, *Pensées*, ed. Philippe Sellier (Paris, 1976), 216.
85. *Grand Larousse de la langue française*, 2d ed., s.v. “erres.”
86. Condillac, *Dictionnaire des synonymes*, s.v. “errant,” “errer,” “erres,” and “vestiges.”
87. Keith M. Baker, “Condorcet’s Notes for a Revised Edition of His Reception Speech at the Académie Française,” *Studies on Voltaire and the Eighteenth Century* 169 (1977): 17–18.
88. *Encyclopédie*, s.v. “génie.”
89. See Stafford, *Body Criticism*, 120.
90. *Encyclopédie*, s.v. “génie.”
91. Antoine le Camus, *Médecine de l’esprit* (Paris, 1753), 138.
92. *Encyclopédie*, s.v. “goût.” This quote is from the portion of the article written by d’Alembert.
93. D’Alembert, *Discours préliminaire*, 48.
94. Emmanuel Joseph Sieyès, *Qu’est-ce que le tiers état?* ed. Roberto Zapperi (Geneva, 1970), 194.
95. *Ibid.*, 214.
96. Emmanuel Joseph Sieyès, “Sur la organisation du pouvoir législatif et la sanction royale,” in François Furet and Ran Halévi, eds., *Orateurs de la révolution française*, vol. 1, *Les constituants* (Paris, 1989), 1031; Emmanuel Joseph Sieyès, *Vues sur les moyens d’exécution dont les représentans de la France pourront disposer en 1789* (Paris, 1789).

97. See Emmanuel Joseph Sieyès, *Essai sur les privilèges*, in *Qu'est-ce que le tiers état?* ed. Edme Champion (Paris, 1888), 9. Cf. Emmanuel Joseph Sieyès, *Délibérations à prendre pour les assemblées de baillages* (Paris, 1789).
98. Sieyès, *Qu'est-ce que le tiers état?*, ed. Zapperi, 218.
99. Maximilien Robespierre, *Oeuvres complètes de Maximilien Robespierre*, 10 vols. (Paris, 1910–67), 6:92.
100. *Ibid.*, 10: 536; 6:91, 255–56, 287–88. 101. *Ibid.*, 10:359.
102. Louis Antoine de Saint-Just, *Oeuvres complètes*, ed. Michèle Duval (Paris, 1984), 459.
103. Robespierre, *Oeuvres*, 10: 276–77.