Divining Nature

Aesthetics of Enchantment in Enlightenment France

Tili Boon Cuillé

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TILI BOON CUILLÉ

STANFORD UNIVERSITY PRESS
Stanford, California

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Printed in the United States of America on acid-free, archival-quality paper

Library of Congress Cataloging-in-Publication Data

Names: Cuillé, Tili Boon, author.
Title: Divining nature : aesthetics of enchantment in Enlightenment France / Tili Boon Cuillé.
Description: Stanford, California : Stanford University Press, 2020. | Includes bibliographical references and index.
Identifiers: LCCN 2020019958 (print) | LCCN 2020019959 (ebook) | ISBN 9781503613362 (cloth) | ISBN 9781503614178 (epub)
Subjects: LCSH: Science and the arts—France—History—18th century. | Art and natural history—France—History—18th century. | Philosophy of nature—France—History—18th century. | Natural history literature—France—History—18th century. | Nature in literature—History—18th century. | Arts, French—18th century—Themes, motives. | Enlightenment—France.
Classification: LCC NX180.S3 C85 2020 (print) | LCC NX180.S3 (ebook) | DDC 700.1/08094409033—dc23
LC record available at https://lccn.loc.gov/2020019958
LC ebook record available at https://lccn.loc.gov/2020019959

Cover design: Kevin Barrett Kane

Cover art: Claude-Joseph Vernet (1714–1789), *A Storm on a Mediterranean Coast*. 1767. Oil on canvas, 113 x 145.7 cm. The J. Paul Getty Museum, Los Angeles. Digital image courtesy of the Getty's Open Content Program.

Typeset by Newgen in Galliard Pro 10/15

NATIONAL ENDOWMENT FOR THE HUMANITIES

The National Endowment for the Humanities: Exploring the human endeavor. Any views, findings, conclusions, or recommendations expressed in this book do not necessarily reflect those of the National Endowment for the Humanities.

To my marvels:
Elena and Rémi

In all things of nature there is something of the marvelous . . .

—Aristotle, *Parts of Animals*

In order for us to imagine nature in the process of creating a marvel . . . the means she employs must be unknown or hidden, like the cords of a machine. As soon as we perceive them, the illusion is destroyed, and instead of a surprising spectacle, it is no more than an ordinary fact.

—Marmontel, “Vraisemblance”

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Acknowledgments

THIS book began with my interest in the marvelous. I never suspected it would take me down so many garden paths, however, and I have incurred many debts along the way. I would like to thank the members of our Eighteenth-Century Interdisciplinary Salon, past and present, who individually and collectively responded to various parts of this project as it evolved, particularly our founder, Rebecca Messbarger, as well as Pannill Camp, Charly Coleman, Alexandre Dubé, Matt Erlin, Minsoo Kang, Kristina Kleutghen, Wolfram Schmidgen, Annie Smart, Alexander Stefaniak, and Mark Valeri, who have been known to forego sleep and to brave storms for the sake of our discussions. Carolyn Abbate's NEH Summer Seminar at Princeton University prompted me to consider opera in terms of performance and reception as well as libretto and score. I am grateful for the support of the Center for the Humanities at Washington University in St. Louis, where I was a Faculty Fellow for a themed focus on the subject of affect, and the National Endowment for the Humanities, which arrived at a critical juncture and allowed me to finish my book.

A tribute to those scholars who have had a formative influence upon my thought can be found in these pages. My research and writing would not have been nearly as rewarding without Eric Gidal's and Anne Vila's invaluable recommendations, references, and encouragement. Jean Allman, Daniel Brewer, Charles Dill, Paul Michael Lützeler, John Lyons, Javier Moscoso, Mary Sheriff, and Karyna Szmurlo all generously engaged with my work at crucial moments. I owe special thanks to Harriet Stone, who never lost faith

in my vision. Numerous friends, colleagues, and mentors, whether wittingly or un-, provided necessary reassurance and fruitful suggestions or proved willing to lend an ear, including Juliette Cherbuliez, Andrew Clark, Andrew Curran, Talia Dan-Cohen, Lynn Festa, Seth Graebner, Chloé Hogg, Anca Parvulescu, Gerald Prince, Jean-Marie Roulin, Scott Sanders, Elzbieta Sklodowska, Joanna Stalnaker, Helen Thompson, and Amy Wyngaard. I greatly appreciate the dedication of my research assistants, Maëlan Gaucher, Anne Seul, and Dawn Mohrmann, who undertook numerous reconnaissance missions on my behalf, sparing me from having to venture yet further afield. I am also delighted to have had the opportunity to participate in the lively, collegial exchange at the Bloomington Eighteenth-Century Studies Workshop "Falsehood, Forgeries, Fraud: The Fake Eighteenth-Century" and the Folger Workshop "The Languages of Nature: Science, Literature, and the Imagination."

I am profoundly grateful for Emily-Jane Cohen's admission that she shared my affinity for the marvelous upon expressing initial interest in the project—providing me with an ideal reader—as well as for Erica Wetter, Kate Wahl, and Faith Wilson Stein's expert guidance throughout the editorial process. I could not have wished for more perceptive outside readers, who intuitively grasped the scope and purpose of my book and helped me to fulfill them. I also wish to thank my previous editors, journals, and presses for permission to draw on my published work: "Music, Passion and *Parole* in Eighteenth-Century French Philosophy and Fiction," in *The Edinburgh Companion to Literature and Music*, ed. Delia da Sousa Correa (Edinburgh: Edinburgh University Press, 2020); "Songs of Sorrow: Bardic Women in Girodet, Ossian, and Staël," *Eighteenth-Century Studies* 52.2 (2018): 159–65; "The Spectacle of Nature in *Paul et Virginie*: Natural History, Opera, and the Novel," *Forum for Modern Language Studies* 48.2 (2012): 149–63; "Marvelous Machines: Revitalizing Enlightenment Opera," *Opera Quarterly* 27.1 (2011): 66–93; and "From Myth to Religion in Ossian's France," in *The Super-Enlightenment: Daring to Know Too Much*, ed. Dan Edelstein (Oxford, UK: Voltaire Foundation, 2010).

Finally, I could not have persevered in this endeavor without my family, which remains my greatest source of inspiration and moral support. My

parents, James and Olivian Boon, fostered the many varied interests featured in these pages—nature, philosophy, literature, opera, art, and religion—and my sister, fellow scholar, and confidante, Jessica Boon, offered vital sources, conversation, and perspective along the way. My husband, Lionel Cuillé, shared the rather visceral moments of blindness and insight, melancholy and enthusiasm that characterize my writing process, and my children, Elena and Rémi, accompanied me wherever my research led, at home or abroad, geographically or conceptually, enabling me to appreciate the journey as well as the destination. I dedicate this book to you, with thanks and admiration.

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Introduction

The Spectacle of Nature

Le Spectacle de la nature, by the Abbé Pluche, rapidly became an Enlightenment best seller that both revealed and fostered a widespread interest in natural history. A richly illustrated, eight-volume philosophical dialogue serially published in the years 1732–1750, Pluche's magnum opus was perhaps an unlikely candidate for such immediate and sustained success.[1] Predicated on a notion of intelligent design, it contributed to contemporary trends in natural philosophy and theology. Pluche discusses the implications of his title in the preface to his work: "We all enjoy the view of Nature's exterior. The spectacle is for our benefit. By limiting ourselves to it, we quite adequately discover the beautiful, the useful, and the true." Content to contemplate the spectacle, Pluche resists the temptation to look behind the scenes.

> But claiming to probe Nature's depths, wanting to attribute effects to their particular causes, wanting to understand the artifice and the workings of the springs . . . is a hardy enterprise of uncertain success. We leave it to those geniuses of a higher order to whom it is granted to enter into these mysteries and see. For our part, we consider it more appropriate to restrict ourselves to the world's external decor and to the effect of the machines that create the spectacle. . . . We can see that it has only been made so brilliant in order to pique our curiosity. Yet, content with a performance that sufficiently occupies

> our mind and our senses, we need not demand access to the *salle des machines.*[2]

Developing the analogy between the laws of nature and stage machinery—also known as the *merveilleux*—Pluche elects to remain in the audience, subject to the illusion, rather than venture backstage in order to determine how the special effects are achieved.[3] This acknowledgment of the implicit limitations of reason and the senses, subsequently dubbed epistemological modesty, left open the question of whether to attribute these effects to nature or the divine. Evidence of this dichotomy can be seen if we compare this analogy to another famed evocation of nature's spectacle, that of Bernard de Fontenelle, who likened nature to the opera in his 1686 *Entretiens sur la pluralité des mondes habités* (*Conversations on the Plurality of Worlds*). While Fontenelle, a philosopher, invoked the analogy to suggest the sufficiency of the laws of matter, Pluche, a priest, invoked it to demonstrate the existence of God.

The notion of nature as spectacle, like that of nature as clock or book, dates back to the Greek philosophers' initial forays into natural history. Christian theologians reinforced this imagery over the centuries, for the perfection or complexity of such creations seemed to imply the existence of a creator. Whether clock, book, or spectacle, the concept of nature harbors an inherent tension, for it is implicitly likened to its opposite: artifact, artifice, or art.[4] In their analyses of the emerging language of scientific inquiry, Steven Shapin and Robert Markley interpret the "constitutive metaphor" of the two books—Nature and Scripture—in the context of late seventeenth-century physico-theology, which informed the methods of the Royal Society, "justifying natural philosophy as a means to a theological end."[5] Jessica Riskin explores the resonance of the clockwork metaphor, primarily associated with late seventeenth-century mechanism yet employed over the centuries to suggest either nature's agency (organized) or lack thereof (designed).[6] Such figurative language arose, Tita Chico suggests, as natural philosophers considered how to understand and represent the natural world.[7]

Early-modern characterizations of nature as book, clock, or spectacle were not unrelated. In *The Excellency of Theology*, Robert Boyle describes

nature as a book either without an ending, whose ending is concealed, or whose ending will never be reached; a cliffhanger of sorts.[8] Larry Laudan traces the heritage of the clockwork metaphor from René Descartes through Boyle to John Locke, all of whom emphasize the fact that, so long as a watch remains closed or a clock is seen from afar (Locke's famous clock at Strasbourg), we can but speculate as to the arrangement of its inner workings. Yet, as Laudan notes, Descartes ultimately "fell victim to his own metaphor,"[9] for just as one can presumably read to the end of a book, one can also in most cases open a watch or a clock to examine its inner workings, which is how the metaphor came to be understood. The comparison of nature to spectacle, however, preserved the notion of an area in the wings, backstage, or behind the scenes (*dans les coulisses*) that could not be perceived from the audience. It did so, moreover, in an era when spectators were removed from the stage and relegated to the audience in order to enhance the illusion. The invocation of the analogies of the book and the clock by those who wished to posit the limits of human understanding thus suggests a certain carryover rather than a sharp distinction between what Riskin refers to as the "theological mechanists" of the Royal Society and the "sentimental empiricists" of the French Enlightenment, who subsequently privileged the notion of nature as spectacle. While the phrase "book of nature" remained prevalent in eighteenth-century Britain, the phrase "spectacle of nature" outstripped it in eighteenth-century France dating from the publication of Pluche's bestseller.[10]

The characterization of nature as spectacle carries certain connotations that the other expressions do not. First of all, it shifts the emphasis away from the implied creator toward a structure of representation and reception, for while we are familiar with references to the author of nature or the great clockmaker, we rarely if ever hear of the divine dramaturge. Whereas the *theatrum mundi* posited the gods or God as spectators of humanity, the spectacle of nature casts humanity not as actors but as audience. While both clock and spectacle consist of moving parts—springs, cogs, wheels—spectacle is far more dynamic; though scripted, choreographed, and directed, it is nevertheless subject to the vagaries of performance. In the early-modern context, spectacle was generally understood to refer to the sung

rather than the spoken theater, moreover, involving the collaboration of the arts and technology to produce a multisensory experience. It also adds an affective dimension, for spectators both comprehend (intellectually) and react (emotionally) to what they perceive. The construct thus proved equally useful in the realms of epistemology and aesthetics and was particularly suited to the widespread tendency to "[view] life in terms of spectator-spectacle relations" that David Marshall attributes to the period.[11] Finally, spectacle effectively subdivides nature into its visible and invisible (or occult) components, the former accessible to the senses, the latter beyond their reach, offering little to no assurance that its "secrets" can be discovered. By the turn of the eighteenth century, natural philosophers and theologians were inclined to agree that first causes were providential, material, or difficult to impossible to determine. In his sweeping study of the period, Jonathan Israel remarks that "apparent 'design,' as Diderot was to confirm, could after all be just as convincingly ascribed . . . to Nature's self-formation or evolution, as to the Providence of Newton."[12] Spectators, regardless of their persuasion, could observe, admire, analyze, and interrogate the design, in other words, without ever venturing to settle the question of whether it was intelligent. Whereas Riskin characterizes Pluche's *Spectacle de la nature* as the last gasp of a "brute-mechanist argument-from-design tradition," I take this work as my point of departure, demonstrating how the sentimental empiricists who wrote in Pluche's wake deployed this metaphor in the interest not of penetrating nature's mysteries or exposing its mechanisms but of respecting its integrity while exploring its vitality, adopting the attitude that Pierre Hadot describes as Orphic.[13]

The notion of spectacle in eighteenth-century France had something of a bad rap. Considered a frivolous means of diversion or entertainment, it was seldom taken seriously. Associated with the rococo aesthetic of distraction rather than the neoclassical aesthetic of absorption, it was, then as now, presumed to occasion passivity, dissipation, or dissention in the audience. Connoting both artificial and superficial, the term *spectacle* was usually prefaced by or presumed to imply the qualifier *mere*. This reputation, as we shall see, was hardly deserved. We might ask, however, whether a spectacle is still a spectacle if there is no one to see it. The notion of spec-

tacle implied, in other words, the existence of a spectator. Joseph Addison and Richard Steele's *Spectator*—a periodical that ran in the years 1712–1713, inspiring Pierre de Marivaux's 1721–1724 *Le Spectateur français*—broadened this role from a member of an audience to a member (and observer) of society. A successful playwright, Marivaux was keenly aware of the role of the spectator, which he explored at great length in the character of Jacob, a peasant freshly arrived in Paris from the provinces, who learned to climb the social ladder by changing costume and forms of address, eventually receiving his comeuppance in the foyer of the Comédie. Like the Baron de Montesquieu's Rica and Françoise de Graffigny's Zilia, who respectively hailed from Persia and Peru and viewed Parisians, their language, and their mores with an objective eye, Jacob saw Parisians for what they really were. Jean-Jacques Rousseau likewise arrived in Paris from provincial Geneva only to decry what he found, while Denis Diderot's eponymous character, Rameau's nephew, exposed the social posturing at the heart of every economic transaction. Sébastien Mercier and Nicolas-Edme Restif de la Bretonne, who observed Paris by day and by night throughout the tumultuous years of the Revolution, round out the list of fictional and factual spectators who broke down the boundaries between stage and street, unmasking the theatricality inherent to eighteenth-century society. Critics who have taken an interest in these developments invariably expand the scope of their inquiry beyond the stage, focusing on the debates that raged among spectators at the Comédie-Française and the Opéra, on the spectator function that emerged in theories of art, law, and politics, or on the spectator as observer and critic of society. I build on these studies yet redirect our gaze toward the spectacle of nature, focusing on figures who view nature from what Marshall calls an "aesthetic perspective."[14]

Among the first to adopt an aesthetic perspective was Addison himself, who anticipates several of my lines of inquiry in *Spectator* nos. 411–21, dedicated to the pleasures of the imagination that arise from visible objects and their artistic representation, whether present or absent, factual or fictitious. These include "histories, fables, and contemplations of nature."[15] While Addison claims that nature is most effective when it resembles art, as is art when it resembles nature, certain fictions depart from nature, employ-

ing what he calls, after John Dryden, the "fairy-way of writing," for fiction takes not only the natural world as its province but also worlds of its own design.[16] From here, Addison segues into a discussion of related genres, including history, natural philosophy, and travel narratives. Foremost among these are texts written by the "authors of the new philosophy," of whom he states: "There is something very engaging to the fancy, as well as to our reason, in the treatises of metals, minerals, plants, and meteors; but when we survey the whole earth at once, and the several planets that lie within its neighborhood, we are filled with a pleasing astonishment, to see so many worlds, . . . and confounded with the immensity and magnificence of Nature."[17] The evocation, discovery, and representation of other worlds is thus common to natural philosophy and fiction. I propose to investigate what transpired when those accustomed to honing their powers of observation on the natural world felt obliged to engage in philosophical speculation or inclined to indulge in the pleasures of the imagination.

ENLIGHTENMENT DISENCHANTMENT

The Enlightenment remains widely associated with the rise of scientific progress and the loss of religious faith, a dual tendency that is thought to have contributed to the disenchantment of the world. In his 1917 lecture "Science as a Vocation," Max Weber nostalgically characterizes the "*inward* calling for science" as "passionate devotion." What was once a matter of enthusiasm or inspiration has become a matter of calculation, however, relying on the mind rather than the heart and soul. Though "inspiration plays no less a role in science that it does in the realm of art," the affinity between the two ends there, for science is linked to progress. Charting the growing division between science and religion, Weber famously declares: "The fate of our times is characterized by . . . the disenchantment of the world," which has come to define the modern condition.[18] Borrowing this phrase in *Dialectic of Enlightenment*, Max Horkheimer and Theodor Adorno attribute the loss of spirituality to the rise of experimental philosophy, asserting: "The program of the Enlightenment was the disenchantment of the world; the dissolution of myths and the substitution of knowledge for fancy."[19] The Enlightenment and modernity have been indelibly associated with disenchantment ever since.

Recently, scholars have started to contest the persistent pairing of the terms *modernity* and *disenchantment* in the history of science, religion, and mass culture. While Bruno Latour characterizes moderns as those who view disenchantment as a necessary evil and antimoderns as those who view it as a catastrophe, he himself insists that this apparent break with the pre-modern past is illusory (the amodern view).[20] Tracing the genealogy of what he boldly dubs the "myth of disenchantment," Jason Ā. Josephson-Storm argues that it began not with the scientific revolution, as has often been claimed—neither Descartes, nor Francis Bacon, nor Isaac Newton eschewed religion and the occult—but rather with the selective reading, reception, and representation of their work.[21] Religion and the occult were not eradicated but merely displaced, he contends, for "if Diderot exiled God, it was in order to enchant nature with powers previously reserved for the divine."[22] Thus, as Darrin McMahon effectively puts it, "the progressive disenchantment of the world was accompanied from the start by its progressive re-enchantment."[23]

While a number of scholars have begun to resist disenchantment's association with modernity, few have returned to the purported origin of the problem, questioning its attribution to the Enlightenment. Recent anti-rationalist interpretations of the era, including those of Jesse Molesworth, Sarah Tindal Kareem, and Courtney Weiss Smith, have focused primarily on British philosophy and literature. Yet France was better known for its rationalism, materialism, and attacks on superstition, fanaticism, and the abuses of organized religion. Its association with disenchantment is therefore harder to shake. Charly Coleman's examination of resacralization as a countercurrent to the secularizing process in eighteenth-century France constitutes a significant step in this direction.[24] I investigate the fate of the marvelous in the age of reason and sensibility. My study challenges Horkheimer and Adorno's assertion that the pursuit of knowledge led to the domination of nature and the denunciation of illusion for fear of the unknown, denying the existence of an absolute rift between science, art, and religion. I therefore provisionally retain, in order to reclaim, the embattled term *Enlightenment*. The notion of disenchantment, I contend, is fundamentally at odds with the aesthetic aims of the period,

which prompted audiences to interrogate, test, and cast beyond the limits of reason and the senses. The figures in my study, to the contrary, both sustained the possibility of and helped establish the epistemological and aesthetic preconditions for belief, whether in revealed, discovered, fictional, or experiential truth.

In their introduction to *The Re-Enchantment of the World: Secular Magic in a Rational Age*, Joshua Landy and Michael Saler delineate three possible approaches to the "problem" of disenchantment. The binary approach suggests that rationalism and secularism relegated enchantment to the margins of popular culture whereas the dialectical approach suggests that rationalism and secularism became a dangerous and deceptive form of enchantment themselves. Yet disenchantment, they contend, need neither displace nor become its opposite. By the same token, enchantment need be neither regressive nor insidious. They therefore promote the antinomial approach, characterizing modernity as harboring "fruitful tensions between seemingly irreconcilable forces and ideas": secularism and superstition, science and religion, reality and imagination, reason and enchantment.[25] My book contributes to this third approach. I do not, however, insist quite so strongly on secularity as a means of recovering what was "formerly found in contemplation of the divine."[26] As my study suggests, both believers and nonbelievers participated in the observation and representation of nature's marvels irrespective of their creed, a compatibility facilitated by the conception of nature as spectacle. The "void" they sought to fill, I maintain, was occasioned not by the absence of God so much as that of the gods during a momentary hiatus when the inadequacy of the pagan marvelous was widely acknowledged but a viable substitute had yet to be found.

If we look up "Enchantment" in Diderot and Jean le Rond d'Alembert's *Encyclopédie*, we find three definitions. One cites the Abbé Pluche, who identifies the etymological origin of the term as "je chante" (I sing), used to refer to the ritual incantations pronounced to preserve or ensure the medicinal or magical properties of plants. Another extends this definition to any amulet or talisman used for healing purposes, particularly in natural medicine or religion, a practice common to philosophers and physicians.

The third, and most famous, to which I will return, associates the term with the opera, or "theater of enchantment," whose cornerstone was the marvelous (*merveilleux*).[27] If we consult the entry "Marvelous," however, we open up a veritable Pandora's box, or can of worms. Defined as the intervention of the gods in the epics of Homer and Virgil, or personified passions in modern poetry, marvelous occurrences are glossed as bold but plausible fictions. Yet the use of the marvelous must be rethought, the anonymous author of the entry avers, for the intervention of the gods, which seemed perfectly plausible to the Greeks and Romans, no longer was to the French. To each time and place its own marvelous, he asserts, making an exception, significantly, for natural phenomena, which he deems universal. The Greeks and the Romans did not borrow their marvelous from elsewhere. It was therefore up to the French to settle on a variety of marvelous to which they could lend credence, which should ideally be informed by their prevailing system of belief.[28] The Christian marvelous was not yet considered a viable substitute, however, for its subject was too sacred, its virgins too modest, its devils too burlesque.[29] Milton alone had succeeded in this vein and would arguably not be rivaled until the full potential of the Christian marvelous was acknowledged toward the end of the century.[30]

Enlightenment France thus became the site not only of a crisis of language, as I have argued previously, but also of what we might consider a crisis of faith—a crisis that was less religious than aesthetic.[31] What we find in the treatises, prefaces, and press, in the encyclopedias, dictionaries, and supplements from the era, is on the one hand a denunciation of the marvelous and on the other a quest to identify fresh sources of inspiration to improve its efficacy or approximate its effects. In the *Supplément* to the *Encyclopédie*, Jean-François Marmontel recounts how the encounter with the marvelous in nature led to the conception of the marvelous in the arts.

> Philosophy is the mother of the marvelous and the contemplation of nature gave her the idea. She saw around her a multitude of marvels without any cause other than movement, which itself had a cause. She therefore said, "There must be a principle of strength and intelligence

> above and beyond what I can see." This was the primitive, generative idea of the marvelous. This unique and universal cause that adhered to a simple law was too vast and imperceptible for the sages or the people. They divided it into a multitude of . . . agents modeled after us, which gave us the gods, the demons, the genies. . . . Nothing could have been more favorable to the arts.[32]

Artists, Marmontel suggests, concoct agents responsible for phenomena that lie beyond the realm of human understanding that natural philosophers are unable to explain. The conception of the marvelous (or the supernatural) in eighteenth-century France was intimately linked to the understanding of nature (or the natural), with which I propose to begin. In the following chapters, we will encounter philosophers and artists who turn to the natural world and to alternative mythologies—notably found in the Middle East, the French tropics, and the Gallic past that espoused various forms of natural theology—in an effort to render the marvelous plausible. This did not mean that Greco-Roman mythology was indelibly replaced or displaced. Instead, it was harnessed, on occasion, for the purposes of exploring the new empirical, sensationalist, and vitalist philosophies, as we see in the deployment of the Pygmalion myth, or infused with a new spirit of conviction, as we see in the emergence of neoclassical history painting, the resurgence of epic poetry, and the reform of tragic opera in the course of the century. It thus both contributed to and benefited from the search for new sources of inspiration. The crisis of faith did not lead, therefore, to the systematic elimination of the marvelous in order to bring artistic productions into line with Enlightenment rationalism. Instead, it inspired experimental forays into alternate subjects, modes, forms, and spaces of representation, often predicated on the natural world yet infused with a sense of the marvelous that audiences found more plausible, probable, or possible and therefore persuasive. Faced with potential disenchantment, disillusionment, or demystification, philosophers and artists actively staved it off, seeking instead to induce and sustain a range of emotions traditionally associated with religion, including wonder, enthusiasm, melancholy, and the "sentiment of divinity."

ENLIGHTENMENT SCIENCE

The notion of nature as spectacle gained currency as natural philosophers and theologians sought common ground for the observation and explanation of nature's workings.[33] The analogy lent itself particularly well to the shift from rational to experimental philosophy during what is commonly known as the scientific revolution. The novelty of the so-called new science lay in the conviction that our understanding of the natural world proceeds not from axiomatic or innate ideas but rather from sensory perception. This conviction, first articulated by Bacon, led natural philosophers to privilege observation and experiment over deductive reasoning. The advent of experimental philosophy as a practice is associated most famously with the debates between Boyle and Thomas Hobbes over the air pump. Boyle's innovation lay in his attempt to explain observable phenomena, not in terms of posited underlying structures or systems but rather in terms of one another. He did so, as Steven Shapin and Simon Schaffer contend, by drawing "a crucial boundary between the experimental matter of fact and its ultimate physical cause and explanation," reserving "fact" for recorded observations or experimental results and variously employing "theories, hypotheses, speculations" for the act of interpretation that consisted of surmising probable cause.[34] Hobbes's dismissal of Boyle's disinclination to read too much into the facts as "unphilosophical" attests to the novelty of Boyle's approach, which was subsequently adopted by the Royal Society. Stephen Gaukroger describes this approach to scientific investigation as a horizontal rather than a vertical treatment of causation.[35]

Locke maintained this distinction between discrete levels of analysis in *An Essay Concerning Human Understanding*: cause and effect, primary and secondary qualities, the microscopic and the macroscopic, the first of which lies beyond and the second of which lies within the bounds of sensory perception.[36] The perception of relations between ideas—notably their agreement or disagreement—was for Locke the basis of all knowledge, which he subdivided into varying degrees of certainty from intuitive to demonstrative.[37] Intuitive knowledge is the immediate perception of the relation between ideas, which if partial or limited takes the form of

probable conjecture yet when entire or absolute approaches divine revelation.[38] Demonstrative, or rational, knowledge is the mediated perception of the relation between ideas through recourse to a third, analogous one, a process Locke called reason, which gives rise to probability.[39] The limits of our knowledge, or our inability to discern the causes of certain effects, oblige us to resort to analogical reasoning, which in turn leads to insight, or further discovery.[40] Remarkably, Locke refers to the certainty produced by intuition as knowledge and to the probability produced by reason as faith, combating the common misperception that faith and reason are opposed.[41]

While epistemological modesty purportedly precludes positing what lies beyond the bounds of sensory perception, empiricism contains a stage that requires philosophers to do just that. Unlike rationalism, which is predicated on a process of deduction from axiomatic principles or maxims, empiricism begins with observation and experiment followed by an attempt to infer or induce the relations (causal or otherwise) among facts. If the role of the natural historian was to observe facts or compile data, that of the natural philosopher became to devise experiments that made it possible to induce the relations among them.[42] David Hume penned his famed critique of the empirical method in France, where he had access to Pluche's library, during the very years *Le Spectacle de la nature* was published.[43] His analysis—found both in *A Treatise on Human Nature* and in his revised *Enquiry Concerning Human Understanding*—focuses on the so-called problem of induction, which he claims falls outside the domain of reason.[44] The assumption that first causes can be induced from secondary effects or that past events can help predict the future is more aptly described, Hume argues, as a matter of custom, habit, or belief.[45] Empiricism, in other words, relies on a moment of insight or a leap of faith that Diderot referred to as "divination." My title, *Divining Nature*, recalls this vital stage in the empirical method while sustaining the term's associations with spirituality and the occult.

Hume, accordingly, emphasizes the importance of a third term, frequently omitted from descriptions of the empirical method: observation, experiment, and *analogy*. Like Boyle and Locke before him, Hume, in a pithy statement in the *Enquiry*, draws a distinction between "Matters of Fact" and "Relations of Ideas."

> No philosopher, who is rational and modest, has ever pretended to assign the ultimate cause of any natural operation, or to show distinctly the action of that power, which produces any single effect in the universe. It is confessed that the utmost effort of human reason is . . . to resolve the many particular effects into a few general causes, by means of reasonings from *analogy*, experience, and observation. But as to the causes of these general causes, we should in vain attempt their discovery; nor shall we ever be able to satisfy ourselves, by any particular explication of them. These ultimate springs and principles are totally shut up from human curiosity and enquiry.[46]

By the time Hume penned his critique, therefore, Boyle's inclination to restrict himself to positing relations among observable phenomena and experimental results had become part and parcel of the empirical method. Whereas we *observe* the conjunction of objects or events, Hume asserts, we *infer* their connection via analogy. Such inferences rely not on the development of reason but rather on the "sentiment of belief" that Hume characterizes as instinctive. Far from denigrating this propensity, which he attributes to animals, children, primitive societies, superstitious people, religious enthusiasts, and philosophers alike, he acknowledges sentiment rather than reason as the basis of human behavior and the subject of moral philosophy.[47] The move from the particular to the general is achieved by inducing the relations that link individual objects, isolated facts, component parts, or experimental results. The perception of relations, or *rapports*, as I will demonstrate, became the predominant methodology in the natural sciences and the arts that informed the understanding of natural harmony in eighteenth-century France.[48]

In his exploration of the productive role of error in the French Enlightenment, a term he glosses as errancy along the path to truth, David Bates calls attention to a similar "conjectural epistemology" in the sensationalist philosophy of Étienne Bonnot de Condillac, predicated on the perception of "organic relations."[49] In his *Essai sur l'origine des connaissances humaines* (*Essay on the Origin of Human Knowledge*) of 1746, Condillac singles out the association of ideas (*liaison des idées*) from Locke's treatise and transforms

it, stripped of its negative connotations, into the fundamental principle of human understanding—the single principle of the work's subtitle—governing the various operations of the soul, including contemplation, memory, imagination, reflection, and analysis. He explores the workings of human understanding by having the reader envision the response of a spectator at the theater or a beholder of a painting.[50] If simple ideas are derived from our perception of sensations, complex or abstract ideas are derived from our perception of relations. The same can be said for simple and abstract terminology. Avoiding the extremes of perceiving no relations, which leads to imbecility, and perceiving them everywhere, which leads to madness, the philosopher is meant to cultivate the art of conjecture, learning not only to see relations (*voir*) but to divine them (*entrevoir*), an art that Condillac applies to the sciences and the writing of history.[51]

A prime example of the art of conjecture can be found in the writings of the Swiss naturalist Charles Bonnet.[52] His *Contemplation de la nature* (*Contemplation of Nature*) is heavily infused with Condillac's language, from the term *contemplation* itself to the links in the chain that constitute the harmony of nature, where "everything is combination, relation, liaison, sequence [*enchaînement*]." Like his precursors and contemporaries, Bonnet posits strict limitations to human understanding: "The contemplator of nature restricts himself to contemplation, he does not presume to dissect." Scientific inquiry should reflect these limitations, he asserts, noting that while he always strives to account for the facts, he never declares definitively: "I found" but rather ventures more modestly: "It appears, I conjecture, one can infer."[53] Accordingly, when observing mildew under a magnifying glass, he has recourse to the notion of spectacle to convey the distance from which he beholds the marvels before him and to envision those that lie beyond his powers of perception.

> What a bevy of marvels a patch of mildew presents to the surprised physicist! What interesting, varied, unexpected scenes unfold on a piece of rotten wood! What a theater for he who knows how to think! But our loge is so far removed that we can but divine [*entrevoir*]. . . . Our obtuse senses only discern the most salient parts; they only grasp

> the bulk of the scenery while the machines that maneuver them remain hidden in an impenetrable night. Who will illuminate this profound darkness? Who will penetrate this abyss where reason will be lost? . . . Let us content ourselves with the little we are permitted to divine and gratefully contemplate the first steps of the human intellect towards such a distant world.[54]

So great is Bonnet's interest in the atomic level that he is obliged to remind us that he is not in fact a materialist philosopher for he does not believe in the materiality of the soul. The only beings capable of penetrating to this level—for their vantage and powers of vision supersede those of the magnifying glass or the microscope—are celestial. His writings thus preserve the mystery of whether the stage machinery is maneuvered by the laws of nature or the hand of God.

The reliance on observation, experiment, and analogy—or the perception of *rapports*—thus accompanied the emergence of a sensationalist and, ultimately, a vitalist understanding of nature in France. Enlightenment vitalism arose from a growing dissatisfaction with mechanistic explanations of man, nature, and the divine, often conveyed through the clockwork metaphor. While mechanism had successfully broken bodies down into their constituent parts, it failed to account for communication between them.[55] Consequently, doctors and philosophers interested in the domains of natural history, chemistry, and physiology began to seek the vital force, life-giving principle of matter.[56] Two properties captured their attention: irritability, or the capacity to move associated with muscle fibers, and sensibility, or the capacity to feel associated with nerve fibers.[57] Irritability rapidly took a backseat to sensibility in medical experiments and philosophical discourse, however, for it accounted only for involuntary movement whereas sensibility encompassed a wide range of physical and emotional reactions, including the power of suggestion.[58] Diderot and D'Alembert's *Encyclopédie* provides two definitions of sensibility, one physiological, the other moral. While the physiological definition is associated with *sense*, *sensory*, and *sensation*, the moral definition is associated with *sensitivity*, *sympathy*, and *sentiment*. As Anne C. Vila argues in her pioneering work on the subject, sensibility thus

functioned as a "bridging concept—a means of establishing causal connections between the physical and moral realms."[59] It encompassed various modes of communication—whether glandular, neurological, or psychological—between seemingly disparate parts of the physical or social body. As such, it took its place alongside other occult forces that gained currency in the eighteenth century, including Newton's ether, Benjamin Franklin's electricity, and Franz Mesmer's animal magnetism. During this period, as Peter Reill notes: "Relation, *rapport*, *Verwandschaft*, cooperation of forces, and reciprocal interaction replaced . . . strict causal relations as defining principles of matter." Scientific methodology, accordingly, began to privilege analogical reasoning and comparative analysis.[60]

In *Les Mots et les choses* (*The Order of Things*), Michel Foucault revisits the tale of Don Quixote, deemed mad for his dogged persistence in seeking similarities in a world consecrated to difference (or remaining blindly faithful to the Renaissance *epistème* throughout the Classical era). Foucault defines the madman as "he who is alienated in analogy."[61] The four types of resemblance that he associates with the Renaissance are juxtaposition, emulation, sympathy, and analogy. Of the latter, he states: "Its power is immense, for the similitudes of which it treats are not the visible, substantial ones between things themselves, but rather the more subtle resemblances of relations."[62] Foucault concedes that the distinction between the Renaissance and Classical *epistèmes* is less stark than it appears, however, for similarities continue to subtend differences.[63] Gary Tomlinson broadens Foucault's categories of resemblance to a more fluid network of affinities or correspondences that together constitute universal harmony, the "magical *epistème*" of the sixteenth century that gave rise to an "aesthetics of the marvelous."[64] Central to the magical *epistème* was the occult power of music, or song, closely related to word and image, whose mimetic properties enabled it to convey celestial harmony (whether angelic or planetary) to the human body, psyche, or soul. Renaissance magicians, who attempted to divine and manipulate occult forces—so-called because they were invisible or their causes were hidden—were thus the precursors of natural philosophers.[65]

Tomlinson posits a shift between Renaissance resemblance and early-modern representation, characterizing the latter as "devised for a disen-

chanted world that could no longer trust in marvelous truths."[66] Just as Tomlinson seeks to nuance Foucault's characterization of resemblance, however, Downing Thomas seeks to nuance Tomlinson's characterization of representation, tracing a history of influence from the treatises of Marsilio Ficino through those of Marin Mersenne and Jean-Antoine de Baïf, founder of the French Académie de poésie et musique. Thomas locates the "recognizable elements of the Renaissance tradition that associated music with obscure forces and correspondences" in the "sympathetic resonance" of sensibility and affect.[67] I, too, am interested in the carryover rather than the sharp distinction between periods, particularly with respect to the notion of natural harmony. In the following pages, I investigate common methodological approaches across the seemingly disparate domains of natural philosophy and aesthetics in Enlightenment France, emphasizing continuity with rather than rupture from the Renaissance and Romanticism. Scholarship dedicated to the relationship between these domains has, to date, focused primarily on the works of Diderot or Rousseau. I seek to broaden this terrain, situating these *frères ennemis* at the center of a network of naturalists, philosophers, artists, and composers whose empirical endeavors to contemplate, comprehend, and convey nature's spectacle and harmony contributed to the reform of the arts.

ENLIGHTENMENT AESTHETICS

The perception of *rapports*, as I suggested previously, informed the understanding of natural harmony in Enlightenment France. Disruptions of this harmony, in the form of passing dissonance or foul weather, often served as the catalyst for theories of aesthetics and affect. While Jerome Stolnitz dates the "starting point of modern aesthetics" from Addison's "Pleasures of the Imagination,"[68] Alexander Baumgarten coined the term in the very years my study opens, first invoking it in his *Meditationes philosophicae* (*Reflections on Poetry*) of 1735, then bestowing it on his *Aesthetica* of 1750. Derived from the Greek for *sensation* or *perception*, the "science of perception," or sensory cognition, as Baumgarten conceives it, was an empirical practice that encompassed study of the arts. Aesthetics was therefore part and parcel of epistemology. Referencing Baumgarten in his lectures on aesthetics, begun in

1818, Georg Wilhelm Friedrich Hegel retrospectively defined the term as the "science of sensation, or feeling," identifying it as a "new science, . . . which for the first time was to become a philosophical discipline, . . . when works of art were treated with regard to the feelings they were supposed to produce." Hegel understood "feelings" to refer to both sensation and sentiment ("as, for instance, the feeling of pleasure, admiration, fear, pity, and so on").[69] Though he would subsequently redefine aesthetics as the "philosophy of art," whose province excluded the beauty of nature and was no longer predicated on feeling, I employ the term primarily in its eighteenth-century sense.[70]

Riskin coined the term *sentimental empiricism* to describe the "inseparable combination of sensation and sentiment" characteristic of scientific pursuits in Enlightenment France.[71] Since the so-called affective turn, several studies have emerged that focus not on *sensibilité*, or the capacity for feeling or fellow-feeling, but rather on particular emotions. By privileging individual emotions, these studies enable us to appreciate more fully their cultural resonance, social implications, and historical evolution. The figures in my study theorized a range of affective responses to the contemplation of nature, including wonder, enthusiasm, and melancholy, which are associated with the history of religion (or religious fanaticism) and are often considered antithetical to enlightenment. In order to distance such responses from their negative connotations, philosophers and artists systematically aligned them with the three faculties featured in the figurative system of knowledge that structured Diderot and D'Alembert's *Encyclopédie*: reason, imagination, and memory. They likewise explored a range of mixed emotions—including "negative happiness," "happy melancholy," and the "joy of grief"—that were closely related to the contemporary theorization of the sublime. Louis Marin defines the classical sublime as "the unrepresentable of representation" characteristic of tempests among other natural phenomena, describing its effect as affect.[72] In the preface to his 1674 translation of Longinus's treatise on the sublime, Nicolas Boileau defines it with respect to language—both style and content—as "that extraordinary, that marvelous . . . that enables a work to carry away, ravish, transport."[73] Sublime language, whose purpose is to enthrall, rendering visualization possible, may result at times in hyperbaton, or the passionate disruption of

discourse.[74] The sublime thus operates at the limits of representation and expression, whether through word, music, or image. Bearing the relevance of these definitions in mind, I wish to trace the eighteenth-century theorization of the sublime back not to Longinus but to Lucretius.[75]

Lucretius's *De rerum natura* (*The Nature of Things*) confronts the reader, like the philosopher, with the spectacle of nature.[76] From the first chapter, which opposes atomic particles to the vertiginous void, to the last, which features a panoply of natural phenomena, including thunder, lightning, clouds, whirlwinds, waterspouts, earthquakes, and volcanoes, the reader is asked to contemplate nature's marvels. As Stephen Greenblatt notes, this "scientific vision of the world . . . was in its origins imbued with a poet's sense of wonder."[77] While Lucretius acknowledges that the effect of not knowing first causes is to have recourse to superstition, he accounts for each "act of nature" in terms of materialist philosophy. Edmund Burke puts a different spin on the matter when he cites Lucretius in *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*. On the one hand, Burke concedes that "Lucretius is a poet not to be suspected of giving way to superstitious terrors"; on the other, he insists that "scripture alone can supply ideas answerable to the majesty of this subject. In the Scripture, wherever God is represented as appearing or speaking, everything terrible in nature is called up to heighten the awe and solemnity of the Divine presence."[78] Associating such moments with the sentiment of the sublime rather than the beautiful, Burke ranges them on the side of religion rather than science. In *Invisible Hands*, Jonathan Sheehan and Dror Wahrman refer to "the emergence of a new hybrid" in the late seventeenth century: a certain "providential materialism" consisting of a "Christian soul" in a "Lucretian body."[79] Though they credit natural philosopher and theologian Pierre Gassendi with the creation of this hybrid, its acceptance was far more widespread. Gassendi's innovation lay in the suggestion that matter's energy, its mobility, even its swerve could be attributed to divine providence. This was the task of physico-theology, which sought "to bring Christian theology and natural philosophy close enough together so that their projects were not only not at cross-purposes, but had a shared focus."[80]

Book II of Lucretius's poem opens with a celebrated passage in which the philosopher considers the sentiment we sustain when we watch a shipwreck from the safety of the shore:

> How sweet it is to watch from dry land when the storm-winds roil.
> A mighty ocean's waters, and see another's bitter toil—
> Not because you relish someone else's misery—
> Rather, it's sweet to know from what misfortunes you are free.
> Pleasant it is even to behold contests of war
> Drawn up on the battlefield, when you are in no danger.
> But there is nothing sweeter than to dwell in towers that rise
> On high, serene and fortified with teachings of the wise,
> From which you may peer down upon the others as they stray
> This way and that, seeking the path of life, losing their way. . . .[81]

While this scenario is of aesthetic interest, it also raises ethical concerns. Lucretius qualifies the suggestion that we may derive comfort from the sight of another's suffering by emphasizing that our response is induced not by their suffering but by our safety, not by their turmoil but by our tranquility. An awareness of the contrast in our circumstances governs our response.

The Abbé Dubos was the first of several eighteenth-century French philosophers to hearken back to this passage, referencing it in his influential *Réflexions critiques sur la poésie et sur la peinture* (*Critical Reflections on Poetry and Painting*) of 1719, when he compares the pleasure derived from watching a shipwreck from the safety of the shore to that of watching gladiators or bullfighters in an amphitheater.[82] Like Lucretius, Dubos attributes our ability to witness such horrors with relative equanimity to our relief at not being directly implicated. He goes on, however, to consider what transpires when we see the reproduction of tragedy in art. Having established that "the copy of the object should, so to speak, provoke in us a copy of the passion that the object would have provoked," he stipulates that the intensity of our emotion before the copy pales in comparison with that induced by the original. By attenuating our response, we are able to view with pleasure in art what we consider with horror in life.[83]

Voltaire, who owned no fewer than six copies of Lucretius's poem, returned to this passage in his philosophical dialogue "De la loi naturelle et de la curiosité" ("Of Natural Law and Curiosity") and in the entry "Curious" in his *Questions sur l'Encyclopédie*, translating it into his characteristic alexandrine rhymed couplets:

> We see with pleasure in the midst of repose,
> Unhappy mortals fighting against the waves;
> We like to see two terrible armies from afar
> Spurred to combat on the fields of death;
> Not that others' pain is such a sweet pleasure;
> But their danger appeals to us from a distance.
> Happy are those who, sheltered in the temple of the wise,
> Peacefully watch storms brewing beneath their feet.[84]

Like commentators before him, Voltaire acknowledges the moral ambiguity at the heart of this passage, stipulating that "we flock towards such a spectacle out of curiosity. Curiosity is a natural human sentiment, but there is not one spectator who would not make every effort, if he could, to save those who are drowning."[85] He describes his own response in such circumstances as both "curious and sensitive [*sensible*]."

Voltaire's insistence on a certain solidarity, or concern for the well-being of others, likewise pervades his 1756 "Poème sur le désastre de Lisbonne" ("Poem on the Lisbon Disaster"). In this poem, he confronts his readers with a vivid representation of the Lisbon earthquake of 1755, lamenting his fellow philosophers' capacity to view natural disaster with composure from afar. Accusing the Parisians of dancing while Lisbon burned, he denounces them as "tranquil spectators" who would sooner speculate idly about first causes than provide humanitarian aid to alleviate human suffering. Despite Voltaire's tendency to condemn the abuses of organized religion, the question of first causes remains inconclusive in his poem, allowing for the possibility of providence yet questioning why a just and all-powerful God would permit the innocent to suffer. Voltaire sought to raise social awareness through his poetry, which the natural disaster itself had failed to produce,

by vividly re-creating and thereby enabling his readers to visualize a catastrophe that took place too far away for them to witness firsthand. The poem thus effectively counters Lucretius's portrait of philosophical remoteness with a model of civil engagement.

Burke revisited this scenario in his *Philosophical Enquiry* the following year. While he concedes that our delight in the contemplation of tragedy in art may stem from the excellence of the imitation, our awareness that the representation is fictional, or the assurance that we are not implicated, he goes so far as to suggest that we also delight in the spectacle of suffering in life. This delight, far from being callous, proves essential to the preservation of both self and others. The pleasure we derive from sympathy prevents us from shunning the sufferer, while the pain we share prompts us to attempt to alleviate the suffering. Though Burke is persuaded that our response to tragedy in art falls short of our response to tragedy in life—providing the famed example of spectators who leave the theater at the news of a nearby public execution—he concludes that "the nearer [the representation] approaches the reality . . . the more perfect is its power." He emphasizes, moreover, that if our safety is a necessary precondition it is by no means the cause of our delight in the suffering of others, dissociating the sentiment from suggestions of Schadenfreude or sadism. Pity is inevitably combined with pleasure, terror with delight; such mixed emotions recurred in evocations of the sublime through the end of the century.[86] These reflections contributed to the development of the notion of disinterestedness, which evokes not indifference but rather our ability to contemplate such Lucretian scenarios without the egotism or survival instinct that tends to detract from our capacity for empathy and aesthetic transport.[87]

In the following chapters, I investigate the response of naturalists, philosophers, artists, and composers to the spectacle of nature. Though the figures in my study initially conceived of their endeavors as scientific, they derived theories of aesthetics and affect from their empirical observation of nature, eliding the distinction between the sciences and the arts. By proceeding systematically from their scientific methodology to their aesthetic conclusions, I interrogate distinctions between disciplines (sci-

ence, art, and religion) and art forms (opera, painting, and poetry) that have at times been overdrawn. Whereas empiricism was conceived in an attempt to eliminate the possibility of illusion in the sciences, it led directly, albeit unexpectedly, to the perfection of illusion in the arts. This startling trajectory from what science would appear to require to what it would seem to preclude resists the strict division, often attributed to the period, between science and religion, nature and representation, truth and fiction. Far from teaching readers and spectators to place their faith in reason and the senses, works of natural history, philosophy, and art instead posited their limits, keeping in play a speculative domain, a realm of interpretation, of divination, that lay beyond the spectacle, leaving spectators free to draw their own conclusions by casting—as Hume would say—past fiction to belief.

Taking Fontenelle's comparison of the spectacle of nature to the opera somewhat literally, Chapter 1 juxtaposes the Comte de Buffon's description of nature in his *Histoire naturelle* to Jean-Philippe Rameau's staging of nature in his lyric tragedies. Buffon's 36-volume natural history vied with Pluche's *Spectacle de la nature* in popularity, and Rameau was the century's most prolific and controversial composer. After analyzing their scientific methods, I examine the representation of natural phenomena in the first volumes of Buffon's *Histoire naturelle* and the first version of Rameau's opera *Zoroastre*, which appeared in the year 1749. Lorraine Daston and Katharine Park argue that the cognitive passion of wonder gave way to scientific curiosity in the Enlightenment. I demonstrate, to the contrary, that Buffon and Rameau sought to sustain the wonder of the reader/spectator when confronted with natural marvels on the page and the stage. Wonder constituted the affective counterpart to encounters with the marvelous, which Rameau's librettist Louis de Cahusac considered the defining component of the French operatic aesthetic. Chapter 1 concludes with a rapprochement of the establishment and reform of two cultural institutions: the natural history museum and the opera.

Diderot and Rousseau were avid readers of Buffon's *Histoire naturelle* and engaged in the public debates surrounding Rameau's operas. From their early, collaborative experimentation with the alternate sign systems of

gesture and song through their nascent art and music criticism, they delineated, tested, and attempted to cast beyond the limits of reason, language, and the senses. To date, scholarship has focused primarily on their theorization of the instinctive passion of pity, also known as sympathy, empathy, or identification, which they sought to cultivate and control. Chapter 2 investigates their observation and representation of the spectacle of nature as the source of philosophical insight and artistic inspiration, focusing on the naturalist and the artist *as* spectators. My reading of Diderot's writings on painting and the theater alongside Rousseau's writings on opera and the novel reveals the close relationship between the enthusiasm of the artist and the identification of the spectator, each reliant on the imagination, a faculty essential to the acts of creation and reception alike. Chapter 2 concludes with a consideration of alternate forms of and venues for the natural spectacles that the philosophers envisioned in an effort to infuse the real with the ideal, the everyday with the marvelous.

Rousseau's protégé, Jacques-Henri Bernardin de Saint-Pierre, conceived of his 1784 *Études de la nature*, dedicated to plant life, as a complement to Buffon's *Histoire naturelle*. His wildly popular pastoral novel, *Paul et Virginie*, inspired by his journey to Mauritius, was first published as the fourth volume of his *Études de la nature* and an illustration of its principles. Chapter 3 juxtaposes the luxury edition of Bernardin's novel, illustrated by Vernet, Girodet, and Prud'hon, among others, with its 1794 operatic adaptation by Jean-François Le Sueur. I read Bernardin's *Études de la nature*, littered with advice for aspiring artists, alongside naturalist and composer Bernard de Lacépède's *Poetique de la musique* and Le Sueur's essays on church music, full of tips for young composers. Both author and composer sustained the mixed emotions of "negative happiness" or "happy melancholy" in response to the spectacle of nature. Their renditions of *Paul et Virginie*, which culminate in a tragic storm, were designed to induce a similar reaction in the reader/spectator, which led to what Bernardin calls the "sentiment of divinity." Chapter 3 concludes with an excursus on French cathedrals, reconceived along lines reminiscent of the natural history museum and the opera in the course of the century.

The Ossian craze swept Europe like wildfire, shifting the frame of artistic reference from the Middle East and the South Seas to the tempestuous northern climes that were likewise part of the French cultural heritage. In 1760, scholar James Macpherson went in search of the Scots national epic and returned with the poems *Fingal* and *Temora*, attributed to the third-century Scots bard Ossian. While the epics were later denounced as a hoax, Macpherson's reconstruction of a lost original from surviving fragments via translation, transcription, and embellishment has since been compared to scientific endeavors such as geology, geography, and cartography. Chapter 4 analyzes Macpherson's pervasive use of similes interrelating the natural and supernatural realms and the relationship between melancholy and memory in the epics. It then turns to the favorable French reception of the epics evident in the works of Germaine de Staël and the artists in Napoleon's entourage. Heralding Ossian as the new Homer, Staël privileges northern melancholy over southern enthusiasm in *De la littérature* of 1800, looking to the "philosophical poetry" of the North as the source of French spiritual regeneration in the wake of the Revolution. Chapter 4 concludes with the establishment of the first folklore institute, the Académie Celtique, which laid the ground rules for a new field of scientific inquiry.

We thus end on a note of historical irony, for the efficacy of the aesthetic reforms proposed in the course of the eighteenth century becomes evident when readers of the Ossian epics—who had theorized how to induce emotion and credence by rendering the marvelous plausible—were taken in by the "hoax." Reputed to be materialists, atheists, and skeptics who eschewed the marvelous, superstition, and fanaticism, the French nevertheless eagerly embraced the Scots epics, which corresponded precisely to what they had been seeking: a "deist" mythology, or natural theology, that facilitated the transition from the Greco-Roman to the Christian marvelous. As a result, they began to locate, collect, and preserve the very vestiges of their culture in danger of extinction that they had once been tempted to eradicate as ancient Scots lore was converted into state-sanctioned art and enshrined on the walls of the Château de Malmaison. The establishment and reconcep-

tion of the natural history museum, the opera, cathedrals, and the imperial palace along similar lines in order to display the marvels of science, art, religion, and folklore for the edification of the viewing public suggest that the period not only perpetuated but proliferated venues and occasions for infusing enlightenment with enchantment.

CHAPTER ONE

The Marvels of Nature in Buffon and Rameau

Nature is a grand spectacle, which resembles that of the opera. From where you are situated at the opera, you do not see the theater entirely as it is; the decor and machines are disposed so as to make an agreable impression from afar and the wheels and weights responsible for movement are hidden from view. . . . The cords of the machines nature presents to us are . . . so well hidden that it took a long time to divine what caused the movement of the universe.

—Bernard de Fontenelle, Entretiens sur la pluralité des mondes habités

In his philosophical dialogue of 1686, Bernard de Fontenelle, perpetual secretary of the Académie des Sciences, famously likened nature to the opera. As the epigraph suggests, the philosopher confronted with the spectacle of nature can no more discern what transpires behind the scenes than can a spectator at the opera. Like the machinist in the audience who wishes to account for an extraordinary stage effect, the philosopher seeks to explain nature's workings. Yet philosophy, Fontenelle claims, is predicated on the combination of curious minds and poor eyesight: "We want to know more than we can see, there's the rub." Philosophers thus spend their lives not believing their eyes on the one hand and trying to "divine what they can't see" on the other.[1] Such divination—or educated guesswork—gradually produces results, however, and Fontenelle proceeds to "lift the curtain" in an attempt to satisfy Madame la Marquise de G***'s curiosity about the world around her. Unlike those who wonder at what they do not understand or cease to wonder once they do, the Marquise finds the very process of discovery wonderful. While both interlocutors accept mechanistic explanations of nature, marveling that it runs like clockwork, Fontenelle nevertheless asks, almost wistfully: "Haven't you ever had a more

sublime notion of the universe?" suggesting that there may be more than meets the eye.[2] Although Fontenelle's convictions were in keeping with a mechanistic worldview, his *porte-parole* nevertheless expresses the desire to cast beyond its limitations.

Pursuing Fontenelle's analogy, I wish to explore the observation and representation of natural phenomena in the works of natural historian George Louis Leclerc, Comte de Buffon and opera composer Jean-Philippe Rameau. Initiated into the Académie des Sciences in 1733, Buffon undertook an exhaustive description of the natural world in his 36-volume *Histoire naturelle* (*Natural History*), published in the years 1749–1789. Like the Abbé Pluche's *Spectacle de la nature*, Buffon's magnum opus rapidly became an Enlightenment bestseller and was translated into German, Dutch, English, Italian, and Spanish during his lifetime.[3] In the meantime, Rameau maintained an active correspondence with various members of the Académie des Sciences as he established the natural basis of musical harmony in his theoretical writings and staged nature in his tragic operas. Though older than Buffon, Rameau was a comparatively late bloomer and equally prolific, writing more than a dozen treatises that laid the foundation for music theory as it is understood today along with five major lyric tragedies, six *opéras-ballets*, and countless shorter dramatic and instrumental works. The same literate members of eighteenth-century French society who read Buffon's *Histoire naturelle* by day went to see Rameau's operas by night. In the age before radio and television, theater was the primary form of public entertainment and the Opéra rivaled the Comédie-Française in ticket sales. Rameau's lyric tragedies reigned supreme in the 1730s–1760s and became the subject of two of the century's most vituperous opera debates, the *Querelle des Lullistes et des Ramistes* of the 1730s and the *Querelle des Bouffons* of the 1750s. Though Buffon obtained the seat in the Académie des Sciences that Rameau coveted, together they revolutionized eighteenth-century notions of the natural basis of the sciences and the arts.

In this chapter, I examine the affinities between Buffon's and Rameau's scientific methods and then, turning my attention from theory to practice, consider their representation of natural phenomena in the opening volumes of the *Histoire naturelle* and the first version of *Zoroastre* that coincided in

1749. I am specifically interested in whether their efforts to establish their respective fields of inquiry—natural history and music theory—on a scientific basis precluded a sense of wonder in response to natural phenomena, either on their part, as they approached the study of nature through empirical observation and experiment, or on the part of their readers and spectators, who perceived their representations of nature on the page and the stage. Wonder is of particular interest in this context, for on the one hand its compatibility with scientific curiosity was a matter of debate and on the other it was theorized as the characteristic affective response to the marvelous in both nature and opera.

Wonder is a fitting point of departure for a study of the spectacle of nature, for as Lorraine Daston and Katharine Park explain, "natural philosophers interpreted wonder as the usual response not only to the rare and unfamiliar, but also to the phenomenon of unknown cause."[4] As I discussed in the Introduction and as we see in Fontenelle's analogy, the spectacle of nature preserved the mystery of first causes or principles, which could accordingly be either scientific or religious, obliging natural philosophers to practice a certain degree of epistemological modesty. *Wunderkammern*, as the name suggests, were filled with all manner of wonders or marvels of remarkable workmanship or unknown provenance that were designed to incite the corresponding emotional response.[5] As the medieval *Wunderkammern* gave rise to the early-modern *cabinets de curiosités*, or natural history cabinets, and ultimately natural history museums, the passion of "wonder," Daston and Park contend, was gradually replaced by a more scientific "curiosity." "Central to the new, secular meaning of Enlightenment as a state of mind and a way of life," they claim, "was the rejection of the marvelous."[6] This claim reinforces characterizations of the Enlightenment as an age of disenchantment. I am interested, however, in the lingering presence of prior connotations.

Sarah Tindal Kareem provides an exceptional analysis of wonder's role in eighteenth-century British philosophy and fiction. Proposing what she calls a "narratology of wonder," Kareem explores how it was transformed from an epistemological passion to an aesthetic affect as Joseph Addison, David Hume, Adam Smith, and Henry Home, Lord Kames responded to

its initial theorization in the works of Francis Bacon and René Descartes. Placing wonder on a century-long trajectory culminating in the sublime, Kareem associates it neither with fear nor with delight but rather with uncertainty, propagating an "aesthetics of suspense" akin to Tzvetan Todorov's definition of the fantastic as the hesitation between natural and supernatural explanations of events.[7] While I wish to keep the contemporaneity of Kareem's study in mind, it is uncertain whether Buffon or Rameau had access to the works of the Scots philosophers, whose impact on French thought will become clear in subsequent chapters.[8] For the purpose of considering the perpetuation of wonder in France, we are therefore obliged to return to Descartes.

In his final treatise, *Les Passions de l'âme* (*Passions of the Soul*), Descartes designates wonder as "the first of all the passions."[9] The modern-day English term, derived from the German *Wunder*, refers either to the phenomenon itself ("a wonder") or to the affective response induced by the phenomenon ("wonder, to wonder"). The early-modern French terminology, on the other hand, distinguished between the phenomenon "merveille" (which gives us both the English noun *marvel* and the verb *to marvel*) and the related affective responses, which ranged from *admiration* (wonder) to *étonnement* (astonishment).[10] Descartes defines *admiration* as "a sudden surprise of the soul, that prompts us to consider attentively objects that seem rare and extraordinary."[11] Wonder is thus a cognitive passion, affecting the mind rather than the heart, that maintains the sense organs in a state of suspended animation as the observer seeks further information about the phenomenon provoking the response.[12] Descartes's characterization of the passions inspired Charles Le Brun's sketches of their corresponding facial expressions, presented to the Académie Royale de Peinture et de Sculpture in 1668, which continued to influence artistic and theatrical renderings throughout the following century. Le Brun's sketch of *admiration* captures the sudden sustained attention and arrested movement that Descartes evoked (Figure 1). This apparent interruption of the cognitive faculties has led scholars to question whether wonder is compatible with scientific investigation. Descartes distinguishes wonder from the related passion of surprise or astonishment, however, which he defines as "an *excess*

FIGURE 1. Charles Le Brun (1619–1690), Expression of *admiration* (wonder) with astonishment. Black chalk, 25.6 × 19.7 cm.

Musée du Louvre, Paris. Thierry Le Mage / © RMN-Grand Palais / Art Resource, New York

of wonder" that renders the body "immobile like a statue." While wonder suspends animation long enough for the observer to obtain additional information, astonishment potentially precludes the observer from doing so.[13] Not only does wonder prompt further discovery, Descartes insists, it ensures that we retain what we have learned: "Wonder . . . is useful because it assures that we learn and remember the things that we did not know before." Unlike astonishment, wonder thus serves not to perpetuate but to combat ignorance.[14] In her gloss of Descartes's musings, Luce Irigaray insists on wonder's dynamism, defining it as "the impetus towards mobility in all of its dimensions." It is the moment that precedes and anticipates motion and emotion, an "inaugural passion" that arises when one is on the verge of knowing.[15]

Claiming that wonder mediates between "the capacity to think and the capacity to feel," between cognition and emotion, Stephen Greenblatt associates it with "a certain kind of looking, a looking whose origins lie in the cult of the marvelous."[16] In light of Fontenelle's analogy between nature and the opera, I propose to broaden the range of sensory perception to include listening. This expanded notion of spectatorship remained very much in vogue throughout the eighteenth century, when natural marvels, which had traditionally been the subject of the naturalist's inquiry, became the peculiar province of French lyric tragedy. Defined as the intervention of the supernatural in the everyday, the term also referred to the stage machinery that rendered the entrance and exits of gods and demons possible. The presence of the *merveilleux*—in both senses of the term—became one of the chief distinctions between spoken and sung theater and a defining feature of the *tragédie en musique*. Contemporary criticism of such "spectacular" effects has fueled the prevailing scholarly opinion that the marvelous was systematically eliminated in the course of the century in order to bring opera in line with Enlightenment rationalism.[17] I contest this critical commonplace, positing wonder as the affective response to inexplicable phenomena both in nature and on the operatic stage.

In the following pages, I foreground the affinities between Buffon's and Rameau's scientific approaches, including observation, experiment, and induction via analogical reasoning, otherwise known as the empiri-

cal method. Both naturalist and composer, confronted with the spectacle of nature, attempted to fathom the basis of natural harmony through the gradual perception of *rapports*, or relations, whether among species or sounds, narrating this process in the form of a sensationalist allegory, parable, or thought experiment. Despite their insistence on the scientific basis of their approaches to natural history and musical composition, Buffon and Rameau nevertheless sought to instill and sustain wonder in the reader/spectator who encountered the representation of natural marvels in their works. Though the status of the marvelous was heavily contested at the time, plans for renovation of the opera and the establishment of the Muséum National d'Histoire Naturelle (National Museum of Natural History) toward the end of the century reveal that criticism led not to the desecration but rather to the perfection of these temples of learning or theaters of enchantment, whose dual purpose was to astound and edify as wondering at inevitably led to wondering about.

NATURAL PHENOMENA

Buffon first entered the public eye when he was appointed Intendant of the Jardin du Roi, renamed the Jardin des Plantes during the French Revolution.[18] Dedicated to the cultivation and study of medicinal plants, the Jardin du Roi was one of the greatest centers for scientific research in Europe, particularly in chemistry, anatomy, and natural history. Buffon conceived of his *Histoire naturelle* when asked to catalogue the contents of the Cabinet du Roi, or king's natural history cabinet, which subsequently became the centerpiece of the Muséum National d'Histoire Naturelle. Buffon's writings contain his defense of Isaac Newton's theory of gravity, Benjamin Franklin's discovery of electricity, the theory of epigenesis advanced by Pierre Louis Maupertuis and Anton van Leeuwenhoek, and his own theory of "transformism," precursor to Charles Darwin's theory of evolution.[19] Buffon was also the first to demonstrate through empirical observation and description that nature had a history.[20] The descriptions and depictions of mammals, birds, and minerals in his *Histoire naturelle* give the impression that the reader, along with the naturalist, is undertaking the study of successive layers and component parts in an effort to ascertain their inner workings.

Buffon's writings reveal, however, that he was persuaded of the limits of reason and sensory perception no matter how desirous of casting beyond them, and was inclined to acknowledge and respect nature's mysteries.

In the *Premier discours* of his *Histoire naturelle*, Buffon compares the pursuit of an ideal method to the quest for the philosopher's stone, dismissing it as occultism rather than science.[21] Addressing himself to those seriously interested in the study of nature, Buffon acknowledges that scientific methods save time and serve as mnemonic devices by offering "a sequence of ideas composed of objects that differ from one another but are nonetheless related. These relations [*rapports*] form stronger impressions than would disparate objects that have nothing in common. That is why methods are useful."[22] He warns, however, that it is just as dangerous to adopt too restrictive a system as to have no system at all. Critical of Carl Linnaeus's system of species classification, Buffon considers how to generate the most natural taxonomy possible. Things in and of themselves, he contends, have neither meaning nor definition. It is only once we begin to understand the relations of one thing to another that we can begin to name, define, and describe them. Observation of nature thus leads to description and from there to the induction of *rapports* (relations, affinities, or analogies) among objects.[23]

Despite his awareness of the limitations and possible deception of the sense of sight, Buffon proposes that aspiring natural historians rely on their eyes rather than their imaginations, trusting to the value of objective description. In order to achieve this desired objectivity, Buffon states, anticipating Jean-Jacques Rousseau's Savoyard vicar: "We must rid ourselves of all our prejudices for the moment, and even strip ourselves of our ideas."[24] To do so, Buffon imagines an amnesiac who, having forgotten everything he knew, strives to account for the world around him. This sensationalist allegory—reminiscent of Molyneux's problem in John Locke's *Essay Concerning Human Understanding* and precursor to Étienne Bonnot de Condillac's statue in his *Traité des sensations* (*Treatise on Sensations*)—takes the form of an observer responding to the spectacle of nature:

> Let us imagine a man who has, in fact, forgotten everything or who awakens new to the objects that surround him. Let us situate this man

> in the countryside, where the animals, birds, fish, plants, and stones parade themselves before his eyes. At first, this man will distinguish nothing and will conflate everything. But if we allow the repeated perception of the same objects to reinforce his impressions, he will soon form a general idea of animate matter, he will easily distinguish it from inanimate matter, and soon afterwards he will have no trouble distinguishing animate from vegetative matter.[25]

By comparing sensory impressions, Buffon's amnesiac starts to comprehend the distinctions between animate and inanimate, the three kingdoms (animal, vegetable, and mineral), the three elements (earth, air, and water), and the species that inhabit them (birds, fish, and quadrupeds), reconstituting his understanding of the world based on firsthand observation rather than received ideas. Here Buffon emphasizes the significance of relations not only among objects but also between objects and an observer, which together determine the order of observation and ultimately the writing of natural history. He thus sums up his proposed taxonomy neatly in a sentence: "[Natural] history must follow description and be based solely upon the relations [*rapports*] that natural things have amongst themselves and with us."[26] The emphasis Buffon places on such relations—among objects and to an observer—will prove to be a constant in the move from (scientific) observation to (aesthetic) representation.

Once free of prejudice and able to compare sensations and form judgments, Buffon's amnesiac turned natural historian can begin to employ what came to be known as the empirical method. Buffon famously called for a shift from the abstract to the real sciences, distinguishing "mathematical truths," based on supposition, from "physical truths," based on facts, leading him to declare: "In mathematics we suppose, in physics we propose." Here, Buffon invokes Newton's fourth rule of reasoning in natural philosophy: "What we call a physical truth is therefore only a probability, yet such a strong probability that it equals a certainty."[27] Though he privileges description based on observation and experiment over deductive, or axiomatic, reasoning, Buffon nevertheless posits limits to what the naturalist can perceive or know.

> But when, after verifying the facts through repeated observations, after establishing new truths through exact experiments, we want to determine . . . the causes of these effects, we suddenly find ourselves pulled up short . . . obliged to admit that the causes are and will always be unknown to us, because our senses . . . can only give us an idea of the effects, and never the causes. We are therefore reduced to calling a general effect a cause and must renounce knowing anything more. These general effects are, for us, the true laws of nature.[28]

While Buffon does not believe naturalists can discern first causes, he is persuaded of their capacity to proceed from particular to general effects. To infer the general from the particular (or principles from facts) requires extensive comparison of observations and experimental results, which may lead to fresh insights or discoveries.

> One should not imagine, even today, that the study of natural history should be limited to making exact descriptions and verifying particular facts. . . . We must attempt to aspire to something greater and more worthy of our attention, namely to combine observations, generalize facts, link them together through the power of analogy, and attempt to attain the heights of knowledge from which we can gauge that particular effects depend upon more general ones.[29]

This process of induction, predicated on the perception of relations (*rapports*), was an essential stage in the empirical method. The example Buffon provides of its successful application is Newton's theory of gravity.[30] Buffon thus manifests the philosophical tendency to acknowledge the limits of reason and the senses that Peter Reill refers to as epistemological modesty, privileging comparative analysis and analogical reasoning. According to Buffon, the role of the naturalist, once he has subjected the facts to empirical observation and objective description, is to sift the evidence and infer how the facts are related. Reill states: "He called this type of understanding divination or intuition, and regarded it as a form of mediation that resulted in the heightened ability to perceive simultaneously form and

force, structure and process, to discern the resemblances between sign and significant, and to mediate between the particular and the general. Its ideal form of knowledge was divine knowledge, to which humans could aspire but never reach."[31]

Accordingly, when considering the effect of the spectacle of nature on its audience, Buffon intimates that we will never fully grasp or manage to explain nature's inner workings.

> The number of nature's productions, . . . her mechanics, her art, her resources, even her disorders, command our wonder. Too small for this immensity, overcome by the number of marvels, the human mind succumbs. . . . What a sense of power this spectacle gives us! What respect this view of the universe inspires us for its Author! What would it be like if the faint light that guides us became bright enough for us to perceive the general order of causes and dependence of effects? But the greatest mind and most powerful genius will never attain this height of knowledge; first causes will forever be hidden, their general results will be as difficult to know as the causes themselves. All we can do is perceive some particular effects, compare them, combine them, and finally recognize an order relative to our own nature.[32]

Buffon's evocation of the spectacle of nature enables him on the one hand to reiterate the tenets of his scientific method and on the other to identify the emotions the spectacle occasions. The sense of wonder (*admiration*) sustained when confronted with nature's marvels (*merveilles*) first overwhelms then fills the observer with respect for the Creator and creation. Yet Buffon, like Fontenelle and Pluche before him, remains on the side of the audience, unwilling because unable to venture backstage.[33]

Buffon was aware of Descartes's definition of wonder, as his discussion of the passions in "Description de l'homme" ("Description of Man") reveals, though he does not initially distinguish it from the attendant passions of surprise and astonishment: "In wonder, surprise, astonishment, all movement is suspended, one remains in the same position. This first expression of the passions is independent of the will."[34] He evokes these terms again

when he turns his attention from the naturalist's involuntary response to the spectacle of nature to the public's desired response to the Cabinet du Roi. Filled with medical anomalies and species that defied classification, the king's natural history cabinet, according to Buffon, should provoke both wonder and astonishment: "But once samples of everything that populates the universe have been assembled, . . . and we cast our eyes for the first time on these shelves filled with diverse, new, and foreign things, the first sensation that results is an astonishment mixed with wonder."[35] Diderot's prose in the article "Cabinet d'histoire naturelle" that appeared in the second volume of the *Encyclopédie* shortly thereafter is reminiscent of Buffon's, for he, too, likens the natural history cabinet to the spectacle of nature: "What an immense and marvelous assemblage! How can we conceive of the spectacle that all the kinds of animals, vegetables, and minerals would present if they were gathered in the same place and taken in, so to speak, at a glance? This infinitely varied tableau can be conveyed by no other means than the very objects it comprises: a natural history cabinet is a microcosm of nature itself." Yet while the "sublime disorder" of nature "transports us with wonder," the natural history cabinet is "made for instruction" and should be organized accordingly.[36]

For this purpose, Diderot cites the rather prosaic description of the organization of the Cabinet du Roi by classes, genres, and species by Buffon's collaborator Louis-Jean-Marie Daubenton from the *Histoire naturelle*. Though Daubenton takes into account the spatial constraints and considerations of symmetry and contrast that must enter into the arrangement of the cabinet in order to sustain visitors' attention and prevent confusion, his recommendations nevertheless remain pedagogical and pragmatic.[37] His terminology contrasts sharply with Diderot's, who anticipates the eventual expansion of the two-room Cabinet du Roi into the Muséum Nationale d'Histoire Naturelle that would later be placed under Daubenton's direction.

> May I be permitted to conclude this article with the exposition of a project that will be no less advantageous than honorable to the nation? It is to erect a temple to nature that would be worthy of her. I

> imagine it comprising several buildings proportionate to the size of the beings they are meant to contain. The middle one will be spacious, immense, and destined for the monsters of the earth and the sea. With what astonishment we will be struck upon entering this place? . . . We will venture from there into other adjacent rooms, where we will see nature in all its variety and stages. People travel to different countries every day to admire their rarities; how could such an edifice not attract the curious from all parts of the world? . . . What a spectacle of everything that the hand of the all-powerful has distributed over the face of the earth, displayed in a single space![38]

Here Diderot attempts not to dispel but rather to impart a sense of wonder that enhances rather than precludes curiosity via the museum's organization and architecture. But is the wonder induced by the spectacle of nature and the natural history cabinet transitory or can it be sustained? Does it forestall or facilitate further investigation and analysis? In order to answer these questions, we must turn to additional instances in which Buffon represents the response to the spectacle of nature, found primarily in the travelogues of seafarers confronted with the phenomenon of the freak storm.

Buffon continues to elaborate on his methodology in his *Histoire et théorie de la terre* (*History and Theory of the Earth*), which follows his *Premier discours.* Castigating his precursors for hypothesizing at random, he remarks that in the past, "fable was mixed with physics," defining the role of the natural historian against this propensity:

> A historian is meant to describe, not invent. He should not allow himself any suppositions and should make use of his imagination only to combine observations, generalize facts, and create an ensemble that presents to the mind a methodical order of clear ideas and of consistent, probable relations [*rapports suivis et vrai-semblables*]. I say probable because we cannot hope to provide exact demonstrations on this subject, which belong to the mathematical sciences, for our knowledge in physics and natural history relies upon experiments and is limited to inductions.[39]

Buffon's phrasing is significant, for while he asserts that hypotheses should be based on firsthand observation of facts, he associates the process of generalization from particulars with the imagination, referring to the resulting inferences not as *vrai (*true*)* but as *vraisemblable* (plausible, probable).[40] Swiss naturalist Albrecht von Haller commented on the novelty of this method in his 1750 foreword to the German edition of the *Histoire naturelle.* Distinguishing between the "arbitrary conjectures" Newton eschewed and the substantiated hypotheses he employed, Haller considers the latter to be equally characteristic of Buffon's writings, for "the author always goes somewhat further than his information, experiments, and insight."[41] Haller invokes an architectural metaphor to explain the utility of hypotheses, likening them to "a scaffolding by which truth is approached," that can subsequently be reinforced, replaced, or discarded: "All the parts of human science would become nothing but fragments and independent pieces without connection and unification if we did not fill in the missing parts with probabilities, and construct a building instead of a ruin." Because hypotheses are controversial, moreover, those who propose are also obliged to defend them, leading to further experimentation and the discovery of corroborating evidence.[42] While Buffon proposes to undertake a history that encompasses the earth's entire surface, both land and sea, he nevertheless insists on the project's limitations, for such vast expanses remain unknown that we can ultimately hope to do little more than scratch the surface: "We must therefore restrict ourselves to examining and describing the surface of the earth and the thin layer of crust we have managed to penetrate."[43] Anything beyond that would qualify, presumably, not as substantiated hypotheses but as arbitrary conjectures, venturing ever further into the realm of the imagination. In the following pages, we will see Buffon repeatedly weighing and defining the amount of imagination that qualifies or disqualifies an inference from being considered "scientific."

Within his *Histoire et théorie de la terre*, Buffon undertakes the history of the winds that Francis Bacon had once envisioned. So multiple are the possible causes (sun, moon, tides) and intervening factors (clouds, mountains, forests), however, that Buffon renounces the prospect of proposing a theory of the winds, confining himself to contributing to the fairly modest

store of extant data on which our ability to predict the weather may someday be based.[44] Buffon's privileged position as Intendant of the Jardin du Roi gave him access to the royal menagerie as well as to René Antoine de Réaumur's collection of taxidermic specimens, enabling him to draw many of his descriptions of animals, birds, and minerals from firsthand observation. He did not, however, travel extensively, certainly not beyond the bounds of Western Europe, and is not known to have taken notes when he did. He was therefore forced to rely on eyewitness accounts for his evidence concerning natural phenomena on land and at sea. In order to draw what conclusions he could from the existing evidence, Buffon had recourse to the travelogues of seafarers as his chief source of information. The empirical nature of these studies, characterized by reiterated claims of objectivity, does not attenuate the challenge they pose to our credulity, as Buffon notes in his chapter on irregular winds: "Details can be found in the *Histoire de l'Académie Royale des Sciences* . . . on the effects of several hurricaines that seem inconceivable and that we would have difficulty believing if the facts were not confirmed by a large number of truthful, intelligent eye witnesses. The same can be said of the waterspouts that navigators never see without fear and wonder."[45] Of interest here is Buffon's assertion that the rational mind is not immune to sustaining the emotions induced by the spectacle of nature, among them fear and wonder.

Buffon cites several travelogues in his discussion of waterspouts, multiplying his examples for comparison and verification. Though the author of the first account claims to offer nothing but the testimony of his senses, he is forced to have recourse to analogous sights and sounds in order to conjure up an image for the reader, thereby animating his description.

> In this location we first perceived boiling water that rose about a foot above the surface of the sea. It was whitish and a sort of thick black smoke appeared above it, so that it looked like a pile of straw that had been set on fire but had just started smoking. It made a muffled noise like a waterfall plunging violently into a deep valley, but the noise was mixed with another, clearer sound like the piercing whistle of serpents or geese. A little later we saw something like a dark canal that looked

> more or less like smoke mounting to the clouds and turning very rapidly. The canal was as big as your finger and made the same noise.[46]

The boiling sea, likened to smoking straw, that emits a whistling sound akin to that of serpents or geese before mounting to the heavens sounds more like a tall tale than good science. While Buffon suggests that the mariner may be subject to "optical illusions," casting doubt on the reliability of both the witness and the eyes, he nevertheless cites the account so as to render the phenomenon recognizable, then juxtaposes it to a second one that corroborates the first.

> At eleven in the morning, the air was heavy with clouds and we saw around our vessel, about three quarters of a mile away, six waterspouts form with a muffled noise like that of running water in subterranean canals. The noise gradually increased, resembling the whistling of the ropes of a ship in an impetuous wind. We first noticed the boiling water that rose about a foot and a half above the surface of the sea. A fog or rather a thick, pale smoke appeared above the boiling water and this smoke formed a sort of canal that mounted to the clouds. . . . This phenomenon occasioned much fear and our sailors, rather than recovering their courage, augmented their fears with the stories they told.[47]

Here again, we encounter boiling sea, rising smoke, and piercing whistle, likened somewhat less fancifully this time to the sounds produced not by serpents and geese but rather by canals and wind. The seafarers' response is nevertheless to exacerbate one another's fears by telling tall tales, exaggerating the dangers and possible consequences. Buffon's discussion of waterspouts remains inconclusive. Conceding that more data must be collected before attempting to explain the phenomenon, he conveys the uncertainty he finds in conflicting accounts from the *Histoire de l'Académie Royale des Sciences* as to whether waterspouts arise from the sea or descend from the clouds, whether they can all be attributed to the same cause, and whether

they are the product of hurricanes and contrary winds or of subaquatic volcanoes and earthquakes.

In his chapter on volcanoes and earthquakes Buffon likewise attests to the difficulty faced in attempting to account for natural phenomena. After painting a vivid picture of the havoc wreaked by volcanoes, he evokes their tendency to give rise to superstition.

> These effects, though natural, have been considered wonders [*prodiges*] and though we see, in miniature, effects of fire that resemble those of volcanoes, the real thing, regardless of its nature, is so likely to astonish us that I am not surprised that certain authors have taken these mountains to be the vents of a central fire and the people have taken them to be the mouth of hell. Astonishment produces fear and fear causes superstition. The inhabitants of Iceland believe that the roaring of their volcano is the cries of the damned and that its eruptions are the effects of the fury and despair of these unfortunates.

Buffon goes on to contrast the explanations offered by popular lore to the conclusions drawn by physicists: “All of that, however, is nothing but noise, fire, and smoke. One finds veins of sulfur, bitumen, and other flammable materials in a mountain. There are also minerals, pyrites that . . . ferment each time they are exposed to air or humidity, . . . catching fire and causing an explosion proportionate to the amount of flaming material. That is what a volcano is for a physicist.”[48] While he brings us abruptly back to earth by attributing volcanoes to the effects of wind, fire, and smoke, Buffon nevertheless acknowledges that such phenomena give rise to supernatural as well as scientific interpretations, recording both the phenomena themselves (natural history or philosophy) and the human tendency to attribute them to the demonic or the divine (history or moral philosophy). Buffon’s discussion of whirlpools serves to confirm this tendency, for he refers to the most famous among them as Charybdis, better known to the reader from Greek mythology than from seafarers’ travelogues or from scientific treatises.[49] Buffon’s readers—like the mariners whose travelogues he consulted—were

thus confronted with a choice between multiple explanations of phenomena (waterspouts) or between superstitious and scientific explanations of phenomena (volcanoes), potentially inducing the very sense of wonder the mariners sustained, that associated with the "phenomenon of unknown cause."[50] They were also confronted with the choice of whether to read his *Histoire naturelle* as a work primarily of natural or of moral philosophy, one that documented natural phenomena themselves or our historically and culturally specific yet psychologically consistent responses to them.

In order to determine whether Buffon considered the sentiment of wonder to be compatible with scientific inquiry, however, we must turn our attention to another order of phenomena: animal life. In part because of his rivalry with Réaumur, Buffon castigates his colleagues for marveling at the social organization of bees (alternately referred to as *mouches* and *abeilles*) in Volume 4 of the *Histoire naturelle*, refusing to listen to what he calls their "theology of insects." Claiming that his fellow naturalists are blinded by wonder, he suggests that this passion exists in inverse proportion to reason.

> All enthusiasm we feel for our subject aside, the more we observe and the less we reason the more we wonder. Is there anything more gratuitous than this wonder at the bees and the morals we project upon them, the love of the common good we attribute to them, this singular instinct equivalent to the most sublime geometry, an instinct . . . that enables them to determine without hesitation how to build as solidly as possible in the least space possible and with the greatest possible economy? What are we to make of such excessive praise?[51]

The mathematical instinct and moral sentiments naturalists attribute to bees incur Buffon's scorn and mockery. Such sentiments, he seems to suggest, are naïve and misguided and impede the progress of scientific inquiry. He therefore resists the impulse to anthropomorphize insects, viewing them in purely materialist terms and asking us to consider them as little more than a society of automata.

> Let us put together in the same place ten million automata animated by a life force and destined by the exact resemblance of their external and internal forms and the conformity of their movements to do the same thing in the same place. The result will necessarily be a work of a certain regularity, characterized by relations of equality, similarity, and position because they rely upon movements that are thought to be equal and alike, and relations of juxtaposition, extension, and form because the space is thought to be delimited and fixed.[52]

Any tendency to see in this organization a semblance of geometry, architecture, love of country, or an ideal republic is a product, Buffon suggests, of a misplaced sense of wonder: "Is not nature astonishing enough without attempting to surprise us further with the dizzying number of marvels we put there that don't exist?"[53]

Buffon's initial vilification of wonder, along with the naturalists who sustain and promote it, would seem to confirm Daston and Park's claim that the passion did not survive the turn of the century. Buffon's study of beavers, which are "to the quadrupeds what the bees are to the insects," leads to an entirely different conclusion, however.[54] Like the other entries in *Histoire naturelle des quadrupèdes*, the chapter on beavers (*castors*) in Volume 8 begins with a social history by Buffon, which enables the reader to perceive relations among species, followed by an anatomical description by Daubenton and engravings by Jacques de Sève, which enable the reader to perceive relations among body parts.[55] Daubenton's descriptions, like de Sève's illustrations, give readers the impression that they are dissecting the animal by proceeding from its external limbs and proportions to its internal organs and skeletal structure. Working from a living model in the Ménagerie de Versailles (Figure 2) and a skeleton in the Cabinet du Roi (Figure 3), Daubenton provides exact enumerations of the beaver's features followed by tables of measurements. These successive layers serve as the basis of his comparative anatomy.[56] Yet like the geologist, who only penetrates a few layers below the earth's surface, the anatomist can only go so deep. Although fully in keeping with the pursuit of scientific knowledge,

FIGURE 2. Jacques de Sève (1742–1788), engraving of a beaver, from Buffon's *Histoire naturelle*, volume 8, plate XXXVI (Paris: Imprimérie Royale, 1760).

Courtesy of Bibliothèque nationale de France

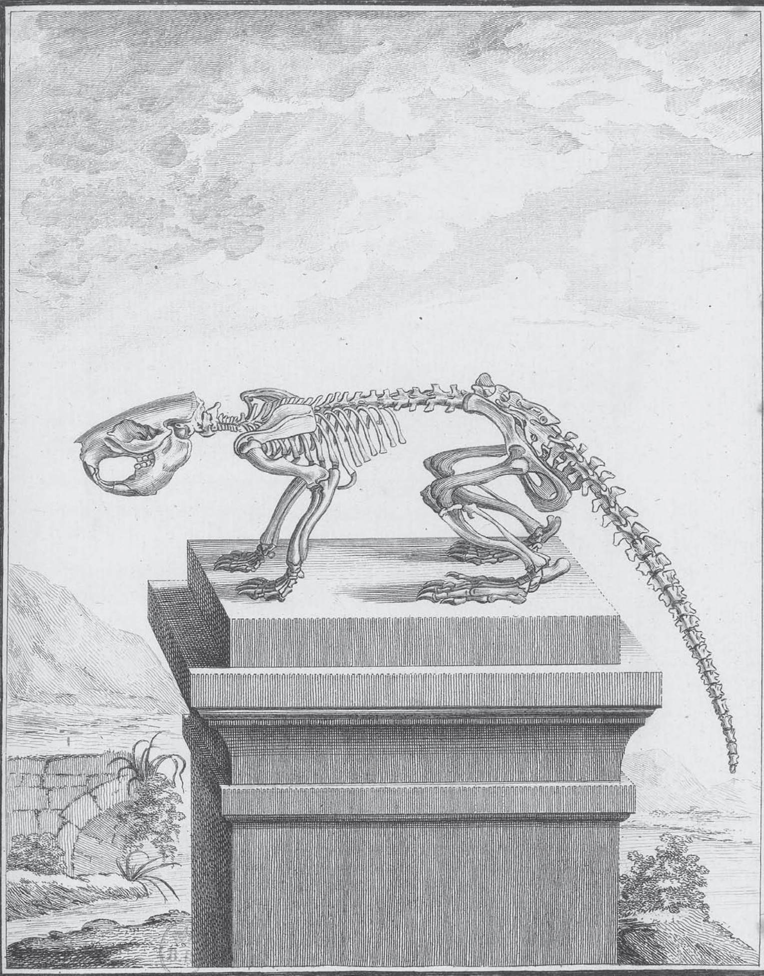

FIGURE 3. Jacques de Sève (1742–1788), engraving of a beaver skeleton, from Buffon's *Histoire naturelle*, volume 8, plate XLII (Paris: Imprimérie Royale, 1760).
Courtesy of Bibliothèque nationale de France

this glimpse behind the scenes neither sheds light on first causes nor, ultimately, detracts from the wonder sustained. Buffon's social history of the beaver, in the meantime, approaches the ideal of what Joanna Stalnaker calls "painterly writing," to which he aspired, capturing the animal in its organic and social integrity and appealing to the combined senses of the reader.[57] It is to this level of painterly writing that I now turn.

Buffon devotes far more time to lauding the social organization of beavers—midway between that of humanity and that of insects—than he does to downplaying the social organization of bees. Resisting the lure of unfounded, unquestioning enthusiasm once again, he approaches his subject with a certain degree of skepticism, denouncing any inclination to anthropomorphize outright. He nevertheless notes the singularity of the beaver's tail, unaccountably covered with scales and as adept at applying stucco as a trowel maneuvered by a human hand. He also lingers over the discrepancy between its webbed hind toes, which resemble those of aquatic animals, and separate front toes, which resemble those of terrestrial animals: "It splits the difference between quadrupeds and fish, as bats do between quadrupeds and birds."[58] The beaver thus held much of the fascination of the polyp, which suscitated a great deal of interest among his contemporaries, Diderot included, as it appeared to straddle the divide between the animal and vegetable kingdoms.[59] Buffon concedes that the beaver, as an individual in the state of nature, may be considered inferior to many other species (less intelligent than the dog, not as wise as the elephant, nor as sly as the fox), but in the state of society it is second to none. Focusing on the animals in summer, when they congregate, he describes the cooperative effort of building dams followed by the erection of their waterproof, weather-resistant mounds. Averse though he may be to the temptation to anthropomorphize, Buffon nevertheless compares the beaver's powers of construction, cooperation, and association favorably to those of humans. This tendency is in keeping with the order he perceives in nature, which he gauges with respect to an observer, or mankind. In glaring contrast to the society of automata he evokes to characterize the materialist workings of a beehive, beaver society acquires unmistakable utopian overtones: "Regardless of the size of the population, undisturbed peace is maintained. Work in

common solidifies their union, the commodities they have procured, the abundance of produce they amass and consume together, serve to sustain it. Moderate appetites, simple tastes, aversion to flesh and blood, remove all notion of rapine or war. They benefit from all the goods that man can but desire."[60] Though Buffon draws the line at attributing to beavers a system of government or slavery, by marshaling the evidence of their extraordinary achievements he begins to nuance the connotations of the French *admiration*, departing somewhat from the contemporary meaning (wonder) and anticipating the more modern sense of the term (admiration).[61] Put another way, he replaces his colleagues' unsubstantiated wonder, an instinctive passion, with substantiated wonder, one that both results from and gives rise to further scrutiny. In either case, he strips the term *admiration* of any association with disbelief: "However wonderful, however marvelous the things we have just revealed about the society and work of our beavers may seem, we dare say that we cannot doubt their reality."[62] Wonder in this instance remains fully compatible with both credence and scientific inquiry.

In a retrospective assessment of the beaver in Volume II of his *Histoire naturelle*, Buffon reiterates the sense of wonder that arises from close observation of the creature, its anatomy, and its habits:

> The beaver, who seems vastly inferior to the dog and the monkey in terms of its individual faculties, nevertheless received a gift from nature nearly akin to speech. It can make itself understood to other members of its species, so well understood that they socialize, act in concert, undertake and execute lengthy and great works together, and this sociability, along with the product of their mutual intelligence [the dam] deserves our wonder more than the monkey's skill or the dog's loyalty.[63]

Just as Buffon conveys the wonder of mariners confronted with the inexplicable phenomenon of the freak storm, he perpetuates our wonder before a creature as singularly accomplished as the beaver. In an undated fragment entitled "De l'art d'écrire" ("On the Art of Writing"), Buffon distinguishes between the "painterly writer" and the painter *tout court*. The distinction

hinges on the differences between successive and simultaneous signification, between wonder and astonishment. Whereas the painter can "produce only a sudden astonishment, an instant of wonder, which fades as soon as the object disappears," the painterly writer can not only "produce this initial effect of wonder" but also "enflame" the reader not with an image but with a *tableau mouvant* (or moving picture) so vivid that it remains "engraved in his memory."[64] It would therefore seem that Buffon sought to sustain rather than to dispel wonder in his readers and that he attributed the ability to do so to his own rather than to his collaborators' contributions.

In his *Essai d'arithmétique morale* (*Essays on Moral Arithmetic*), published as the fourth supplement to the *Histoire naturelle*, Buffon remarks that it is because we have become accustomed to nature's wonders that we no longer perceive them as such. Here, he further develops the distinction between wonder and surprise or astonishment, associating scientific inquiry with the former.

> There are two ways to think about natural effects, the first is to see them as they appear to us without considering their causes, or rather, without seeking their causes, the second is to examine the effects with the aim of attributing them to principles and causes. These two points of view are very different and produce different reasons for astonishment: the one causes the sensation of surprise, the other gives rise to the sentiment of wonder.[65]

Buffon associates the inclination, if not the ability, to infer principles and causes from effects with wonder (a sentiment) rather than surprise (a sensation). Wonder therefore constitutes not only the point of departure but also, implicitly, the ultimate goal of philosophical—or what we now call scientific—inquiry. To Buffon's mind, however, it also proved compatible with religious faith.

Though Buffon's cosmology and theory of transformism are thought to have contributed to the Enlightenment's atheistic tendencies, his own convictions have been a long-standing subject of debate.[66] Buffon made

his peace with the Sorbonne in the fourth volume of his *Histoire naturelle* by publishing a retraction of any views considered at odds with theology.[67] This retraction has been deemed a stroke of genius as it released him from having to alter his text. Buffon's voluntary return to the creation story in his 1778 *Époques de la nature* (*The Epochs of Nature*) was therefore presumably motivated neither by the need nor by the desire to render his work palatable to the authorities or the public. Instead, he submitted these pages to the judgment of Suzanne Necker, wife of Louis XVI's finance minister, mother of Germaine de Staël, and a *salonnière* in her own right, with whom Buffon sustained a fourteen-year friendship and correspondence. By his own admission, he and Mme Necker did not necessarily agree on the sanctity of religion, yet he sought and obtained her approval prior to the publication of his revised interpretation of the creation story, in which he strove to reconcile his dating of the earth with Genesis.

In his rereading of the first book of the Bible, Buffon encourages his readers to privilege the spirit over the letter, at least where the letter seems to contradict nature and reason. He then performs a literary analysis of the text that justifies his reading of the six days of the week as a figurative representation of six epochs of indeterminate length. In so doing, he makes a key distinction between superstition and "true religion" or between blind and enlightened faith: "The more I penetrated into the heart of nature, the more I wondered at and profoundly respected her Author, but a blind respect would be superstitious; true religion supposes, to the contrary, an enlightened respect."[68] As if to counterbalance the distinction he had drawn at the beginning of his career between mathematical and physical truth, Buffon now draws an analogy between revealed and discovered truth: "As all reason, all truth comes equally from God, there is no difference between the truths he revealed to us and those he permitted us to discover through our observations and research. There is, I repeat, no difference save that between a first, gratuitous favor and a second that he preferred to postpone and have us earn through our efforts."[69] Enlightenment can therefore be acquired via revelation or research. More intriguing still is Buffon's rationale for why the Creator chose not to reveal all of nature's marvels at the

outset. The gradual revelation of these marvels through scientific inquiry, Buffon argues, is God's way of renewing our faith once force of habit has rendered us indifferent to the spectacle of nature.

> A new truth is a sort of miracle, the effect is the same. The only difference is that a real miracle is a feat God accomplishes suddenly and rarely, whereas he uses mankind to discover and make manifest the marvels with which he filled nature, and as these marvels operate constantly, and are displayed for our contemplation from all time and for all time, God ceaselessly recalls us to him not only with the current spectacle but also through the successive development of his works.

Likening each scientific discovery to a small miracle, Buffon declares his ultimate goal to be the reconciliation of science and religion: "I allowed myself this interpretation of the first verses of Genesis with the aim of bringing about a great good, which would be to reconcile, once and for all, the science of nature with that of theology. In my opinion they only appear to contradict one another, as my explanation would seem to show."[70]

The question is therefore not whether Buffon believed what he wrote but rather in what position he placed the aspiring natural historian or the reader of his natural history. Whereas we previously distinguished the awestruck mariner, who has recourse to superstition to explain the natural phenomena before him, from the reader, confronted with a choice between superstition and science, here the reader is effectively encouraged not only to sustain wonder at the marvels of creation but also to entertain the possibility of religious and scientific truth, whether revealed or discovered.

STAGING NATURE

The publication of the first volumes of Buffon's *Histoire naturelle* coincided with the performance of the first version of Jean-Philippe Rameau's *Zoroastre* in 1749. Thomas Christensen has provided a masterful reading of Rameau's theoretical works in light of early eighteenth-century philosophical and scientific trends, tracing his changing conception of music from Cartesian mechanism through Newtonian empiricism to Lockean sensationalism.

Whereas Christensen makes but two passing references to Buffon in the course of his study, I wish to explore the affinities between Rameau's and Buffon's philosophical enterprises further. Their projects were fundamentally related, for Buffon set out to observe, describe, and historicize the natural world from whose principles, Rameau argued, musical harmony arose. In the opening line of his 1722 *Traité de l'harmonie réduite à ses principes naturels* (*Treatise on Harmony Reduced to Its Natural Principles*), Rameau defined music as "the science of sounds."[71] Whereas Buffon pronounced himself against Cartesian deduction in his *Premier discours*, Rameau, who belonged to an earlier generation, remained enamored of the Cartesian method and attempted to place his musical theory on the same footing as that of a mathematical science, purportedly to persuade Jean le Rond d'Alembert to admit him to the Académie des Sciences. This Cartesian veneer was but skin-deep, however.[72] Beneath the surface lay a committed empiricist whose convictions continued to evolve in light of the scientific discoveries of his day. Rameau is widely considered to have taken his claims for the rational basis of music to irrational extremes, to have favored musical mimetics over musical expression, and to have privileged (universal) sensation over (moral) sentiment. Here, I attempt to even the score to some extent, acknowledging his crucial contribution to what would be an ongoing philosophical and aesthetic conversation in the course of the century.

Rameau's account of how he derived his principle of harmony in his *Démonstration du principe de l'harmonie* (*Demonstration of the Principle of Harmony*), drafted in 1749, is indicative of the scientific method he favored. He acknowledges that his first impulse, when attempting to simplify the rules of composition, was to have recourse to the Cartesian method: "Enlightened by Descartes's method, which I had fortunately read, . . . I began by descending into myself." Singing a single note, he asks himself which note should follow but fears that his affinity for the third or the fifth is dictated by habit. Realizing that, had he been raised elsewhere, he might have made a different choice, he admits that his inclinations may be governed not by nature but by convention. Given the importance of convention in determining taste, he concludes that in order to arrive at the natural principle of music he must change tactic, or method.[73] Rameau then places

himself in the position of someone with no knowledge of music. Although this moment in Rameau's writings has been compared to Descartes's principle of radical doubt, it also resembles Molyneux's blind man and Buffon's amnesiac, both of whom anticipate Condillac's statue: "I placed myself as nearly as possible in the state of a man who had neither sung nor heard song. . . . Then, I began to look around me and to seek in nature what I was unable to draw from within myself as clearly or as surely as I desired. My search did not last long. The first sound that struck my ear was like a ray of light. I suddenly realized it was not unique or that the impression it made upon me was compound."[74] Rameau's so-called deaf-mute, when confronted with the spectacle of nature, comes to distinguish between noise on the one hand and two types of sound on the other: the fundamental bass and harmonic overtones. He discovers, moreover, that the harmonic overtones themselves comprise the third and the fifth, resonating an octave or double octave above the fundamental bass. They arise, in other words, from the major tonic triad. Rameau thus comes to the triumphant conclusion that any sonorous or resonant body (*corps sonore*)—the most natural being the human voice—serves as the generative principle of all the components necessary for musical composition, including harmony, melody, genres (major/minor), and modes.[75]

Rameau's version of the sensationalist allegory, devised in the same year as Buffon's, suggests that he made a conscious shift from a deductive to an inductive approach.[76] Though one of his signal accomplishments was to synthesize the theories of his predecessors and contemporaries, Rameau's treatises reveal that he derived and confirmed the principle of harmony through extensive observation and experiment. As early as his *Traité de l'harmonie*, he states: "All knowledge of harmony should be based upon the relation between the high and low notes." To discover the nature of these relations, Rameau experimented with a vibrating string: "We chose a string stretched so that it could emit a sound. We then divided the string into several parts with movable bridges, and found that all of the sounds or intervals that correspond to one another were contained within the first five divisions of the string."[77] From these experiments he arrived at the ratios, or proportions, that govern the mathematical relationship of the tonic to the third and fifth. While Rameau, like Buffon, privileges *rapports*, he

derives the term *rapport* not from chemistry (elective affinities) but from mathematics (ratio, proportion). As we shall see in Chapter 2, the notion of *rapports* remained crucial to ensuing discussions of music for the function of a note is defined with respect to those around it whether in a melodic sequence or in a harmonic progression.

In order to persuade his intended audience of aspiring composers that the relation between the tonic, third, and fifth is audible in the harmonic overtones of any resonant body, Rameau designed a series of experiments to be tried at home. Of the seven experiments he proposes in his *Génération harmonique* (*Harmonic Generation*) of 1737, I cite the one most likely to be familiar to today's readers, which illustrates the notion of sympathetic vibration.

> Take a viola or a cello and tune two strings a twelfth from one another. If you play the low string you will see the high string vibrate, you may even hear it resonate, and you will certainly hear it if you stroke it with your fingernail while it vibrates. Then play the high string and you will not only see the low string vibrate in its entirety, you will also see it divide itself into three equal parts, forming three antinodes between two nodes or fixed points.[78]

Rather than assume his readers will take his word for it, Rameau initiates them into the empirical method, encouraging them to believe the evidence of their senses when attributing the origin of harmonic proportion to the *corps sonore*.[79] Condillac, accordingly, held up Rameau's music theory as a model not of the *esprit de système*, or Cartesian deduction, but rather of the *esprit systématique*, or Newtonian empiricism, in his 1749 *Traité des systèmes* (*Treatise on Systems*).[80]

Whereas Rameau defined music as a science in his *Traité de l'harmonie*, he redefined it as both a science and an art in his *Génération harmonique*, for "not only does it comprehend the knowledge of relations, like the rest of mathematics, but . . . it can pride itself on exciting and calming the passions at will, just like poetry and eloquence."[81] If music's reliance on *rapports* qualifies it as a science, its ability to stir the passions qualifies it as an art. Rameau increasingly turned his attention to music's ability to convey

and stir the passions in his later treatises, possibly in response to Rousseau's entries on music for the *Encyclopédie*. Rameau's 1754 *Observations sur notre instinct pour la musique* (*Observations on Our Instinct for Music*), dedicated entirely to the subject, is of particular interest in this regard. In it, he attributes emotional expression to harmony, from which melody arises: "Harmony alone stirs the passions; melody derives all its power from this source, from which it emanates directly."[82] Here, Rameau implicitly refutes Rousseau's investment of melody rather than harmony with the ability to convey and stir the passions, an exchange to which I will return in Chapter 2.[83] Associating the Italian music that Rousseau championed with imitation, Rameau aligns French music with expression, which he again attributes to harmony.[84] He insists, moreover, in his *Erreurs sur la musique dans l'Encyclopédie* (*Errors on Music in the Encyclopedia*) of the following year, that "expression is born from neither a high nor a low pitch, but solely from the relation between keys."[85] *Rapports* thus serve as the basis not only of musical harmony but also of musical expression.[86] Of greatest interest, however, is Rameau's reconciliation of reason and sentiment in the listening experience. Rather than focus on the meaning of the words, he insists that listeners allow themselves to respond emotionally to the music: "Often we attribute to music what we owe to the words, or to the expression we lend them. We try to submit to their forced inflections and that is no means of judging. We should, to the contrary, allow ourselves to be swept away by the sentiment inspired . . . and this feeling will become the organ of our judgment. . . . Once reason and sentiment are in agreement there is no higher court of appeal." Rameau thus aligns sentiment with reason and good judgment—"If we are truly sensitive and if we judge according to our sentiment we will always judge well"—urging the composer, performer, and listener alike to trust their instinctive emotional response to music.[87]

In her recent exploration of the relationship between Rameau's theory and compositional practice, Cynthia Verba places particular emphasis on the tenets of dramatic expression he articulated in his *Observations*. Focusing on the link between reason and sentiment in his tragic operas, she discovers "an extraordinary parallelism between the harmonic progressions in the musical setting and the emotional progressions in the text." Verba is atten-

tive to a range of passions conveyed via what she calls a "strategy of tonal anchoring." By modulating away from and back to a firmly established key, Rameau renders such departures audible, palpable, and frequently unsettling to the listener.[88] Charles Dill likewise signals the importance of modulation from an established key in "moving the passions" of the listener and, more significantly for our purposes, in occasioning wonder. Dill posits that musical progression in Rameau's theoretical writings mirrors the progression of the passions in Descartes. Wonder, according to this schema, remains the "first of all the passions," preceding the others, which are subsequently paired into positive and negative binaries; it is also a cognitive passion in keeping with the composer's attempt to reconcile reason and sentiment. The "rhetoric of wonder" is particularly pronounced, Dill notes, in Rameau's narration of his discovery of the overtone series, or the enharmonic genus, as we have seen.[89]

Rameau dramatized this narrative in his 1748 *acte de ballet Pigmalion*, orchestrating the *corps sonore* to convey the coincidence of the statue's sensory and the artist's emotional awakening.[90] The Pygmalion myth took many forms in Enlightenment France, from paintings and sculptures to operas and ballets, for it permitted the simultaneous representation of the statue's discovery of sensation and the artist's discovery of sentiment. Though the statue purportedly comes to life as the result of an invocation of the gods, the myth was frequently deployed as sensationalist allegory, the aesthetic counterpart to Condillac's epistemological statue.[91] In the following passage, artist and statue alike start to question their senses, interrogating the source of the *corps sonore*, which the artist considers as extraordinary as the statue's capacity for movement. The accompanying chord progression blurs the distinction between the noumenal and the phenomenal, for though audible to the artist it is not clear whether the sound is divine in origin, accompanies the light that illuminates the scene, or emanates from the statue itself:

Pigmalion

Whence come these chords? What harmonious sounds?
A vivid light fills this place.

What a wonder [*prodige*]! What god? By what intelligence,
Has a dream seduced my senses? . . .

The Statue

What do I see? Where am I? And what do I think?
Whence come these movements?
Oh heavens! What should I believe? And by what power
Am I able to express my feelings?[92]

Dill explains the *mise-en-abyme* effect of this passage on the audience: "In terms of musical expression, the logic would run as follows. The character Pigmalion hears the chord of nature and expresses wonder. . . . Similarly, the audience member experiences wonder mimetically at hearing the fundamental base descend by a minor third and, aided by Pigmalion's words, feels something akin to the character's emotional state."[93] Wonder is thus experienced on three levels, those of the statue, the artist, and the audience.

If we consider some of the remarkable paintings of Pygmalion and Galatea from the period, including those by Jean Raoux (1717), François Lemoyne (1729), François Boucher (1767), Jean-Baptiste Regnault (1786), and Anne-Louis Girodet (1819), we note that the facial expression, gesture, and suspended movement associated with the passion of wonder can to a certain extent be identified in the statue as she begins to take in the spectacle of nature and certainly in the artist faced with the inexplicable phenomenon (*prodige*) of the statue's animation. Collectively, these works present us with a portrait of the artist as creator and beholder. In her analysis of the paintings by Raoux and Lemoyne, Mary Sheriff emphasizes the reciprocity of the positions of sculpture and sculptor as each is caught in a state of suspended animation.[94] François Boucher, who served as set designer for the Paris Opéra in the 1730s and 1740s, recasts the sculptor of the myth as a painter in his *Pygmalion et Galatée* (*Pygmalion and Galatea*) of 1767, creating what we might call a metapainting (Figure 4).[95] Though the artist turns away from the beholder, we glimpse his characteristic facial expression, preserved since Le Brun's day, which is also shown in three-quarter view in the sculpted bust to the left. In addition, we perceive the raised hand with fingers splayed in a gesture characteristic of the vast majority

FIGURE 4. François Boucher (1703–1770), *Pygmalion and Galatea*. 1767. Oil on canvas, 234 × 400 cm.
State Hermitage Museum, St. Petersburg / Bridgeman Images

of the paintings of this subject, a gesture that accentuates our impression that the artist and the artwork are mirror images of one another. Yet the angled wall on which the artist leans is contained within what appears to be the frame of the painting, both of which are littered with the tools of the artist's trade, leaving the beholder uncertain as to the distinction between artist and artwork (is the painter part of the painting?). While the beholder *in* the painting is confronted with what was variously interpreted as a scientific or a religious parable (sensory awakening or divine intervention), the beholder *of* the painting is confronted with what may be perceived as a representation of art or life. Retaining this image of the wonder, doubt, uncertainty, or hesitation occasioned in the mind of the beholder, I now wish to consider the response induced in the spectator when confronted with equally inexplicable phenomena on the operatic stage. It is my contention that *admiration*, or wonder, constituted the affective counterpart to the *merveilleux* characteristic of the French *tragédie en musique*.

The emphasis on sensibility and the passions in Rameau's later theoretical works resonates with the philosophical convictions of his most faithful librettist, Louis de Cahusac, who collaborated with the composer in the 1740s and 1750s on two *opéras-ballets*, two *pastorales héroïques*, and his last two *tragédies en musique*: *Zoroastre* and, it is thought, *Les Boréades*.[96] Cahusac's 1754 *Traité historique de la danse* (*Historical Treatise on Dance*), written in the same year as Rameau's *Observations*, is in many respects the philosophical counterpart of Rousseau's *Essai sur l'origine des langues* (*Essay on the Origin of Languages*), which I will discuss in Chapter 2. In his treatise, Cahusac recounts the natural origin of voice and gesture as alternate means of expressing the passions that in turn gave rise to the arts of song and dance.[97] Addressing aspiring choreographers, Cahusac encourages them to study the passions in order to determine how to induce them in the spectator: "You, whom nature endowed with talent, . . . study the passions, know their effects, the transformations they bring about in characters, the impressions they make on features, the external movements they provoke. Accustom your soul to feelings, your gestures will soon learn to express them."[98] Though the ballet, once dissociated from opera, would increasingly be associated with sentiment, at the time it remained part and parcel of the French *tragédie en musique*. In order to rethink the role of ballet in tragic opera, Cahusac spoke to the origins and aesthetic aims of opera itself: "The Greeks imagined a living representation of the various passions of mankind. This was a sublime stroke of genius. . . . Poetry and music, united to form a complete expression, repeatedly struck pity, wonder, and terror into the hearts of the Greeks. This invention is one of the most admirable feats of the mind [*esprit humain*]."[99] Cahusac thus added the sentiment of wonder (*admiration*) to those of pity and terror that Aristotle attributed to the genre of spoken tragedy—an addition Rousseau would subsequently reinforce when defining opera in his *Dictionnaire de musique* (*Dictionary of Music*).[100] Claude Lévi-Strauss echoes and enhances this association in his reflections on Rameau: "Opera unites wonder and passion with the addition of a third enchantment, music."[101]

The addition of wonder to the passions traditionally associated with the spoken theater seems highly appropriate, given the fact that Cahusac, like

Philippe Quinault, the Abbé Pellegrin, and other librettists and critics before him, considered opera to be the privileged domain of the marvelous. Defined as the intervention of the supernatural in the everyday, the *merveilleux* also came to refer to the stage machinery that made such interventions possible. Pellegrin's preface to Rameau's *Hippolyte et Aricie* is often cited as evidence that the operatic stage constituted the designated locus of the marvelous in early-modern France. In his preface, Pellegrin justifies his decision to adapt Jean Racine's *Phèdre* for the operatic stage by claiming that the work was better suited to the opera than to the spoken theater given the composer's relative freedom to stage marvelous effects.[102] Cahusac echoes this conviction, identifying the marvelous as the cornerstone of the *tragédie en musique*. In the following passage from *Traité historique de la danse*, Cahusac credits Lully's librettist Quinault with having privileged fable over history and argues that the presence of gods, heroes, personified passions, and animated nature on stage justifies the use of music, song, and dance.

> At first, the marvelous was the cornerstone of the edifice and fable, or imagination, provided the only materials [Quinault] thought he needed to build it. He discarded history, which already had its theater, and which contains truth that is too familiar, characters who are too serious, actions that are too similar to daily life for . . . song, music, and dance not to seem ridiculously incongruous.
>
> Building upon the marvelous, he gave full reign to the arts in his theater. Gods, heroes, . . . Olympus, Hell, the empire of the sea, miraculous metamorphoses, Love, Vengeance, Hate, all the personified passions, the elements in movement, all of animated nature provided the genius of the poet and composer with a thousand varied tableaux, an endless supply of materials for the most brilliant spectacle.[103]

Cahusac echoes this assertion in the article "Enchantment" that he contributed to the *Encylopédie* the following year: "The marvelous is the foundation of French opera. . . . It is a theater of enchantments, featuring all sorts of marvelous that can only be achieved through the intervention of the

gods of fable and with the aid of fairies or magic." In this entry, Cahusac suggests that the significance of the marvelous lies in its ability to appeal not only to the senses but also to the passions: "It is but another means at the poet's disposal for conveying passion and for inventing more effective ways of surprising, shattering, seducing, and troubling the spectator."[104]

Appealing to the senses and the passions was not enough, however; the marvelous also had to be reconciled with reason. In *Spectator* no. 315, Addison alludes to this aesthetic criterion with respect to the French tradition: "Aristotle observes, that the fable of an epic poem should abound in circumstances that are both credible and astonishing; or, as the French critics choose to phrase it, the fable should be filled with the probable and the marvelous."[105] Kareem notes, apropos of this passage: "Just as the familiar tempers novelty in order to prevent wonder from slipping into stupefied astonishment, so, in Addison's account, probability tempers the marvelous and thereby maintains the reader's assent by preventing wonder from slipping into incredulity."[106] The same rules that governed epic poetry applied to the operatic stage, where the effective deployment of the marvelous adhered to a certain internal logic, or *vraisemblance du merveilleux*, dictated by audience expectations and articulated by contemporary theoreticians of the opera.[107]

As we saw in the Introduction, the anonymous author of the entry "Marvelous" in the *Encyclopédie* questions the possibility of perpetuating the marvelous in an enlightened age, remarking that the intervention of the gods in human affairs no longer carries its original strength of conviction or power of persuasion, for what was religion to the Greeks and Romans (the intervention of their own gods) was but mythology to the French (the intervention of Greco-Roman gods). Jean-François Marmontel revisited this entry in the *Supplément* to the *Encyclopédie*, distinguishing two types of marvelous. Unlike his predecessor, he argues in favor of preserving the supernatural marvelous, as defined above. To do so, he states, poets and composers must imbue their deities with the force of human vice, virtue, and passion, enabling spectators to view the spectacle *as if* they adhered to the belief system from which the marvelous hails. He also defines another type, however, namely, the natural marvelous.

> The natural marvelous, I dare say, is predicated on the outer limits of the possible. Truth can reach it and simple reason can believe in it. It includes all the extremes: unprecedented events, unheard of characters and virtues, unthinkable crimes, games of chance that seem to portend a certain fatality. . . . It includes the great revolutions in physics: floods, earthquakes, upheavals that changed the face of the earth. . . . In morals, the great invasions and vast conquests, the overthrow and rapid succession of empires. . . . Finally, it includes particular events whose coincidence seems to be orchestrated by a higher power.

The natural marvelous encompasses natural and historical revolutions and reversals, phenomena or feats so extraordinary that we are inclined to attribute them if not to a remarkable individual then to a higher power. This is the kind of marvelous that "makes fiction a continual enchantment."[108] According to Catherine Kintzler, natural disasters furnished an ideal means of rendering the marvelous plausible: "Meteorology and spectacular natural phenomena were therefore in high demand: tempests, storms, earthquakes, volcanic eruptions, lent the deities a powerful helping hand while offering them a convenient means of conforming to the laws of the natural world."[109] While the marvelous had been associated with French tragic opera since its inception, the *natural* marvelous corresponded to the specific brand at which Rameau excelled and to which he gave fullest expression in the operas he wrote with Cahusac.

Although Rameau was certainly not the first to portray the marvelous through music in the French operatic tradition, such recognizable sound effects became one of the hallmarks of his style. Graham Sadler notes that the works of eighteenth-century composers include a number of "highly imaginative or frankly experimental passages of instrumentation, usually in the context of storm scenes, depictions of bird-song and other natural and supernatural phenomena."[110] Caroline Wood identifies the integration of the orchestra into the drama as a signal development of the transitional years from Jean-Baptiste Lully to Rameau, pointing to the rise of three types of scene: oracles, *sommeils* (sleep scenes or dream sequences), and tempests.[111] Commenting on the eruption of a volcano in *Les Indes galantes*, Cuthbert

Girdlestone remarks: "It is, indeed, in descriptive passages of battles, storms, monsters, 'frémissements des flots,' that Rameau is most modern."[112] David Buch concurs that "Rameau's experimental spirit and novel approach to harmony, texture, rhythm, and the orchestra . . . seem to have been most inspired in scenes of magic and enchantment" that featured what he calls "sonic images" of storms, incantations, invocations, oracles, and transformations.[113] The instrumental techniques Rameau implemented to achieve such effects include his innovative use of rapid passages in the strings (violins), his expanded use of woodwinds (flutes) and low reeds (bassoon), and, of course, his deployment of the wind machine. His scoring, as we have seen, employed unexpected modulations and passing dissonance to disrupt otherwise stable keys, as well as the strategic use of the *corps sonore* in passages meant to induce wonder, allude to enchantment, or evoke the divine, as Geoffrey Burgess has persuasively argued.[114]

Visual effects were equally important, however, for the costumes and decor considerably enhanced the impact of the "mythological, pastoral, or 'exotic'" settings of Rameau's operas.[115] *Zoroastre* premiered on the stage of the Palais-Royal—the primary venue for performances of the *tragédie en musique*—that was designed for single-point perspective scenery with a proscenium arch. Spectators could be seated on benches on the stage, in the amphitheater, or in boxes situated at right angles to the stage. Though the amphitheater was longer than it was wide, it was rounded at the back and space was provided for a forty-member orchestra.[116] While no sketch or reproduction of the scenery from *Zoroastre* has survived, it is nevertheless possible to reconstitute the experience to some extent. Castil-Blaze's account in the *Académie impériale de musique* conveys some of the excitement that Piero Bonifazio Algieri's decor for *Zoroastre* occasioned.

> The dean of the city guilds lobbied in favor of the staging of the new opera. The scenery for act 5, by Piero Algieri of Venice, inspired transports of enthusiasm. This painter had already distinguished himself by the decor for the rival fairies and the prison in *Dardanus*. The temple and underground scene in *Zoroastre* added to Algieri's great renown. . . . All the scenery and costumes made for *Zoroastre* were

> entirely new; Paris signaled its adoption of its foremost spectacle with a liberality, care, and pomp that had long been forgotten.[117]

Like Jean-Nicolas Servandoni before him, Algieri was known for his ability to "bring the *merveilleux* to life."[118] His model of the set for the 1760 revival of Rameau's *Dardanus* featuring a *gloire*—the clouds that precede or accompany a *deus ex machina*—gives us a sense of what a spectator might have seen from the audience (Figure 5).[119] Readers of the *Encyclopédie* eventually had access, moreover, to the forty-nine plates representing the *machines de théâtre* gathered by M. Giraud, machinist of the Paris Opéra.[120] These plates reveal what lay behind the scenes, the cogs and wheels, ropes and pulleys that orchestrated the appearance of clouds (natural phenomena), which in

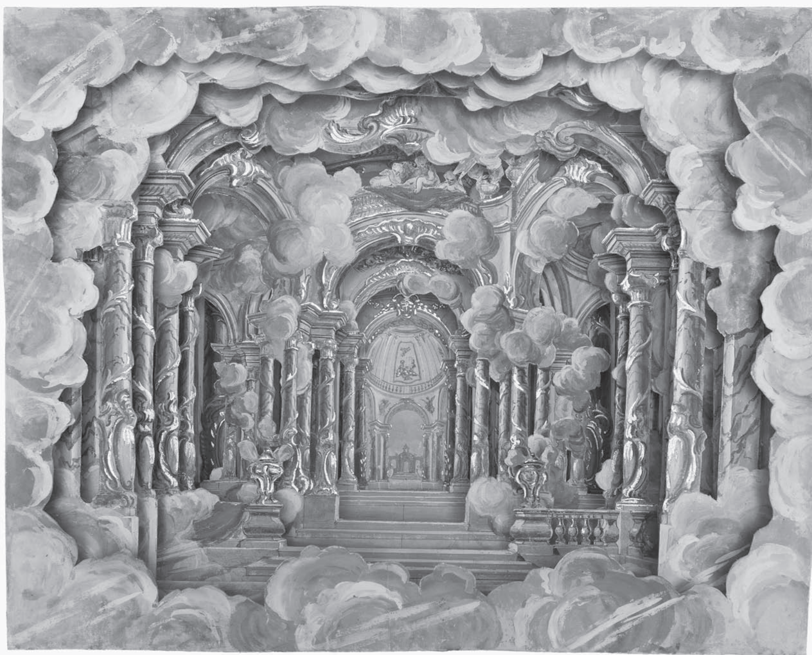

FIGURE 5. Piero Bonifazio Algieri (?–1764), model of the scenery for the finale of Rameau's *Dardanus.* Circa 1760, Château de Champs-sur-Marne.
© Benjamin Gavaudo / Centre des Monuments Nationaux

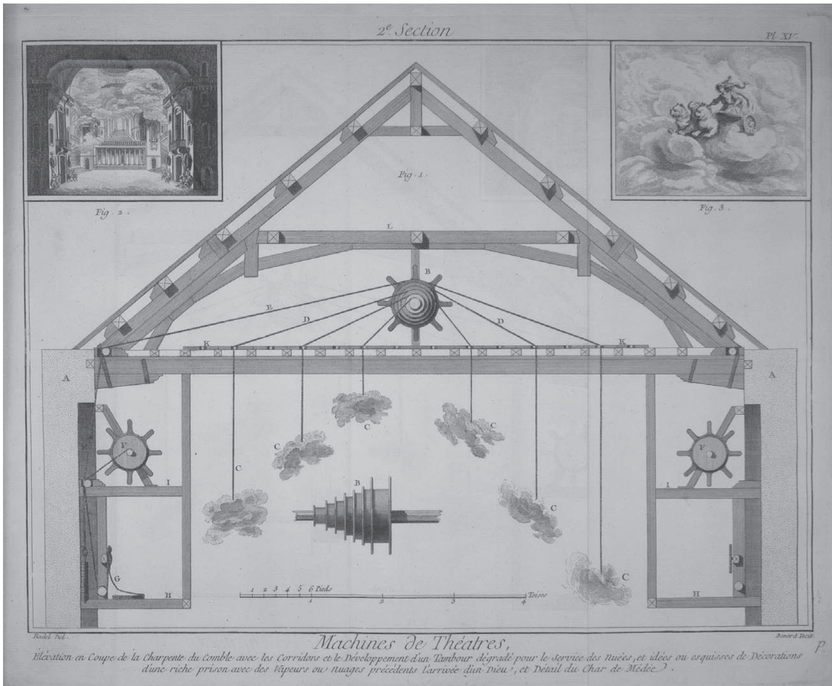

FIGURE 6. Robert Bénard (1734–1777), engraving of theater machinery, from Diderot and D'Alembert's *Encyclopédie*, volume 10, section 2, plate XV (Paris: Briasson, 1772).

Courtesy of Olin Library

turn anticipated or facilitated the intervention of gods (supernatural phenomena) (Figure 6). Like De Sève's engravings for Buffon's *Histoire naturelle*, the plates from Diderot and D'Alembert's *Encyclopédie* participate in the "culture of diagram" that John Bender and Michael Marrinan have identified.[121] Like Buffon's discussion of geographical formations, however, they penetrate only a few layers deep and—far from enabling us to induce first causes—continue to operate within a network of relations, or correlations. Of what, then, were the spectators meant to be cognizant when watching a performance, the illusion of the spectacle or the mechanical devices that rendered such illusion possible? And to what extent did their

awareness of the machinery behind the scenes detract from the wonder they sustained in response to the events on stage?

Rameau revised each of his tragic operas so extensively that the two versions are often considered separate works. Modern revivals and recordings, including those of William Christie and Marc Minkowski, have tended to favor the revisions, naturally assuming that they constitute the composer's final word, the work's perfected form. In *Monstrous Opera: Rameau and the Tragic Tradition*, Dill contends, to the contrary, that the original versions of Rameau's operas are more representative of the composer's artistic vision while the revised versions reflect the compromises he made to conform to audience expectations. The originals are accordingly more original, whereas the revisions constitute concessions to operatic convention and public demand.[122] Dill characterizes the 1749 version of *Zoroastre* as the "culmination of a period of intense compositional activity" and the "defining point in Rameau's career," given the affinity between the poet and the composer's aesthetic convictions.[123] I therefore propose to focus on the 1749 version of *Zoroastre* rather than the 1756 rewrite. In order to do so, I will have recourse not to spectator response from the period but to indications in the libretto and score as to where the spectators were to be situated with respect to events on the stage, what they were to hear and see, and to what extent they were to trust their senses. The notion of the implied spectator—an extrapolation from the narratological concept of the implied reader—enables us to appreciate how an operatic work signifies beyond the immediate constraints of production and reception, as I have argued elsewhere.[124] When we discuss literary texts, we base our interpretations on textual analysis as well as reception history. Similarly, when analyzing opera, I remain attentive to musical and textual indications of what the characters and spectators can and cannot perceive (see, hear, understand). I therefore shift the focus from contemporary spectator response, subject to limited attention spans, rampant dilettantism, and the technological hazards of performance, to the spectator the work implies. In the following analysis of the opera, I suggest that instances of the marvelous are designed to occasion wonder in the spectator, placed in the position of the natural philosopher or machinist of

Fontenelle's analogy. Confronted with a series of inexplicable phenomena, the implied spectator remains suspended between possible interpretations, or probable causes, on the levels of both story and staging.

Zoroastre is considered the "clearest case of a Masonic-inspired opera" prior to Mozart's *Die Zauberflöte* (*The Magic Flute*). Cahusac was a Mason, eventually becoming secretary of his lodge, and Burgess attributes the metaphysical bent of Rameau's later theoretical treatises to the composer's increasing fascination with the brotherhood.[125] Zoroastrianism—the religious philosophy of ancient Persia whose priests were the magi (the origin of the term *magician*)—was a precursor of freemasonry, yet Diderot's description of Zoroastrianism in his article on Persian philosophy for the *Encyclopédie* reads more like an excerpt from his *Eléments de physiologie* (*Elements of Physiology*). He enumerates its principles as follows:

1. Nothing comes from nothing.
2. There is therefore a first principle, infinite, eternal, from which all that has been and all that is emanated.
3. This emanation was very perfect and very pure. It must be regarded as the cause of movement, heat, and life.
4. Intellectual fire, very perfect and very pure, symbolized by the sun, is the principle of this emanation.
5. All beings emerged from this fire, both material and immaterial. It is absolute, necessary, infinite. It is self-moving and moves and animates everything that exists.
6. But matter and spirit being of two diametrically opposed natures, two subordinate principles, antagonistic towards one another, emanated from the original divine fire: Orosmade and Arimane.[126]

Zoroastrianism—like the opera based upon it—thus serves as a parable of natural philosophy or theology likely to appeal to materialists, sensationalists, vitalists, and deists alike. The spectacle of nature that unfolds on stage belongs not to the Greco-Roman world but rather to what was loosely known as the "Orient," for Cahusac shared the contemporary interest in "ancient Middle Eastern, Egyptian, and Persian mystical traditions"

and replaced the Gods of Olympus with what Sylvie Boissou has called a "'pseudo-exotic' pantheon."[127]

On a grand scale, *Zoroastre* stages a conflict between the forces of good and evil, light and dark, love and hate, sun and storm, order and chaos, yet each is associated with an earthly representative. Zoroastre represents Orosmade, or Light, and Abramane represents Ariman, or the forces of darkness. It is also a tale of jealousy and revenge, for Abramane and Érinice join forces against Amélite and Zoroastre, who have jilted them for one another. Abramane seals his vengeful pact with Érinice by breaking his magic wand in two and giving her half—half a wand for half a crown. Each of the earthly representatives thus backs his own political candidate: Zoroastre supports Amélite's legitimate while Abramane supports Érinice's illegitimate bid for the throne. The suggestions of sun or nature worship in the opera are quite evident, but the natural and supernatural forces at work are difficult to distinguish. Zoroastre's god is described as the embodiment of light, or Enlightenment.[128] All natural phenomena, whether positive (flowers, zephyrs) or negative (thunder, lightning), are of his making. Zoroastre's act 2 solo completes the association between Orosmade and the sun itself.[129]

The opening acts contain several instances in which the spectators mistake a supernatural for a natural occurrence, as their eyes and ears deceive them. The earthquake that interrupts act 1, scene 3, for instance, is initially taken by the characters and the audience to be just that. The stage directions read: "The dance is interrupted by a noise like that which precedes earthquakes. The waters of the river become agitated and darkness descends on the theater." As the audience hears frenetic sixteenth notes in the strings, oboes, and bassoons, the chorus of Bactrians sings: "The rays of the sun grow pale / The earth trembles, the day flies, / The noise that resounds in the air / Unites with echoing cries / What a dreadful night!"[130] Not until scene 6 do we learn that the quake is caused not by natural forces but by the evil spirits that Abramane has summoned to help Érinice confront her rival.[131] Similarly, the flames that mount Pirée emits in act 2, scene 4 resemble a volcano. The stage directions read: "Suddenly, blazing flames are seen surging forth from Pirée" and the chorus of savages and magi exclaims

"Heavens! The mountain is ablaze with flames!" The audience then hears a blazon of eighth notes in the trumpets and French horns accompanied by cymbals as the chorus sings: "What brilliant and varied sounds!" The volcano's eruption is followed by what appears to be an atmospheric response in the form of a flaming cloud, which is clearly all the chorus sees as it sings: "A new flame / Ignites and shines in the air." Not until Orosmade's voice issues forth from the flaming cloud in scene 5 does the audience understand that what appeared to be natural phenomena are in fact the fireworks that typically accompany the descent of a god, in this instance seated in a Salamander-drawn chariot of fire.[132] What at first appears to be fire and brimstone is subsequently identified as "divine flame."[133]

The opening acts thus inspire a sense of wonder in the spectator, who responds as one would to the sight of earthquakes and volcanoes without knowing whether to attribute these phenomena to divine or natural causes. The opera proceeds to interrogate the relationship between the natural and the supernatural via an elaborate interplay of disembodied voices that projects beyond the limits of mechanism and mimesis. Cahusac introduces the notion of casting one's voice in the first scene of the opera, when Abramane tells Érinice that "to settle the fate of the empire, the gods / Will soon borrow my voice."[134] Both Abramane and Zoroastre speak for their divine counterparts in the course of the opera, yet who ultimately wields the power, the god or his prophet, remains uncertain. The interplay of disembodied voices serves only to make this question more pressing and the answer more elusive. We first encounter Zoroastre banished from Bactria and in exile among the "savage Indians." The voice of Orosmade, issuing from the flaming cloud as the stage directions specify, enjoins Zoroastre to resist tyranny, enlighten the universe, and triumph over the shadows of hell, all in the name of love.[135] Zoroastre's power lies not only in the fact that the chorus of witnesses that surrounds him hears and repeats the god's injunction, but also in the fact that once Zoroastre returns to his nation he becomes a disembodied voice in turn.

Zoroastre reaches Bactria in the midst of a storm. The score indicates that he and no longer Orosmade occupies the chariot of fire that is now visible to the audience. The chorus of Bactrians that can be heard offstage

is presumably lodged behind the city walls, which constitute the decor.[136] The stage and the audience are thus implicitly situated outside the city walls, and the spectator witnesses the encounter between Zoroastre and the Bactrian women as they flee the city. Zoroastre makes the following declaration, fully lit, from center stage: "Gather, faithful people, / Run to my voice, run to my voice, / I come to break your chains." As his words reveal, the Bactrians who are offstage within the city walls can hear but not see him. His declaration gives rise to much speculation as they exclaim: "What voice of salvation rings in the air!"[137] Zoroastre, who descends in a chariot of fire and speaks as a disembodied voice in turn, thus presumably carries much the same force of conviction for the Bactrians as the god he represents carried for the spectators. As the spectators watch the effect of Zoroastre's voice on the Bactrian people, however, they find themselves in the position of the casual observer who sees the magician's sleight of hand. They cannot entirely disbelieve because they were privy to the communication between Zoroastre and his god while in exile and heard the voice that Zoroastre in effect subsequently embodies. Yet if the Bactrians are the victims of a hoax, who is to say the spectators are not? Just as Rameau and Cahusac give the Bactrians the impression that Zoroastre is all-powerful, they give the spectators the impression that the source of his power is divine. This play on the mechanisms of faith obliges the spectators to question what they have seen and heard and what they believe.

Though we might expect all doubt to be dispelled by the oracle in act 4, this oracular utterance ultimately proves to be false.[138] In scene 7, Abramane invokes his god in the temple of Ariman. The wording of his invocation gives us pause, however, for Abramane states: "Oh you, whom by various names, / I have made known to the universe / As absolute ruler of the world."[139] The words "made known" invite us to question whether Ariman is actually the absolute master of the world or Abramane has simply represented him as such. Suddenly, Vengeance announces that "Hell will speak" and Ariman's voice is heard authorizing Abramane to instigate a reign of terror: "Burden with your chains / All the people of the universe; / Triumph, to arms! . . . / Avenge your suffering with torrents of blood; / Offer your master this welcome spectacle."[140] Once again, the Bactrians are not privy

to the communication between human and divine and are therefore not aware that the forces of evil are consorting against them. To the contrary, they are in the midst of crowning Amélite queen when they hear the priests' offstage announcement: "Let the name of Érinice / Mount to the heavens." Abramane then reiterates and glosses the priests' words, identifying them as an oracle: "Bow, trembling, to the sovereign law / That the wrathful gods dictate through my voice; / The oracle has declared their choice / That Érinice be your queen."[141] Yet while the spectators hear the subterranean voice directly, the oracle is not part of its pronouncement. Instead, the pronouncement is uttered by the priests and repeated by Abramane, prolonging the spectators' uncertainty as to whether Abramane is faithfully representing or deliberately misrepresenting his god. Like the Bactrians, the spectators are therefore, for the moment, obliged to take Abramane's word for what Ariman says.

This prolonged uncertainty enhances the drama that ensues. As the sky darkens, the chorus of Bactrians rounds out the voice of Zoroastre and the chorus of priests seconds the voice of Abramane, each side conjuring the heavens to destroy its adversaries: "Let a thunderbolt open the earth beneath their feet."[142] As the lightening visibly strikes and the thunder audibly resonates in the oboes, bassoons, and strings, each side champions the onslaught of the storm. Since both gods have purportedly spoken, the spectator does not know which one will prevail until the song of Abramane and the priests is gradually replaced by cries of dismay at the power of nature and the perfidy of the gods as they disappear into the bowels of the earth.[143] Rameau and Cahusac thus place the spectator in the position of Buffon's readers, confronted with both scientific and superstitious rationales for the natural phenomena before them and hesitating between philosophical and theological explanations. As Burgess notes, the terms *enchantment/enchanter* are systematically opposed to *magic/magician* in the opera.[144] The triumph of the one over the other is thus equated with the triumph of reason over the powers of darkness, aligning enlightenment with enchantment.

Zoroastre was the first *tragédie en musique* in which Rameau abandoned the prologue, or the encomium to the king, leaving us with the distinct

impression that he and Cahusac were lobbying in favor of an enlightened monarchy.[145] Zoroastre's sojourn among the Indians gives rise to an exchange reminiscent of Montesquieu's troglodytes when he refuses the crown they offer, urging them to use their laws and their innocence as their sole guides.[146] Once among the Bactrians, however, he attempts to spur them on to defend their city against their enemies, accusing them of cowardice when they refuse to wage war against the gods, saying somewhat dismissively: "Bear your chains without complaint."[147] Zoroastre cannot respect a people unwilling to defend their rights against oppression. Roused by his words, the Bactrians renew their effort to assert themselves, yet just as they declare Amélite their queen, the voice of the priests momentarily overrules the voice of the people. But once the false oracle and false gods are exposed, the people's will prevails. Ultimately, Amélite agrees to become their ruler neither because she is "of royal lineage" nor for the sake of personal ambition. Instead, she accepts the crown because the Bactrians proclaim themselves in her favor.[148] This is as close to an instance of representative government as we are likely to find in midcentury tragic opera. While the opera's association with freemasonry has been used to explain its symbolism and the power struggle between the forces of good and evil, it also has political connotations. Margaret Jacobs reveals that the society for which Rameau and Cahusac showed such affinity constituted one of the earliest pan-European forms of representative government, providing an alternative to the monarchical model.[149] Burgess notes the democratizing influence of the *corps sonore*, moreover, which induces the audience to sing along, shifting the emphasis in the opera from the relative elitism of oracular utterance to the *vox populi*.[150] If Rameau is to be believed, no intellectual understanding of the theory behind the harmony is required, for it triggers a universal, instinctive, physiological, and ultimately emotional response among listeners that elides cultural and class distinctions.

SPECIAL EFFECTS

The use of the *merveilleux* at the opera—understood as the machinery designed to facilitate the staging of natural and supernatural phenomena—had both defenders and detractors. While the librettists Quinault, Pellegrin,

and Cahusac were staunchly in favor of perpetuating the *merveilleux* as a defining feature of the *tragédie en musique*, others pronounced themselves vehemently against it. Rousseau and Diderot, as well as Friedrich Melchior Grimm, notoriously mocked the occasional failure of operatic machines and decor to sustain theatrical illusion. Like many of their critiques of contemporary practice, however, their remarks soon led to envisioned reforms. The aim and effect of contemporary criticism was not, as has often been claimed, to eliminate the *merveilleux* but rather to improve it. Cahusac's contributions to the *Encyclopédie* reveal his desire to correct perceived flaws, constituting a sustained reflection on the aspects of staging that tend to enhance or disrupt the effects of theatrical illusion on the spectator. In his entry "Gesture," he declares: "The goal of French opera is to seduce the mind, charm the senses, and transport the soul into enchanted regions."[151] In his entry "Scenery," he further stipulates that "illusion begins with the scenery, which must, through its truth, its magnificence, and the coherence of its composition, represent the setting of the scene, forcibly removing the spectator from a real place and transporting him to a pretend place."[152]

This is not to say that Cahusac was unaware of the possible pitfalls. He readily concedes that an inadequately concealed *machine de théâtre* or an ill-conceived gesture risks destroying the illusion, and complains that budgetary restrictions tend to limit the efficacy of special effects. Consider his entry "Chariots."

> It's the most common machine at the opera and therefore, doubtless, the most neglected. As a majestic *ritournelle* is executed, we see the descent of a divinity and the illusion begins; but no sooner has the chariot bypassed the ceiling than the cords become visible and the illusion dissipates. There are several simple ways of concealing from the spectators' eyes the ugly cords that transform the most agreeable marvelous into a ridiculous spectacle. Successions of artfully placed clouds alone would do the trick and that they are not used is inconceivable.[153]

Whereas Rousseau's *porte-parole* Saint-Preux would caricature the Paris Opéra for falling short of audience expectations, Cahusac anticipates that

city administrators will soon see fit to remedy the problem. Yet even when the text, music, scenery, and staging successfully consort to transport the spectator, bad acting suffices to spoil the effect. Here, Cahusac adopts the vantage of a spectator.

> I hear melodious sounds, I see a place decorated with everything that could please the eyes of an avid spectator, I imagine the daylight that illuminates it to be that of the delicious gardens of Olympus. My gaze falls on a character whose majestuous and graceful appearance should correspond to this first seductive impression. I see nothing but a clumsy figure who walks with a studied gait, waving two large arms at random with a monotonous pendular movement. My attention wanders, it leaves me cold, the charm has disappeared, and I see nothing more than the ridiculous arrival of a god or goddess rather than the imposing figure that the beautiful prelude had promised.[154]

Cahusac's thoughts on theatrical illusion—realized by artfully concealing stage machinery, reconciling words, music, and gesture, and integrating the ballet into the story—anticipated the reforms introduced by the actor David Garrick and the choreographer Jean-Georges Noverre, who sought to render staged movement more natural later in the century.

Diderot's 1757 *Entretiens sur Le Fils naturel* (*Conversations on the Natural Son*)—in which he theorizes the pantomime and envisions both the bourgeois drama and the *ballet d'action*—is frequently read as a condemnation of the *merveilleux* on the operatic stage. In this dialogue, Diderot's interlocutor Dorval claims that "the burlesque and the marvelous are equally unnatural."[155] He goes further, declaring: "The burlesque genre and the marvelous genre have no poetics and cannot have one."[156] This citation is reminiscent of the controversial conclusion to Rousseau's 1753 *Lettre sur la musique française* (*Letter on French Music*): "The French have no music and cannot have one." Yet Rousseau's declaration led to two decades of sustained reflection on how to reform the genre he decried, contributing to the rise of the *opéra-comique* and the *mélodrame* and to the reform of lyric tragedy, as we shall see. Similarly, in his *Entretiens* Diderot regrets

Dorval's condemnation of the *genre merveilleux*, which leads to a discussion about how it can be salvaged.[157] Dorval's reflections on the *merveilleux* are closely related to those in the unattributed *Encyclopédie* entry on the subject. Like epic poetry, tragic opera is predicated on Greco-Roman mythology, which no longer carried the strength of conviction it once did for the Greeks and Romans, for whom it was not myth but religion.[158] The "true theogony," Dorval declares, is human vice, virtue, passion, and natural phenomena personified: "The imitation of . . . the most powerful nature"—whether nature itself or human nature (the passions)—should be the basis of the reformed lyric theater.[159] Rameau and Cahusac had arguably already come a long way in this direction, turning from Greco-Roman mythology to works predicated on natural theology that, in the case of *Les Boréades*, would personify the winds.[160] Dorval goes still further, however, envisioning in quasi-messianic, quasi-Wagnerian terms the coming of a poetic and musical genius equal to the task of reuniting the arts, reconciling the *genre merveilleux* with nature and infusing it with its lost strength of conviction.[161]

The *merveilleux* was frequently a subject of derision. Criticism of implausible plots, unconvincing performances, defective machinery, and inadequate theater space constituted a first step toward their improvement, however. Voltaire voiced his acerbic critique of the contemporary state of French theaters in the very year that Buffon's *Histoire naturelle* and Rameau's *Zoroastre* appeared.[162] By the end of the century, stage architecture had been thoroughly reconceived, taking the science of acoustics and optics into account in order to enable the audience to lend greater credence to the events and to empathize or identify with the characters on stage, as Pannill Camp has recently shown.[163] According to Pierre Patte, who designed and orchestrated many of these improvements, the goal of the architectural reforms was "to stir the soul, to delude the senses, and to enchant the spectators."[164] Charles Nicolas Cochin, who provided the frontispiece for the *Encyclopédie*, participated in the rethinking of operatic theater design subsequent to the fires that burned the Palais-Royal opera to the ground first in 1763 and again in 1781. Though he designated additional space for stage machinery, which remained essential for scene changes, he anticipated that it would soon be replaced with alternative techniques. He was

particularly dismissive of the visible cords, cutout clouds, and trap doors that permitted the comings and goings of gods and demons yet fooled no one. To this end he suggested that the scenery be changed manually, not before the spectators' eyes in the midst of the action but behind a curtain provisionally lowered between scenes: "Wouldn't it be more agreeable and reasonable if everything were put in place without our knowledge and we felt the sort of surprise that such a transformation occasions in the brief interval needed to raise the curtain?"[165] He thus shared Cahusac's desire to conceal the mechanisms of stage production. Like other reformers of his day, influenced by their sojourns in Italy, Cochin favored an elliptical design for the theater with a stage that extended into the audience and boxes that faced the stage to ensure that spectators could both see and hear. He sought, however, to achieve "a balance between distance and proximity," as Downing Thomas has observed, seating spectators far enough from the stage or situating the action far enough from the audience so that battle scenes would appear real and singing and declamation would appear effortless.[166] For Cochin, the most desirable vantage point was that from which the spectators "see nothing that destroys the illusion."[167] To this end, he favored the use of a perspective *per angolo* with a vanishing point that was further away than the stage was deep to enhance the efficacy of the scenery. Regretting that French opera had benefited from so few talented set designers since the days of Servandoni and Boucher, Cochin envisioned the effect of landscape painters with the skill of a Claude-Joseph Vernet or a Hubert Robert.[168] These changes enabled him to project what Thomas characterizes as "a space of belief" that was compatible with "rational judgment" yet contributed to the spectators' communal affective response.[169]

In 1801, Pierre Boullet, who witnessed both Palais-Royal fires, penned his *Essai sur l'art de construire les théâtres, leurs machines et leurs mouvemens* in an effort to provide a theoretical basis for theatrical practice. Unlike Cochin, he was a firm believer in the potential and perfectibility of stage machinery. On the strength of forty years' experience as head machinist at Versailles and the Théâtre des Arts, Boullet sought to save his successors time and money by explaining how to resolve the remaining difficulties that hindered the efficacy of special effects.[170] The artist's vision,

he maintained, should be neither restricted nor impeded by the means of production, particularly insofar as the marvelous was concerned: "When theaters are constructed according to flawed principles, we turn to the machinist, whom we haven't consulted, and say: 'make marvels.' But by that point the simplest things are quite difficult to execute."[171] To avoid this scenario, the architect, machinist, and set designer should ideally confer prior to building a theater or staging a production.[172] The dimensions of most theaters by the turn of the century remained insufficient for operatic productions, which required greater depth and breadth to accommodate stage machinery. Boullet conveys a vivid image of exposed cords, encumbered chariots, and torn costumes resulting from too little space, requiring the machinist to go to great lengths and expense to compensate for the lack of foresight that risked heavily compromising stage illusion.[173] He therefore recommends that the architect provide two lodges, one for the machinist and set designer, the other for the poet and composer, situating them in the privileged place formerly reserved for the king so as to better gauge and anticipate the needs of each performance.[174]

These visions of the future—Cahusac's of improved acting and special effects, Diderot's of a gifted poet-composer, Cochin's of improved scenery and stage design, and Boullet's of an omniscient machinist—helped bring about the gradual shift that Marian Hobson charts in the meaning of *illusion* in the course of the century from enchantment to belief.[175] Hobson associates the first of these terms with dissimulation (representation, *aletheia*), the second with simulation (replica, *adequatio*). The former is characterized by a simultaneity or alternation of doubt and conviction—which Hobson associates with Rameau and refers to as *papillotage*—the latter eliminates the doubt.[176] Wonder, like the *merveilleux*, is more readily associated with the first of these two meanings. A response to the phenomenon of unknown cause, it is linked to the spectator's momentary inability to account for what he or she perceives (natural or supernatural? mechanical or metaphysical? real or illusory?), whether on the level of the story or the staging. Yet this moment of suspended animation and affect, once resolved, is as likely to lead to conviction as to the skepticism often associated with the Enlightenment.

The conversion of the Cabinet du Roi into the Muséum National d'Histoire Naturelle followed a similar trajectory. Originally associated with the wonder provoked by uncertainty as to an object's function, provenance, or classification, it, too, moved from an aesthetic of enchantment to one of belief in the course of the century. Plans for the natural history museum during the years of the French Revolution bore out Diderot's evocation of the natural history cabinet's potential in his *Encyclopédie* entry of 1752. Repeatedly described as a "spectacle of nature," housed not in a theater but in a temple, the museum was intended to render the *rapports* among species, classes, and genres apparent for the purposes of public instruction—the *rapports* (divined relations), not the *ressorts* (hidden springs).[177] Greenblatt traces the trajectory from cabinet to museum, the function of the latter being to arouse "a wonder that then leads to the desire for resonance" or curiosity about the network of relations in which the object of wonder is imbedded.[178] E. C. Spary's reading of the documents from the Revolution containing several appeals for the extension of the museum's grounds recalls Patte's statement of the goals for the architectural reform of the theater. The museum, garden, and menagerie were to be transformed into an "enchanting spectacle" comprised of the "marvels of nature" that would enable visitors "to admire them, to study them, to understand them," reconciling their ability to wonder (*admirer*) and to discern.[179] The target audience included physicians, botanists, and artists as well as children: "Must we not, above all, show our youth the spectacle of nature [and] . . . the harmony of its phenomena?"[180] The reconceived Jardin and Cabinet du Roi, transformed into the Muséum National d'Histoire Naturelle, was to serve as a model of the physical world just as "regenerated France" was to serve as a model of the moral world.[181] Though this Revolutionary rhetoric may, with hindsight, strike us as rather ominous, Spary's analysis of the politics of the museum's founding—as an institution in the service of the nation, under the leadership of an elected director, that established equality among the naturalists as part of the public education program led by Nicolas de Condorcet—serves to attenuate such implications.[182]

My analyses of Buffon's *Histoire naturelle* and Rameau's *Zoroastre* thus lead me to question Daston and Park's claim that in the eighteenth century

"the anti-marvelous aesthetic of art mirrored the anti-marvelous aesthetic of nature."[183] Reill's observation that Buffon relocated the metaphysical *within* nature, just as Cahusac relocated enthusiasm *within* reason, as we shall see in the next chapter, suggests that the Enlightenment conception of nature and reason remained both susceptible to and compatible with the cognitive passion of wonder that Aristotle considered to be the origin of philosophical inquiry. Just as Buffon explored relations among species, Rameau explored relations among sounds. The two of them established *rapports* as the basis of natural harmony in the sciences and the arts. They sought to instill and preserve a sense of wonder in the reader/spectator at the spectacle of nature, even—or especially—when its harmony was disrupted by foul weather or passing dissonance. As "the first of all the passions," wonder represents a moment of cognitive and affective uncertainty, or hesitation, when judgment and disbelief are suspended as information is sought. Yet the aesthetic reforms that contributed to the establishment of the Muséum National d'Histoire Naturelle and the renovation of the opera were designed to promote what Hume called "the sentiment of belief," whether in fact or fiction, revealed or discovered truth. While the Enlightenment is thought to have eradicated wonder from the Renaissance understanding of nature that Romanticism would subsequently restore, I maintain, to the contrary, that wonder never ceased.

CHAPTER TWO

The Philosophy of Nature in Diderot and Rousseau

Who blends his voice with the torrent that falls from the mountains? Who senses the sublimity of a deserted place? Who listens to himself in the silence of solitude? He does. Our poet lives on the banks of a lake. His gaze roves over the water, and his genius expands. That it where he is seized by this spirit, sometimes tranquil, sometimes violent, that stirs and appeases his soul in turn. . . . Oh Nature! . . . You are the fertile source of all truths!

—*Denis Diderot, Entretiens sur Le Fils naturel*

On the second day of the *Entretiens sur Le Fils naturel*, Diderot rejoins Dorval, who "had abandoned himself to the spectacle of nature." Genius, Dorval explains, loves solitude, and seeks inspiration in forests and fields, lakes and mountains. Such natural phenomena catalyze enthusiasm, imagination, and passion in turn. As Diderot watches, Dorval simultaneously sustains and describes the physiological effects of a mounting enthusiasm—bordering on fury—that both consumes poetic genius and brings its creations to life. Remarkably, while in the midst of his transport, Dorval is able to explain how he feels, a mode of narrative that Anne C. Vila characterizes as natural philosophical.[1] Yet, coming to himself, he inquires: "What did I say? What was I going to say to you? I don't remember." This instance of alienation is akin to that which Rameau's nephew experiences when, in the midst of his musical pantomime, he imitates the subject of music's imitation—nature and the passions—embodying music itself.[2]

Such moments of enthusiasm, sustained by the *promeneur solitaire* (solitary walker) before the spectacle of nature, closely resemble Diderot's experience in his "Promenade Vernet," to which I will turn shortly, and that of his erstwhile friend Jean-Jacques Rousseau during his youthful peregrinations. Indeed, critics have debated which of the two Dorval represents.[3]

From his childhood confessions to his late-life reveries, Rousseau attributed his ability to give free reign to his imagination to his relative proximity to nature and distance from society. Though he and Diderot disagreed as to where the philosopher should reside, they consistently sought to reform society and the arts in light of their observation of nature and human nature (the passions). While they each demonstrated a predilection for a different sign system (gesture and song) and their related art forms (painting/theater and music/opera), their philosophical project may in many respects be considered a joint enterprise. Jean Starobinski quotes Diderot as saying: "Painting is the art of reaching the soul through the medium of the eyes. If the effect stops at the eyes, the painter has only gone part way," adding parenthetically: "Rousseau says no less about music."[4] Together they investigated more extensively than any of their contemporaries—with the possible exception of Adam Smith—the instinctive passion of pity, sympathy, or identification, particularly in their nascent art, literary, and music criticism. The ability to occasion this sentiment in the audience became, in their estimation, the chief measure of the creator's success. Yet with what sentiment should the spectator identify? Arguably, not only with the range of emotions conveyed by the characters but also with the enthusiasm the painter, poet, or composer sustains before the source of inspiration itself.

In the dedicatory paragraph of his *Salon de 1763*, addressed to Friedrich Melchior Grimm, Diderot acknowledges the affinity between sensibility and enthusiasm, attributing the capacity for the two to Rousseau.

> In order to describe a Salon to your and my satisfaction, do you know what I need, my friend? All manner of taste, a heart sensitive to all charms, a soul susceptible to an infinite array of enthusiasms, a variety of styles that corresponds to the variety of brushes, in order to be grand or voluptuous with Deshays, simple and true with Chardin, delicate with Vien, pathetic with Greuze, to produce all possible illusions with Vernet. But tell me, where is such a Vertumnus? We may have to go to the banks of Lake Geneva to find him.[5]

Diderot and Rousseau's contributions to the reform of spoken and sung theater through their conception of the bourgeois drama and the *opéra-*

comique, both of which purportedly eschewed emotional extremes, resulted in their being associated less with emotional expression than with emotional control. Rousseau's meticulous design of Julie's marriage, Émile's education, and the social contract has reinforced this impression, as has one of the interlocutors in each of Diderot's philosophical dialogues. Darrin McMahon singles the philosophers out, however, as proponents of creative genius who wrote against the grain of their contemporaries but had history on their side.[6] As an atheist materialist and a providential deist, the two may be considered strange bedfellows. They agreed, however, that familiarity with the spectacle of nature should not breed indifference; that the marvels of nature should never become a matter of course. Rather, the philosopher's genius lies in the ability to perpetually see nature's marvels afresh.[7] I propose to investigate the relationship between sensibility and enthusiasm in response to the spectacle of nature in their writings. I am particularly interested in the role of the imagination in artistic inspiration and spectator identification, which precedes resumption of the critical distance necessary to execute or evaluate a work of art.

Jan Goldstein has identified enthusiasm and imagination as "eighteenth-century smear words," or the era's "detested other," widely considered antithetical to "enlightened rationality."[8] Investigating whether these terms enjoyed equal opprobrium in Britain and France, he comes to the conclusion that the French reserved the scorn that the British heaped on enthusiasm for the imagination.[9] The definitions of the terms in the Diderot's *Encyclopédie*, as we shall see, include what Goldstein glosses as the positive (French) valence of "inspired artist," the negative (British) valence of "religious fanatic," and the equally questionable cross-Channel connotations of "contagious disease." Both the negative and the positive valences hearken back to the Greek etymological sense of the word *enthusiasm* as "possession by a God," associated with inspiration and fanaticism.[10] Lord Shaftesbury preserves these connotations in *A Letter Concerning Enthusiasm*, yet casts them in a more favorable light. "No poet," he contends, "can do anything great in his own way, without the imagination or supposition of a divine presence, which may raise him to some degree of [enthusiasm]."[11] Whereas ancient poets believed in the inspiration of the muses, modern poets are obliged to conjure up such sources of inspiration

by dint of their imagination in order to sustain the enthusiasm necessary for the creative act.

> For inspiration is a real feeling of the divine presence, and enthusiasm a false one. But the passion they raise is much alike. For when the mind is taken up in vision, and fixes its view either on any real object, or mere specter of divinity; when it sees, or thinks it sees any thing prodigious, and more than human, its horror, delight, confusion, fear, admiration or whatever passion belongs to it or is uppermost on this occasion, will have something vast, "immane" and (as painters say) beyond life.[12]

Enthusiasm thus described is reminiscent of wonder (*admiration*), the cognitive passion we discussed in Chapter 1, for it is felt in the presence of something prodigious, glossed here as vast, monstrous, or superhuman. It is characteristic of artistic vision, whether occasioned from without or within. Shaftesbury stipulates that atheists are equally susceptible to enthusiasm, which simulates the effects of yet need not be predicated on belief. Taking Lucretius as an example, he remarks that the poet is obliged to divinize nature before he can materialize it: "Even the cold Lucretius makes use of inspiration, when he writes against it and is forced to raise an apparition of nature, in divine form, to animate and conduct him in his very work of degrading nature and despoiling her of all her seeming wisdom and divinity."[13] Ultimately, Shaftesbury intimates, the source of inspiration is moot, for "whether the matter of apparition be true or false, the symptoms are the same and the passion of equal force in the person who is vision-struck."[14] When considering how to convey this passion to the reader, Shaftesbury cites Horace: "To be able to move others, we must first be moved ourselves," but emphasizes the importance of plausibility: "Or at least seem to be so, upon some probable grounds."[15] His phrasing suggests a similar ambivalence concerning whether the poet's source of inspiration be true or false and whether the poet's passion be real or feigned. Once again, the effect is the same, facilitating the identification of the reader. Shaftesbury thus forges a link between enthusiasm and imagination, the creator and the spectator, that I wish to pursue.

In the years in which Étienne Bonnot de Condillac penned his treatises on systems and sensation, Diderot his letters on the blind and deaf, and Rousseau his first and second discourses, the three philosophers frequently conferred.[16] Condillac attributed the difference in the status of spectacle in ancient Greece and contemporary France to the devolution of prosody in his *Essai sur l'origine des connaissances humaines.* Building on John Locke's distinction between natural and arbitrary signs, he identified gesture and tone as examples of the former. While the prosody of the Greeks was rich in both, appealing strongly to the imagination, that of the French was devoid of either, engaging little more than the memory. Greek declamation, enhanced by pantomime and song, was therefore well suited to vast theaters and audiences, drawing on the resources of painting, sculpture, and architecture. The divergence of these natural signs over time and their reification into conventional systems led to the contemporary circumstances in eighteenth-century France, where the arts had lost their power of expression, theaters no longer accommodated large audiences, and "the imagination [had] a hard time submitting to the illusion of [their] musical tragedies."[17] This was the regrettable state of affairs that Diderot and Rousseau set out to rectify.

Crucially, Condillac not only valorized the role of imagination but also sought to define enthusiasm. Considering imagination and analysis to be equally essential for innovation in the arts and sciences, he distinguishes between instinct, madness, and reason, defining the first as involuntary imagination, the second as unbridled imagination, and the third as a measured use of the imagination, in harmony with the other "operations of the soul."[18] Imagination, in this sense, is opposed to neither reason nor truth, even in the domain of fiction, a conviction Condillac conveys through a rhymed couplet from Nicolas Boileau: "Nothing is beautiful but the true; only the true is pleasing. It ought to reign throughout, even in fiction."[19] Condillac turns his attention to enthusiasm as one of the operations of the soul that is regulated by reason, yet defines it with respect to the imagination. Responding to our situation, surroundings, or circumstances, our imagination associates not only ideas but also emotions with what we perceive. If wonder precedes the other passions, transpiring before we know how to respond either cognitively or emotionally to what we perceive, enthusiasm

consists of the ensuing barrage of passions, which assail us simultaneously until we distinguish the strongest among them. This state of enhanced sensory awareness and emotional susceptibility that accompanies the perception of *rapports* bears a close resemblance to the representation of enthusiasm and imagination in the writings of Diderot and Rousseau. In this chapter, I differentiate between wonder and enthusiasm, which follow closely on one another but are nevertheless distinct. I explore the affinities between the inspiration of the artist, frequently associated with enthusiasm, and the identification of the spectator, often referred to as pity—two separate but related forms of sensibility that involve a movement out of oneself (*hors de soi*). As we shall see in the works of Diderot and Rousseau, inspiration and identification, while reliant on the imagination, are consistently tempered with judgment and held to standards of verisimilitude, the purpose of which nevertheless remains to perfect illusion.

THE POET AND THE PAINTER

Of all of the figures in my study, Diderot has proven to be of greatest interest for scholars investigating the carryover between natural and moral philosophy, the sciences and the arts. Indeed, he seems to have had a finger in every pie. George Louis Leclerc, Comte de Buffon references Diderot's *Lettre sur les aveugles* (*Letter on the Blind*) in the opening volumes of his *Histoire naturelle*, and Jean-Philippe Rameau is thought to have consulted him when drafting the "Mémoire" he read before the Académie des Sciences in 1749, suggesting that Diderot influenced their thought. In turn, Diderot referenced Buffon's *Histoire naturelle* repeatedly in his equally vast *Encyclopédie* and immortalized Rameau, the uncle (if somewhat derisively), in *Le Neveu de Rameau* (*Rameau's Nephew*). An avid reader of British philosophy and literature, who kept abreast of the writings of Shaftesbury, Hutcheson, Hume, Richardson, Burke, and Sterne as they appeared, Diderot was equally well versed in contemporary writings on physiology, which informed his aesthetics, as Pierre Saint-Amand, Wilda Anderson, Anne C. Vila, and Andrew H. Clark have demonstrated. His impact on the figures in my ensuing chapters, if somewhat oblique, will nevertheless be readily apparent. Known primarily as the editor of the *Encyclopédie* with Jean le Rond d'Alembert dur-

ing his lifetime, his collected works, despite their unusual publication history, significantly contributed to the reform of painting, theater, and the novel.

Diderot's *Lettre sur les aveugles* appeared in 1749, the very year that Buffon published the first volumes of his *Histoire naturelle* and Rameau staged the first version of *Zoroastre*. Culminating in a consideration of Molyneux's problem, with which Buffon and Rameau had likewise engaged, the text is dedicated to the questions of how a congenitally blind man understands the world around him and what he would be able to recognize if his sight were suddenly restored. Molyneux's problem became pertinent not only to philosophy but also to medical science when William R. Chesselden published the results of a blind boy's cataract operation earlier in the century. The case was taken up by George Berkeley, Voltaire, and Condillac in turn before attracting Diderot's attention.[20] Diderot considers the question in the context of a letter based on a fictionalized conversation with an actual blind man, Nicholas Saunderson, who was something of a philosopher in his own right. Saunderson's deathbed conversation with the vicar, Gervaise Holmes, in which he articulates what is commonly understood to be an atheist, materialist understanding of the universe, is thought to have led to Diderot's arrest and imprisonment after the letter's publication because the authorities, like other readers since, understood Saunderson to be Diderot's *porte-parole*.[21] A closer look at the content and context of this exchange leads us to question the certainty of this conclusion, however.

In their discussion, Saunderson and Holmes broach the subject of God's existence, considering whether a blind man can believe in God without having witnessed the spectacle of nature: "The minister began by raising the objection of nature's marvels: 'But sir!' the blind philosopher said to him, 'leave aside this beautiful spectacle that was never made for me! I was condemned to spend my life in the shadows, and you refer to wonders I cannot fathom . . . If you want me to believe in God, you must have me touch him.'" Remarking that Newton and other natural philosophers "were struck by the marvels of nature and recognized an intelligent being as their author," the vicar emphasizes the potential compatibility of religion and science. Saunderson replies that, all respect for his precursors notwithstanding, "Newton believed in the word of God, whereas he was reduced to trusting

the word of Newton."[22] Though Saunderson proposes an understanding of the universe predicated exclusively on matter and movement, anticipating Diderot's *Rêve de d'Alembert* (*D'Alembert's Dream*), he ends up hedging his bets after the fashion of Blaise Pascal, exclaiming "Oh God . . . of Newton, have pity on me!" before dying.

If Diderot is thought to have shared Saunderson's convictions, with which did he concur, his skepticism or his last words? The reflections of the letter's author only serve to reinforce the question.

> How shameful for those . . . who can see, and to whom the surprising spectacle of nature announces . . . the existence and the glory of its author! . . . They have the eyes of which Saunderson was deprived, but Saunderson had a purity of morals and an ingenuity of character that they lacked. While they lived as though blind, Saunderson died as though he could see. The voice of nature makes itself heard via the organs that remain to him, and its testimony against those who stubbornly shut their eyes and their ears will be all the stronger. I wonder whether the true God was not more fully veiled for Socrates by the shadows of paganism than for Saunderson, deprived of his sight and of the spectacle of nature.[23]

Those who witness the spectacle of nature yet do not believe live as though they are blind, whereas Saunderson, who made an eleventh-hour leap of faith, died as though he could see. If unable to see nature's spectacle, Saunderson is all the more capable of hearing nature's voice. The letter's author would thus seem to valorize, or second, the blind man's last words. The structure of Diderot's letter, like that of his philosophical dialogues, gives rise to more than one possible reading, making it nearly impossible to assign a single position or a definite conclusion to the author of the text. Regardless of whether Diderot himself was moving from deist or fatalist inclinations to more materialist persuasions, his texts kept multiple possibilities in play. For my present purposes, therefore, I wish to pursue the question of whether the spectacle of nature—and spectacle in general—bred skepticism or conviction in Diderot's philosophy and aesthetics.

Diderot heralded the recent “revolution in the sciences” in his 1754 *Pensées sur l’interprétation de la nature* (*Thoughts on the Interpretation of Nature*), dedicated to aspiring natural philosophers. Rational philosophy had had its day and experimental philosophy was the wave of the future, he proclaimed. Geometers should therefore quietly cede the laurels to chemists, physicians, and naturalists. Among the means available to experimental philosophy, Diderot stipulates, are observation, reflection, and experimentation, which he characterizes as interdependent: “Observation gathers the facts, reflection combines them, experiment verifies the result of the combination. Observation of nature must be assiduous, reflection profound, and experiment exact. We rarely see these means united.”[24] Once well versed in these three components of the empirical method, however, Diderot emphasizes the significance of a fourth, namely divination.

> Socrates had so much experience considering men and weighing circumstances that on the most delicate occasions, a prompt and accurate calculation secretly transpired within him, followed by a prediction born out by events. He judged men as people of taste judge their creations, with feeling. The same can be said for experimental physics, according to the instincts of our great practitioners. They have seen nature’s operations so often and so closely, that they divine fairly precisely the course she is likely to take if tempted to provoke her through bizarre experiments. Thus the greatest service they can render those they initiate into experimental philosophy, is less to teach them procedures and results than to convey this spirit of divination with which one anticipates [*subodore*], so to speak, unknown procedures, new experiments, undiscovered results.[25]

Close observation of nature, society, and experimental results enables philosophers to make informed guesses or conjectures that lead to fresh insights or discoveries. This is what Diderot meant, Saint-Amand suggests, by the *interpretation* of nature.[26] Such moments of insight or ability to predict the future based on the past are the very ones that David Hume attributes first to custom or habit and ultimately to belief: the stage of the empirical

method that cannot be attributed to reason alone. "This 'esprit de divination,'" Anderson remarks, "allows the natural philosopher to posit what is unseeable immediately or in totality."[27] Diderot underscores the importance of our ability to divine what we cannot see by characterizing experimental philosophy as blind: "We have distinguished two sorts of philosophy, experimental and rational. The one is blindfolded, always walks while groping [*tâtonnant*], seizes everything that falls within her grasp, and ultimately encounters precious things."[28] Though the blind cannot see, a malfunction of their external eye, they are nevertheless endowed with imagination, which Diderot refers to as the internal eye. Those not endowed with imagination, he asserts in *Éléments de physiologie*, are spiritually rather than physically blind.[29] The "genius of experimental physics" resides in the capacity to "see beyond" such sensory limitations. "That is the kind of divination that should be taught to students, that is, if it can be taught," he declares, positing an association between the natural philosopher, the blind seer, and the genius.[30]

In Chapter 1, I noted the centrality of *rapports*—whether they arise from chemistry (elective affinities) or mathematics (ratios, proportions)—to Buffon's and Rameau's understanding of natural harmony. Jacques Chouillet traces the first use of *rapports* in Diderot's writings to a section of his 1748 *Mémoires sur différents sujets de mathématiques (Memoirs on Different Subjects of Mathematics*) entitled "Principes généraux d'acoustique" ("General Principles of Acoustics").[31] In this memoir, Diderot sought to demonstrate that "musical pleasure consists in the perception of relations between sounds."[32] He studied music not only as a succession of sounds, whose relation he calls harmony, but also in terms of the pleasure it affords the listener. Like Buffon, he was interested in both the relations among objects and the objects' relation to an observer. As Béatrice Didier states: "It is not enough for relations to exist in music; the ear must also detect them."[33] In subsequent writings, Diderot gradually broadened the scope of the "perception of relations" from pleasure to reason and taste, ultimately extrapolating from harmony to beauty, which he famously defined in these terms, reminding us that while relations themselves may exist in nature and art, their perception resides in the eye (or mind's eye) of the beholder: "I

therefore call beautiful outside myself everything that has the capacity to awaken in my understanding the idea of relations and beautiful with respect to myself everything that awakens this idea."[34]

The perception of relations was thus equally essential to Diderot's natural philosophy and his aesthetics. In *Pensées sur l'interprétation de la nature*, he recommends that natural philosophers enhance their knowledge by proliferating their observations and by multiplying and combining their experiments.[35] Only then will they accumulate enough data to render the relations between isolated phenomena apparent: "As long as experiments are disparate, isolated, without connection, irreducible, . . . more must be conducted. At that point, one must focus exclusively on one's subject and *torment* it, so to speak, until phenomena are so closely linked that, given one, the others follow."[36] Discovery lies, in other words, not in identifying or even in understanding isolated phenomena but in perceiving or inferring the relations among them. Diderot's *Essais sur la peinture* (*Essays on Painting*) of 1765 suggest that he expects art students to undergo much the same training as aspiring natural philosophers. The perception of relations is necessary for the study not only of form but also of color, perspective, and chiaroscuro. Unlike Rousseau, who attributes more importance to line than color, Diderot finds that color gives life to a painting and that the gifted colorist is rare. Envisioning the artist's palette as a colorful chaos, he remarks: "He dips his brush in this chaos and draws forth creation." No color remains pure, however, for when transferred from the palette to the canvas it undergoes a radical transformation through combination, juxtaposition, and intensification. The artist thus "gropes [*tâtonne*], works, reworks, and *torments* his color," much as a natural philosopher does his subject, multiplying his experiments until the colors become harmonious or discordant on the canvas. Declaring that the rainbow is to painting as the fundamental bass is to music, Diderot expects the painter, like the composer, to become a "great harmonist," having grasped the relations among colors or sounds.[37]

Clark attributes Diderot's interest in relations between parts to his 1745 translation of Shaftesbury's *Inquiry Concerning Virtue or Merit*, which constituted Diderot's coming to writing.[38] The conviction that the universe

is ordered and good is the position of the theist in Shaftesbury's essay, yet by predicating both virtue (ethics) and beauty (aesthetics) on the ability to appreciate harmonious relations among parts, Shaftesbury renders them accessible and appealing to believers and nonbelievers alike.[39] In his *Inquiry*, Shaftesbury compares the various species in the order of nature or passions in the animal economy to the strings of an instrument that either resonate harmoniously (evidence of health and virtue) or play out of tune (evidence of sickness and vice).[40] Shaftesbury thus endowed notions of harmony and beauty with a moral sense that Diderot retained. While Shaftesbury cautions against the deleterious effects of extreme passions in his *Inquiry*, advocating moderation, or harmonious balance, for the well-being of the individual and society, Diderot opens his *Pensées philosophiques* (*Philosophical Thoughts*) of the following year with what reads as a rejection of this praise of moderation.

> The passions are incessantly denounced; they are blamed for all that ails mankind, and we forget they are also the source of his pleasures. . . . But what angers me is that we always look at them unfavorably, as though reason would be insulted were we to say a word in favor of its rivals. Yet only the passions and the great passions can elevate the soul to great things. Without them, no sublime, either in works or in morals. The fine arts would revert to infancy, and virtue would become petty.[41]

If virtue is predicated on the harmony rather than on the nature of the passions sustained, it should be just as possible to achieve such a balance among strong passions as it is among mild ones, Diderot suggests, critiquing any misguided notion of virtue that attenuates and therefore falls short of the vigor required for capturing sublime moments or conveying powerful subjects. This is not to say that art should not serve a moral purpose, Diderot is categorical on that front ("Painting and poetry have something in common . . . they must both be moral"), but morality need not be staid.[42] The passions depicted or induced must be forceful; the moral imparted vivid. As Starobinksi notes in "L'espace des peintres," "the ethical element to

which Diderot is devoted is not the moral lesson, but rather intensity of emotion," constituting an ethics of aesthetics.[43] Despite or perhaps because of his inclination to reconcile strong passion with virtue, Diderot shared Shaftesbury's interest in enthusiasm.

Enthusiasm belonged to a constellation of terms cross-referenced in the *Encyclopédie*, where we encounter a concerted effort to distance them from their negative connotations. Notably, the author of the oft cited entry on enthusiasm was Louis de Cahusac, whose entries on operatic illusion we examined in the last chapter. Like Shaftesbury, Cahusac acknowledges that enthusiasm is commonly understood to be a kind of fury occasioned by divine inspiration or madness, but he salvages the term by redefining it as "reason's masterpiece."[44] The terms in which he accomplishes this shift are telling. "It was believed," Cahusac explains, "that a man had to be entirely beside himself [*hors de lui-même*], in order to be able to produce creations that took out of themselves [*hors d'eux-mêmes*] those who saw or heard them." The expression "être/mettre hors de," which recurs in descriptions of enthusiasm and pity, here applies first to the artist and then to the spectator. Yet Cahusac attributes enthusiasm's "extraordinary effects" to a different cause—namely, a prompt yet sublime operation of reason in the mind of a man of genius.

> Supposing that, unexpectedly, you see a fine painting in [mint] condition. A sudden surprise brings you to a standstill, you experience a general emotion, your eyes remain as if absorbed in a sort of immobility, your entire mind considers a crowd of objects which occupy it at the same time, but, soon returning to its own activity, your mind runs over the different parts of the whole which has astounded it, its heat is communicated to your senses, your eyes obey it and inform it: a keen fire animates them; you notice, detail and compare the attitudes, contrasts, lighting, the characters' features, their passions, the choice of activity represented, the skill, force and boldness of the brushstrokes. . . .[45]

Here again, enthusiasm recalls the workings of wonder, the first of all the passions that Descartes described as a "sudden surprise of the soul." Yet this

initial response soon gives way to a state of enhanced sensory awareness and emotional susceptibility. Enthusiasm is not, in fact, the "sudden surprise" but rather the "keen fire" (*feu vif*) that ensues, animating the senses and enabling the genius to "notice, detail and compare," perceiving relations like a good naturalist while registering the emotions they occasion. It is communicative, moreover, leading the genius to want to impart his vision. Drawing an analogy between what transpires in the artist and in the spectator, Cahusac stipulates: "There are two kinds of enthusiasm; one that produces, another that admires."[46] Enthusiasm is conveyed by bringing art to life.

The related entries in the *Encyclopédie*, including imagination, verve, and genius, constitute a series of similar recuperative moves. Recalling that the Greeks referred to the muses as "memory's daughters," Voltaire grounds the imagination in memory.[47] John D. Lyons traces the early-modern association of imagination and memory to Aristotle. Imagination was the faculty that "receives, arranges, retrieves, classifies, and combines the sense data," transforming memories of lived experience in the form of mental images or impressions into something we have not encountered before. Lyons characterizes this broader understanding of *phantasia* as "a deliberate mental activity through which we experience the sensory details of the past, the present, and the possible."[48] Distinguishing between active and passive imagination, Voltaire attributes the former to creators or inventors in the arts and sciences, including poetry and mathematics, which rely on imagination and judgment.[49] He singles out poetry as the fine art that requires the most active imagination and induces enthusiasm, which he defines as "the internal emotion that . . . transforms the author into the character he is envoicing."[50] Once again, enthusiasm is conveyed through a process of identification, though this time not between the artist and the spectator but rather between the artist and his creation.

Louis de Jaucourt's contributions to this constellation of terms are of particular interest, for not only does he take his lesser-known entry on enthusiasm directly from Roger De Piles's 1708 *Cours de peinture par principes* (*Principles of Painting*); he takes his entry on verve almost verbatim from Charles Batteux's definition of enthusiasm in his 1746 *Les Beaux-arts réduits à un même principe* (*The Fine Arts Reduced to a Single Principle*).[51]

Like his sources, Jaucourt associates the terms with artistic inspiration yet emphasizes their reliance on and compatibility with reason, judgment, and verisimilitude. An artist's powers of observation, enhanced by a vivid imagination, enable him to identify with his creation.

> This is the source of verve or enthusiasm. Its effects are easy to comprehend, if we remember that an observant artist borrows all the characteristics from which his imitations are composed from nature; he draws them from the crowd, assembles them, and absorbs them. Soon, his fire ignites at the sight of an object, he forgets himself, his soul passes into his creations, he becomes Cinna, August, Phedre, Hippolytus in turn, and in the case of La Fontaine, he becomes the wolf and the lamb, the oak and the reed.[52]

This phenomenon is closely related to what Joseph Roach finds most interesting in Diderot's notion of the *modèle idéal*, which he describes as internal rather than external: "The creation and collection of diverse images to form a picture in the mind of the artist." This process, which Roach characterizes as "a combination of observation and introspection," is reminiscent both of the empirical method and of the means by which the imagination recombines and transforms the raw materials of observation and memory during the creative process. The ideal model rectifies the problem, inherent to mimesis, of the Abbé Dubos's pale copy, according to which the emotion produced by the representation never equals that produced by the object itself. Instead, just as the ideal model enhances nature, it also enhances spectator response. Diderot thus draws a crucial distinction, Roach contends, between the imitation and the illusion of reality, an illusion the artist seeks to reproduce in the mind of the beholder: "He views the task of the artist as perfecting a double illusion—first in his own experience, then in the beholder's."[53] This understanding of the artist's task is closely related to the definitions of enthusiasm, imagination, and verve we have already encountered. It also proves to be a defining feature of genius.

In his short unpublished commentary "Sur le génie" ("On Genius"), Diderot distances genius from its associations with the extremes of imagination or judgment, attributing it instead to *l'esprit observateur*.

> The observing mind I refer to is exercised without effort or conflict. It does not look, it sees, it educates itself . . . without study. No phenomenon is present, yet all have affected it, and what remains is a sort of sense that others do not possess. It is a rare machine that says something will succeed . . . and it succeeds; something will not succeed . . . and it does not succeed; something is true or false . . . and it is as he said. . . . This sort of prophetic mind is not the same in all walks of life; each station has its own.[54]

Diderot's equation of *l'esprit observateur* with *l'esprit prophétique*—the ability to induce a cause based on close observation or to predict the future based on past experience—recalls once again the fourth stage of divination that he considered integral to the empirical method. Like Cahusac, who reconciled enthusiasm with reason, and Voltaire, who grounded imagination in memory, Diderot associated genius with observation and insight.

Throughout these definitions, we note the emphasis on the identification of artist and spectator with the creation, or work of art. The association of artist and spectator crystallized in the eighteenth century around the Pygmalion myth, as Suzanne Pucci and Mary Sheriff have shown.[55] *Pygmalion* essentially tells the story of the creation of the ideal model. Unable to locate the ideal woman in nature after extensive observation of mankind, the sculptor envisions a composite of the most beautiful components of the women he has observed and models her in marble. Galatea is thus a representation not of nature itself but of idealized nature (*la belle nature*) comprised of discrete parts the sculptor has observed, remembers, and recombines. The sculptor's vision, which serves as inspiration for his masterpiece, is reminiscent of Cahusac's definition of enthusiasm and of the activity of the imagination, which recombines memories of past perceptions. As we saw in Chapter 1, this myth allows a privileged glimpse of the statue's sensory and the sculptor's affective awakening. It also places the sculptor in the position of the creator/spectator. As David Morgan observes, the myth exemplifies the potential slippage from make-believe to belief as the sculptor's artistic vision and amorous fantasy are realized.[56] In his *Salon de 1763*, Diderot singles out Étienne-Maurice Falconet's *Pygmalion aux pieds*

de sa statue qui s'anime (*Pygmalion at the Feet of His Statue, Which Comes to Life*) as the work he would have liked to own. Falconet's rendition of the myth is what Pucci calls a metasculpture, much as Boucher's is a metapainting. The challenge for the artist in both instances is how to convey the statue's animation via a static medium. Diderot faced a similar challenge in his *Salons*, where he became preoccupied not only with how to convey life through art—including movement and passion—but also how to bring art to life, particularly for readers unlikely to see the artworks he critiqued for themselves.[57] It is to Diderot's art criticism that I now turn.

Though Diderot employed some of the terminology we have examined in his earlier writings, nothing prepares us for his unprecedented deployment of the language of enthusiasm in his *Salon de 1767*. We have seen that blindness provided a useful point of contrast and painting a frequent metaphor for artistic vision. Surprisingly, however, while systematically linking the terms *inspiration*, *enthusiasm*, *imagination*, and *verve*, Diderot increasingly associates them not with philosophy or painting but rather with poetry. His *Salon de 1767* featured two works that Diderot, among others, felt compelled to compare, Joseph-Marie Vien's *St. Denis prêchant la foi en France* (*St. Denis Preaching in France*) and Gabriel-François Doyen's *Le Miracle des Ardents* (*The Miracle of the Ardents*), both now housed in the Église Saint-Roch in Paris.[58] In his discussion of these works, Diderot reiterates an observation he made in *Essais sur la peinture* when contrasting order and expression: "Every beautiful composition, every true talent . . . supposes a certain temperament of reason and enthusiasm, of judgment and verve . . . without which compositions are either extravagant or cold."[59] Though Diderot praises both Vien and Doyen, each artist errs on the side of one of these extremes, with Vien tending toward coldness and Doyen toward extravagance. Diderot unhesitatingly credits Vien with a better *faire*, or technique, pronouncing him the better painter. He qualifies this statement, however: "Note that despite the greatest artistic intelligence, he is without an ideal, without verve, without poetry, without movement."[60] Verve, movement, and poetry thus share a certain rhythm, accent, or dynamism inherent to Diderot's understanding of nature.[61] Diderot systematically reinforces the opposition we perceive here between the painter and the poet in the course of his discussion: "Vien

draws well, paints well, but he neither thinks nor feels. Doyen would be his pupil in art, but he would be Doyen's pupil in poetry."[62] When summing up his opinion of each artist, he pronounces Vien "the first painter of the French school, insofar as technique is concerned," but adds that "poetry is something else entirely."[63] Though the contrast Diderot draws might lead us to associate Doyen with the natural genius and Vien with the imitative genius that Joseph Addison defined in *The Spectator* earlier in the century, neither, in Diderot's estimation, strikes the right balance. Instead, each has something to learn from the other: "Give Vien Doyen's verve, which he lacks, give Doyen Vien's technique, which he doesn't have, and you will have two great artists."[64] Yet Diderot does not maintain strict neutrality until the end, for he ultimately considers that an artist can acquire the technical skill evident in a finished work, whereas the poetry apparent in a sketch is the sign of genius.[65] In the showdown between Vien and Doyen, the latter emerges victorious, for he has the potential for genius that Diderot associates with the constellation of terms we have been exploring. These terms become still more prolific as the vying between painting and poetry comes to a head in another famed passage from the *Salon de 1767* that I will now investigate, the "Promenade Vernet."

In Diderot's estimation, the student of nature and art par excellence was Claude-Joseph Vernet, who was blessed with "a fertile imagination assisted by a profound study of nature."[66] The recipient of the royal commission to paint the seaports of France, Vernet was reputed to have lashed himself to the mast of a ship in order to study a storm.[67] In "Regrets sur ma vieille robe de chambre" ("Regrets for my Old Dressing Gown"), Diderot employs the terms *harmonious* and *beautiful* to describe the *rapports* in the painting by Vernet that crowns his private collection. Diderot revisits the distinction between genre and history painting in his *Essais sur la peinture*, claiming the prestige of the latter for Vernet's landscapes because he portrays living nature.[68] Michel Delon has traced Diderot's increasing preoccupation with Vernet's harbor scenes in his *Salons*, culminating in the "Promenade Vernet."[69] In this famed passage, Diderot purports to be not an art critic in the Salon du Louvre, writing for Grimm's *Correspondence littéraire*, but rather a philosopher observing nature with what David Marshall has called

a "picturesque eye."[70] In *The Frame of Art*, Marshall asks "what it means to see a scene from nature as if it were a work of art," defining the picturesque as "a point of view that frames the world and turns nature into a series of living tableaux."[71] While this is precisely what Diderot claims to do in the fiction of the text—"substitute art for nature in order to judge it well"—he in fact does the reverse, substituting nature for art.[72] En route, we encounter a deft vying for precedence among the philosopher, the painter, and the poet that I wish to explore.

The highest form of praise Diderot accords an artist is to mistake art for reality, tasting the fruit, addressing the characters, or wandering into the scenes depicted, as evidenced in his discussions of Jean-Baptiste-Siméon Chardin, Jean-Baptiste Greuze, and Hubert Robert. The structure of the "Promenade Vernet" is unique, however, in that it superimposes, or even conflates, harmony in nature and beauty in art, both of which are predicated on the perception of *rapports*.[73] Whereas Diderot the philosopher responds to the one within the fiction of the promenade, Diderot the critic calls attention to the other within the context of his *Salons*. At each successive site, Diderot's critical faculties are momentarily suspended as he falls subject to what is very recognizably, given our discussion in Chapter 1, a state of wonder (*admiration*), of which I cite a single example, namely the second site, rich in vocabulary from the lexicon we have been exploring: "I was immobile, my eyes wandered without fixing on any object, my arms fell to my sides, my mouth was open. My guide respected my wonder and my silence; he was as proud and happy as if he had been the owner or even the creator of these marvels. I cannot tell you how long my enchantment lasted."[74] Edmund Burke, whose *Philosophical Enquiry* Diderot read shortly before undertaking the *Salon de 1767*, identifies this state of wonder, or enchantment, as the characteristic response to the sublime in nature.[75]

Diderot's ability to pursue his conversation with the Abbé is frequently disrupted when wonder-struck. Yet this state is closely followed by the heightened sensory awareness and emotional susceptibility—which risks leading to sensory overload—that Diderot identifies with enthusiasm and Dorval associates with poetic genius, as evident at the sixth site.

> If you don't make an effort to envision this site, you will think me mad when I tell you I emitted a cry of wonder and remained motionless and stupefied. . . . Oh nature, how imposing, majestic, and beautiful you are! That is what I said in the depths of my soul. But how can I convey to you the variety of delicious sensations that accompanied these words, repeated a hundred different ways. No doubt they could be read in my expression. They were evident in the accents of my voice, alternately feeble, forceful, interrupted, continuous. At times my eyes and my arms reached toward the sky, at times they fell by my side as though overcome with exhaustion. I believe I shed some tears. You, my friend, who know so well the intoxication of enthusiasm, tell me what hand gripped my heart. . . . Who knows how much time I spent in this state of enchantment.[76]

As Diderot gradually becomes attuned to the spectacle of nature before him, we witness the attendant loss of his sense of self, surroundings, and time. While his "cry of wonder" is accompanied by the characteristic suspension of movement, the ensuing "variety of sensations" he sustains, conveyed through as many corresponding facial expressions and vocal accents, is indicative of his state of enthusiasm, or enchantment. The close succession of wonder and enthusiasm is reminiscent of Cahusac's definition of the latter in the *Encyclopédie*, and Diderot equates each with enchantment.

In the course of their nature walk, Diderot ponders the differences between painting and poetry and the difficulties of translating one into the other, establishing a certain rivalry between the two.[77] The painter must aspire not to imitate but rather to enhance nature, Diderot asserts at the first site, in order to "redouble our enchantment." The Abbé protests, leading to the following exchange: "'What? Seriously, you think that Vernet has better things to do than to rigorously copy this scene?' 'Yes I do.' 'Tell me how he will go about embellishing it then.' 'I don't know, and if I did I would be a greater poet and painter than he.'"[78] Here Diderot intimates that Vernet should not be content to copy nature, relying exclusively on observation and imitation, yet suggests that if he (Diderot) knew how to improve on nature he would be the better artist. By the second site, how-

ever, Diderot's "heated imagination" has already added two young lovers to the scene who are not there.[79] He is tempted to try his hand at poetry, moreover, aware of what a poet could have made of the third site, no longer content to describe what he sees and regretting a lost opportunity: "I'm telling you things as they were. In a more poetic moment I would have unleashed the winds, stirred up the waves, shown the boat grazing the clouds one minute, cast into the depths of the abyss the next. I would have brought to your ears the cries of desperate women. You would have seen hands raised to the heavens; but there would not have been one word of truth."[80] Here, Diderot reveals the poet's ability to brew up a storm without recourse to extant models in nature or art.

By the fourth site, Diderot purports to have acquired precisely the knowledge he lacked—how to improve upon nature—and undertakes to impart this *savoir faire* to the artist. Noting a group of figures worth capturing on canvas, Diderot exclaims: "Vernet, my friend, take your pencils, and hurry to enrich your portfolio with this group of women. . . . The more faithful your copy, the more beautiful your painting." Yet no sooner does he encourage the artist to produce an exact copy of nature than he corrects himself: "I am mistaken. You should render these women with a lighter touch. You should apply them less heavily. You should attenuate the dry yellowish tone of this terrace. . . . But how will you convey not the form of these diverse objects nor their color but the magical harmony that joins them together?"[81] Here, Diderot perceives either how the artist can improve upon nature or how he (Diderot) can improve upon the painting. In either case, Diderot, by his own logic, is implicitly the better artist, though he consecrates his skill to suggesting how the painter can improve his art. The most difficult aspect of the landscape to capture—the aspect that seems to escape them—however, is the magical harmony that links the disparate objects of which it is composed.

Throughout the remainder of the nature walk, Diderot increasingly associates enthusiasm, imagination, verve, and movement with the poet rather than the philosopher. Echoing Locke and Burke, he remarks that the poet tends to remark similitudes, the philosopher differences, but considers this to be an unfortunate state of affairs. Declaring "The philosopher reasons,

the enthusiast feels," he retraces the march of civilization: "Everywhere decadence of verve and poetry, as the philosophical mind progresses." This devolution has brought about the loss of figurative language and animated descriptions as well as the capacity for belief. Remarking, "Poetry always contains a bit of a lie. The philosophical mind teaches us to discern it, and goodbye illusion and effect," he valorizes poetic illusion over philosophical truth for its power to move the reader. Exclaiming, "the extent to which incredulity saps poetry's resources is extraordinary," he opposes the poet, the enthusiast, and the genius, who employ their imagination, to the philosopher and the critic, who employ their judgment. Language is comprised of words that no longer convey the original idea or image of the things they represent as they did at the dawn of society and do in the minds of children, having lost the variety of accent that conveys emotion and nuances meaning. Reduced to sensation and signifiers, we exchange words as we do legal tender. Philosophers must therefore attempt to restore or regain what has been lost. Only then will they realize "that in science, as in nature, everything holds, and a sterile idea, like an isolated phenomenon, are two impossibilities." The perception of *rapports* in science, as in nature and art, will enable philosophers to perceive what poets and painters strive to portray: the magical harmony of a landscape.[82]

On reaching the seventh site, featuring Vernet's *Clair de lune* (Figure 7), Diderot precipitously breaks the fourth wall, admitting that he is not in fact a philosopher describing nature but a critic describing paintings.[83] Conceding that this is the very painting he would like to own, Diderot finally praises the painter for having not copied but surpassed nature, a possibility at which he has but hinted until now, saying: "He who was a cold and tranquil spectator on the shores of the sea marvels at the canvas . . . [Vernet's] compositions preach grandeur, power, and majesty more forcefully than nature herself." It is at this point that Diderot likens the painter to the Creator, regretting his own incapacity to do justice to his subject: "What do my cold and insipid expressions mean, my lines devoid of warmth and life . . .? Nothing, nothing at all. You must see it for yourself."[84] If the painter is capable of surpassing nature, the critic's words fall short of conveying the image he describes, though the painter might never have fulfilled his po-

FIGURE 7. Claude-Joseph Vernet (1714–1789), *A Harbor in Moonlight*. 1787. Oil on canvas, 60.96 × 81.28 cm.

Saint Louis Art Museum. Gift of Christian B. Peper, 37:2006

tential without the critic's prompting. Many analyses of the "Promenade Vernet" conclude with the breaking of the fourth wall and the painter's triumph, yet Diderot's promenade does not end there.[85] For just as we are inclined to attribute his aesthetic convictions to Dorval or Rameau's nephew rather than to the philosopher, from here on in Diderot slowly but surely starts to identify with the poet.

The advantage Diderot attributes to the poet in his writings lies in the ability to use his imagination as well as his judgment. In *De la poésie dramatique* (*On Dramatic Poetry*), he remarks that whereas poetry has traditionally been compared to painting, the more apt comparison would be between poetry and history, both of which purport to recount extraordinary events: "The natural order of things sometimes associates extraordinary events. The same order distinguishes the marvelous from the miraculous. Rare occurrences are marvelous; naturally impossible occurrences are miraculous. The

dramatic arts reject the miraculous."[86] The marvelous, should thus presumably be retained. Yet whereas the historian merely recounts, the poet tends to embellish such accounts, enabling him to move the reader.

> The historian recorded what happened, purely and simply, . . . which does not move or interest as much as possible. . . . The poet would have written what struck him as most moving. He would have imagined events. He would have invented speeches. He would have developed the story. The important thing for him would have been to be marvelous, without ceasing to be plausible. . . . That is the function of the poet.[87]

The challenge for the poet is to strike the right balance between the marvelous and the plausible. He thus has the same potential to improve upon history as the artist has to improve upon nature.

The ensuing discussion is reminiscent of Diderot's description of divination, the crucial stage of the empirical method. He distinguishes the poet, this time, not from the historian but from the philosopher (aligning philosopher, historian, and critic in his analysis).

> To remember a necessary sequence of images as they succeed one another in nature is to reason according to the facts. To remember a sequence of images as they would necessarily succeed one another in nature given certain phenomena, is to reason according to hypothesis, or to feign. . . . And the poet who feigns and the philosopher who reasons are equally and in the same sense consistent or inconsistent, for to be consistent, or familiar with the necessary sequence of phenomena, is the same thing. That is enough, it seems to me, to demonstrate the analogy of truth and fiction, to characterise the poet and the philosopher, and to highlight the merit of the poet. . . . He has received from nature a superior degree of the quality that distinguishes the genius from the ordinary man . . . imagination.[88]

We have already examined the significance of the natural historian's ability to infer general ideas or probable cause from close observation of the facts.

Here, Diderot emphasizes that familiarity with the necessary sequence of phenomena is essential for philosophers and poets alike. In what he refers to as the analogy between truth and fiction, Diderot likens the philosopher's method to the poet's art. The philosopher who ceases to rely on memory alone and begins to use his imagination becomes, Diderot suggests, a poet.[89] This is precisely what Diderot proceeds to do in the conclusion of the "Promenade Vernet." In order to fully appreciate this outcome, however, we must first consider the aesthetics of the storm.

By the time he wrote the *Salon de 1767*, Diderot was well acquainted with Lucretius's *De rerum natura* along with the commentaries of Dubos and Burke that I discussed in the Introduction.[90] He revisits their aesthetic preoccupations in the "Promenade Vernet," considering the distinction between witnessing a tragedy in life or art, first in the realm of painting, then in the realm of theater. The consternation occasioned by a fire that would ordinarily lead the onlooker to try to save or seek to join the victims, for instance, produces joy when depicted on a canvas. This explains our predilection for scenes of virtue in distress. Perplexed, the Abbé asks: "But if I experience pleasure, why am I crying? And if I am crying, why is it pleasurable?"[91] In response, Diderot implicitly invokes Lucretius, insisting that in order to be moved we must be able to place ourselves in the victims' stead, for "it is difficult to be strongly moved by a peril that we may never experience." This contrast between identification and critical distance catalyzes the Abbé's moment of insight.

> "Ah, now I understand." . . . "What, Abbot?" . . . "I play two roles, I am double; I am Le Couvreur, and I remain myself. It is I Le Couvreur who trembles and suffers, and it is I myself who experience pleasure." . . . "Very good, Abbot, and that is the limit of the imitator of nature. If I forget myself too much or for too long, the terror is too strong. If I do not forget myself at all . . . it is too weak. It is this happy medium that makes me shed delicious tears."[92]

The ideal response to tragedy in art—the *juste milieu*, or happy medium between pity and pleasure—produces what Diderot characterizes as delicious tears. Such mixed emotions become characteristic of Lucretian scenarios

in eighteenth-century French aesthetics, as we shall see in Chapter 3, contributing to the theorization of the sublime. This response to tragedy in art is an example not of artistic inspiration but of spectator identification, yet the same sensory awareness, emotional susceptibility, movement *hors de soi*, and resulting double role are in play. Whether we characterize them as two levels of enthusiasm, two forms of identification, or two types of sensibility—that of the artist and that of the spectator—we note the invariable rapprochement of enthusiasm and pity, linking the former not to madness or folly but rather to the century's more humanitarian impulses. With this coincidence in mind, we can now turn our attention to the stirring conclusion of the "Promenade Vernet."

At the end of the promenade, Diderot leaves all pretense of a nature walk or a salon setting behind and goes home to bed. There, he experiences a sort of waking dream in which the poet ultimately outdoes the painter. Burke challenged Dubos's assertion that painting was more capable than poetry of moving the passions, insisting instead: "It is in my power to raise a stronger emotion by the description than I could do by the best painting."[93] This is precisely what Diderot sets out to do. Turning his attention from Vernet's harbor scenes to his shipwrecks (Figure 8), he invests his account with two qualities that Vernet hoped his works would convey: magic and movement.[94] By claiming his vision is a dream, Diderot renders the marvelous plausible. By adding action verbs (*approach*, *fill*, *depart*, *run*, *cry*, *throw*, *swim*, *massacre*), he infuses the static medium of painting with movement, revealing the advantages of successive over simultaneous signification. By specifying what he sees and hears and shifting to the present tense, he enhances the immediacy of his experience and ours. In Delon's words, "the tempest is spectacle."[95] Here, Diderot forsakes the role of philosopher, historian, or critic for that of poet, vying with the painter himself.

> I saw, or I thought I saw, . . . a vast seascape open up before me. I was devastated, on the shore, at the sight of a burning ship. I saw the lifeboat approach the ship, fill with men, and depart. I saw the unfortunate souls that the lifeboat could not hold become restless and run along the deck of the ship, crying out. I heard their cries. I saw

FIGURE 8. Claude-Joseph Vernet (1714–1789), *A Storm on a Mediterranean Coast*. 1767. Oil on canvas, 113 × 145.7 cm.

J. Paul Getty Museum, Los Angeles. Wikimedia Commons

> them throw themselves into the water, swim to the lifeboat, and cling to it. I saw the lifeboat ready to go under, and it would have if those who were in it . . . had not mercilessly massacred . . . their traveling companions. I can still see one of these unfortunate souls, I see him. He received a mortal blow in his side. He is stretched on the surface of the sea, his long hair dispersed, his blood flowing from a large wound. The abyss is about to swallow him. I see him no more.[96]

Movement and passage of time are signaled not only by the comings and goings of the lifeboat and the passengers on the deck but also by the gradual disappearance of the corpse beneath the waves (I saw them . . . I see him . . . I see him no more . . .). Like the fiction of tableaux in nature, Diderot's dream sequence, or nightmare, suggests that the painting acts on him with

the force of nature rather than art. The similarity of this scenario to that in Lucretius is striking. Yet Diderot's exclamation "I was devastated, on the shore, at the sight of a burning ship" differs markedly from Lucretius's relative calm and comfort. Moreover, the narrator describes his tears as "real," not "delicious."[97] Implicitly, then, Diderot sustains the emotions he would feel when confronted with tragedy in life, not in art: pity rather than pleasure, devastation rather than calm. The highest praise the critic can offer an artist is to deny the painting its status as fiction, forgetting the frame. Vernet thus remains the *peintre par excellence*. Here, however, the poet implicitly outdoes the painter, sustaining and catalyzing stronger emotions—pity tinged with horror rather than pleasure—crossing the threshold from representation to reality, from description to narration, from *tableau* to *tableau mouvant*, from beauty to the sublime. En route, he restores lost expression to language in the form of movement, image, and accent.

In *De la poésie dramatique*, Diderot asks: "What does the poet need? An untamed or cultivated, peaceful or troubled nature? . . . Will he prefer the spectacle of a tranquil sea to that of turbulent waves?"[98] Giving preference to untamed nature and troubled waters, he asserts that in a day and age when such occurrences are rare, the poet's role is to invent them. Diderot elaborates on this response in his thoughts on chiaroscuro toward the end of the "Promenade Vernet," which is informed by Burke's description of the sublime in nature and designed to induce enthusiasm: "Clarity is good at convincing us, but worthless at moving us. Clarity, however we interpret it, detracts from enthusiasm. Poets speak incessantly of eternity, infinity, immensity, time, space, divinity, tombs, dead souls, hell, dark skies, deep seas, dark forests, thunder, lightning that tears through the skies: be mysterious [*soyez ténébreux*]."[99] The enthusiasm characteristic of the great landscape artist is what Diderot qualifies in his *Pensées détachées sur la peinture* (*Detached Thoughts on Painting*), not as a delightful terror but rather as a sacred horror.[100] Like natural philosophy, poetry is predicated on the close observation of natural phenomena, whether salutary or destructive. Like poetry, natural philosophy requires an instance of imagination or insight. Sustained use of the imagination is all that distinguishes the philosopher from the poet. Yet Starobinski notes: "Diderot would like to become that

hybrid: an enthusiastic philosopher."[101] If we consider his to have been a recuperative move, like those of the contributors to the *Encyclopédie*, Diderot may have sought to endow the poet with the "faire" and the philosopher with the "verve" that each was thought to lack, counterbalancing their negative stereotypes as well as their natural proclivities.

In the "Promenade Vernet," Diderot simultaneously occupies the positions of natural philosopher (vis-à-vis nature) and critic (vis-à-vis art), gradually suggesting their equivalence to the positions of artist and spectator. Just as the artist's enthusiasm enables him to perceive (reason), retain (memory), and recombine (imagination) his perceptions before conveying the feelings aroused by nature or her victims to his audience, so the spectator's sensibility enables him to identify with these feelings, whether marveling at nature's magnificence or suffering her scourges. Far from being antithetical to Enlightenment, enthusiasm thus remains as crucial to the notion of artistic inspiration as *sensibilité* becomes to spectator identification. Though categorized as feelings, they might more accurately be described as states of heightened sensory awareness and emotional susceptibility. Both are predicated on an act of the imagination that transports the artist and the beholder *hors de soi*, beyond the limits of reason, the self, and the senses. Both must subside, moreover, before critical judgment is possible. Yet the goal of creation is not to allay but rather to convey the artist's enthusiasm to the spectator. Diderot's observation of harmony in nature as of beauty in art served as a springboard for his imagination, enabling him to see beyond and, once a critic, become a creator. He conceived of the poet and the painter as collaborators and competitors, each ultimately enhancing, while perpetually seeking to outdo, the other.[102] If enthusiasm is conveyed by bringing art to life, Diderot achieved this effect by infusing word with image, painting with poetry.

THE POET AND THE COMPOSER

Rousseau, like Diderot, was steeped in the reading of Buffon's *Histoire naturelle* and Rameau's music theory. An aspiring musician, he read Rameau's *Traité de l'harmonie* in his youth, initially emulating the composer he would later oppose. His close friendship with Diderot provided a fertile context

for the development of his convictions about the relationship between the sciences and the arts, nature and culture, music and language. Though Rousseau would eventually leave the fold of the Encyclopedists and the *philosophes*, he and Diderot nevertheless remained deeply indebted to one another. Rousseau was one of the century's most acerbic critics of spectacle in the form of French opera and theater, yet he referred to the "spectacle of nature" more often than any of the figures in my study, possibly given his familiarity with the Abbé Pluche's work.[103] His own sensitivity to this spectacle, as we have seen, may have served as a model for Diderot's Dorval. In the following pages, I trace Rousseau's response to the spectacle of nature from early childhood through old age, as related in his autobiographical writings and attributed to his presumed *porte-paroles*, Émile's tutor and Saint-Preux. In Rousseau himself, if not always in his characters, we find the figure of the inspired artist whose works are designed to convey emotion to his audience. As Rousseau was one of the foremost theoreticians of pity, I am particularly interested in the correlation between the enthusiasm of the artist and the identification of the spectator, both predicated on an act of the imagination. As we shall see, the relations between artist and spectator also informed the pedagogical and amorous relations in Rousseau's writings, as mediated by the voice.

Rousseau's encounter with the spectacle of nature began at an early age—too early for him to have devised a scientific method after the fashion of Buffon, Rameau, or Diderot. In Book IV of his *Confessions*, he expresses regret at not having kept a travelogue to record his early nature walks as he would later in life. He nevertheless recalls the salutary effect of his wanderings throughout his formative years, before he made a name for himself.

> The sight of the countryside, the succession of pleasant views, the open air, . . . all this disengages my soul, gives me a greater audacity in thinking, throws me in some manner into the immensity of beings in order to combine them, choose them, appropriate them at my whim without effort and without fear. . . . If I amuse myself by describing them. . ., what vigor of brushwork, what freshness of coloring, what energy of expression I give them! It is said that all this has

> been found in my works, although they have been written toward my declining years. Oh if those of my earliest youth had been seen, those I made up during my travels, those I composed and I never wrote![104]

The nature walks he would recount later in life pale in comparison, Rousseau suggests, to those of his youth. Though he evokes the *esprit d'observation* that would subsequently inform his critique of society, treatise on education, and botanizing, he sees not with his eyes but with his heart, develops not his thoughts but his sentiments, and paints rather than describes what he sees. This state, he explains, was not compatible with the act of writing. He could no more have burdened himself with notebooks in the course of his travels than he could have consigned his thoughts to paper.

And yet it was on just such a walk that Rousseau came to writing, on the road to Vincennes to visit Diderot, who was annotating the first volumes of Buffon's *Histoire naturelle* while in prison after the publication of his *Lettre sur les aveugles*. On reading the question posed by the Académie de Dijon for its annual essay contest in the *Mercure de France*, Rousseau famously entered a state of agitation bordering on delirium that he describes as lasting not just for the duration of the contest but for the next several years: "With the most inconceivable rapidity my feelings raised themselves to the tone of my ideas. All my little passions were stifled by enthusiasm for truth, for freedom, for virtue."[105] Alternately characterizing his sentiment as *effervescence*, or *ivresse*, Rousseau characterizes the "noble enthusiasm that had dictated my writings" as a "celestial fire" to which he attributes his sudden eloquence.[106] This anecdote recalls the descriptions of artistic inspiration that we find in Shaftesbury's *Letter Concerning Enthusiasm* and throughout the *Encyclopédie*.

As often as not, Rousseau's "exquisite sensibility" proved an impediment to communication, however. His passionate nature hindered his ability to participate in salon conversation, for instance, which required ready rather than staircase wit.

> Two almost incompatible things are joined in me without me being able to conceive how: a very ardent temperament, lively impetuous

> passions, and ideas that are slow to be born, confused, and never offer themselves until after the event. One would say that my heart and my mind do not belong to the same individual. Feeling comes to fill my soul quicker than lightning, but instead of enlightening me it sets me on fire and dazzles me. I feel everything and I see nothing. I am fiery but stupid: I need to be cool in order to think. What is surprising in this is that I nevertheless have reliable enough discrimination, penetration, even finesse as long as one waits for me.

Writing thus has a certain advantage over conversation, for it can be postponed. When describing his writing process, Rousseau stipulates that he has observed both nature and humanity extensively but is unable to record, synthesize, and draw inferences from his observations until after the fact. He therefore prefers to write when alone.

> I have studied men and I believe myself to be a rather good observer. Nevertheless I do not know how to see anything of what I am seeing; I see well only what I recall, and I have intelligence only in my memories. Out of everything that is said, everything that is done, everything that happens in my presence, I feel nothing, I penetrate nothing. The exterior sign is all that strikes me. But later everything comes back to me: I recall the place, the time, the tone, the look, the gesture, the circumstance, nothing escapes me. Thus based on what has been done or said I find what has been thought, and I am rarely mistaken.[107]

Rousseau's process closely resembles that of the naturalist or the artist that Diderot describes. While his observations are made on-site, he must revisit them in his memory before he is able to infer their greater meaning or the intention behind actions and words. This process, he says, is never accomplished at a desk but rather while walking through nature.

The solitude and critical distance Rousseau required before he could record and draw inferences from his observations explains, perhaps, not only his relatively late coming to writing but also why he ended rather than

began life by botanizing. Because walking gave free reign to his imagination, he was often lost in his thoughts, at one with nature, as we see in the seventh promenade of his *Rêveries du promeneur solitaire* (*Reveries of a Solitary Walker*).

> The earth, in the harmony of the three realms, offers man a spectacle filled with life, interest, and charm—the only spectacle in the world of which his eyes and his heart never weary. The more sensitive a soul a contemplator has, the more he gives himself up to the ecstasies this harmony arouses in him. A sweet and deep reverie takes possession of his senses then, and through a delightful intoxication he loses himself in the immensity of this beautiful system with which he feels himself one. Then, all particular objects elude him; he sees and feels nothing except in the whole.

Here, we should note the particular status of the term *reverie*, or waking dream, which Rousseau contrasts to thought and reflection: "During these wanderings my soul rambles and glides through the universe on the wings of imagination, in ecstasies which surpass every other enjoyment."[108] In this state, he is less aware of "particular objects" than of the harmonious whole. As he comes to himself, individual sights and sounds disrupt his reverie as imagination gradually gives way to perception, making it difficult for him to distinguish between fact and fiction.[109] Germaine de Staël would later refer to Rousseau's *Rêveries* as an "eloquent tableau of a being who is subject to an imagination stronger than he."[110]

As Rousseau ages, however, this pleasurable state becomes increasingly difficult to attain. Only in his later years, in an effort to stave off the melancholy that replaces the enthusiasm of his youth, does he begin to focus his attention on the particular objects that make up the harmonious whole. He remarks, however, that he could never have collected minerals, displaying them in a natural history cabinet, or animal remains, dissecting them in an anatomical amphitheater. Instead, he prefers to study living nature, creating a herbarium that recalls the spectacle of nature once he is too old to travel: "I will never again see those beautiful landscapes, forests, lakes,

groves, masses of rocks, or mountains whose sight has always touched my heart; but now that I can no longer roam about those happy regions, I have only to open my herbarium, and it soon transports me there. The fragments of plants I collected there suffice to remind me of that whole magnificent spectacle."[111] While Rousseau would successfully confer his love of botany on his protégé, Jacques-Henri Bernardin de Saint-Pierre, as we will see in Chapter 3, he formalized the scientific method that he himself was loath to employ for his fictive pupil, Émile.

Rousseau based Émile's education not on his personal experience but rather on his observation of society. As both a prodigy and, in a sense, a prodigal son, his own childhood could not serve as the basis for raising an ordinary child. Émile's education is designed to prevent the merging of imagination and perception that we see in Rousseau's *Confessions* and *Rêveries*, separating them into two consecutive phases of his development, which at the outset is meant to be purely sensory. Distancing Émile from books and society, which risk inculcating him with false or prejudicial ideas, his tutor exposes him instead to concrete objects: sticks, apples, cakes, the sun, the moon, and clouds. Through repeated exposure, Émile learns to gauge the relations (*rapports*) between objects, confirming the accuracy of his vision through the sense of touch. A true empiricist, he learns to judge by comparing sensations, which is also how he forms his first ideas, defined as "notions of objects, determined by relations."[112] According to his tutor, the relative accuracy of one's perception of relations determines the quality of one's mind. Crucially, he adds that judgment is passive in sensation but active in perception. Until the child has acquired sufficient experience through repeated exposure to phenomena, his active judgment is likely to be mistaken, leading him to interpret extreme cold as heat or to misinterpret a mirror image: "When he judges a thing by its appearance, he is active, he compares, and he establishes by induction relations he does not perceive; then he is deceived or can be deceived. To correct or prevent the error, he needs experience."[113] After honing his senses, therefore, the next step in Émile's education is to hone his powers of induction, which Rousseau calls judgment or reason.[114] This is how Émile learns to distinguish between truth and fiction, reality and illusion. Only after he has learned to

gauge the relations between things is he ready to gauge the relations between people, to which we shall return.

Rousseau's Savoyard vicar employs a similar method in order to derive the tenets of his natural religion. Unlike Buffon's amnesiac, Rameau's deaf-mute, or Condillac's statue, the vicar has been deprived neither of his memory nor of the use of one of his senses, suddenly restored. Instead, he engages in a sort of thought experiment in which he returns to the sentiment of his existence, the sense of pure being by way of a blank slate, in order to revisit and revise his understanding of the world around him. Through an active process of comparing perceptions, observing "their concurrences and their relations . . ., their harmony," he begins to comprehend the order of nature. Yet he is as unable to fathom first causes, he claims, as were Descartes and Newton. Persuaded that there can be no action or reaction without an act of will, he posits not the laws of nature but rather his articles of faith, for movement suggests the existence of a guiding will and order that of a guiding intelligence. He calls the intelligent will that animates nature God and that which animates mankind the soul.[115] Claiming to have read Bernard Nieuwentijdt's *L'Existence de Dieu démontrée par les merveilles de la nature* (*The Existence of God, Demonstrated by the Marvels of Nature*) of 1727, which influenced Pluche's *Spectacle de la nature*, he critiques the author for enumerating individual marvels at the expense of the greatest marvel of all, "the harmony and accord of the whole."[116] The harmonious spectacle of nature contrasts strongly, the vicar claims, with the discordant spectacle of society, a contrast Rousseau continues to draw throughout his writings. The vicar thus uses the very same process of divination to derive the tenets of his natural religion that philosophers used to derive the principles of natural science and artists used to derive the ideal model.

Rousseau himself was raised Protestant and is known to have converted on more than one occasion, resembling the youth with whom the Savoyard vicar converses. He arrives at a similar conclusion while gazing on his favorite view in Book XII of his *Confessions*, that of Lake Geneva, which constitutes a "ravishing spectacle of nature": "When the weather was good, when I got up I did not fail to run onto the terrace to breath in the morning's salubrious and fresh air, and to let my eyes slide over the horizon of that

beautiful lake, whose banks and mountains which bordered it enchanted my sight. I find no more worthy homage to the divinity than this mute admiration excited by the contemplation of its works."[117] City dwellers may be nonbelievers, Rousseau concedes, but those who reside in the country cannot but infer the existence of God from the wonder occasioned by nature's marvels.[118] Rousseau frequently characterizes such sensitivity to nature not as an ability to see its spectacle but as an ability to hear its harmony. The Savoyard vicar likens the reasoning of materialist philosophers to that of a deaf man who, unable to hear the sound that makes a string vibrate, believes the string vibrates of its own accord. Such a man, he claims, is unable to hear not only sounds but also his own "inner voice," which is all that distinguishes him from a machine.[119] "View the spectacle of nature, hear the inner voice," the vicar urges.[120] It is to this voice of nature, which Rousseau theorized more fully in his musical writings, that we are meant to hearken.

Rousseau's musical writings emerged from his conversations with Diderot and Condillac about the limits of written language, which led Diderot to experiment with gesture and Rousseau to experiment with song, as well as from the tumultuous years of the *Querelle des Bouffons* waged between partisans of French and Italian opera. Two of Rousseau's texts constituted an attack on French opera as notorious as his attack on French theater in the *Lettre à d'Alembert*. One was his *Lettre sur la musique française*, in which he declares that "the French do not have a music and cannot have any"; the other was Saint-Preux's letter on the Paris Opéra, which contains a scathing critique of the *merveilleux*.[121] In the first, Rousseau's derision is directed at the harsh consonants, silent vowels, and lack of accent that characterized the French language, rendering it unmusical. In the second, it is directed at the technological failures and inconsistencies that plagued French operatic productions, rendering them implausible. The implied opposition between Rameau's and Rousseau's understanding of music and evaluation of the French operatic tradition became overt when Rousseau agreed to write the entries on music for the *Encyclopédie* that Rameau had declined. The ensuing debate between the two burgeoned beyond the bounds of the *Encyclopédie* and left its mark on the definitions in Rousseau's influential *Dictionnaire de musique*.[122] Yet the balance of Rousseau's

musical writings was dedicated to envisioning the musical ideal he wished to promote rather than denouncing the contemporary practices he found so objectionable. In order to appreciate the nature of this ideal, we must first review the terms of his debate with Rameau.

Like his precursor, Rousseau derived his conclusions from empirical evidence. An autodidact in nearly every subject he studied, he learned music from Le Maître, in choir school, and from Rameau's theory, copying, teaching, and considering how best to notate music before traveling to Italy and trying his hand at composition. In his response to Rameau's *Erreurs sur la musique dans l'Encyclopédie*, Rousseau relocates "nature" not in the fundamental bass or *corps sonore*, which he associates with pure sensation, but in the vocal expression of passion, which he associates with sentiment. He identifies the "relations of sounds" by which Rameau defined music as a principle of melody and harmony alike, the one sequential, the other simultaneous. In neither case can a sound be defined without reference to those around it. Yet melody, not harmony, Rousseau asserts, qualifies music as a figurative art, rendering it capable of meaning and expression.[123] Just as Rameau provides a series of experiments in his *Génération harmonique* that enabled readers to hear and generate the tritone chord and harmonic overtones for themselves, Rousseau devises experiments in his *Lettre sur la musique française* that enable readers to determine which language is most lyrical by singing to listeners of various nationalities and gauging their emotional response. These experiments were designed to initiate readers into the empirical method, enabling them to corroborate the composers' conflicting assertions as to whether the natural origin of music is harmony or melody and whether the listener's response to music is determined by sensation (universal) or sentiment (cultural).

The seventh volume of *Le Spectacle de la nature*, in which Pluche discusses how nature gave rise to the arts, appeared soon after Condillac's *Essai sur l'origine des connaissances humaines.* It informed Rousseau's musings on the spectacle and the voice of nature.[124] Whereas Rousseau's theory of the devolution of society is attributed to his reading of Buffon, his theory of the devolution of music and language resonates strongly with Pluche and Condillac. Pluche identifies music and painting as figurative arts that

function like a language, from which we derive both pleasure and meaning, but proves to be primarily interested in music. Summing up the debate between partisans of melody and harmony in France, he anticipates the stance Rousseau assumes against Rameau. Whereas the subject of imitation should be nature itself, "[the musician] seldom imitates the human voice and the heart's expression." Though he refuses to take sides in the rivalry between French and Italian music, Pluche is critical of the rise of instrumental music—which he claims signifies nothing—as well as of the privileging of ornamentation over accent, the marvelous over the natural.[125] While Rousseau picks up on Pluche's critique (including the growing division between melody and harmony, vocal and instrumental music) in his *Lettre sur la musique française*, he develops his ideal (including the analogy between music and painting) in his *Essai sur l'origine des langues.*

Rousseau's *Essai* was not published until after his death, yet he claimed it began as part of his *Discours sur l'origine de l'inégalité* (*Discourse on the Origin of Inequality*) of 1755, in which he theorizes pity, an instinctive passion that arises in the state of nature and serves as the foundation of society.[126] Rousseau locates the origin of language in the transition between nature and society, asserting: "*La parole*, being the first social institution, owes its form only to natural causes."[127] *Parole*, or vocal utterance, refers in this case to the simultaneous birth of song and speech, music and poetry. The natural causes that determine its form are to be found in Rousseau's climate theory. Whereas inhabitants of the cold, harsh climate of the North were obliged to disperse in search of resources and to express their needs via gesture and articulated speech for the sake of clarity, the inhabitants of the warm, bountiful climate of the South were more inclined to gather around wells and express their passions through vocal accent and sustained vowels. Song arose from and melody imitates the vocal expression of the passions.[128] This description applies not only to languages of the South but also to nascent languages. Over time, accented gave way to unaccented speech, figurative to literal meanings, poetry to prose, and sentiment to reason as language gradually lost the ability to express the passions and move the listener. Such was the current lot of philosophers and politicians, who had lost the power to persuade.[129] Rousseau, accordingly, sought to restore the lost energy of

expression to poetry and music (via song) that Diderot sought to restore to painting and theater (via gesture).

Rousseau thus shifted the emphasis Rameau placed on the imitation of nature through musical harmony to the imitation of the passions through vocal melody. The only natural harmony, he claimed, was to be found in perfect unison, for both the tritone chord and harmonic overtones can be generated by a single note. He attributed his preference for music over painting to his conviction that the voice mediates human relationships.

> Painting is often dead and inanimate; it can transport you to the depths of a desert; but as soon as vocal signs strike your ear, they proclaim a being similar to yourself; they are, so to speak, the organs of the soul, and if they also depict solitude for you, they tell you that you are not alone there. Birds whistle, man alone sings, and one cannot hear either a song or an instrumental piece without immediately saying to oneself: another sensitive being is present.[130]

The voice plays a crucial role in Rousseau's theorization of pity, as elaborated in his *Essai*. "How do we let ourselves be moved to pity?" he asks, "By transporting ourselves outside of ourselves; by identifying ourselves with the suffering being." Though reliant on the imagination to effect this movement *hors de soi*, pity also poses a challenge to it, for how are we to feel another's pain? The answer lies not in witnessing the spectacle of suffering but in listening to the sufferer's story. While gestures and images speak most clearly to the eyes, "when it is a question of moving the heart and enflaming the passions, it is an altogether different matter. . . . The passions have their gestures, but they also have their accents, and these accents, which make us tremble . . ., make us feel what we hear."[131] The ability to empathize constitutes the basis of human relationships, preserving us less from solitude, which Rousseau both sought and savored, than from isolation: "He who imagines nothing feels only himself; he is alone in the midst of mankind."[132]

This privileged mode of communication between sensitive souls—which, like musical composition, aspires to perfect unison—became Rousseau's

ideal for human relationships, whether pedagogical or amorous. He sought to achieve this ideal union not only between two beings but also between the arts of poetry and music, positing their relationship as both complementary and competitive: "As an essential part of the lyric Scene, whose principal object is imitation, Music becomes one of the fine Arts, capable of painting every Portrait, of arousing every feeling, of struggling with the Poetry, of giving it a new force, of embellishing it with new charms, and of triumphing over it by crowning it."[133] This characterization of the relationship between poetry and music recalls that which Diderot dramatizes between poetry and painting. Ultimately, their rivalry is meant to be productive, contributing to the reform of opera, in which music and poetry are joined.

Rousseau explored the means of approaching this ideal union or perfect unison in his *mélodrame Pygmalion*, written in 1762 and first performed in 1770. As we saw in Chapter 1, Rameau dramatized the statue's sensory and the sculptor's affective awakening in his 1748 *Pigmalion*, attuning both statue and audience to the intonation of the *corps sonore*, from which he believed harmony was derived. Rousseau shifts the emphasis in his rendition to the natural expression of passion via the alternation of vocal and melodic lines, persuaded that the ideal union of poetry and music can be found in the *récitatif obligé*.

> These alternative passages of Recitative and Melody enhanced by all the splendour of the Orchestra, are the most touching, ravishing, and energetic in modern Music. The Actor, stirred, transported by a passion that does not allow him to say everything, interrupts himself, stops, is reticent, at which times the Orchestra speaks for him, and these silences, thus filled, affect the Auditor infinitely more than if the Actor had said himself all that the Music conveys.[134]

Like Diderot, Rousseau considered that extremes of passion lead to the breakdown of language (hyperbaton), only in this case music, not gesture, steps into the breach.[135] This is precisely what transpires when Pygmalion, who fears his creative genius has left him, is transported by enthusiasm in the presence of his creation, Galathée. Likening his enthusiasm to the life-

giving principle that renders matter sentient, Pygmalion offers to share this life force with Galathée, declaring: "It will be enough for me to live in her."[136] Yet the statue's animation leads not to a sensory awakening but rather to the acquisition of a sense of self. Marshall explores the implications of Galathée's speech as she notes the distinction between herself ("It is I"), cold marble ("It is no longer I"), and her creator/spectator ("Ah! it is I again"), noting the movement *hors de soi* on the part of both statue and sculptor as they recognize themselves in one another, yet emphasizing the importance of maintaining their integrity if they are to perpetuate their desire.[137] Rousseau revisits the myth in an effort not only to outdo Rameau but also to experiment with the ideal union, via enthusiasm and identification, of two modes of expression and two souls.[138] The Pygmalion myth, which enabled Diderot to ponder how to bring art to life, negotiating the transition from make-believe to belief, also becomes emblematic for Rousseau when, as Felicity Baker remarks, "the illusion of art is resolved in reality."[139]

Rousseau drafted the *Lettre à d'Alembert*, *Julie*, and *Émile* in close succession in the years 1758–1762. They contain his vituperous attacks on the artificial nature of Parisian spectacle and envision solutions that anticipate his *mélodrame*. Rousseau's chief complaints about Parisian spectacle pertain to their deleterious effects on society, or human relationships. Despite gathering in public places, spectators nevertheless remain both isolated and passive. The empathy theater is meant to foster bears no fruit: "I hear it said that tragedy leads to pity through fear. So it does; but what is this pity? A fleeting and vain emotion which lasts no longer than the illusion which produced it; . . . a sterile pity which feeds on a few tears and which has never produced the slightest act of humanity."[140] Spectacles, moreover, promote a false semblance of woman. Unable to find the equivalent of this "imaginary model" in society, men settle for women of easy virtue.[141] Rousseau's critique and proposed reform of the spoken theater in his *Lettre à d'Alembert* have attracted extensive scholarly attention. I am interested in his critique and proposed reform of the sung theater in *Julie, ou La Nouvelle Héloïse* (*Julie, or the New Heloise*). In the following pages, I examine the corrective he proposed to the shortcomings of Parisian spectacle, predicated on the ideal response he envisioned to the spectacle and harmony of nature.

As we have seen, Rousseau's first care in his treatise on education is to postpone the development of Émile's imagination—as he does his reading—for fear of prematurely exposing him to what might lead to a sexual awakening. He does not intend to postpone it indefinitely, however, stipulating: "Do not stifle his imagination; guide it."[142] Émile's senses are meant to stimulate his imagination rather than the reverse.[143] After a childhood dedicated to the development of his senses and judgment, the first manifestation of Émile's imagination coincides with the declaration of his *sensibilité* during adolescence, which Rousseau calls his "second birth."[144] This is the age at which Émile's tutor starts to cultivate his pupil's altruism and enthusiasm.[145] Together, they visit a favorite site in order to watch the sunrise and the sunset. The description of the sunrise evokes both sights and sounds. The light changes, the dew sparkles, and the birds sing, providing "a half-hour of enchantment which no man can resist. So great, so fair, so delicious a spectacle leaves no one cold." Yet Rousseau suggests that enthusiasm for such a spectacle cannot simply be conveyed. Instead, Émile must become an enthusiast in his own right by dint of repeated exposure.

> The child perceived the objects but he cannot perceive the relations linking them; he cannot hear the sweet harmony of their concord. For that is needed experience he has not acquired; in order to sense the complex impression that results all at once from these sensations, he needs sentiments he has not had. . . . With what transports will he see so fair a day dawning, if his imagination does not know how to paint for him those transports with which it can be filled? Finally, how can he be touched by the beauty of nature's spectacle, if he does not know the hand responsible for adorning it?[146]

As in his childhood education, Émile must first learn to perceive relations (*rapports*) in nature, training his senses in order to cultivate not his judgment in this instance but his imagination. Experience alone can provide him with the necessary store of memories that give his imagination grounds for comparison, enabling him not only to perceive the beauty of the relations

among objects that constitute the spectacle but also to hear their harmony. He must first become a naturalist before he can become an enthusiast.[147]

Once persuaded that Émile has developed a sensitive soul and acquired sufficient experience, conveying enthusiasm by appealing to his imagination becomes his tutor's preferred mode of instruction.

> Never reason in a dry manner with youth. . . . Make the language of the mind pass through the heart, so that it may make itself understood. . . . I shall begin by moving his imagination. I shall choose the time, the place, and the objects most favorable to the impression I want to make. . . . I shall put in my eyes, my accent, and my gestures the enthusiasm and the ardor that I want to inspire in him. Then I shall speak to him, and he will listen to me. I shall be tender, and he will be moved.[148]

This is how to ensure that your pupil remembers his lessons. This is how to make of him "mon ouvrage" (my creation).[149] Precisely such a relationship can be found in Rousseau's novel, *Julie*, though it rapidly progresses from pedagogical to amorous.

Like Émile's tutor, Julie's tutor cum lover, Saint-Preux, is portrayed as an enthusiast capable of deriving inspiration from the spectacle of nature.[150] Saint-Preux contrasts the lovers' response to the spectacle of nature to that of Julie's husband Wolmar. He and Julie pity Wolmar—who is associated with reason throughout the novel and characterized as an observing eye—for his lack of sensitivity and faith:

> Imagine Julie out walking with her husband; she admiring, in the rich and brilliant adornment which the earth displays, the work and gifts of the Author of creation; he seeing nothing in all this but a fortuitous combination in which nothing is linked to anything else except by a blind force. Imagine a sincerely united couple, not daring lest they annoy each other to yield, he to the reflections, she to the sentiments, that the surrounding objects inspire in them. . . . Alas!

> She says sorrowfully; the wonders of nature, so alive, so animate for us, are dead in the eyes of the unfortunate Wolmar, and in this great harmony of beings, where everything speaks of God in so sweet a voice, he perceives nothing but an eternal silence.[151]

Whereas Julie and Saint-Preux infer God's existence from his works, Wolmar perceives in nature's perfection only the workings of natural law. This distinction implies on Wolmar's part a certain tone deafness or inability to hear natural harmony, the voice of nature. Whereas Wolmar lacks the very qualities Émile's tutor strives to cultivate in his pupil, the lovers' response to the spectacle of nature serves to identify them as sensitive souls.

Unlike Wolmar, Saint-Preux and Julie manifest the very capacity for empathy that Émile acquires. In the course of their relationship, pity and enthusiasm become the watchwords that systematically accompany, replace, or serve to sublimate and elevate the potentially more carnal passion of love. While both sentiments may be considered forms of sensibility or identification, pity retains its humanitarian and enthusiasm its religious overtones. While others have focused on the role of pity in *Julie*, I wish to explore that of enthusiasm.[152] The title of Rousseau's novel references the letters of Abelard and Heloise, which Saint-Preux, in an initial if unwitting act of seduction, gives Julie to read. Disapproving of Abelard's behavior, which he will later emulate, Saint-Preux exclaims: "Take away the idea of perfection and you take away enthusiasm; take away esteem and love is reduced to nothing."[153] On several occasions, Saint-Preux comments on Julie's enthusiasm for all that is honest and virtuous. This is precisely the nature of Saint-Preux's enthusiasm for Julie herself—who is in a sense honesty and virtue incarnate—displacing and improving on his previous ideas of love. Disputing any notion that their love might compromise her virtue, he exclaims: "What you make me feel approaches a real delirium, and I fear it will finally make me lose my reason. Let me . . . taste this new enthusiasm, more sublime, more intense than all my previous notions about love."[154] It is their enthusiasm for virtue, Julie explains, that renders the couple more moral than the moralists.

> Ah! those sad reasoners! What sweet ecstasies their hearts have never felt nor given! My friend, leave aside those vain moralists, and search

> your soul; it is there you will always rediscover the source of that sacred fire that so often kindled in us the love of sublime virtues; it is there you will find that timeless effigy of the truly beautiful the sight of which inspires us with a holy enthusiasm, and which our passions constantly sully but can never destroy. Remember the [delicious] tears that flowed from our eyes, the throbs that choked our pounding hearts, the transports that raised us above ourselves, at the story of those heroic lives that make vice inexcusable and constitute the honor of mankind.[155]

Here we encounter, as we do in his *Confessions*, Rousseau's sacred or celestial fire. Like Diderot's scenes of tragedy in art, stories of heroism occasion the lovers' "delicious tears." Rousseau's Savoyard vicar singles out such responses as evidence of innate goodness.

> If there is nothing moral in the heart of man, what is the source of these transports of admiration for heroic actions, these raptures of love for great souls? What relation does this enthusiasm for virtue have to our private interest? . . . Take this love of the beautiful from our hearts, and you take all the charm from life. He whose vile passions have stifled these delicious sentiments in his narrow soul, and who, by dint of self-centeredness, succeeds in loving only himself, has no more transports. . . . This unfortunate man no longer feels, no longer lives. He is already dead.[156]

Such impassioned responses constitute rather than compromise the lovers' morality.

Julie eventually has misgivings, however, and begins to suspect that she and Saint-Preux may be using the expression "enthusiasm for virtue" as a euphemism for "living in sin." After their night of love, she regrets "having deprived [love] of its greatest charm. That blissful enchantment of virtue has vanished like a dream."[157] She cites to Saint-Preux the line from his letter in which he condemns Abelard's comportment—"Take away the idea of perfection and you take away enthusiasm"—as a rationale for her marriage to Wolmar, declaring decisively: "Beneath that sacred enthusiasm

the frantic love that so inflamed us both disguised its transports to make them still dearer to us and prolong our delusion. . . . It is time for the illusion to cease."[158] Wolmar reinforces this impression, attributing the lovers' misstep to this very delusion: "From the time I learned of your liaison I judged each of you in terms of the other. I saw what delusory fervor had led you both astray; it acts only on beautiful souls."[159] It seems, indeed, that enthusiasm for virtue leads to its loss as the adjective *sacred* (*sacré*) is replaced by *delusory* (*trompeur*). Saint-Preux does not share Julie's guilt, however, suggesting that his own enthusiasm for virtue continues unabated. Previously directed toward Julie's innocence, his enthusiasm is now reserved for her strength and courage: "Forgive me an enthusiasm I no longer find fault with. . . . There will never be but one Julie on earth."[160] When explaining near the end of the novel how his feelings for Claire have evolved, Saint-Preux draws a vital distinction between love and friendship, which turns on enthusiasm.

> For all that, does it become love? Julie, ah what a difference! Where is the enthusiasm? where is the idolatry? Where are those divine distractions of reason, more brilliant, more sublime, more powerful, a hundred times better than reason itself? A passing flame sets me afire, a moment's delirium seizes me, troubles me, and disappears. I rediscover in her and me two friends who love each other tenderly and tell one another so. But do two lovers love each other? No; *you* and *I* are words banished from their language; there are no longer two, they are one.[161]

Saint-Preux's perseverance is ultimately justified in Julie's last letter, delivered posthumously, in which she acknowledges that their love was virtuous, eternal, and sincere. Rousseau thus purges enthusiasm of its associations with vice and contagion in the course of the novel, transforming it into an emotion that renders the ideal union or perfect unison between lovers possible.

Though Rousseau ultimately salvages pity and enthusiasm, both impulses can prove misleading if excessive or bestowed on unworthy objects. The spectacles that occasion them must therefore be carefully crafted if

they are to reform rather than corrupt society. Rousseau was disillusioned by the spectacles he encountered in the course of his travels, which tended to fall short of his expectations. Such, he recounts in *Confessions*, was his initial response to Paris, Versailles, the Opéra, and the ocean. Saint-Preux is similarly disillusioned when he goes to Paris, where he visits the Théâtre Italien, the Comédie Française, and the Opéra. There, theater has ceased to be a mimetic art. Whereas Greek tragedy originally represented historical events and religious convictions, French tragedy no longer accurately portrays either customs or beliefs.[162] Instead, it has become an eclectic spectacle: "Not only all the marvels of nature, but many other marvels much greater still, which no one has ever seen, are there represented at great cost, and surely Pope meant to designate this strange theater [when] he says that Gods, leprechauns, monsters, Kings, shepherds, fairies, fury, joy, a fire, a jig, a battle, and a ball are seen jumbled together."[163] Saint-Preux laments the fact that "on the stage the Frenchman does not look for naturalness and illusion," which—we are given to understand—should be the goal of spectacle. Neither words nor gestures convey the passions, and neither characters nor spectators are transported, remaining in and aware of the theater as such. As far as the spectator is concerned, "The actor . . . is always an actor, never the character he represents."[164] Note that, contrary to expectation, naturalness and illusion are equated and both are found to be lacking.

Here we begin to detect a shift in the understanding of theatrical illusion that Rousseau and Diderot share. The goal of theater is to sustain illusion, for we are meant to be more persuaded by what we see on stage than by reality for the duration of the play. Yet reality (*naturalness*), including contemporary customs, characters, and conditions, comprises illusion, which should be neither false nor misleading. Saint-Preux therefore regrets that neither vocal nor instrumental music displays the characteristics so essential to music—melody, cadence, song, measure, and accent—and that their delivery appears painfully artificial. He likewise regrets that opera ballets "possess neither sentiments, nor tableaux, nor situations, nor warmth, nor interest, nor anything at all to offer a foothold to music, flatter the heart, and sustain illusion." The marvelous, "being made only for imagining," should not be attempted given such ineffectual means, for the decor, light-

ing, and sound effects are flawed.[165] It is better suited to epic poetry, where the imagination plays the role of the stage machinery.[166] The problem with the current state of the marvelous on the operatic stage is not that it is illusory but that it is not illusory enough. The lovers, accordingly, present one another with two alternative forms of spectacle in the novel that are designed to render representation, expression, and illusion possible.

The first is the description of Julie's garden, which is infused with the language of spectacle yet serves to reconcile enthusiasm with virtue. Saint-Preux has had more occasion than Julie to observe both Parisian spectacles and untamed nature.[167] His descriptions of the vistas he admired in the Valais when in exile—replete with huge cliffs, dense woods, thundering waterfalls, thick fog, optical illusions, and chiaroscuro—are infused with the very aesthetics that Diderot, following Burke, found appealing, occasioning delightful terror.[168] Calculating the effect of this enchanting landscape, Saint-Preux exclaims: "All in all, the spectacle has something indescribably magical, supernatural about it that ravishes the spirit and the senses; you forget everything, even yourself, and do not even know where you are."[169] The beauties of "nature's cataclysm," he declares, "are pleasing only to [sensitive] souls."[170] The aptly named Elysée, or Elysian fields, which Saint-Preux visits after Julie's marriage, is designed to cater to his sensibilities. Though cultivated, it likewise appeals to his imagination, provokes his enthusiasm, and promptly transports him to another place: "Surprised, stunned, transported by a spectacle so unexpected, I remained motionless for a moment, and cried out in [involuntary enthusiasm]: O Tinian! O Juan Fernandez! Julie, the ends of the earth are at your gate!" Saint-Preux believes he is the first mortal to have set foot in what he thinks he sees [*je crus voir*]: an untamed wilderness. Julie wonders, however, whether the garden's ability to transport the spectator will outlast the discovery of how the spectacle was achieved: "Take a few steps and you will understand. Farewell Tinian, farewell Juan Fernandez, farewell the whole enchantment! In a moment you will have returned from the ends of the earth."[171] Saint-Preux's response to the garden initially resembles Rousseau's on his nature walks, for even as he begins to notice how paths, streams, and branches have been redirected, he prefers to "contemplate" than to "think" and remains lost

in a "reverie" bordering on "ecstasy." After revealing how previously unfertile soil has been irrigated and populated first by native plants and then by local birds, however, Julie asks: "Are you still at the ends of the earth?" Saint-Preux replies: "No. . . . At this point I am utterly outside it, and you have indeed transported me into Elysium."[172] Wolmar takes this remark to be facetious, but Saint-Preux assures him that he is sincere. Saint-Preux's tour of the garden thus serves not to dispel illusion but to explain how it can best be achieved and sustained. The explanation, moreover, serves to enhance rather than detract from the effect.[173]

The garden, like the herbarium, enables those who are unable to observe plants, birds, and fish in their natural habitat to surround themselves with them instead, giving visitors the impression that they, not the fauna and flora, have been transported. As Julie remarks, "all this cannot be done without a modicum of illusion."[174] This is precisely the degree to which Rousseau would have liked the hand of the machinist to be concealed at the opera. Regardless of the strength of the appeal to the imagination or the power of the illusion to transport the spectator, he once again reconciles the spectacle with morality. Unlike the bosquet, which is more natural yet becomes the site of Julie's undoing, or the Valais, which is more sublime yet emblematizes Saint-Preux's unfulfilled desire, Wolmar emphasizes that the garden was "planted by the hands of virtue" and thus remains a "tableau of innocence."[175] Accordingly, when Saint-Preux returns the next day, he perceives a garden not of pleasure but of virtue, attributing the effect to the hand not of Julie d'Étange but of Julie de Wolmar. This spectacle, in subtly shifting the dynamic between the lovers and inflecting the nature of Saint-Preux's affections, serves to sanctify and safeguard Julie's marriage. Yet if Wolmar serves as the observing eye and the model of good judgment in the novel, Saint-Preux remains the ideal spectator, whether of the sublime spectacle of nature, the artificial spectacles of Paris, or the natural spectacles designed to replace them.

The spectacle Saint-Preux proposes to Julie, in his own letter on French music, is quite different. During his exile, situated between their first kiss and their first night of love, Saint-Preux undergoes a conversion experience from Rameau's to Rousseau's music theory. Prior to that evening,

Saint-Preux admits, "I did not perceive in the accents of melody applied to those of language the powerful and secret connection of the passions with sounds." Conceiving of music in terms of harmony and sensation, he had not yet grasped the relationship between melody and sentiment, which the castrato Regianino proceeds first to explain, then to demonstrate. In the course of the evening, the music that until then had but tantalized Saint-Preux's ear penetrates to his very soul. No longer is he distracted by the sight of the singer's struggles to produce a sound. Once initiated into an appreciation of the Italian linguistic and musical idiom, Saint-Preux loses all notion of the mimetic art as such. Discovering that sound can convey image, he hears the passions directly ("I thought I was hearing [*je croyais entendre*] the voice of grief, rage, despair") and envisions the characters who express them ("In my mind's eye I saw [*je croyais voir*] mothers in tears, lovers betrayed, furious Tyrants").[176] His enthusiastic transport coincides with complete identification. He emphasizes, however, that his initiation enabled him to sustain the full force of the performance. Once again, understanding enhances rather than precludes illusion.

Saint-Preux's sole desire is that Julie will one day sing with him in Italian: "I am sure that having a voice as [sensitive] as yours, and more familiarity than I had with Italian declamation, a single session will suffice to bring you to the point where I am, and make you share my enthusiasm."[177] The sound of her voice promises to stir his soul and to bare hers, provoking delicious tears. Though the duet never takes place, it constitutes a vision of the potential exchange of sensibilities and union of souls that is oft repeated in the novel. Were Julie to sing the castrato's words "*cor mio . . . idolo amato*," they would be no longer feigned but true. All dissimulation, all distinction between actor and role, would be eliminated from the performance. As sign is reunited with idea, signifier with signified, being replaces seeming and imitation gives way to expression. Julie declines Saint-Preux's proposition for fear that, were they to sing a duet in Italian, as Regianino envisions, the sincerity of their song would become apparent to her mother.[178] The lovers' shared enthusiasm has the potential to sublimate and elevate their sentiment, catalyzing the union of souls through the mediation of music. Yet because the moment is never realized, it remains pure potential, awakening

their memories of what might have been each time they hear two voices blend.[179] As we envision Saint-Preux as creator/spectator and Julie as creation/performer, they assume the positions of other couples in Rousseau's writings, notably Pygmalion and Galatea, who incarnate ideal uni(s)on.

Saint-Preux refers to Julie as the "divine model" that he carries within himself, with whom he is reunited when he turns from the false spectacles of the world to "return within myself," merging self and other. This model serves as a sort of moral compass or "image of virtue."[180] It is in the context of another relationship predicated on shared enthusiasm for virtue, that of Émile and Sophie, that Rousseau offers the following insight, linking enthusiasm, as he does pity, to the imagination, which creates of the loved one a *modèle idéal*.

> There is no true love without enthusiasm, and no enthusiasm without an object of perfection, real or chimerical, but always existing in the imagination. What will enflame lovers for whom this perfection no longer exists and who see in what they love only the object of sensual pleasure? . . . In love everything is only illusion. I admit it. But what is real are the sentiments for the truly beautiful with which love animates us and which it makes us love. This beauty is not in the object one loves; it is the work of our errors. So, what of it? Does the lover any the less sacrifice all of his low sentiments to this imaginary model? Does he any the less suffuse his heart with the virtues he attributes to what he holds dear? Does he detach himself any the less from the baseness of the human *I*? Where is the true lover who is not ready to immolate himself for his beloved?[181]

This passage would seem to anticipate the culminating moment in Rousseau's *mélodrame*—written in 1762, the year after *Julie* and the very year *Émile* was published—the moment when the statue comes to life, recognizing herself in another ("c'est encore moi"), which coincides with Pygmalion's resolution to forsake his talent, genius, and life to reside in her.[182] These pairs achieve a certain reciprocity in their shared empathy and enthusiasm that transports each of them *hors de soi*, finding fulfillment in one

another. As Julie says to Saint-Preux when inviting him to join her for their second night of love: “Come then, soul of my heart, life of my life, come be reunited with yourself.”[183]

In the “Entretien sur les romans” (“Conversation about Novels”) that serves as a second preface to *Julie*, in which R and N discuss whether the letters are real or fictive, R(ousseau) describes love, enthusiasm, and illusion in terms that evoke the original, figurative and therefore persuasive language, or *parole*, characterizing it as a language of devoutness and suggesting once again that ideal human relationships are reliant on ideal modes of expression.

> Love is but illusion; it fashions for itself, so to speak, another Universe; it surrounds itself with objects that do not exist, or to which it alone has given being; and as it renders all its sentiments by images, its language is always figurative. But such figures lack precision and sequence; its eloquence is in its disorder; it convinces more when it reasons less. Enthusiasm is the final degree of passion. When passion is at the full, it perceives its object as perfect; makes it into its idol; places it in Heaven; and just as the enthusiasm of devoutness borrows the language of love, so does the enthusiasm of love borrow also the language of devoutness.[184]

If enthusiasm distinguishes love from friendship, illusion distinguishes love from marriage, for as Julie remarks of Wolmar: “No illusion prepossesses us for each other; we see each other such as we are.”[185] R appears to be prepossesed in favor of love’s illusions, however. When N critiques the language in which the lovers express themselves, suggesting that their impassioned style is out of keeping with their mundane existence, R reminds him that, uniquely preoccupied with their passion and one another, they express their feelings; they do not choose their words. Instead, “inventing among themselves a little world different from ours, there they create an authentically new spectacle.”[186] While this “authentically new spectacle” can, of course, be interpreted as Julie’s exemplary household (Clarens) or garden (l’Elysée), it also applies to the lovers’ communion of souls, characterized by shared pity and enthusiasm and mediated not by the “hands of virtue”

but by the voice of nature or expression of the passions through the ideal uni(s)on of poetry and music.

NATURAL SPECTACLE

The prospect with which we began—Dorval's enthusiasm before the spectacle of nature, which recalls that of both Diderot and Rousseau—is not the first evocation of its kind in the *Entretiens sur Le Fils naturel*. In the preface to the play, Diderot explains that *Le Fils naturel* is a commemorative reenactment of Dorval's own story, which he wrote at his father's request. After viewing the performance from a corner of the salon, where his presence goes unnoticed, Diderot remarks: "Dorval's story was known throughout the region. The performance was so true, that forgetting on more than one occasion that I was a spectator, unbeknownst to them, I was about to leave my hiding place and add a real character to the scene." The family is unaware (and Diderot nearly forgets) that he is watching a play. Yet the performance is disrupted by the family's real emotion, when the actor playing Dorval's father, who had died a few days earlier, enters the room. Asking to borrow the manuscript because he missed the denouement, Diderot reads the play, as we have just done, before returning to discuss it with Dorval. He transcribes their ensuing conversations for the reader with the remark: "In vain I seek within myself the impression that the spectacle of nature and Dorval's presence made. I cannot recreate it. I no longer see Dorval, I no longer hear him. I am alone, amongst the dusty books in the shadows of my study . . . and I write these feeble, sad, cold lines."[187] The spectacle of nature to which Diderot refers, in this context, is not that which induces Dorval's enthusiasm, which we have not yet witnessed, but rather the play itself, which we may interpret not as the spectacle of nature per se but as a natural spectacle.

Both Diderot and Rousseau proposed what might be considered natural spectacles in their writings on theater in the years 1757–1758. These were meant to serve as viable alternatives to the small dark theaters reminiscent of prisons that divided spectators by class and were, they maintained, every bit as corrupt as the populations they served. The alternative spaces of representation they proposed were modeled on the transparency of the window

rather than the opacity of the mirror, as Pannill Camp has shown.[188] Just as the walls of the Salon Carré du Louvre disappear when Diderot imagines the space not as a gallery of paintings but as a walk through nature, the stage separating actors and spectators is eliminated when Dorval asks Diderot to picture, and indeed to view, the performance not in the theater but in the salon. Distinctions between actors and roles similarly vanish as the family reenacts its own story, and roles are reversed as Dorval and Diderot (both authors and characters) trade places. Yet in *De la poésie dramatique*, Diderot asks us to envision a fourth wall separating the spectators from the space of representation, ensuring that their presence goes unnoticed in order to sustain the illusion.[189] This tension between actual and virtual walls raises the question of whether this alternative space of representation is quite as natural as it seems.

Rousseau's alternative space of representation was intended to preserve the Genevan equivalent of the Parisian salon—namely, its clubs or societies. Here, too, walls disappear as he moves the spectacle out of doors in an effort to abolish lingering divisions of class, gender, and role. Recalling the origins of sociability from which *parole* was born, the *fête champêtre* had the potential to restore the natural, spontaneous expression of passion to vocal utterance: "There the first festivals took place, feet leaped with joy, eager gesture no longer sufficed, the voice accompanied it with passionate accents; pleasure and desire, mingled together, made themselves felt at the same time. There, finally, was the true cradle of humanity, and from the pure crystal of the fountains came the first fires of love."[190] Accordingly, Rousseau's public festivals feature song, dance, and athletic competitions, harmless forms of entertainment in which both sexes can participate with no need for duplicity or dissimulation. The terms in which he describes them are particularly significant: "But what then will be the object of these [spectacles]? What will be shown in them? Nothing, if you please. . . . Let the spectators become [the spectacle]; make them actors themselves; do it so that each sees and loves himself in the others so that all will be better united."[191] Eliminating the distinction between performers and spectators, the public festival is conceived as a collective version of the ideal relationships we have seen in Rousseau's writings, in which the participants' ability

to leave the confines of their own self-interest and find fulfillment in one another fosters the uni(s)on that serves as the basis of natural harmony. Nature furnishes the setting, the subject, and the mode of expression of this alternate form of spectacle, intended to cultivate the pity and generate the enthusiasm associated with the movement *hors de soi*. As the Revolutionary festivals bore out, this communal sentiment frequently took the form of enthusiasm for virtue, whether it arose spontaneously or by coercion.

Whereas Diderot and Rousseau undeniably demonstrate a predilection for transparency, the question remains whether their advocacy and, indeed, association of nature, authenticity, and truth was necessarily incompatible with imagination, enthusiasm, and illusion.[192] In examining the natural spectacles that they proposed, critics have consistently detected the presence of the gardener's hand. Diderot asks in *De la poésie dramatique*: "Isn't one of the most important and difficult aspects of dramatic art to conceal the art?"[193] He reminds us, however, that nature itself is by no means so transparent as we may think: "All we see in nature is a series of effects whose causes are unknown, whereas the unfolding of a drama is never obscure, and if the poet conceals enough of his devices to pique our curiosity, he always allows us to see enough to satisfy us."[194] The difference between the natural world and the theater is that a play's devices (*ressorts*) are only partially hidden, suggesting that those of the natural world, though extant, are entirely concealed.

Nature is not only somewhat opaque, it is rarely unadulterated. In the preface to his *Discours sur l'origine de l'inégalité*, Rousseau asks a crucial question. How, precisely, are philosophers meant to go about observing unspoiled nature or human nature in the midst of society? How can we conceive of what we were like prior to our corruption? Our original state is difficult to discern, for nature and artifice are hard to distinguish. Rousseau suggests that philosophers begin by setting aside not their books but the facts, remarking: "The Researches which can be undertaken concerning this Subject must not be taken for historical truths, but only for hypothetical and conditional reasonings better suited to clarify the Nature of things than to show their genuine origin, like those our Physicists make every day concerning the formation of the World."[195] Rousseau's observation of the

state of society enables him to infer what the state of nature must have been before projecting an ideal model of what society should be, as he does in *Du Contrat social* (*The Social Contract*). Yet what he proposes, he freely admits, is pure conjecture, an exercise in the past conditional. This is how philosophers and physicists alike "clarify the Nature of things."

Diderot likewise finds historical truth to be of limited value, for it is mired down in particulars that are seldom subject to verification and corroboration and rarely yield universal truths, as he declares in his *Éloge de Richardson* (*In Praise of Richardson*).

> Oh Richardson! I dare say that the truest history is full of lies and that your novel is full of truths. History paints certain individuals, you paint the human race. . . . History only encompasses a certain stretch of time, a certain part of the globe, you encompass all places and all times. The human heart, that was, is, and shall always be the same, is the model you copy. . . . From that point of view, I dare say that history is often a bad novel, and that the novel, as you write them, is a good story. Oh painter of nature! It is you who never lies.[196]

Fiction, in Diderot's estimation, was thus truer than history. Both Diderot and Rousseau replaced any aspiration to historical truth with a marked preference for "historical faith," a term coined by Samuel Richardson, who served as their model for the reform of the novel. As Nicholas Paige explains in his discussion of the pseudofactual regime of the novel, Richardson used the expression "historical faith" to describe the provisional credence induced by consistent, reiterated truth claims, such as an author's pretense to be but the editor or translator of a found correspondence or memoir, a ploy that Richardson, Diderot, and Rousseau all adopted. Paige glosses historical faith neither as total belief nor as literal belief but rather as "a species of the belief we have in historical discourse . . . rather than a special type of belief reserved for literature."[197] It is accorded to fictions that *seem* real and, on occasion, *are* true. Yet how is this effect achieved?

In *De la poésie dramatique*, Diderot remarks: "There is no drama that will not make an excellent novel. . . . Illusion is their common goal but

on what does illusion depend? The circumstances." He then provides an equation for achieving the desired effect: extraordinary circumstances plus ordinary circumstances equals illusion. This equation applies to the tale, the novel, opera, fable, and farce. The poet must strive to offset extraordinary circumstances with a sufficient number of ordinary circumstances so as to "counterbalance the marvelous and create the illusion."[198] Combining the ordinary with the marvelous is the goal of art.[199] The purpose of verisimilitude is not to eliminate but to attenuate the marvelous, to render it plausible, to make it seem possible. Details from everyday life, gathered and rendered by the astute observer of nature and human nature, furnish the basis of illusion in the novel, engaging the readers' imagination and emotions in turn. Novelists are attentive to details that tend to escape others' notice. It is on this "multitude of minor details," Diderot declares, that illusion depends.[200] A detail that mars beauty or eloquence does not detract from the illusion but rather serves to enhance it, constituting an *effet de réel*. The details that aid and abet the imagination have the air and the ring of truth.

Diderot and Rousseau, along with their contemporaries, effectively replaced the verisimilitude of the marvelous, featuring other beings, times, places, and modes of expression that were operative in epic and opera and that Cahusac worked so hard to perfect, with one that featured the here and now; another form of the natural marvelous, one that we might characterize, in anticipation of the surrealists, as the everyday marvelous (*le merveilleux du quotidien*). To this end, they sought to redefine the term *novel*. As Diderot states in the *Éloge de Richardson*, "The world that we live in is the setting of the scene, the basis of the drama is true, the characters are as real as possible, their personalities are taken from the midst of society; . . . the passions portrayed are those that I feel within me," adding, crucially: "Without this art . . . the illusion would be but momentary, the impression but temporary and faint."[201] Reality and truth constitute the basis of illusion, which is meant to be persuasive and enduring. Yet illusion tends to arouse our suspicions, for we are inclined to conflate credence with credulity, and to perceive naïveté as negative. As Marshall remarks, however: "The best and most powerful art is seen to make the most sophisticated

spectators respond like naïve spectators."[202] Diderot and Rousseau were among Richardson's sophisticated readers, both capable and desirous of sustaining and inducing a naïve response.

An example of such a reader can be found in the fifth book of *Émile*, when Sophie finds herself hard put to choose a life companion. On further investigation, her parents discover that she has fallen in love with Fénélon's Télémaque. When they attempt to make light of the situation, Sophie protests that she is not, in fact, naïve *à ce point*.

> Is it my fault if I love what does not exist? I am not a visionary. I do not want a prince. I do not seek Telemachus. I know that he is only fiction. I seek someone who resembles him. And why cannot this someone exist, since I exist—I who feel within myself a heart so similar to his? No, let us not thus dishonor humanity. Let us not think that a lovable and virtuous man is only a chimera. He exists; he lives; perhaps he is seeing me. He seeks a soul that knows how to love him. But what sort of man is he? Where is he? I do not know. He is none of those I have seen. Doubtless he is none of those I shall see. O my mother, why have you made virtue too lovable for me? If I can love nothing but virtue, the fault is less mine than yours.[203]

Sophie does not believe that Télémaque exists, that fiction is real. Rather, she considers such a character to be possible and therefore holds out hope that she might some day meet someone as virtuous as he. This episode once again mirrors the Pygmalion myth, for Sophie has not yet met a man as virtuous as a character in a novel and echoes the despair Rousseau voiced at the difficulty of finding women in society as virtuous as those portrayed on stage. Yet just as Rousseau refers to Julie as the *new* Heloise, he refers to Émile as the *new* Télémaque. While they may strike us as paragons of virtue, these characters are in fact flawed. Not only are they flawed but their flaws are of a nature that we share and that make them seem human. Though we have not yet met them, we certainly could. The more readers identify with or strive to emulate them, the more of them we may encounter in society, lessening the danger of transferring our affections from art to life. In

her study of judgment in *Émile*, Denise Schaeffer suggests that Rousseau manages to transcend the binary idealism/disillusionment by cultivating a double vision or perspective, neither bewitched nor detached, that Sophie exemplifies: encompassing what is and what could be.[204] This double perspective rejoins Diderot's double role, which structures both creation and reception. Sophisticated artists and spectators, like philosophers, remain capable of a naïve response, the movement *hors de soi* associated with philosophical insight, artistic inspiration, and spectator identification. Otherwise, they resemble not Saint-Preux, alternately critical of and susceptible to spectacle, but Wolmar, capable of neither sensitivity nor faith.

Diderot conferred the novelist's eye for detail on the great actor in his *Paradoxe sur le comédien* (*Paradox of the Actor*), yet famously denied the actor sensitivity, preferring a level head. This shift does not entail the sacrifice of the imagination or illusion, however: "The actor who bases his performance upon reflection, the study of human nature, the consistent imitation of an ideal model, imagination, memory, will be uniform, the same at every performance, always equally perfect."[205] Imagination, which allows the actor to recombine memories of past perceptions to forge an ideal model, remains essential. The moment of insight is situated between the critical distance required for the observation of nature and that required for the appraisal of art.[206] This moment coincides with the creation of the ideal model, after which the actor proceeds to execute it untiringly and to perfection.[207] Forged from observations of daily life, the ideal model constitutes not an imitation but an illusion, an enhanced reality: "Consider for a moment what we call, in the theater, being true [*être vrai*]. Do we mean things should be portrayed the way they are in nature? Not at all. The true, in that sense, would be but the ordinary. Wherein lies the truth of the theater? In the conformity of action, speech, image, voice, movement, gesture, with an ideal model imagined by the poet and often exaggerated by the actor. Therein lies the marvelous."[208] This notion of an enhanced nature (*surnaturel*) or an enhanced reality (*surréel*) effectively negotiates the transition in the understanding of art and the imagination from reproductive to productive, mimetic to creative.[209] This gradual shift mirrors the distinction Diderot and Rousseau drew between the functions of history,

philosophy, and fiction, for the latter points toward a more universal, enduring, or persuasive truth.

The goal of Diderot and Rousseau's experimentation with gesture and song was to enable the reader/spectator to share the philosopher's insight or the artist's inspiration, a phenomenon facilitated by the fact that the philosopher and the artist are spectators of nature themselves. The creation of a persuasive illusion allows the reader/spectator, like the philosopher and the artist, to bypass the materiality of isolated facts, objects, or signs and infer a form of relational truth. To achieve this effect, Diderot and Rousseau frequently had recourse to virtual painting or performance, forms of natural spectacle that appealed to the reader's imagination while escaping, and thereby resolving, technological difficulties or cognitive dissonance. Critics seldom note that Diderot's *Entretiens* contains not only the pantomime of a tragedy and the libretto of a ballet but also the vision of an opera. Diderot's observation of Dorval unfolds, in a sense, as a drama in three acts. As the sun sets on the first day of their conversation, Dorval shares his observations of nature with Diderot after the fashion of a natural philosopher. As the sun rises on the second day of their conversation, he both defines and incarnates the poetic genius in the throes of enthusiasm before the spectacle of nature, a transport Diderot shares. On the third day of their encounter, the weather has changed, yet Diderot is convinced he espies Dorval in the midst of a storm, blending his voice with the tempest.

> The next day, the sky was troubled; a cloud that preceded the storm, bringing thunder, stopped over the hill, casting it in shadow. From where I stood, the lightning seemed to be lit and snuffed out in these shadows. The tops of the oaks were agitated, the sound of the wind blended with the murmur of the water. The thunder rambled, rumbling, amongst the trees. In the midst of this obscure scene, my imagination, dominated by secret relations, showed me Dorval as I had seen him the day before, transported by enthusiasm, and I thought I heard [*je croyais entendre*] his harmonious voice rise above the winds and the thunder.[210]

Judging the ground to be too wet to walk on, Diderot returns to the salon to continue his conversation with Dorval, who awaits him there, leaving us to wonder whether the scene was the product of Diderot's overactive memory, a figment of his imagination, or yet another waking dream. Who is the transported spectator, Dorval or Diderot? Who the poetic genius? Is this a moment of artistic inspiration, of spectator identification, or have the two once again been conflated? Is Diderot envisioning the ideal genre—a virtual opera, staged in a storm and reliant on imagination rather than machinery—or the ideal philosopher, capable of alternating creative enthusiasm with the assiduous revision of a manuscript?

CHAPTER THREE

The Harmony of Nature in Paul et Virginie

THE storms at sea and resulting shipwrecks that we witnessed in previous chapters—described in the Comte de Buffon's *Histoire naturelle* and depicted in Claude-Joseph Vernet's *naufrages*—gave rise to Jacques-Henri Bernardin de Saint-Pierre's *Paul et Virginie*, a novel inspired by a true story: the sinking of the *Saint Géran*. In 1744 a vessel of the French East India Company was rounding the Cape of Good Hope with its cargo of African slaves when it foundered on the coral reef that surrounds the Isle of Amber, a small, rocky island two miles off the shores of Mauritius. Though no storm arose, the treacherous waters proved to be rough in the best of weather. Of those confined to their hammocks from illness, those unable to reach shore for lack of lifeboats, and those who perished in the waves, all but nine passengers were lost. The account published in the *New Monthly Magazine and Universal Register*, based on the *procès verbal*, reads like Denis Diderot's nightmarish vision of one of Vernet's shipwrecks in his *Salon de 1767*: "Some prostrated themselves on the deck in prayer; some appeared to be stupefied by fear; some ran wildly to and fro, uttering frenzied shrieks; some loudly implored pardon of those they had injured or offended; some threw themselves into the arms of their friends, bidding them a last adieu."[1] Bernardin de Saint-Pierre learned of the incident while sojourning on the island of Mauritius (then called l'Île de France) in his official capacity of military engineer during the years 1768–1770. In his fictionalized version, Bernardin ultimately held a storm at sea responsible for

the catastrophe rather than a difference of opinion between the captain and his officers, but preserved the names of the governor of the island (M. de la Bourdonnais) and two of the passengers (Virginie and Domingue), as well as the captain's (as opposed to the heroine's) refusal to undress to save himself from drowning.[2] The result was what D. G. Charlton has declared "the first real shipwreck scene in French literature."[3]

Paul et Virginie became one of the greatest publishing sensations of the eighteenth century, surpassing even Jean-Jacques Rousseau's *Julie, ou la Nouvelle Héloïse* in popularity. In the author's own words, during his lifetime:

> It was made into novels, idylls, and several plays. Its subject was printed on belts, bracelets, and other women's accessories. Many fathers and especially mothers gave their newborn sons and daughters the nicknames Paul and Virginia. The reputation of this pastoral spread through all of Europe. I have two English, an Italian, a German, a Dutch and a Polish translation; I have been promised a Russian and a Spanish one as well. It has become a classic in England.[4]

Heralded as the modern equivalent of Homer's epics, *Paul et Virginie* became a favorite of the Emperor Napoleon. The novel's commercial success continued unabated throughout the next two centuries, serving as a source of inspiration for both fashion (curtains, wallpaper, and china) and the arts (paintings, ballets, and operas).[5] Among the children named for the protagonists were Bernardin's own, born after the publication of the novel. Its popularity can in part be attributed to the care he took to promote the work, commissioning illustrations from famed artists for the edition of 1789 and the luxury edition of 1806, the latter of which is a striking example of the new genre launched by Bernardin's publisher and father-in-law, Pierre Didot, known as the "painter's book."

Bernardin referred to his work not as a novel but as a pastoral. The genre of the pastoral had enjoyed renewed popularity in the years since the translation of Salomon Gessner's pastoral prose poems into French, as Fabienne Moore relates.[6] Jean Fabre persuasively argues that Bernardin

may have recognized the description of what he had written after the fact in Jean-Pierre Claris de Florian's *Essai sur la pastorale* (*Essay upon Pastoral*) of 1787.[7] Florian emphasized certain aspects of the genre that are quite recognizable in *Paul et Virginie*, including the relationship between nature, sentiment, and virtue, the complementarity of upper- and lower-class characters, and the significance of the setting: "The shepherds . . . hardly ever left their valley, their wood, the banks of their river. The world ended for them a league from their village."[8] Florian closely associated the pastoral with the novel, which he compared to a walk in the country: "It is a pleasant countryside, divided by streams, woods, orchards, hills; the reader can walk there for a long time without getting tired."[9] The pastoral was thus a particularly suitable mode of expression for an aspiring naturalist.

The fate of the operas to which *Paul et Virginie* gave rise was not nearly as bright as that of the novel or its famed illustrations. The story was immediately adopted as the subject of a competition between the two rival halls at the Opéra Comique, the salle Favart, and the salle Feydeau. Though Hector Berlioz hailed Jean-François Le Sueur's 1794 adaptation as infinitely superior to Rodolphe Kreuzer's 1791 attempt, it was not revived in the nineteenth century. Instead, performances of Kreuzer's 1806 ballet, recycling his music from the opera, kept the subject in the public eye until Victor Massé wrote a new version for the Théâtre Lyrique in 1876. Praised for restoring the novel's tragic ending, this version's relative success was nevertheless short-lived and only a handful of songs remain in the repertoire.[10] Finally, in a rigorously documented study, Ornella Volta tells the harrowing tale of Erik Satie's failure or refusal to write the music (possibly lost) for the libretto by Jean Cocteau and Raymond Radiguet, written in 1920 and published in 1973.[11] The operatic failures have thus endured for as many centuries as the novel's success. To focus on these works' relative success or failure, however, is to overlook the aesthetic principles that served as a framework for their composition.

Bernardin is known to have been Buffon's successor, Vernet's friend, and Rousseau's protégé. As my analysis suggests, he may also have been familiar with the writings of Diderot and Edmund Burke. Often derided for his interest in final causes, his methodology bears a close resemblance

to that of the other figures we have studied thus far. In this chapter, we follow Bernardin from his initial foray into the observation of nature in his 1773 travelogue *Voyage à l'Île de France* (*Journey to Mauritius*) through the natural laws that he transformed into principles of artistic composition in his 1784 *Études de la nature* (*Studies of Nature*) and his application of those principles to his 1788 novel *Paul et Virginie*. I then explore the resonance between Bernardin's principles of artistic composition and contemporary theories of musical composition in the treatises of naturalist and composer Bernard Germain de Lacépède, who wrote *La Poétique de la musique* (*Poetics of Music*) in 1785, and Le Sueur, who wrote his *Exposé d'une musique une, imitative* (*Essay on Church Music*) in 1787. Finally, I consider how these works, published within a four-year period, collectively influenced Le Sueur's 1794 operatic version of the novel. Of particular interest are the mixed emotions with which, these authors theorized, the reader or spectator responds to the spectacle of nature—as such or in books, on stage, or in church—leading to what Bernardin called the "sentiment of divinity."

A HANDBOOK FOR YOUNG ARTISTS

Bernardin de Saint-Pierre studied mathematics at the École des Ponts et Chaussées and joined the army as an engineer at the outbreak of the Seven Years' War. His early travels included Malta, Amsterdam, St. Petersburg, Warsaw, Vienna, Dresden, and Berlin. In 1767 he set sail for Madagascar on the *Marquis de Castries* as an infantry captain and royal engineer for the purpose of rebuilding the colony of Fort-Dauphin, but elected to remain on Mauritius after suffering a storm at sea and the loss of several sailors to scurvy.[12] Prior to this voyage, he had little knowledge of natural history. In his travelogue, *Voyage à l'Île de France*, Bernardin offers the following disclaimer: "Before continuing, please note that I know nothing about botany. I describe things as I see them."[13] He developed a far more extensive knowledge of the subject, however, by frequenting the Intendant, Pierre Poivre, who directed the Jardin Botanique des Pamplemousses in 1767–1772, and the explorer Louis-Antoine de Bougainville's naturalist, Philibert Commerson, whom Poivre persuaded to join them in Mauritius in 1768 after his voyage around the world.[14] It was Bernardin's interest in plant life that

nourished his friendship with his fellow botanist Rousseau on his return to France and that informed his *Études de la nature*.

In *Green Imperialism*, Richard Grove identifies two privileged loci that came to the fore in early environmental writings: the tropical island and the botanical garden, both forms of earthly paradise. Their association—which Grove traces to Saint-Preux's comparison of Julie's Elysée to the Pacific islands of Tinian and Juan Fernandez—was considerably developed in the writings of Bernardin de Saint-Pierre.[15] The island of Mauritius, whose sugar, tobacco, coffee, and cotton plantations were built on a slave economy, was subject to the ravages of deforestation, desiccation, soil erosion, and species disappearance (the dodo, the sea turtle).[16] Under Poivre and Commerson's governance, however, it became a haven for botanists and naturalists and the somewhat unlikely site for the development of a sustained environmental policy.[17] Bernardin would posit the existence of an exemplary community that lived in harmony with the laws of nature, becoming an integral part of the species interdependence that he observed while there.[18] In the following pages, I trace his trajectory from one privileged locus (tropical island) to the other (botanical garden).

In the final entry of his travelogue, "On Voyagers and Voyages," Bernardin de Saint-Pierre expresses surprise that more of the great authors of his time had not tried their hand at the genre: "It is remarkable that not one of our writers, so famous for their literature and philosophy, has published any travel book. We lack a model in such a fascinating genre, and we shall long lack one, for Messieurs Voltaire, D'Alembert, Buffon and Rousseau have not written one. Montaigne and Montesquieu have written travel accounts, but did not publish them."[19] In his renowned *Voyage autour du monde* (*Voyage Around the World*) of 1771, Bougainville intimates that his contemporaries may view the genre and its authors with a certain lack of respect:

> I am a traveler and a sailor, that is to say, a liar and an imbecile in the eyes of that class of writers, lazy and superb, who, in the shadows of their studies, interminably philosophize on the world and its inhabitants, imperiously subjecting nature to their imaginations. A singular procedure, inconceivable on the part of those who, having observed nothing themselves, write and dogmatize exclusively based on obser-

> vations borrowed from those very travelers whose capacity to see and think they deny.[20]

Apart from the organizational and rhetorical challenges they pose, travelogues, in other words, enable philosophers to practice the empirical method from the safety and comfort of their homes. Bernardin attests to having met Bougainville during his travels, and the success of Bougainville's travelogue is thought to have inspired Bernardin to publish his own.[21] He proved to be more than an armchair philosopher, however, drawing on the powers of observation and description he developed while abroad to inform the three-volume *Études de la nature* that brought him the fame he coveted.

Bernardin's travelogue alternates between brief entries recording daily activities and weather conditions, frequently limited to a single remark covering a three-day period, and detailed asides bearing such titles as "Observations on the Sky, Winds and Birds," "Fish, Shells, and Coral," "Plants, Insects and Animals," or "Observations on the Customs of Sea-Faring People," "Morals and Habits of the White Inhabitants," and "Slaves, Hottentots, and the Dutch." His account thus reveals the eye of a naturalist or an anthropologist (a natural or moral philosopher) rather than any inclination to write a plot-driven account of his adventures at sea. Apologizing to the reader for his tangential remarks, he intimates that he started writing in order to pass the time.[22] He interrupts his account of marine life, however, in an attempt to introduce some semblance of order or method to his approach. Like Buffon before him, Bernardin remarks that all methods of classification in natural history are defective. Implicitly comparing the writing of natural history to the organization of a natural history cabinet, he proposes to place the simplest organism at the center of a sphere and to align increasingly complex organisms along spokes extending outward. Organisms that do not belong on a given spoke are linked to analogous organisms via a string, forming the center of a new sphere. This figurative system, which he conceives when discussing mollusks but contends can be extended to all living things, enables him both to identify organisms he may have overlooked and to link various life forms together.[23] He places a similar emphasis on the importance of relations among species or within a collectivity in his discussion of coral reefs, clearly anticipating the eventual

design of his *Études de la nature*: "I could be persuaded to think that all our plants are the fruit of the work of a multitude of animals living together. I prefer to think that a tree is a Republic, rather than a dead machine, obeying God knows what hydraulic laws. I could defend this opinion with plenty of curious observations. Perhaps one day I'll have the leisure to do it."[24]

Bernardin returns to the relations among individuals or component parts that constitute a collectivity or a whole when he reflects on the novelty of his descriptive enterprise in the final entry of his travelogue, questioning a traveler's (or naturalist's) ability to do justice to what he sees:

> The art of conveying nature is so new that the terms have not even been invented. Try to describe a mountain so as to make it recognizable: when you have talked about its base, its flanks and the summit, you have said it all. But what varieties in these curved, round, long, flat, hollowed-out forms, etc.! You can only find roundabout phrases. . . . It is not surprising, then, that travellers render natural objects so poorly. If they paint a country, you will see towns, rivers, mountains; but their descriptions are arid like geographical maps. . . . The [physiognomy is] missing. . . . Yet the likeness of an object depends on the harmony of its parts; you might have the measure of all the muscles on a man, but will still not have portrayed him.[25]

Without communication between parts, you have no living being; without the harmony of these parts, you cannot paint a portrait. Joanna Stalnaker recounts Rousseau's and Bernardin's struggle to develop a descriptive language with a stable referential basis (nature) for the study of botany.[26] Bernardin's emphasis on the significance of *rapports*, or relations, is consistent with that of Buffon, Rameau, Diderot, and Rousseau, which we examined in earlier chapters. He, too, would ultimately associate them with the term *harmony*. While he admits we may be hard put to conceive of storms as part of nature's harmony, Bernardin insists they are necessary to cool the atmosphere, control the insect population, and contribute to the formation of coral reefs.[27] As Malcolm Cook observes, discord serves to enhance rather than detract from natural harmony through contrast.[28]

Bernardin's travelogue contains the raw materials for several components of his pastoral novel, including the description of the tempest he would ultimately hold responsible for the sinking of the *Saint Géran*. As part of his meteorological journal he records the telltale signs of an oncoming cyclone in the straits of Mozambique.

> On the morning of the 23rd the winds came from the southeast, and seemed to announce a storm. Clouds gathered round the mountain peaks. They were of an olive and copper colour. One could see a long range of them, higher than the rest and motionless. Clouds lower down were blowing rapidly past. The sea smashed against the reef with a din. Many seabirds flew inland for shelter. Domestic animals seemed uneasy. The air was heavy and hot, even though the wind had not fallen.[29]

Bernardin later recalls this storm, during which the mainmast of his ship was struck by lightning, in *Harmonies de la nature* (*Harmonies of Nature*). He depicts himself clinging to the mizzenmast throughout the tempest, "trying to familiarize myself with this terrible spectacle."[30] Like Vernet, whom he counted among his friends and whose depiction of storms he admired, Bernardin sought to study their development firsthand.[31] Later in his travelogue, he provides a vivid account of the calm before the storm at his arrival on nearby Réunion Island: "We could hardly breath, the air was so heavy, the sky so dark, as clouds of sea birds sought refuge on the coast. Land birds and animals seemed disturbed. People, too, felt a secret dread at the sight of a terrifying storm in the midst of a calm." He records not only the harbingers of the storm but also the response it engendered: "The coast was crowded with people drawn to the spectacle of the ocean, and the danger faced by the ships."[32] We will return to his description and depiction of the fateful tempest in his novel, informed in part by his own experience of storms at sea.[33] His travelogue reveals, however, that his ability to describe both the portents of a storm and the havoc it wreaks was drawn from his firsthand observation of nature and informed his convictions about art. He was persuaded, moreover, that direct knowledge of nature was required before one could savor its artistic representation: "An art

lover takes pleasure in a painting by Vernet only because it reminds him of a series of effects that he himself has observed, and I submit that he cannot fully appreciate its merits unless he has seen and even navigated the sea."[34]

Bernardin was well aware of the connection between the observations he made during his travels and his subsequent writings, announcing: "My speculations and my ideas about nature are materials that I aim to use to build a vast edifice."[35] The following description of the island's mountainous landscape anticipates the level of detail he would subsequently employ when creating the setting for his novel, attentive to the contours of the terrain he explored as well as to the foliage, colors, sounds, and prevailing mood:

> The sides of these ravines are covered in trees which hang with bunches of scolopendria and clusters of liana, which dangle down. . . . You can find an infinite variety of fern; some, like leaves detached from their stalk, meander around the stones, and gain their subsistence from the rock itself; others rise up like a tree of moss and resemble a plume of silk feathers. . . . Instead of reeds bordering the riverbanks, you only find *songes*, which grow profusely. They are a kind of water lily with a large leaf shaped like a heart that floats on the water without getting wet. . . . These wild places were never gladdened by bird song or by the mating of peaceful animals. . . . Despite the disorder all around, these rocks could have been made habitable if the Europeans had not brought more evil to the island than is found in nature.[36]

Though this natural retreat has yet to be shaped by the gardener's hands (a sketch) or anticipates a garden's return to nature (a ruin), it contains the raw materials for the description in the novel of the fountain known as Virginie's repose, as Bernardin renders the semblance of disorder habitable.

> They had left the hollow below the rock with no ornaments but those of nature. On its damp brown slopes great tufts of maidenhair beamed like green and black stars, and bunches of hart's-tongue [*scolopendria*], hanging down like long ribbons of purplish-green, waved at the wind's pleasure. Nearby were borders of periwinkles, whose blossoms are so much like those of the red gillyflower, and pimen-

> tos, their blood-red pods more brilliant than coral. Round about, the balsam-plant with its heart-shaped leaves, and basil with the odor of cloves, gave out the sweetest perfumes. From the high cliffs creepers [*liana*] hung like flowing draperies, covering the rock sides with great curtains of greenery. Sea birds, attracted to these peaceful retreats, would come to spend the night. . . . Virginia liked to rest on the banks of this fountain.[37]

Though Bernardin has enhanced his color palette, balanced sounds with smells, and restored the order and birdsong that he regretted were missing from the earlier description, one cannot help noticing that the rocks are adorned with the same vegetation, namely ferns, *scolopendria, liana,* and the heart-shaped leaves of the water lilies or the balsam plant.

The illustrations below, taken from Bernardin's travelogue and his novel, are equally suggestive of how the empirical study of nature informed his fiction. Unlike many authors who left the illustration of their works largely to the artist, Bernardin corresponded extensively with those he commissioned to illustrate his works, as the preface to the 1806 luxury edition of *Paul et Virginie* attests. The caption of Jean-Michel Moreau's engraving for the *Voyage à l'Île de France*—"What serves your pleasures is wet with our tears"—reveals the illustration, like the text, to be a critique of the dehumanizing conditions of slavery Bernardin encountered on the island (Figure 9). The slaves depicted in a landscape leached for the purposes of producing the coffee in sacks to the left are clearly overworked and underfed, recalling Bernardin's remark in his travelogue: "I do not know if coffee and sugar are necessary for happiness in Europe, but I do know that these two plants have led to misery in two parts of the world."[38] In comparisons of his travelogue and his novel, critics have noted the striking contrast between the relatively harsh circumstances of Bernardin's lived experience and the lush descriptions of his island utopia.[39] The mountain range, with its sparse and stubby vegetation that forms the backdrop to the family of slaves—one of them mercilessly flagellated in the distance—in Moreau's illustration could almost be a study for the similar backdrop in Louis Lafitte's illustration of the luxury edition of the novel (Figure 10). The move from fact to fiction is apparent in Lafitte's addition of a pair of idyllic madonnas

FIGURE 9. Jean-Michel Moreau (1741–1814), “What serves your pleasures is wet with our tears,” from Bernardin de Saint-Pierre’s *Voyage à l’Isle de France, à l’Isle de Bourbon, au Cap de Bonne Espérance* (Paris: Merlin, 1773).

Courtesy of Newberry Library

FIGURE 10. Louis Lafitte (1770–1828), "Already their mothers talked at their cradles about marriage," from Bernardin de Saint-Pierre's *Paul et Virginie* (Paris: Didot, 1806). Colored etching.

Bibliothèque nationale de France, Paris. © BnF, Dist. RMN-Grand Palais / Art Resource, New York

with children in the foreground surrounded by the industries of crops and spinning pursued in a well-irrigated landscape by domestics both clothed and fed, all under the narrator's approving eye.

Françoise Lionnet urges us to consider not only the meaning of the pastoral that later became Mauritius' origin myth but "what it serves to conceal."[40] We should bear in mind, however, that Bernardin's travelogue reveals what his novel may have concealed, and that far from veiling the truth, he projected a second, more complete edition of his travelogue that was to constitute the sixth and seventh volumes of his *Études de la nature* subsequent to the publication of his novel. The novel does not necessarily mask the conditions on Mauritius, moreover, for in the course of his exploration on foot Bernardin encountered what he took to be a functioning domestic economy in the family of M. Le Normand that served as a counterexample to the flagrant abuses of the *Code Noir* that he encountered and denounced elsewhere on the island:

> The whole plantation consisted of eight slaves, with nine members of the family: master and mistress, five children, a young cousin and a friend. The husband was away. . . . The whole house was a single room; in the middle a kitchen; at one end, the stores and the bedding of the servants; at the other end, the matrimonial bed. . . . On the wall all the instruments used in the home and in the fields were hanging on hooks. I was truly shocked to find a very pretty woman in this miserable dwelling. She was French, born into a good family, as was her husband. They had come here several years before, to seek their fortune; they had abandoned their relations, their friends, their country to spend their days in a wild place, where one saw only the sea and the frightening cliffs of the Morne Brabant. . . . But the air of contentment and the good nature of this young mother of a family seemed to make all who got close to her happy. She was breast-feeding one of her infants; the four others stood round her, playful and content.[41]

This scene may have served as the more immediate source of inspiration both for Bernardin's description of the domestic economy in the novel—

masters and servants sharing a dwelling, tools and fruits of agricultural labor hung on the wall—and for Lafitte's illustration.[42] In order to fully appreciate the move from empirical observation to artistic representation, however, we must first restore the novel to its original context as the fourth volume of Bernardin's *Études de la nature*.

Bernardin conceived of his *Études de la nature* as a complement to Buffon's *Histoire naturelle*. While Buffon devoted his attention to animals and minerals, Bernardin dedicated his energies to the third kingdom: plants. Having remarked in his travelogue that all scientific methods are by definition defective, Bernardin turns a critical eye in his studies of nature not on observation, which he praises, but on the scientific propensity to systemic thought and causal analysis. Though persuaded of final causes, he considers first causes to be beyond our ken. Our error, he claims, lies in presuming to know what we cannot see: "Despite all our efforts, we can perceive only effects and harmonies in nature; first principles always elude us. What is worse, our scientific methods have influenced our morals and religion. It is easy to misrepresent the intelligence that governs all things when we represent first causes as purely mechanistic."[43] Lucretius made this mistake, Bernardin suggests, in attributing the spectacle of nature to atoms. And yet, in his effort to materialize the divine, Bernardin remarks, Lucretius ended up inadvertently divinizing matter, for if you remove the name from the famed invocation of Venus that opens *De rerum natura*, it reads as a invocation of God.[44] Socrates managed to avoid this mistake, preferring to respect nature's secrets: "It is not that Socrates did not study nature well, but he stopped seeking causes in order to admire the effect. No one compiled more observations than he on this subject. He employed them frequently in his conversations on divine providence."[45] Bernardin illustrates the dangers of causal analysis with a parable, likening the scientist to the happy peasant in an alpine valley who worships the naïade of the mountain stream that fertilizes his garden. One day, the peasant decides to make a pilgrimage to the source of the stream only to find himself at the foot of a glacier, transforming his prevailing emotion from *ravissement* (enchantment) to *effroi* (fear).[46] Like the spectator in the audience who prefers not to know what transpires behind the scenes, Bernardin chooses to remain

in the valley on the banks of the stream. This, he suggests, is what God intended, for given the force of emotions frequently sustained in the theater, where spectators are inclined to weep, hold their breath, clap their hands, and faint, just imagine how we would react to the spectacle of nature's secrets revealed. Instead, "God has placed us at a suitable distance from his infinite majesty; close enough to glimpse him, yet far enough away so as not to be overcome [*anéantis*]."[47]

Though Bernardin encourages his readers to observe the spectacle of nature, he is quite particular about how to proceed. In the overview of his *Études de la nature*, he critiques the notion of subdividing nature into its constituent parts, stating that it has yet to be appreciated in its entirety.

> Even were we to know, in the greatest detail, all of the parts that compose a plant, all these preliminary notions will form but a vain science. It would be interesting to determine their ensemble, their attitude, their contribution, their elegance, the harmonies they form when grouped or contrasted with one another. I don't know whether anyone has ever attempted anything of the sort.[48]

Bernardin illustrates his assertion that legitimate science does not consist in nomenclature and categorization but rather in the perception of relations or harmonies among parts with two salient examples. On the one hand, he resists the notion of the natural history cabinet, as well as the art of Louis-Jean-Marie Daubenton, who provided the description of the Cabinet du Roi and the anatomical descriptions of quadrupeds for Buffon's *Histoire naturelle*: "What a spectacle the collections of animals in our cabinets presents us. In vain do the Daubentons use their art to give them some semblance of life." On the other hand, he likens the potential abuses of natural history to those of history *tout court*: "The history of mankind has been otherwise disfigured. . . . Everywhere mankind has been dissected and we are shown no more than his corpse. Thus the most worthy object of creation, like the rest of nature, has been degraded by our knowledge." To rectify this situation, Bernardin argues for an organic appreciation of nature: "In order to judge nature's magnificent spectacle we must leave each object in its place

and remain in the one she has assigned us." He thus echoes Buffon's conviction that the spectacle of nature should be appreciated in terms of the relations among parts and their relation to an observer.[49]

An example of such an organic appreciation of nature can be found in the layout of Paul's garden. Paul structures his garden as an amphitheater, akin to a natural history cabinet yet less artificial, to be taken in either gradually or at a glance by a visitor eager to learn more about the harmony, or symbiosis, between plants and their habitat. Amphitheaters, by definition, are situated in the open air, constituting a point of convergence, like the sketch and the ruin, between art and nature.

> He had arranged the trees and plants so as to compose a view that could be enjoyed all at once. In the middle of the valley he had planted grasses of low growth, then shrubs, next trees of medium height and finally, around the circumference, tall trees; so that, from its centre, this vast enclosure appeared an amphitheater of greenery, fruits and flowers. . . . But in disposing these plants and trees according to his own plan he had not strayed from Nature's; with her as his guide, he had put in the high places those whose seeds are dispersed by the wind, and beside water those with seeds designed to float: so did each plant grow in its proper site and each site receive from its plant its natural ornament.[50]

Here, Paul is careful not to wrest the plants from their natural setting but rather to reproduce it, ensuring in turn that they are able to reproduce. He thereby provides a natural habitat for living plants that differs from Daubenton's collections of animal remains in cabinets and books yet anticipates what Bernardin would provide for living creatures in the national garden and menagerie. The principles he follows are strongly reminiscent of Julie's Elysée and resonate with the distinction Diderot makes between painting and Rousseau makes between preserving living and dead nature.

The only scientific method that Bernardin fully condones is the observation of nature's harmony.[51] He attributes its discovery to Pythagoras, whose sense of proportion provided the basis for the study of mathematics

and music and served to affirm his belief in God.[52] Bernardin would have been aware of Buffon's use of the term *rapport* in his *Histoire naturelle*, particularly in the *Premier discours*, where he lays out his scientific method. He may also have been aware of the 1765 definition of harmony in the *Encyclopédie*, written not by Rousseau, who was responsible for the entry on musical harmony, but by Diderot, who defines it in terms that recall both Buffon's reflections on nature and his own reflections on the beautiful. The term, Diderot notes, can be used in the context of either music or painting.

> HARMONY, n. f. (Gramm.) it is said of the general order that reigns among the diverse parts of a whole, an order that ensures that they contribute as perfectly as possible either to the effect of the whole or to the artist's goal. From which it follows that in order to assert that a perfect harmony reigns in a whole, one must know the whole, its parts, the relation [*rapport*] of the parts amongst themselves, the effect of the whole, and the artist's goal.[53]

Bernardin's discussion of harmony in the tenth study of *Études de la nature* echoes this definition. He opens the section "De l'harmonie" ("On Harmony") with the statement "Nature opposes beings to one another in order to produce *convenances* between them," using the term *convenances* (affinities, correspondences) as a synonym of *rapports* (relations). It is through a system of affinities or relations among parts that the order of the whole, the order of nature, is established. Take, for instance, his description of the bee, who exists in a symbiotic relationship with the flowers it pollinates and is part of the social order of the hive.[54] Bernardin gradually starts to privilege the term *harmony*, however, preserving its relationship to beauty and pleasure and identifying it as a law of nature: "When two opposites are combined, in any genre, pleasure, beauty, and harmony are born. I call the time and place of their union 'harmonic expression.' It is the only principle I have been able to perceive in nature."[55] Harmony can be enhanced through *consonances*, or repeated harmonies—such as the reflection of a mountain in the surface of the water or the reverberation of the water off the sides of a mountain—which reinforce our impression of nature's order

or design.[56] Let us now examine the role this natural principle played in his aesthetic practice.

Bernardin conceived of his *Études de la nature* not as aesthetic but as scientific. He defines science as "our sense [*le sentiment*] of the laws of nature with respect to mankind."[57] The tenth and twelfth studies are dedicated to the exposition of natural laws, both physical and moral. Stated simply, the law that subtends his tenth study is as follows: "Discord is born from the contrast between opposites, harmony from their union."[58] He then seeks proof of this law in nature. His extended example of how to transform a harmonious union into a discordant contrast of opposites reads more like a handbook for young artists, however.

> With these same harmonies the long mountain ridges, surmounted by high peaks in the form of pyramids and separated by deep valleys, ravish us with their grace and majesty. If you add winding rivers at the bottom, poplars that radiate on the banks, shepherds and their flocks, you will have valleys reminiscent of Tempe. The circular forms of the mountains are situated, in this scenario, between two extremes, namely the peaks of the rocks and the depths of the valleys. But if you eliminate the harmonic expressions, that is to say the curves of the mountains and their happy inhabitants, retaining only the extremes, you will have a stretch of the terrain of Cape Horn, angular rocks straight down at the edge of precipices.
>
> If you add contrasts in color, like snow on the dark rocks of the summit, the sea foam that breaks on black shores, a pale sun in an obscure sky, sudden showers in the midst of summer, terrible gales of wind followed by disturbing calm . . . you will have an entire landscape of this desolate earth covered with shadows of death.[59]

The curves of mountain peaks, valleys, and winding rivers that protectively surround the shepherds and their flocks in the first part of the description thus create a harmony of color, form, and movement that can as easily be disrupted by rendering the colors stark, the curves angular, the outlines blurred, and the sounds dissonant. Bernardin provides a series of such

guidelines for artists, specifically painters, throughout his *Études de la nature*, a tendency he acknowledges, saying: "I've strayed from my subject somewhat in order to give lessons in *convenances* to artists whose art is as difficult as my criticism is easy."[60]

More striking still, however, is the extent to which Bernardin adheres to these precepts in his novel, first published as the fourth volume of his natural history, which he describes as "a respite from my *Études de la nature* and my application of its laws."[61] An example can be found in the description of the valley in which the cabins of Paul and Virginie are situated, surrounded by mountains with the sea in the distance, which Bernardin depicts three times. On the night before her departure, Virginie visits the site overlooking the cabins, here indiscernible in the darkness, which is later dubbed the lovers' *adieux*.[62] The following passage bears a remarkable resemblance not only to one of Vernet's harbor scenes but also to the first half of the prescriptive passage cited previously in which opposites are harmoniously united. This time, however, rather than presuming to direct the artist's brush, Bernardin proposes to capture in words what he claims no artist's brush can express.

> It was one of those exquisite nights which are so frequent in the tropics and whose beauty is beyond the powers of the most accomplished painter. The moon appeared amidst the firmament, surrounded by a veil of cloud which its beams were dispersing by degrees. Its light diffused itself imperceptibly over the mountains of the island, making their peaks shine with a silvery green. The wind held its breath. From the woods, from deep in the valleys, from high on the rocks could be heard the little cries and the soft murmuring of birds caressing each other in their nests. Every creature, down to the insects chirping under the grass, rejoiced in the brightness of the night and the stillness of the air. The stars sparkled in the sky, and were reflected on the bosom of the sea, which sent back their trembling images. Virginia's eyes wandered distractedly over the vast, sombre expanse of the ocean, distinguishable from the shore of the island only by the red lights of the fishermen. At the entrance to the harbour she could

> make out a light and a shadow: these were the deck-lantern and the dark hull of the ship in which she was to embark for Europe.[63]

The mountain range is once again visible in this passage, bathed here in moonlight, populated not by shepherds and their flocks but by nesting birds and singing insects, and embraced by Virginie's troubled gaze. The mountains are opposed to the sea, peaks to valleys, light to shadows, red to green; yet all are united by the source of light, sound, silence, and the trajectory of a gaze. This magical description serves as a counterpoint to the havoc nature wreaks elsewhere in the novel.

Bernardin achieves this effect during a summer storm, somewhat earlier in the novel, that leads to the destruction of Virginie's repose and Paul's garden. The following description employs the techniques of the latter half of his prescriptive passage, rendering the harmonious union of opposites discordant and creating an optical illusion that anticipates the eventual destruction of the harbor:

> About this time the excessive heat drew up from the ocean vapours which hung over the island like a vast parasol, and gathered round the mountain-tops, whose mist-enshrouded peaks now and again sent forth long streaks of fire. Soon the woods, the plains and the valleys resounded with frightful bursts of thunder and the rains fell like dreadful cataracts from the sky. Foaming torrents rushed down the sides of the mountain; the floor of the valley became a sea, the plateau where the cabins stood a little island, and the entrance to the valley a sluice through which earth, trees and rocks were carried pell-mell by the roaring waters.[64]

Here again we see the mountain peaks surrounding the valley, yet the calm silvery green of the moonlight has been replaced with menacing tongues of flame, the veil of clouds with sheets of rain, the pregnant silence of the wind holding its breath with tumultuous thunder. Remarkably, the rainfall is so heavy that the vista comes to resemble the sea, island, and lock more characteristic of harbor scenes and evocative of the novel's tragic ending.

This site, we eventually realize, is the very one on which we are situated, where not only the narrative but the act of narration takes place. The novel opens with a glimpse of the aftermath of the destruction, once the cabins have been reduced to ruins—a glimpse all the more poignant once we discover how lush the site once was. Here, Bernardin calls attention less to the contours of the site than to its extremes, replacing harmonious union with discordant contrast.

> At the entrance to the valley, . . . the echoes from the mountain repeat unceasingly the sound of the wind that stirs the nearby forests and the crash of the waves as they break on the far-off reefs; but beside the cabins themselves no sound can be heard and round about one sees only the high rocks rising sheer like the walls of a fortress. . . . The rains that are attracted to their peaks often paint their green and brown sides with the colours of the rainbow, and at their base feed the springs which form the source of the little Latania River. Within their precincts a profound silence reigns: all is tranquil, the air, the waters, and the light. . . . On the floor of the valley the light is soft, for the sun's rays reach it only at midday; but from the first moment of dawn they strike the encircling peaks, which rise above the shadows of the moutain, and make them appear gold and purple against the azure of the sky.[65]

The mountains and valley of the previous passages remain visible here, stripped of all that once rendered them compelling. The sheer cliffs, no longer softened by moonlight or shrouded in mist, serve less to shield and protect than to imprison. The distant echoes of the wind and breaking waves contrast sharply with the silence of the enclosure. The soft light and tranquility of the valley floor at noon sets off the grandeur and brilliance of the mountain peaks at dawn. Yet this color is an effect of water and light rather than vegetation, and we have the eerie sense that the site is no longer inhabited by fauna, flora, or people. This is the vista on which the narrator and narratee gaze, filling them with a sense of solitude and prompting the question about who used to live there. Bernardin thus employs the guide-

lines he gives artists in his *Études de la nature* to exemplify the natural law of opposites in the composition of his novel.

Later in the tenth study, Bernardin provides a more elaborate formulation of this principle, extrapolating from aesthetics to affect: "Everything is formed by opposites in nature; the sentiment of pleasure is born from their harmony, that of pain [*douleur*] from their contrast."[66] His transition from the composition of the scene (harmony/discord) to the emotion induced (pleasure/pain) anticipates his twelfth study, when he turns from physical sensation to moral sentiment. Bernardin opens his twelfth study by reformulating Descartes's *cogito* as "I feel, therefore I exist." Aligning himself with the sensationalists and vitalists (among them Buffon, Diderot, and Rousseau), he opposes reason to sentiment, associating reason with society and politics and sentiment with nature; reason with the particular, local, or national, and sentiment with the general, universal, or international: "Reason varies from age to age, sentiment is always the same. Errors of reason are local and variable, sentimental truths are constant and universal. Reason creates the Greek self, the English self, the Turkish self; sentiment creates the human self and the divine self." Whereas reason, like imagination and memory, is a faculty of the understanding, the "sentiments of the soul" cast beyond it. Bernardin therefore privileges the works of philosophers, poets, fabulists, and tragedians, who appeal to the emotions, over those of historians, moralists, and comics, who appeal to the intellect.[67]

Novelists, of course, implicitly write in this vein, but Bernardin identifies two other arts that are ideally suited to conveying sentiment: music and pantomime. While clearly better versed in analogies between poetry and painting, when examining how the senses give rise to sentiment he lingers on hearing long enough to consider its role in perceiving both language and music.

> I needn't dwell on the intellectual relations of hearing. This sense is the immediate organ of the intellect; the one that receives the word and is exclusive to man, and that is, through its infinite modulations, the expression of all the affinities [*convenances*] of nature and of all

> the sentiments of the human heart. But there is another language that seems to belong even more entirely to this first principle of ourselves, which we have called sentiment, namely music.[68]

Bernardin makes similar claims for the power of pantomime in his novel—recalling Diderot's aesthetic convictions: "Pantomime is mankind's first language, it is known to all nations."[69] Sentiment, music, and pantomime thus share the ability to transcend divisions among ages, people, and places.

Bernardin marshals these elements in the open-air performance that his characters stage in his novel. As he later remarks in *Harmonies de la nature*, he naturally associates a forest glade with a theater.

> The sight of a forest occasions the sweetest meditations. I say to myself, as though before one of our most magnificent spectacles: the machinist, the set designer, and the poet are beneath the theater and behind the scenes. They are the ones who have set the stage and set the actors into motion, just as the forest spirits are beneath the earth, and what I cannot see on the surface is still more worthy of my admiration than what I can see.[70]

This is the venue he chooses for Paul and Virginie's favorite pastime: reenacting biblical stories with their slaves Domingue and Marie. Having likened Paul's garden to an amphitheater, Bernardin portrays the forest glade in which they perform their pantomimes as a theater *tout court*.

> So lifelike was the presentation of these stories that we felt as if we had been transported to the fields of Syria or Palestine. Nor did our plays want for suitable scenery, lighting, and music. The stage was usually set at a cross-roads in the forest, where the openings between the trees formed leafy arcades around us. . . . When the sun had sunk on the horizon, its rays, broken by the trunks of the trees, glanced in long sheaves of light into the shadows of the forest to produce the most majestic effects. Sometimes the whole of its fiery disc appeared at the end of an avenue and made it sparkle with light. Then

> the foliage of the trees, illuminated from below by the saffron rays, glowed; . . . their brown and mossy trunks seemed to be transformed into columns of antique bronze; and the birds, . . . surprised to see a second dawn, broke silence all together, greeting the daystar with thousands upon thousands of songs.[71]

Here nature not only serves as the setting or backdrop for the performance but also plays a role. The trees provide the decor, the sun the lighting, and the birds the music, contributing to the special effects and continuing to unfold in real time as the sun sets (or, from the birds' perspective, rises). Bernardin refers to these pantomimes as *fêtes champêtres*, retaining several key aspects of Rousseau's model, which he proposes as an alternative to theater: the open-air setting, the elimination of the distinction between actors and audience, and the innocence of the relationship between the sexes. Bernardin likewise attenuates the strictness of the hierarchy between masters and slaves, both of whom participate in the pantomime, and the sharp demarcation between fiction and reality. The stories of Moses and Ruth, tales of hospitality and of marriages that dispel enmities and restore social standing, recall certain aspects of the reconstituted family's own story and portend Paul and Virginie's union, conjuring a "confused memory of happiness and woe" and occasioning "tears of mingled joy and sorrow."[72]

This mingling of joy and sorrow proves to be significant, for Bernardin is aware that emotions may be mixed. Descartes did not sufficiently emphasize that passions come in pairs, failing to counterbalance desire with repugnance or wonder with terror, he remarks.[73] Anticipating the language of Hugo's *Préface de Cromwell* of 1827, Bernardin privileges melancholy over other moods as the one that best conveys our awareness of the human condition. He perceives not only nature but also mankind as a union of opposites: "one animal and the other divine . . . the body and the soul, the sentiment of our misery and that of our excellence." From their discord arises the drama of human existence; from their harmony arises the pleasure derived from melancholy, a sentiment that Bernardin refers to as *bonheur négatif* (negative happiness).[74] Agreeing with Lucretius that "our pleasure and our security increase on the shore at the sight of a tempest," he

associates this mixed emotion with our awareness that it is raining outside but we are warm inside, that a ship has sunk but we are safe on the shore. This is the sentiment that leads us to read accounts of war and natural disasters or stories of ghosts and robbers. It is also the sentiment that enables us to savor tragedy in art.[75]

As though he were already anticipating the tragic ending to his novel, Bernardin reduces the "harmonious union" or "discordant contrast" of opposites he discusses in his *Études de la nature* to the pithier "harmonious contrasts" at work in nature during tropical storms, providing an example from off the Cape of Good Hope: "Nature often accompanies the signs of disorder that upsets its seas with agreeable expressions of harmony that compound the horror." Tempests that burst forth from a clear blue sky with no warning connote all the duplicity of a broken promise.

> These tempests, in broad daylight, are more frightful than words can express. The soul is troubled to see the signs of calm become the signs of a tempest; azure in the sky and a rainbow on the waves. The principles of harmony appear to be overthrown; nature seems to assume a perfidious character, masking her fury with the appearance of benevolence. . . . Thus nature augments the effects of terror, by blending it with agreable expressions.

Bernardin recommends that artists employ such harmonious contrasts as an effective technique for intensifying the beholder's emotional response to the sight of a natural disaster.

> Thus a painter who wishes to reinforce in a painting the allure of a landscape and the happiness of its inhabitants need but represent a vessel in the distance battered by the wind and an angry sea; the happiness of the shepherds will be enhanced by the sorrow of the sailors. But if he wanted to augment the horror of a tempest, to the contrary, he would have to oppose the sorrow of the sailors to the happiness of the shepherds by placing the vessel between the spectator and the landscape.[76]

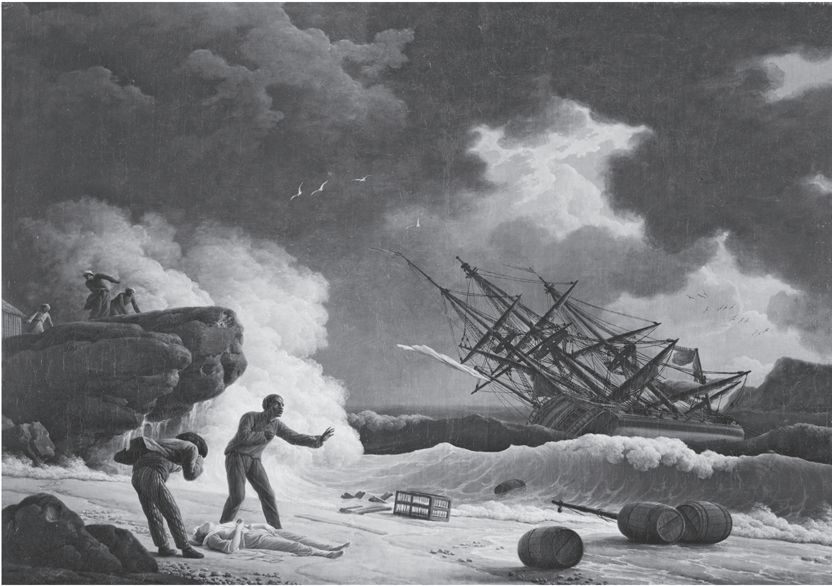

FIGURE 11. Claude-Joseph Vernet (1714–1789), *The Death of Virginie*. 1789. Oil on canvas, 87 × 130 cm.

State Hermitage Museum, St. Petersburg. Erich Lessing / Art Resource, New York

The aptness of Bernardin's remark becomes evident when we compare two famed depictions of the novel's tragic ending.

Such harmonious contrasts can be seen in Vernet's 1789 painting *La Mort de Virginie* (*The Death of Virginie*) (Figure 11), which demonstrates the effect of relegating the shipwreck to the background, opposing not happiness and sorrow but death and destruction. Let us pause for a moment to consider the relationship between the painting and the novel. Legend has it that Bernardin and Vernet both strapped themselves to masts in order to observe storms at sea. Yet Bernardin was equally familiar with the seascapes and shipwrecks by the artist. Bernardin's descriptions of tropical storms may therefore have been informed both by his firsthand experience and by his appreciation of Vernet. As a tribute to the artist's talent, he asked Vernet to illustrate the shipwreck in the 1789 edition of his novel. This illustration serves, in a sense, as a study for Vernet's painting of the same year, which Bernardin did not commission but was nevertheless inspired

by his description of the shipwreck in *Paul et Virginie*. We might ask, in this context, whether Bernardin's aesthetic principles were derived from or influenced Vernet. The artist depicts the moment when the narrator and Domingue return to the scene of the tragedy to find Virginie's body, which has washed ashore along with detritus from the ship, caught between the Isle of Amber to the far right and the shores of Mauritius. Though Paul is nowhere to be seen as he lies half-drowned nearby, recovering from his failed attempt to save her, we may safely assume that Virginie's clenched hand contains the portrait he gave her. The narrator bends down to disengage it as Domingue beats his chest with his fist, rending the air with his cries. The immobility of Virginie's body on the sand is surrounded by outcroppings of rocks, chicken coops, and wine casks bathed in the surreal light Bernardin describes as a "pallid olive glow" that likewise illuminates the sea spray and seabirds in the foreground. This eerie stillness creates a disturbing contrast to the dark, menacing clouds, the turbulence of the sky and sea, and the capsizing ship in the distance. The tragedy is enhanced by the spectators on the shore, drawn to the victim, whose fate they do not share, by a "movement of humanity."[77] If Bernardin's description of the site that came to be known as the lovers' *adieux* seems to have been modeled after Vernet's harbor scenes, Vernet's final painting was clearly informed by the novel, illustrating the artist and author's shared aesthetic principles.

As Bernardin suggests, the horror of the tempest is unquestionably augmented when situated in the foreground, however. Pierre-Paul Prud'hon again immortalized the tragedy of the novel's ending in his illustration of the 1806 luxury edition (Figure 12). While Bernardin gives preference to poetry over painting in *Harmonies de la nature*, he acknowledges the profound affinity between the two.[78] Pronouncing Prud'hon the "La Fontaine of draughtsmen," presumably for his ability to appeal to the emotions rather than the intellect, Bernardin has nothing but praise for this illustration in his introduction to the luxury edition. He attributes Prud'hon's talent to his artistic sensibility: "Where did he find the models of these mobile and fugitive effects that art cannot capture and that nature alone conveys through fleeting images: a furious wave in a hurricane, and an angelical soul in a scene of despair?"[79] Here Prud'hon illustrates not the moment when Virginie's

FIGURE 12. Pierre-Paul Prud'hon (1758–1823), *Virginie Shipwrecked*, from Bernardin de Saint-Pierre's *Paul et Viriginie* (Paris: Didot, 1806). Colored etching and aquatint, 27.8 × 21 cm.

Musée du Louvre, Paris. Michel Urtado / © RMN-Grand Palais / Art Resource, New York

body is found but the moment when her life is lost. Deciding against situating the beholder next to the spectators on the shore or even abreast of Paul in the water, Prud'hon eliminates all critical distance by confronting us with Virginie's moral suffering on the deck of the *Saint Géran*. Placing the beholder beside Virginie, he obliges us to share her moral dilemma, for we are arguably close enough to save her yet will clearly be the next to drown. Gone is our sanguinity as we simultaneously bemoan Virginie's fate and anticipate our own. Prud'hon thus gives us the choice of saving the victim or sharing her fate that Diderot claimed was our response to nature rather than art.[80] Yet Paul also witnesses the tragedy from the waves at the bottom right. He is unable to recover from such a sight, which leads him to an early grave; the question that interests Bernardin, however, is how can we?

In the course of *Paul et Virginie*, Bernardin posits that the very function of the novel is to enable the reader to observe the tempest from the shore. The narrator of the story, an old man who, having seen the world, has withdrawn disillusioned from society, evokes the pleasures of solitude.

> To these I add the enjoyment of a few good books, which not only teach me to become better but make the very world I have left behind promote my happiness; for by keeping before my mind images of the passions that cause the wretchedness of its citizens, they allow me to enjoy a negative happiness [*bonheur négatif*] when I compare their lot with mine. Like a shipwrecked man who has climbed to safety on a rock, I contemplate from my solitude the storms that rage through the rest of the world, and my tranquillity redoubles at the distant sound of the tempest.

Though this ability to contemplate suffering with relative equanimity from afar may initially strike us as somewhat callous, the narrator remarks: "If I chance to meet someone in adversity, I try to help him by my advice, just as a man passing along the bank of a rushing stream stretches forth his hand to an unlucky creature who is drowning."[81] Relieved to have been saved from shipwreck, the onlooker wishes to save the next victim in turn. This is precisely what the narrator attempts to do for Paul by offering him con-

solation. Unfortunately, it is too late for Paul: "I was like a man attempting to save a friend who refuses to swim even though he is sinking in the midst of a river."[82] The narrator presumably sustains this sentiment throughout the telling of the story, however, for Bernardin associates *bonheur négatif* with the contemplation of ruins—the vanishing point between nature and art, or civilization—which is precisely the state of the forsaken cabins that prompts the narratee's initial query about their former inhabitants.[83] The tragedy that proves too much for Paul is therefore somewhat mitigated for the reader, attenuating the strong emotions of Prud'hon's moral quandary with the mixed emotions of Bernardin's *bonheur négatif*. Let us now consider how Jean-François Le Sueur sought to create a similar effect in his operatic version of the novel.

A HANDBOOK FOR YOUNG COMPOSERS

To appreciate the affinity between Bernardin's and Le Sueur's principles of composition, we must first resuscitate another figure from the period, naturalist and aspiring composer Bernard Germain de Lacépède. Though Lacépède has been studied in light of the interests he shared with Bernardin and Le Sueur, respectively, he constitutes a missing link between the novel and the opera of *Paul et Virginie*. On arriving in Paris, Lacépède sent two letters of introduction to the men he admired most: Buffon and Gluck. He subsequently became Buffon's collaborator on the final volumes of the *Histoire naturelle* (those dedicated to fish and serpents), ensuring that the posthumous writings of the author saw the light of day, and served as his *sous-démonstrateur* at the Jardin du Roi. In his "Discours sur la nature des poissons" ("Discourse on the Nature of Fish"), which serves as an introduction to the three volumes dedicated to the subject, Lacépède announces that he will undertake a project near and dear to Bernardin's heart by turning his attention from the animals of the land and the air to those of the unexplored waters.[84] He situates fish at the center of a network of *rapports* connecting simple to complex organisms, considering them to be "the hub where all the spokes of the wheel [*rayons de la sphère*] that constitute living nature meet."[85] His phrasing recalls the organizing principle for the study of nature that Bernardin first proposed when discussing mollusks in

his travelogue. The terms in which Lacépède describes the spectacle of the sea resonate strongly with Bernardin's writings, moreover, though they inspire a love of science as opposed to a love of God: "At times the tranquil sea doubles the number of stars during gentle nights under a serene sky; at times the tempest precipitates banks of clouds preceded by black shadows that hurl their redoubled lightning against enormous mountains of water raised by the winds. . . . Over the sea, grandeur, power, sublime beauty. . . . How can one not be penetrated by this interior force, by this ardent love of science?"[86]

Lacépède proved equally susceptible to a love of music, writing *La Poétique de la musique*, which became one of the primary influences Le Sueur acknowledges in his essay on church music, *Exposé d'une musique une, imitative*.[87] Lacépède and Le Sueur are unusual in that they took the writings of both Rameau and Rousseau seriously rather than taking sides in their debate. Le Sueur's treatise is not well known, and he himself has been relegated to precursor status as Berlioz' teacher.[88] Yet in the context of eighteenth-century French debates about nature, art, and society, his theory and compositions take on added significance. In the following pages, I juxtapose the aesthetic writings of Lacépède and Le Sueur to those of Bernardin to reveal why this particular version of the opera and the novel constitute a meeting of the minds regardless of their relative success or failure. Reading Le Sueur's opera in this context enables us to account for certain of his aesthetic choices that have since been called into question. It also affords a unique opportunity to explore the relationship between natural history, the arts, and religion in eighteenth-century France.

The French musical landscape had changed significantly since Rameau's day, influenced by the opera quarrels and by Rousseau's writings on music. Rousseau's 1752 *Devin du village* (*The Village Soothsayer*), an ideal union of song and speech that recounts the pastoral love of a shepherd and shepherdess, was an overnight sensation, breathing fresh life into pastoral opera and becoming the model for the French *opéra-comique*.[89] Rousseau's critique of French music prompted Christoph Willibald Gluck and Ranieri de' Calzabigi to rethink their approach to lyric tragedy in the reform operas they wrote for Paris in the 1770s. Their efforts to eliminate unnecessary

repetition and ornamentation, to compose the music in light of the poetry, and to justify the presence of overtures, choruses, and ballets via the story rendered the reform operas both dramatically coherent and emotionally powerful. Paying tribute to Rousseau in his open letter to the *Mercure* of 1773 and again in his dedication of the score of *Orphée ed Euridice* (*Orpheus and Euridice*) to his pupil, Marie Antoinette, Gluck declared: "I saw with satisfaction that the accent of nature is the universal language. M. Rousseau employed it with the greatest success in the simple genre. His *Devin du village* is the model that no composer has yet imitated. . . . Music will no longer be limited to the cold beauties of convention."[90] Gluck did not rid the French operatic stage of the marvelous in terms either of the plot or its staging, preferring to retain harrowings of hell and *dei ex machina*, as I have demonstrated elsewhere. He centered the drama on the vocal expression of human passion, however, moving the audience to tears and reconciling Rousseau to French music.[91]

The title of Lacépède's *Poétique de la musique* suggests that he set out in the wake of these events to do for lyric theater what Aristotle's *Poetics* had done for spoken theater—namely, to provide the theory behind the practice. In his treatise he synthesizes and dialogues with Rameau's and Rousseau's musical theories, frequently citing Gluck's operas as models. Retaining Rameau's notion of natural harmony, he associates the major mode with nature and the minor mode with convention, yet valorizes the latter as the means of expressing the suffering or unfulfilled desire of the disadvantaged, including peasants, indigenous peoples, and slaves. He likewise sustains Rousseau's focus on the link between music and the passions, exploring how they can be made to succeed, counterbalance, or attenuate one another. The epigraph to his work is a citation from Alexis Piron: "Our genius lies in our sensitivity [*sensibilité*]." Music, Lacépède explains, has two primary means of representing nature and human nature: sound and sentiment. It can imitate sounds from nature directly (running water, birdsong, thunder, waves), but how does it represent the passions, which are inaudible? Just as we use nonlinguistic signs to convey sentiment (gesture, facial expression, inarticulate cries) music translates these "signs of sentiment" into sound using tone, accent, tempo, and dynamics.[92] But should the musician wish

to convey an inaudible image to the listener (a landscape, for instance), he is first obliged to consider how it makes him feel.

> The composer must vividly envision the landscape he wishes to paint and imitate; he must profoundly internalize all that this situation inspires, abandoning himself to the sweet peace, to the seductive calm, to the tender melancholy that fills his soul, to the emotions that the greenery and the woods inspire, to the . . . memories they evoke, following the movements of his imagination, whether it decorates and animates the landscape before his eyes or darkens and overshadows it with sorrowful images. Once he is deeply moved, deeply affected, once everything he sees has, so to speak, reached his heart, let him paint what he feels. He will trace the sentiments the landscape he wishes to represent inspires, these sentiments will, in turn, evoke the idea, and we will think we see the landscape.[93]

Similarly, if a composer wishes to portray a character, he must first identify with the character before he can convey what he or she feels. Here, we recognize the workings of the imagination and enthusiasm as defined in the *Encyclopédie*, which we examined in the last chapter.

> Let him fill himself [*se pénétrer*] with the situation he wishes to paint, . . . let him transport himself to the place of the action, let him put himself in the character's place, let him . . . become a king, general, chief of a great people, hero, etc., let him assume his character, embrace all his sentiments, become inflamed with all of his passions. Imperceptibly, his soul will ignite and his exalted genius will elevate his ideas. Let him then succumb, without thinking, to the fire that consumes him and the transport that overcomes him. Let him forget he is a musician and compose a tragedy.[94]

What produces neither sound nor sentiment lies beyond music's province. While it can represent the nature and strength of a passion (wonder, terror, pity) as well as the nature and condition of a character (king, soldier, peas-

ant), music relies on language to make intellectual distinctions. Whereas painting is self-sufficient, therefore, poetry and music are often more forceful when combined.[95]

Having justified the synthesis of music and poetry in opera, Lacépède considers the combined effect of music and painting by turning his attention to the role of the scenery. In the midst of an extended excursus on how to ensure that the overture adequately prepares the spectator for what follows—the actions we are about to witness, the characters we are about to meet, the emotions we are about to sustain—Lacépède decries the practice of performing the overture while the curtain is down. Only after the curtain rises and the spectator sustains the full visual and aural impact of the scenery and music will the stage, in effect, be set.

> As soon as the spectator sees the stage, his surroundings . . . disappear. He leaves his own thoughts behind and is prepared to believe himself in the countries depicted before him. As the slightest sound related to what he sees and the stirrings of his heart strikes his ear, voilà, he traverses all intervening time and space and is transported to the land and era of the heroes about to appear.[96]

The ensuing lyric tragedy, Lacépède asserts, should be "one [*une*], and varied," a principle that recalls Rousseau's ideal uni(s)on and proves essential to Le Sueur's subsequent essay on church music. Both poet and musician contribute to this unity of dramatic conception, yet it falls to the musician to enhance the poetry or to compensate for what it lacks in order to sustain the illusion.[97] While each act should be internally consistent, the sequence of acts must also have an "air de famille," or a certain narrative and affective coherence. Here Lacépède invokes a rather singular phenomenon, musical mnemonics, appealing to the reader's personal experience to corroborate its existence. The first time we hear a tune, it may leave us relatively indifferent. Once we start to associate the tune with a particular emotion, however, the tune becomes capable of evoking and indeed inducing that emotion every time we hear it, gaining strength through repetition. If we are to sustain the full force of a lyric tragedy, narrative coherence must first be

established to ensure that we register an emotional response to the music, linking sound to affect and bringing our musical memory into play. The ultimate goal, once again, is to render the illusion complete.

> The various components of a tragedy must have a family resemblance . . . not only in order to create the liaison that is the subject of our discussion but also in order to create illusion, or at least to enhance it, in order to prevent the spectator from realizing that he is merely attending a theatrical representation, in order to persuade him that he is really witnessing what he is shown and that the depicted event is actually before his eyes.[98]

Lacépède cautions that the composer should not attempt to evaluate the success of his work while in the throes of enthusiasm. Only once he regains the critical distance that enables him to perfect his creation should he measure it against Lacépède's principles of composition.[99]

Lacépède's treatise appeared in 1785, precluding the possibility that he consulted Bernardin's *Études de la nature* of the previous year, yet he places similar emphasis on nature, sentiment, melancholy, and music. In a posited origin myth, Lacépède assigns fleeting happiness and the melancholy that results from its loss to two consecutive moments: the first gives rise to song and dance, which he derides; the second gives rise to true music. "It is to pain [*douleur*] and sad melancholy that we owe true music, that animated tableau of all the passions . . . that cause such delicious tears to flow." The human condition, Lacépède remarks, does not allow us to "enjoy a pure, unadulterated happiness" but rather to savor "delicious tears." Memories of the past and visions of the future inevitably disrupt our present happiness. By representing "the portrait of human suffering," music offers us the pleasure of empathizing with others, the realization that we are not alone, and the illusion that our own suffering will dissipate as rapidly as the scene before us.[100] Lacépède associates natural harmony with the image of "happiness mixed with tender melancholy."[101] To illustrate his point, he provides the synopsis of what Downing Thomas has called a "virtual opera," which bears a strong resemblance to *Paul et Virginie*.[102] Though the novel can-

not have informed Lacépède's treatise, as it was not published until three years later, it is quite possible that Lacépède's treatise and Bernardin's novel together informed Le Sueur's version of the opera.

Lacépède's explanation of how song, dance, and true music arose from the initial experience of plenitude and loss serves as prelude to a drama in several acts played out between two young lovers that in turn gives rise to opera's constituent parts. Subject to what is described as "a mixture of happiness and sadness," the lovers' attempt to express their feelings gives rise to the first duet.[103] They are then torn asunder by the intervention of "cruel and ferocious men," and the expression of their despair gives rise to the first "pathetic duet [*duo pathétique*]."[104] The origin of two contrasting duets—a "[love] duet" and a "pathetic duet"—is closely followed by the origin of two contrasting choruses: a "chorus [of terror]" and a "chorus of joy." If the resemblance to Paul and Virginie's idyll of mutual love, both fraternal and amorous, followed by the cruelty of their separation not by noble savages but by barbarous Europeans is already striking, what follows is truly remarkable. A violent storm lays waste to the lovers' surroundings, prompting Lacépède to exclaim: "What a sad and lugubrious tableau the ravaged countryside presents!" and the terrified onlookers to sing the first chorus.[105] The storm puts a tragic end to the love story in Bernardin's novel, yet neither Lacépède's virtual opera nor Le Sueur's real one stops here. Instead, the storm dissipates; revived by the conciliatory rays of the sun, "The men are gradually reborn to joy and happiness," ending the drama and the origin of opera with the first chorus of joy, or thanksgiving.[106]

As we shall see, Lacépède's virtual opera serves as a veritable blueprint for Le Sueur's *opéra-comique*, yet the ending, in which harmony is born of discord, prompts us to consider Lacépède's thoughts on tragedy versus comedy. Though he devotes the first part of his treatise primarily to a consideration of tragic opera, castigating comic opera for appealing to the intellect instead of the emotions, Lacépède ultimately proposes to consider how comic opera ought to be written, revealing the genre's hidden potential.

> Tragic authors can rarely approach the kings and illustrious individuals whose characters they must portray, but the musician who writes

> comedy will find humanity everywhere. Let him seek all the effects of the passions, let him survey the various social classes, they can all become the subject of his tableaux. . . . Let him rest on occasion under the rustic roof of an unknown laborer; there he will see and hear nature better. . . . May his heart be softened by the combined tears of tenderness and misfortune. May he taste the pleasure of benevolent and consolatory pity. May he mingle his tears with those of fate's innocent victims.[107]

The melancholy characteristic of the human condition is felt most acutely by the victims of fate, who are capable of moving the composer to pity, cultivating the sensitivity to his subject that helps ensure his music springs from sentiment, which both Lacépède and Le Sueur considered the precondition for artistic genius.[108] This potential was something that comic and pastoral opera clearly shared, for in the section dedicated to the latter, Lacépède resists the critic's or philosopher's urge to meta-comment on the genre and instead follows an artistic impulse to write a stirring, unmediated synopsis of the very first pastoral—the one to which *Paul et Virginie* has been most frequently compared—*Daphnis et Chloé*, which constitutes the second virtual libretto in his treatise.[109]

Like Bernardin and Lacépède before him, Le Sueur structures his essay on church music of 1787 around a single guiding principle: that church music, like music for the theater, should be "one [*une*], imitative." He calls this principle of unity natural law and by it understands neither unison nor Aristotle's three unities, but rather unity of dramatic conception, or a harmonious reunion of parts.[110] Writing for the benefit of young, aspiring composers, Le Sueur reminds them that the church calendar is based on a story, but the same music cannot be used to convey each of the successive chapters, which include the nativity, the resurrection, Pentecost, and the assumption. He therefore seeks to counterbalance the unity of the life of Christ, a unity achieved through melody and movement (rhythm), with the variety that enables us to distinguish between its episodes, a variety of emotional expression (dynamics, accent, tone).[111] Though Le Sueur strives to differentiate music from the other fine arts, he frequently draws his ex-

amples from opera and painting and expresses principles of artistic composition that are indebted to Lacépède and bear a strong resemblance to those of Bernardin de Saint-Pierre.

Like opera, Le Sueur argues, church music must be dramatic, citing Gluck, Piccini, Grétry, Paësiello, Philidor, and Gossec as models. The means of composing both genres of music are the same: "The composers of dramatic and church music employ the same palette. Raphael used . . . the same brush to paint his magnificent tableaux of the School of Athens and the Transfiguration."[112] Le Sueur defines dramatic music as imitative, or mimetic. On the one hand, it can imitate nature: "Our music, particularly if joined to poetry, can not only through its various inflections, the succession of fortes and pianos, but also through its movements, its measure and rhythm, paint for the imagination the brilliance of lightning, thunderclaps, an earthquake, the ardor and impetuosity of the winds, the sound of a tempest."[113] On the other hand, it can imitate human nature, or the passions: "Music can imitate all the tones, all the inflections of nature. All sentiments are also within its domain and the human heart is the living book that the composer must ceaselessly study."[114] Le Sueur's claims about the art of the composer rejoin contemporary claims about the art of the novelist, for the notion that the novelist is the painter of nature and the human heart dates from the unprecedented success of Samuel Richardson's novels in France and can be found in the works of such influential theoreticians of the novel as Diderot (*Éloge de Richardson*, 1762) and the Marquis de Sade (*Idée sur les romans*, 1799).[115]

The emphasis Le Sueur places on mimesis is reminiscent of the 1746 treatise *Les Beaux-arts réduits à un même principe*, in which the Abbé Batteux identified the imitation of nature as the basis of the fine arts. When considering the distinctions between the fine arts, however, Le Sueur differentiates between an imitation and a copy: "The work of a copyist perfectly resembles its model; that of the imitator but approaches it." A waxwork constitutes a lifelike replica, or copy, of its model, which it renders through wax, paint, textiles, glass, hair, and the like. Yet sculpture, which is confined to a single medium, whether stone or bronze, merely evokes, or imitates, its model. Though an imitation, unlike a copy, is rarely mistaken for the

original, it remains more admirable because it is more difficult.[116] Le Sueur likens painting and theater to the former (a waxwork, or copy) and music to the latter (a sculpture, or imitation), for music conveys form and meaning via the medium of tone, or accent.[117] Accordingly, mimetic music "does not exactly imitate its object; it awakens within us the sensations that the object makes us feel." Le Sueur uses the example of a sunrise to set music apart from the other arts.

> For example, if the composer had wanted to paint the sunrise, the listener would not say, immediately, as one would of a painting "that is a sunrise," he would say: "I feel, when hearing this music, a calm, a freshness, a serenity similar to that which I would feel when seeing the morning of a beautiful day. The musician must therefore have wanted to portray the dawn or the sunrise. Rather than making me see the thing, which is impossible, he awakens in my soul the sensations that one sustains upon seeing this object."[118]

Le Sueur's definition of imitation thus shades imperceptibly into expression. He reinforces this impression by asserting that if poetry and painting are at times more powerful, music is more expressive. It remains all the more evocative because ephemeral.[119] Le Sueur thus contributes to the transition in the understanding of how music signifies from mimesis to expression that transpired in the latter half of the century.[120] He also placed himself in the tradition of the Abbé Dubos, Diderot, Rousseau, and other French philosophers, who were persuaded that music signifies differently.

Le Sueur consistently privileges the expressive power of music over language, going so far as to distinguish not only vocal from musical lines but also words from their inflection, claiming that tone is the universal language: "Words only name, identify sentiment; tone expresses sentiment itself; tone makes us feel it, conveys it to us. Words make themselves understood in one country but not another, because languages change. Tone makes itself understood in all countries, tone is the universal language."[121] He thus differentiates between the experience of reading Virgil's descrip-

tion of a storm at sea (pure poetry) and that of hearing his poetry set to music: "Then he will no longer recount, will no longer describe, but will thunder; you will think you hear, so to speak, the very roar of this angry ocean; it will convey to your soul the mute terror that you would feel before the spectacle Virgil describes; thus from an affected reader you become a frightened spectator."[122] The effect of hearing the lines sung to music thus outstrips the effect of narration or description, enabling the spectator to identify with the victim of the storm.

Le Sueur reminds us, however, that the initial spectator of nature is the composer himself. In order to convey the sentiment occasioned by the spectacle of nature to the listener, the composer must first be a sensitive soul. In the tradition of poets and philosophers, Le Sueur recommends that aspiring composers begin by knowing themselves: "Does a heavenly thrill transport you with the fiery desire . . . to see realised each feature that nature has already unveiled to your imagination but still hides from your eyes? . . . Take up the pen, nature has made you a composer, but if you feel nothing, withdraw, for the place is sacred."[123] If eligible, they should consecrate themselves to the study of two books: those of nature and the human heart. Le Sueur suggests that composers familiarize themselves in particular with the sounds produced and emotions induced by sunrises and storms. If they themselves are wracked with astonishment, wonder, terror, and pity when confronted with the spectacle of nature, they are all the more likely to prove capable of occasioning such emotions in the listener. While the instruments evoke the sounds of the storm itself, the vocal line conveys the attendant emotions. Here Le Sueur envisions himself not as the composer nor yet as a member of the audience but rather as a potential victim of the storm, aware of the chorus of wonder, astonishment, and fear that surrounds him, employing the first-person present tense—"I think I see" (*je crois voir*) and "I think I hear" (*je crois entendre*)—characteristic of aesthetic transport in Diderot and Rousseau's writings.[124] The genius of the composer lies in his ability to channel these emotions simultaneously. In order to portray a tempest, he must in a sense recreate the storm in the soul of the listener.[125] Yet the emotion Le Sueur privileges over all others

once the storm subsides and a new day dawns is the "happy melancholy" (*mélancolie heureuse*) he associates with sunrises, resurrection, and faith in divine grace.[126]

Just as Bernardin was inclined to take the advice he gave young painters in his *Études de la nature* when he wrote the novel that illustrated its principles, so Le Sueur appears to have taken the advice he offered young composers as he made the transition from church music to music for the theater in the course of the next few years. *Paul et Virginie* was but his second opera and his only *opéra-comique*. Though the subject was in all likelihood proposed in light of the novel's recent success and in order to spearhead the competition between theaters, the affinity between the author's and the composer's convictions rendered the choice quite natural and helps explain a certain number of Le Sueur's more questionable aesthetic decisions. Le Sueur collaborated on the work with Alphonse du Congé Dubreuil, who wrote the libretto of *Iphigénie en Tauride* (*Iphigenia in Tauris*) for Niccolò Piccinni (Gluck's rival) that both Lacépède and Le Sueur admired for its unity of dramatic conception. The opera is structured by the very same order of events we observed in Lacépède's virtual opera or origin myth: the lovers are united (happiness), forcibly divided (despair), caught in a storm (terror), then saved (relief). It is further structured by the two natural phenomena Bernardin and Le Sueur found most captivating: a sunrise at the beginning and a storm at the end. It also features a fascinating extended middle section (act 2) in which the lovers, lost in the forest and exposed to the elements, and the chorus, who seeks them, express themselves through a combination of music and pantomime (the universal languages), as the stage directions indicate.

> The actors of the chorus, while hastily descending the rocks, should take care to observe, without seeming to take notice, that there is a certain cadence between the movement of their gestures and that of the music. To do so, they will make sure that we can sense the conformity between the rhythm of their hurried steps and those of the orchestra by making them fall exactly on the first note of each half-

> beat such that the same rhythmopoeia gives their steps and gestures a regularity at one with that of the music.[127]

The chorus comprises, moreover, a combination of "Indian savages" (*sauvages indiens*) and runaway slaves, expanding the cast of characters to include those whom Lacépède and Le Sueur were persuaded would give unadulterated expression to the voice of nature.[128]

The most controversial aspect of the opera, both then and now, is its happy ending, an aspect that attracted the criticism of the author and one that initially appeared to be linked to the choice of genre (*opéra-comique*) that was rapidly becoming synonymous with French music. Yet the generic specifications of tragic and comic opera were not traditionally based on how the story ends. Indeed, tragic operas usually ended happily whereas comic operas were starting to gravitate toward increasingly serious subjects. Under the entry "Opéra" in his 1787 *Elements de littérature* (*Elements of Literature*) Marmontel distinguishes the two genres: "One taking the supernatural world as its basis, the other reduced to simple nature."[129] *Paul et Virginie* would not have been considered suitable for a tragic opera because the characters are lower class (one illegitimate, the other disinherited) and the tragedy domestic rather than the stuff of gods, heroes, and kings. Thomas differentiates French comic opera from its Italian counterpart by associating *opera buffa* with wit and gaiety and *opéra-comique* with intense feeling. The emergence of *opéra-comique* can therefore best be understood in the context of contemporary aesthetic reform, for it shared the aims of imitating nature and conveying sentiment with the bourgeois drama and the sentimental novel in the wake of Diderot and Rousseau's writings.[130] Friedrich Melchior Grimm remarked on the tendency of *opéra-comique* to provoke a mixture of laughter and tears, and Michel-Paul-Guy de Chabanon appreciated its ability to move from a sad situation to a joyful one.[131] It was thus ideally suited to convey Le Sueur's *mélancolie heureuse* or Bernardin's *bonheur négatif*.

Though typical of eighteenth-century French opera in general, Le Sueur's "happy ending" was not dictated by the genre of *opéra-comique* in

particular. I therefore wish to reevaluate the affective response elicited by the lovers' fate. In his essay on church music, Le Sueur revisits the question of our response to tragedy in art and in life, likewise drawing his example from painting: "Why do we tremble with horror when we witness a real murder and sustain agreable sensations when we see it imitated, represented? The painting's frame allows us to perceive that the misfortune is not real, and we give ourselves over, securely and without remorse, to the pleasure produced by the likeness."[132] Here we encounter the very question that Diderot pondered in his "Promenade Vernet" and Bernardin broached in his *Études de la nature*. Yet throughout his writings, Le Sueur differentiates between painting and music precisely because in opera there is no equivalent of the painting's frame. Theorized as capable of collapsing the critical distance between stage and audience, a musical work, were it to end on a tragic note, would not necessarily enable the spectator to feel the contrasting sense of security or relief afforded by a painting or a novel. Instead, this effect must be achieved by the music itself, for music has the power to assuage the passions from which it arises and which it in turn induces in the listener. Lacépède suggests as much, addressing himself to the passions themselves.

> Without you it would not exist, . . . this magical art that charms the cruelest sorrows, suspends the greatest troubles, extinguishes the flame of hatred, sustains in our souls the sacred flames of sensibility, makes tears flow that are more precious, more sweet, more dear to tender hearts than any pleasure and that give rise to beautiful days in the midst of cloudy ones. You have given us the means of healing all the wounds you have inflicted; you have, in a sense, dissipated all the suffering you have induced.[133]

Whereas the beholder of a painting is aware of the frame and the reader of a novel is aware of the fiction, the spectator at an opera, once moved by the music, relies on the music itself, that final chorus of thanksgiving and redemption, to provide the sense of security and relief that makes it possible to savor tragedy from afar via its peculiar blend of pleasure and pain,

whether *bonheur négatif* or *mélancolie heureuse*. The unmitigated despair associated with the tragic tableau that concludes Massé's nineteenth-century version of the opera was not among the aesthetic aims of the period. If not necessarily faithful to the ending of the novel, therefore, Le Sueur's opera nevertheless occasions the very sort of mixed emotions that both author and composer considered to be the universal affective response to the spectacle of nature, the response they endeavored to achieve in art in order to inspire their reader or listener with the "sentiment of divinity."

THE SENTIMENT OF DIVINITY

In his *Enquiry Concerning Human Understanding*, David Hume draws a distinction between fiction and belief. "The difference," he contends, "lies in some sentiment or feeling," which is a matter of degree or strength of conviction.[134] The vivacity of the sentiment occasioned is determined by the vividness of the image or impression, a notion akin to Diderot's use of the term *verve*. Though Hume considers memory to be accompanied by greater "vivacity of perception" than imagination, imagination can acquire this vivacity and be mistaken for memory, engendering belief. What determines belief is not the actual status of the past perception (true or false) but the strength of our present impression of it, which relies on the imagination. We can thus "remember" something that we saw or heard happen to someone else as though it happened to ourselves or mistake a story we heard or an image we saw for a memory. While in principle belief is grounded in the memory of sensory perception, the imagination links the two.[135] Belief arises when an image or object presented to the memory or the senses evokes an associated idea that appeals strongly to the imagination and the passions. If images and objects did not excite associated ideas, our knowledge would be "limited to the narrow sphere of our memory and senses." Hume thus opposes memory and the senses to imagination and the passions, attributing belief to the latter via the association of ideas. The Roman Catholic Church, he explains, ritually presents sensible images or objects to its parishioners, thereby strengthening their belief in what the objects resemble or represent, a phenomenon David Morgan characterizes as "sedimented practice."[136] Hume refers to the correspondence between

images or objects and associated ideas as a "pre-established harmony" predicated on the observation of nature.[137] If nature were constantly changing, he remarks, ideas of necessary connection would never be formed and inference would not be possible.[138] Similarly, if human nature were inconsistent, we could not anticipate how someone would react to certain situations or under certain circumstances. Attempting to predict the weather or to devise a battle plan would become an exercise in futility. While Hume considers such inferences to be not rational but instinctive—common to animals, children, and primitive societies—they are nevertheless reinforced by experience. They constitute the crucial stage of the empirical method that Diderot referred to as "divination." Remarkably, Hume notes that whereas first causes and principles are beyond our ken: "Those who delight in the discovery and contemplation of final causes have here ample subject to employ their wonder and admiration."[139] He describes such passions as pleasurable, giving "a sensible tendency towards the belief of those events, from which [they are] derived."[140] This is precisely the sort of pleasure in which Bernardin de Saint-Pierre indulged.

In 1792, Bernardin began his *Harmonies de la nature*, in which he explores final causes, and was appointed Buffon's successor as Intendant of the Jardin du Roi, which had recently been renamed the Jardin des Plantes. That same year, he submitted a *Mémoire sur la nécessité de joindre une ménagerie au Jardin National des Plantes de Paris* (*Memoir on the Necessity of Adding a Menagerie to the National Botanical Garden of Paris*) to the Convention Nationale, in which he reveals his awareness that he has very large shoes to fill. Lamenting that Buffon had been obliged to study animal life within the confines of the Cabinet du Roi and the menagerie at Versailles, he declares: "May the glory of realizing on behalf of the representatives of the nation what Buffon desired under the ministers of the court be mine."[141] After visiting the five exotic animals still housed at Versailles once it was pillaged during the Revolution, Bernardin makes a persuasive argument for transferring the royal menagerie to Paris for the purposes of public instruction.[142] The Jardin des Plantes offers the opportunity to study living things, he remarks, whereas the natural history cabinet merely stores

their remains: "If the cabinet is the tomb of the kingdoms of nature; the garden should be their cradle."[143] Drawing an absolute distinction between living and dead matter, he argues that live animals, like live plants, should be made available for the edification of zoologists and artists alike. Though Bernardin oversaw the expansion of the Cabinet du Roi, renamed the Cabinet d'histoire naturelle, into the Muséum National d'Histoire Naturelle, the distinction he drew between living and dead matter placed the garden and the menagerie closer to nature than the natural history museum. While the former sought to preserve natural harmony, the latter disrupted and reconstituted it.[144] This distinction is reminiscent of Diderot's redefinition of history painting and Rousseau's valorization of his herbarium. Bernardin envisions the garden and the menagerie as coexisting in a symbiotic relationship, or "double harmony," where beavers thrive in the shade of poplars on the riverbank.[145] In an extraordinary moment, he shares his thoughts on leaving work for the day.

> We seek, even involuntarily, to discern the existence of [God] everywhere. . . . That is why the largest natural history collections, galeries of the rarest paintings, gardens filled with the most curious plants, the best-written books, everything, that is to say, that displays the most marvelous relations [*rapports*] in nature, after having filled us with wonder, end up boring us. We often prefer a rustic mountain, a rugged rock, some wild solitude that offers us new and more direct relations. Often, when leaving the magnificent Natural History Cabinet of the Jardin des Plantes, we mechanically stop to watch a gardener dig a hole in a field with his spade, or a carpenter square a piece of wood with his axe. We think we are about to see some new harmonies emerge from the heart of the earth or the side of an oak. We do not value those we have just enjoyed unless they lead to others that are unknown to us.

Ultimately, Bernardin considers natural history cabinets, art galleries, gardens, and books to pale in comparison to the spectacle of nature itself, for

nature perpetually renews what such simulacra merely preserve. Yet regardless of their varying degrees of success, the common end of all representations of natural harmony remains "Divinity itself."[146]

Bernardin associates the "sentiment of divinity" with wonder and *bonheur négatif*.[147] He considers it to be "the primary motivator of the human heart," an instinctive passion that serves as the basis of human society, inspires progress in the arts and sciences, and "makes the world . . . an enchanted place."[148] Defining instinct as "pre-sentiment," Bernardin glosses the hyphenated term not as presentiment, a doubtful and confused notion of what may befall us, but rather as "before-sentiment"—common once again to animals, children, and primitive societies—which he describes as certain, decisive, and clairvoyant.[149] The sentiment of divinity is derived from the observation of natural harmony. "Through the spectacle of the present harmonies of nature, I rise towards its author," the narrator of *Paul et Virginie* remarks.[150] This, Bernardin explains in *Harmonies de la nature* is why he dedicated himself to botany.

> [I]f we consider the harmonies of the plants with the elements, the animals, and humans, they make Divinity manifest on all the earth. They preserve us both from atheism and from superstition, these two fruits of pride. They speak the same language to all people, at all times and in all places. . . . Vegetal . . . harmonies are as inalterable as celestial harmonies, but as they are closer to us, they offer us enchanting spectacles.[151]

The sentiment of divinity is occasioned by the sense of wonder that explains our penchant for the marvelous, a sentiment Bernardin calls sublime and identifies as the source of genius. He recognizes this penchant in our fondness for fairy tales, epic poems, operas, and travelogues.

> Travelogues, though for the most part written artlessly, . . . are nevertheless the most interesting of our modern literature, not only because they introduce us to new benefits of nature . . . but because of the dangers on land and at sea from which their authors escape often

> against all hope. . . . This sublime sentiment inspires mankind with a taste for the marvelous.[152]

This penchant was thus associated with the very genres from which *Paul et Virginie* arose and to which it gave rise. "The sentiment of wonder carries us directly into the heart of the Divinity," Bernardin declares, citing as evidence the universal expression of wonder—"Oh, my God!"—even in the domain of politics and the sciences, for we are never tempted to exclaim, "Oh, my king!" or "Oh, Newton!"[153] By characterizing the sentiment of divinity as instinctive, Bernardin likens it to a universal language. Like *bonheur négatif*, it is a mixed emotion, arising from our awareness of the human condition: "Its first effect is to produce in us a strong impulse of joy, the second to make us shed tears. Our soul, struck by this divine light, simultaneously rejoices at glimpsing the heavenly homeland, and despairs at having been exiled from it."[154] The sentiments of wonder, *bonheur négatif*, and divinity are thus intimately related. They are derived most forcefully from the spectacle of nature itself and to a lesser degree from its various simulacra.

In the seventh book of *Le Spectacle de la nature*, with which Rousseau was familiar, the Abbé Pluche fancifully imagines what would transpire if the partisans of harmony and melody were each given their own theater. The venue he selects for the partisans of harmony is the opera, with its characteristic stage sets and machinery, which he reproaches for having privileged pleasure over utility. The venue he selects for the partisans of melody is the church. There, musical expression that conveys nature, sentiment, and meaning is dedicated to the glory of the divine and the inspiration of the devout. The organ and the choir should be devoted to moving not musical connoisseurs but the people. The music must be both touching and memorable, permitting and inspiring them to join in, and thereby teaching them to sing and pray. Its enchantment will be enhanced if the composer draws his subject from sacred or profane history or from the marvels of nature.[155] In their treatises, Lacépède and Le Sueur pick up on Pluche's train of thought.

In the second part of *La Poétique de la musique*, Lacépède turns his attention from opera composers to composers of church music, remarking that they too must be able to imitate both nature (the marvels of creation)

and human nature (the passions). He envisions two possible scenarios. In the first, he likens the congregation not to spectators but to actors participating in a sacred ceremony, in which case the composer's role is not to induce but rather to perceive and enhance the actors' emotion, rendering their prayers all the more fervent.[156] In the second, he likens the congregation to the audience of "a sort of theatrical representation," devoid of stage, decor, and gesture, which he calls a "hiérodrame," a grand motet or oratorio, also known as a "sacred opera."[157] This dramatic music compels the congregation to identify with the people for whom the hymns were composed.[158] In the first of Lacépède's scenarios, the congregation actually participates in a commemorative ceremony; in the second, they believe they are participating in the original event. Both scenarios play upon the fine line between mimesis and lived experience. Yet in order to achieve this end, the composer, too, must believe himself to be in the midst of the heavenly host.[159] The resulting emotion, whether enhanced or induced, consists not only of prayer and exaltation but also of mourning, for resurrection is preceded by sacrifice. Compositions that convey images of suffering must therefore also offer consolation, which Lacépède describes as "a sort of illusion" that renders "melancholy sweeter" or misery bearable.[160]

While Le Sueur's *Exposé d'une musique* contains several passages that shed light on his composition of opera, his primary goal in drafting this work was to explain not how to infuse an operatic work with a sentiment of divinity but how to infuse church music with a sense of dramatic unity. Yet this proves to be but another means to the same end. Le Sueur staunchly defends French church music against the accusation that it "no longer has the marvelous power to paint the passions and to convey the sentiments it wants to express to the listener's soul."[161] To do so, composers must lend narrative structure and coherence to church ceremony through the creation of what he variously refers to as "links in a chain," a "secret thread," "analogies," or a "family resemblance."[162] Le Sueur's aim, once again, is twofold: to lend enough dramatic unity to the life of Christ to convey the sense of an unfolding story while maintaining enough affective contrast between episodes that they cannot be interchanged, as the church calendar is divided into four distinct seasons. Le Sueur reminds his readers of Christi-

anity's potential to convey strong emotion through scenes as powerful as God's descent on Mount Sinai, the death of the Messiah, or the crossing of the Red Sea, echoing Lacépède's conviction that such subjects require the grandeur of a cathedral rather than the intimacy of a salon.[163] The nature of the emotion conveyed depends on several factors, including age, rank, station, character, and nation.[164] Just as Iphigenia's sacrifice elicits various responses from the characters in Gluck's opera, Christ's resurrection occasions different reactions from the guards (fear), Mary Magdalen (love), and the apostles (faith).[165] Like Bernardin, however, Le Sueur imagines yet another reaction, akin to the sentiment of divinity, which he likens to other mixed emotions, shifting imperceptibly in his explanation from the role of composition teacher to that of congregation member.

> Do you want the music to express the tender yearning of all creatures for their Creator? Let the most energetic accents, while remaining sweet, suave, and religious, be heard. . . . Let the temple resound with this sentiment, that must soon enter all hearts, penetrating them with the saintly intoxication, the mute respect, the sacred horror for which the listeners will already have been prepared. . . . But I already see your genius ignite. The supreme intelligences have lent you their heavenly harps. I hear them resonate beneath your fingers. I hear your touching modulations, your sublime chords. What surprising effects they have already produced on my soul. . . . You raise me above a mortal. You transport me to the sublime concerts that resonate in the eternal resting place, and my enflamed heart, casting itself as though beyond me [*hors de moi*], loses itself in the heart of its Creator.[166]

The mixed emotions of saintly intoxication and sacred horror transport Le Sueur, like Bernardin, into the heart of the Creator. Recalling Diderot's waking dream of witnessing a shipwreck from the shore, Le Sueur employs the first-person present tense to describe his sensory experience: "I see," "I hear," and implicitly "I lose myself." While Lacépède suggests that composers must forget themselves, or their role, for their compositions to be effective, Le Sueur writes as one who does so. In the context of church

ceremony, however, he identifies no longer with nature's victims but with God's creatures. In Lacépède's and Le Sueur's treatises, church music has the same effect on composers and the congregation as the spectacle of nature has on Bernardin de Saint-Pierre and his narrator.

The application of the principles of operatic composition to church music hearkens back to the periodic rapprochement of church and stage. Medieval mystery plays chronicled the life of Christ and the saints, including their moments of doubt, emulation, and conversion. Anthony Kubiak remarks on the coincidental disappearance of Medieval theater and its reappearance in the form of the Mass and the pageantry associated with passion week. Calling attention to the "oppositional identity between faith and illusion," he posits an "asymptotic" relationship between theology and theater.[167] The Mass and the Passion constitute two instances in which the congregation is exhorted to believe in the real presence in the face of apparent substitution or absence. The mystery of transubstantiation plays upon the distinction between the "vraisemblable" and the "vrai" as what appear to be bread and wine become the body and blood of Christ in the course of the ritual, not only commemorating but also implicitly repeating the original sacrifice and thereby transforming the congregation from spectators into participants. The mystery of the resurrection is predicated on the ability to believe without the corroboration of reason or the senses (sight, touch), a leap of faith that proves too much for doubting Thomas. Christopher Semk pinpoints another such conjunction of theology and theater in the Parisian martyrological tragedies of the 1640s. The efficacy of commemorations or reenactments of Christ's martyrdom, as well as the exemplary conversion or mimetic martyrdom of the saints, relies on the capacity of the saint—and by extrapolation the congregation—for complete identification, once again transforming them from spectators into participants, occasionally emblematized by the appearance of stigmata. While Semk notes that the elimination of the distinction between actor and spectator anticipates Antonin Artaud's vision of total spectacle, it is also reminiscent of the vanishing point between illusion and reality associated with Diderot's bourgeois drama and Rousseau's *fêtes champêtres*.[168] Lacépède and Le Sueur's application of the principles of operatic composition to church music constitutes another such

instance. Compositions for church festivals were to be based on the life of Christ. Musical mnemonics derived from such narrative coherence fostered vivid emotions that enhanced the congregation's strength of conviction, transporting them beyond fiction (or ritual) to belief.

Church ceremony, like painting, theater, opera, and the novel, became increasingly attentive to standards of verisimilitude in eighteenth-century France. The clergy were among those who wished to eradicate all vestiges of superstition in order to render religious tenets more persuasive. Accordingly, commissioned art works were expected to correspond both to historical sources and to the biblical stories they represented in all particulars: ornamentation was to be kept to a minimum and in good taste; and church architecture and decor were extensively rethought. Like the Palais-Royal opera, which burned to the ground twice in the course of the century, affording an opportunity for reconceiving its structure and purpose, as we saw in Chapter 1, some cathedrals burned and were rebuilt, others were restored, and still others were redesigned or redecorated. A certain amount of carryover can be seen between the artists involved in these projects. Giovanni Servandoni, renowned for his set designs and *machines d'opéra* was also the architect of Saint-Sulpice, for instance, and Jacques-Germain Soufflot, who renovated the cathedrals of Lyon and Paris, was close friends with Charles-Nicolas Cochin, who re-envisioned the opera. John McManners's description of the characteristic eighteenth-century design of the altar is striking in its resemblance to Bernardin's forest glade and to an operatic set.

> In Counter-Reformation spirituality, devotion was brought to a central focus: . . . God comes to earth, and the worshipping congregation comes together at the altar, in the Eucharist. The centre of the church must be the high altar, . . . with marble columns, a great baldachin, and a golden *gloire* of cloud-borne angels. This was the centre to which a new perspective would lead, uninterrupted by rood-screens, tombs, memorials, and clutters of statuary—the eye would rather be led up to it by delicately wrought grilles and polished marble floors. Down these vistas, the sunlight would stream, through clear glass if necessary, suggesting a belief that was luminously reasonable.[169]

FIGURE 13. Étienne-Maurice Falconet (1716–1791), *Divine Glory* (detail). 1759. Marble and bronze. Chapel of the Virgin, Église Saint-Roch, Paris.
Wikimedia Commons

The columns, natural light, and sense of perspective that Bernardin achieved in Paul and Virginie's *fêtes champêtres* are all present in this description, as is the descent of cloud-born deities characteristic of the operatic stage, now Christian rather than Greco-Roman. Michael Paul Driskel has researched the systematic addition of *gloires* to altarpieces in eighteenth-century France, including Nicolas Coustou's 1712–1726 version for Notre Dame de Paris and, most notably, Étienne-Maurice Falconet's 1759 version for the Église Saint-Roch, which also housed Joseph-Marie Vien's and Gabriel-François Doyen's rival masterpieces on which Diderot commented in the *Salon de 1767* (Figure 13). Accordingly, Diderot advised art students not only to venture into nature, the streets, and the Académie Royale de Peinture et de Sculpture to train the eye, but also to visit Saint-Roch.[170] The visual impact on the spectators, or congregation, was central to this reconception of the altar, which included resituating the intervening choir stalls, yet the music that accompanied church ceremony proved to be equally important.

Cross-pollination between church music and the opera, both of which had their origins in Italy, dates from Jean-Baptiste Lully's compositions for the Royal Chapel and the Palais-Royal. The foundation of the Concert Spirituel in 1725 further blurred the distinction between sacred and secular music.[171] Le Sueur played a key role in this process. Named to the coveted position of Notre Dame de Paris' *maître de chapelle* in 1786, his responsibilities included composing the music for church festivals, conducting, and training choirboys.[172] Though the ecclesiastical ban on actors did not pertain to opera singers, who were employed by a royally sanctioned institution, Le Sueur was the first to persuade a Parisian cathedral to employ opera singers and a full orchestra for the four feasts of the church calendar. While choirboys furnished the voices for both church and opera, as the church was the only venue for early vocal training, the high tenors required for church festival days were trained at the opera.[173] Firm distinctions between sacred and secular instruments likewise broke down in the course of the century, and the organ was outfitted with new stops designed to simulate not only all instruments in the orchestra but all sounds of nature (including the human voice), enhancing composers' ability to inspire a sentiment of divinity in the congregation.[174]

Bernardin, in all likelihood, would have placed the church at the same remove from the spectacle of nature as the art gallery and the natural history museum, however. Cook asks of Bernardin's novel: "What is the church's responsibility in the young heroine's tragic end?"[175] Although Paul and Virginie regularly attend mass at l'église des Pamplemousses, it is there that they feel the social hierarchy on the island most keenly and so prefer to pray at home or in the woods and fields.[176] Virginie's resolution to go to France, despite Paul's wishes and the narrator's better judgment, is determined when the missionary suggests it is God's will.[177] The narrator regrets that the Bible has been placed at the service of European tyranny and conquest.[178] Virginie's wealthy aunt's religious convictions vacillate between the extremes of atheism and superstition.[179] Even Virginie's stately funeral, which her family members do not attend, rings false, recalling the hypocrisy of official ceremony and the governor's duplicity.[180] Yet Paul and Virginie enact their Bible stories not within the confines of a church or theater but

in a forest glade, likened to both a temple and a stage. The narrator describes Virginie's death as a sort of apotheosis, moreover, in which her soul is freed from physical constraints and the mediation of her senses, becoming "all sight, to enjoy the rich colors of the dawn; all smell, to savor the perfumes of our plants; all hearing, to listen to the concerts of our birds," transfiguring her into the ideal spectator.[181]

The recommendations that Bernardin, Lacépède, and Le Sueur offered aspiring naturalists, artists, and composers in the years 1784–1788 were informed by their familiarity with the scientific methods and aesthetic theories of their precursors as well as by their own firsthand observation of nature and the human heart. They urged those who wished to follow in their footsteps to observe the spectacle of nature, analyzing the mixed emotions they themselves sustained before seeking to reproduce them in their audience through the application of natural principles to works of art. Distinct religious overtones can be detected in their writings, however, that were far less resonant in those of their precursors. Whether transporting the reader/spectator far from the corruptive influence of western society to restore the authenticity of natural sentiment, or transporting the congregation from commemorative ritual to original sacrament, their ultimate goal was to inspire in others the sentiment of divinity, casting past fiction to belief.

CHAPTER FOUR

The Poetics of Nature in Ossian and Staël

In 1760, Scots scholar and preceptor James Macpherson published a slim volume entitled *Fragments of Ancient Poetry, Collected in the Highlands of Scotland, and Translated from the Gaelic or Erse Language* at the behest of Hugh Blair, theologian and chair of rhetoric and *belles-lettres* at the University of Edinburgh. These fragments had Blair convinced that they were parts of a more alluring whole that would help boost Scots national pride, which had suffered at the hands of the English when the Jacobite rebellion was crushed in 1745. Blair's preface to the *Fragments of Ancient Poetry* attested to their authenticity, suggested that more poetic remains were to be found where they came from, and envisioned a project of recovery. Members of the Edinburgh Select Society, including John Home, David Hume, Henry Home, Lord Kames, and Adam Ferguson, embraced the notion of the possible existence of a "Scottish Homer."[1] Funds were obtained to finance Macpherson's travels through the Highlands, where he was to seek and ideally locate the Scots national epic. Macpherson's mission proved to be more successful than anticipated, for in the space of a few months he produced a translation of the six-book epic poem *Fingal*, published in 1761, closely followed by the eight-book sequel *Temora*. The discovery of a Scots national epic in which the British, French, and Germans alike recognized their cultural origins captured the European imagination and, by the end of the century, the poems had been translated into more than half a dozen languages. The Ossian craze became an international publication

phenomenon that outstripped the popularity of the best-selling natural histories and novels we have examined thus far, inspiring French philosophers, artists, and composers in turn. Macpherson's fame turned to notoriety, however, when the poems were exposed as a hoax. Far from being faithful translations of a Scots original, as Macpherson had claimed, they were found to be part translation of written fragments, part transcription of oral narrative, and part embellishment, and were promptly demoted from archaeological evidence or historical document to mere literature. Macpherson's (re)construction of a lost original nevertheless had a profound impact on such influential figures as Johann Wolfgang von Goethe, Johann Gottfried Herder, François-René de Chateaubriand, Germaine de Staël, and Napoleon Bonaparte, to name but a few.

In previous chapters, we have seen the French turn to the Middle East, the Swiss Alps, and the French tropics as privileged loci where the marvels of nature had purportedly been preserved. The Ossian craze drew their attention to the Scots Highlands instead, engaging in what James Mulholland has called a "cross cultural and cross-media poetics."[2] This change of scenery involved a shift in prevailing climate and mood, from predominantly sunny, despite the occasional squall, to a pervasively gloomy atmosphere and disposition. Though subsequently denounced as a hoax, the process by which Macpherson (re)constructed the Ossian epics bears a close resemblance to the empirical method philosophers employed to derive their scientific, aesthetic, and religious principles. The controversy concerning the epics' authenticity has continued to this day, with opinions divided as to whether Macpherson was the unwitting victim of a conspiracy spearheaded by the Edinburgh literati, whether he himself attempted and, for a while, succeeded in pulling the wool over his contemporaries' eyes, or whether his undertaking constituted a legitimate albeit somewhat misguided attempt to collect and preserve the ephemeral remains of a culture on the brink of extinction.[3] Rather than undertaking to lay this controversy to rest, I am interested in the aspects of contemporary philosophical inquiry and artistic practice that help account for the epics' favorable reception, particularly in France.

Macpherson's fluency in Gaelic and English, identification with Highland culture, sympathy with the Jacobite rebellion, and thwarted poetic aspirations may have contributed to his personal investment in the epics' success. While Homer, Virgil, Milton, and the Bible have been numbered among his sources of inspiration, he nevertheless went in search of a Scots national epic at a time when the specificity of their culture was increasingly being differentiated from that of the Anglo-Saxons, Britons, Bretons, and Franks and when their right to political sovereignty had just been quashed. He was therefore uniquely situated and qualified to reconstruct from fragmented remains an ideal whole that may never have existed but that resonated strongly with other origin myths promulgated for the purposes of rethinking contemporary society, including Jean-Jacques Rousseau's. Had Macpherson made no pretense of the epics' authenticity, his contribution might have been perceived as a *tour de force* of cultural recovery as opposed to a literary hoax, comparable to Antoine Galland's "translation" of the *Mille et une nuits* into French at the beginning of the century in terms of both its questionable status and its widespread influence. Macpherson operated at the vanguard of what would soon become a pan-European interest in folklore and folksong, before an ethics of collecting practices was established. Ironically, the controversial nature of his methods afforded an occasion to put such guidelines into place, leading to the establishment of folklore institutes throughout Europe.

The close affinities between the medico-philosophical communities in Edinburgh and Paris helped pave the way for the favorable French reception of the Ossian epics. Robert Whytt and William Cullen served on the faculty of the Edinburgh Medical School, where they derived their theories of vitalist physiology—including a "sentient principle" and an "animal oeconomy"—conceiving of the human body in terms of the nervous rather than the vascular system.[4] Charles Wolfe identifies Whytt as the origin of the Comte de Buffon, Denis Diderot, and Théophile de Bordeu's shared conviction that sensibility was a "general or universal property of matter"[5] and Andrew H. Clark characterizes Diderot's writings as the "poetic analog" of Whytt's interest in sympathetic reactions, or communication among

parts.[6] Cullen was the friend and physician of David Hume, who studied at the University of Edinburgh, and of Adam Smith, who gave a series of public lectures to the Edinburgh Philosophical Society, of which they were all members. Both Hume and Smith wrote influential theories of the passions that were well known in France and Britain. The kinship between Rousseau's notion of *pitié* and Smith's notion of sympathy, as defined in his *Theory of Moral Sentiments* of 1759, is widely recognized. Here, however, the history of influence is reversed, for Smith had read Rousseau's 1755 *Discours sur l'origine de l'inégalité*, becoming one of several conduits for Rousseau's theories of nature, language, and society into Scotland. Both *pitié* and sympathy are roughly synonymous with moral *sensibilité*, which is closely related to its physiological counterpart. The connection between sensation and sentiment in the Scots medico-philosophical context thus bore a strong resemblance to that which we have seen in France.[7] Swiss naturalist Charles Bonnet, who is thought to have epitomized "eighteenth-century Francophone sensationalism,"[8] drew no absolute distinctions between the animal, vegetable, and mineral kingdoms in his *Contemplation de la nature* of 1764. Instead, his universal chain of being constituted an "all-embracing continuum" that encompassed not only every "rock, tree, dog, or man" but also material and spiritual beings.[9] This perception of relations among elements, species, and realms closely corresponds to the representation of nature in the Ossian epics.

In previous chapters, I investigated the theorization of wonder, enthusiasm, and the mixed emotions that gave rise to the sentiment of divinity in response to the spectacle of nature. These mixed emotions belonged to the broader category of melancholy that likewise straddled the physiological and moral domains. Considered a "disease of the soul," melancholy had, since Medieval times, been extended from a humor or temperament to an emotion or mood. The emotions it encompassed included sorrow (the response to past suffering) and fear (the apprehension of future suffering), particularly if unfounded, enduring, or extreme. Like enthusiasm, melancholy was often attributed to an overactive imagination and risked becoming irrational, bordering on fury, frenzy, or madness.[10] The force of their imagination led melancholiacs, like enthusiasts, to identify strongly

with the suffering of others, leading to hypochondria.[11] Melancholiacs likewise (or consequently) suffered themselves, both morally and physically. Whether the cause was moral and the effect physical or the reverse was not clear. The malady therefore became the province of physicians, philosophers, and theologians, necessitating the treatment of body and soul alike.[12]

In his *Letter Concerning Enthusiasm*, as we saw in Chapter 2, Shaftesbury distinguished between ancient poets, who believed they were divinely inspired, and modern poets, who were obliged to resort to other sources of inspiration or to work themselves into a similar state. Regardless of the source of inspiration, real or imaginary, the effect was the same. Similarly, melancholy was considered to be a response to an unknown or, at best, uncertain cause. The legitimacy of the malady lay in the reality if not of the cause then of the resulting symptoms. Like enthusiasm, melancholy was frequently thought to accompany genius, though the source of inspiration was more likely to be considered demonic than divine. Stephanie Shirilan traces this association from Aristotle through Marsilio Ficino and Robert Burton, who attributed melancholiacs' heightened cognitive ability to their acute sensitivity and vivid imaginations. In an unexpected twist, Burton recommended inducing wonder as a cure for melancholy, effectively diverting the sufferer's attention from one unknown cause to another in an effort to convert despair to hope.[13]

At the time, melancholy was considered peculiar to the microclimate of the British Isles. George Cheyne's 1734 treatise on nervous disorders, *The English Malady*, identified it as such. The French also considered melancholy to be quintessentially English, as Eric Gidal has shown, yet cast this temperament in a positive light by systematically pairing it with the aspects of English culture they found most admirable. The Abbé Dubos had suggested as early as 1719 that mood is a function of climate, associating melancholy with the North. In *De l'esprit des lois* (*The Spirit of the Laws*), the Baron de Montesquieu broadened the effects of climate to encompass laws and customs, attributing the English propensity to both suicide and constitutional government to the cold. Their ability to empathize with others and willingness to consecrate themselves to a greater cause by way of diversion from their own suffering contributed to this dynamic. Gidal credits Pierre

Jean Grosley in particular with bringing the salutary aspects of the English malady to the attention of the French. In his 1770 treatise *Londres* (*London*), Grosley expands the pursuit of "solitary erudition" in which Rousseau and Jacques Henri Bernardin de Saint-Pierre indulged "to encompass a public sphere of cultural and political engagement." Gidal situates this notion of "civic melancholy"—as Anne C. Vila does *sensibilité*—"between Enlightenment and pathology."[14] Just as wonder leads not to stasis but to inquiry, civic melancholy fosters not anguish but analysis, rendering the passage from trauma to freedom possible.[15]

Whereas previous chapters focused on the relationship between wonder and reason, enthusiasm and imagination, here I wish to investigate that between melancholy and memory. Zsolt Komáromy charts the affinities between memory, imagination, and representation that date back to antiquity, resisting the false distinction between memory as reproductive and imagination as productive. According to the mimetic model that endured through the mid-eighteenth century, observations were stored in the memory and recombined in the imagination, as we saw in Chapter 2. In the course of the century, we witness a gradual transition in the understanding of the imagination from mimetic to creative. According to Komáromy, memory underwent a similar transition from mimetic to constructive. Creative imagination differs from constructive memory, however, for while the former gives rise to other worlds, the latter helps shape the world that determines it.[16] The distinction between original and copy that Dubos identified as the problem of mimesis, or representation, is also inherent to our understanding of imagination and memory. Memory, like imagination, is at the outset but an image or copy of the original object, observation, or experience. In order to demonstrate how the opposition between original and copy is elided in constructive memory, Komáromy turns to oral tradition as preserved in the Homeric epics. I extend this discussion to the oral tradition that came to rival and potentially to replace Homer in the course of the eighteenth century, preserved in the Ossian epics. The epics came to play a critical role in the French reconception and representation of their national identity during the transitional years from revolution to republic or empire (depending on one's political persuasions). In this chapter, I consider the

French reception of the Ossian epics as a process of reconstruction, first of Scotland's past, forged from poetic remains, then of France's future, forged from the ruins of the Revolution.

THE RUINS OF POETICS

Macpherson's arrival at King's College, Aberdeen, in 1752 coincided with a change in the curriculum, as Fiona Stafford relates. The new course of study favored empirical observation in history, geography, and natural philosophy. Macpherson's tutors included Thomas Reid, founder of the Scottish School of Common Sense, and Alexander Gerard, author of prizewinning essays on taste and genius, who himself was the student of Thomas Blackwell, author of *An Enquiry into the Life and Writings of Homer*. Macpherson is thought to have begun collecting the fragments that served as the basis for his first translations of Scots ballads into English shortly after completing his studies.[17] In the same years, he began to try his hand at poetry, both reading and writing for the *Scots Magazine*. The contemporary publication of Edward Young's "Night Thoughts," Thomas Gray's "The Bard," and Edmund Burke's *Philosophical Enquiry*, which appeared in 1757, proved to be as influential as his knowledge of Homer, Virgil, Milton, and the Bible. Macpherson's *Fragments of Ancient Poetry* appears to have been informed by a combination of his familiarity with the Gaelic originals and his own poetic aspirations. Blair expressed the conviction in his preface to the collection that these fragments were but parts of a larger whole.[18] Though the remains themselves took the form of ballads, Macpherson and Blair were persuaded, like many in their circle, that the lost original must have been an epic poem, which Macpherson proposed to reconstitute before translating it into English prose.

Championed by the Edinburgh literati, Macpherson undertook what might be considered an early example of field research, journeying to the Isle of Skye and the Outer Hebrides in quest of the remains of the lost epic. His enterprise rapidly became a collaborative effort as some were compelled to recite and others to transcribe oral poetry, while still others contributed and collected written manuscripts, collated variants, and assisted with translations.[19] Macpherson freely acknowledged his debt to his collabora-

tors in the preface to *Fingal*: "Several gentlemen in the Highlands and isles generously gave me all the assistance in their power and it was by their means I was enabled to compleat the epic poem."[20] His Highland roots and native Gaelic proved useful in convincing those he met on his travels to share or even part with their treasures. Though it is unclear whether Macpherson's methods were persuasive or coercive, and he was more inclined to retain than to return manuscripts, he thereby managed to preserve them, legating several to the Highland Society at his death that are now housed in the National Library of Scotland and the Royal Irish Academy.[21] At a moment when the Highlanders' language and culture were rapidly being dispersed and erased, Macpherson's efforts to collect and record both called attention and lent importance to this material.

Had Macpherson stopped there, his undertaking might not have significantly differed from other early folklore collection practices. But he considered the status of the raw materials with which he returned to be not only fragmented but flawed. He therefore undertook to restore the purity of the purportedly lost original to the corrupt remains.[22] Concerted efforts to discern Macpherson's methods have given us a sense of how he went about this task.[23] In keeping with his education at the University of Aberdeen, his initial approach appears to have been empirical. He is known to have had in his possession several versions of various Gaelic ballads transcribed from oral recitation or in manuscript form. These, however, had already suffered the ravages of time in the form of lacunae, lost meanings, and unknown references. Macpherson's collaborators attest to his having objected, when he came across indications that the ballads had been embellished. They found his ability to identify and see past such inconsistencies to be particularly admirable. Macpherson's own omissions or additions, which were purportedly designed to correct these flaws, were in a sense no different from those of the bards on whose memories the oral tradition relied. His inference of a coherent whole from disparate parts also bears a strong resemblance to the crucial stage of the empirical method, that of divination. This is the stage that Macpherson's tutor Gerard attributed to genius.

If we consider the scientific method of the figures I discussed in previous chapters, we note certain striking affinities. Macpherson's project of

recovery began as an empirical process of observation and transcription, yet privileged the subsequent stage of imagination or insight. J. F. Campbell's comparison of Macpherson's final product to a Greek hut as opposed to a natural history cabinet or museum is useful in this regard.

> Macpherson's Ossian, like the Greek hut, is, in the main, composed of genuine materials, and a clever antiquary or a good critic, might yet pick out all the old fragments, and maybe arrange them more scientifically. . . . The Greek hut, with all its incongruities, dirt, discomfort, with its dress of shrubs and lichens, and utter disregard for the rules of architecture, is more likely to attract the painter's eye than the most symmetrical museum of antiquities, geology, and botany . . . and so Ossian has attracted the notice and the admiration of famous men, who would not have bestowed a thought upon popular tales and ballads separately arranged, and classed in due order, as I have striven to do.[24]

While Campbell's collection of ballads was in a sense more true to his sources, Macpherson's epic poems had the potential to reach a broader audience, attracting the painter's eye. His reconstruction of a lost original bears a strong resemblance both to Buffon's efforts to divine the age of the Earth, shifts in its surface, and species transformation from the fossil record, and to Bernardin de Saint-Pierre's use of firsthand observations from his journey to the Île de France as the raw materials for his pastoral *Paul et Virginie*. Though we deem one process scientific and the other artistic, both rely on a combination of observation and insight. In his 1759 *Essay on Taste*, Gerard asserts that genius relies on invention, or imagination, which enables us to associate remote ideas, remarking in a passage evocative of Macpherson's process: "Thus from a confused heap of materials, collected by fancy, genius, after repeated reviews and transpositions, designs a regular and well proportioned whole."[25] If Macpherson took the stage of divination, interpretation, or invention common to the sciences and the arts farther than some, it attests to his ingenuity just as much as to his disingenuousness according to the standards of the time.

Gerard emphasized the interdependence of memory and imagination in his subsequent *Essay on Genius*. Firsthand observation of nature serves to enrich and vary works of genius, he claims, for "many descriptions and relations which are introduced into poetry, as if they were the creation of fancy, are really copied from memory." Whereas memory recalls relations, or *rapports*, among ideas or objects, imagination bestows such relations on them. The two are therefore difficult to distinguish. Gerard provides a telling example of the slippage between them. When someone describes a place seen or event witnessed, he relies on memory. Yet "if he illustrate any part of his recital by a comparison with resembling objects, or enliven it by contrasts; or if he have forgotten part of the objects and supply the defect which this would occasion in his story, by putting in such circumstances as are consistent with the other parts; then he exercises imagination." Far from dissuading the reader from giving in to this temptation, Gerard suggests that such embellishment through association is inevitable: "We never can have a long train of thoughts, or carry on a long conversation, even relating to the merest matters of fact, wholly by the suggestions of memory, without any aid from imagination." He therefore invites us to ponder the role of imagination or genius in the writing of history. While memory arises from "a natural aptitude to retain the relations of things," the relations we are inclined to remark or remember vary from person to person. Some are adept at logic, others at natural history, history, or poetry. Of the latter, Gerard states: "Many of these relations are originally bestowed upon the parts solely by imagination; but after they are bestowed, and the work is read, they become observed connexions of the parts of that work, and are proper objects of memory."[26] History, which consists of memories, cannot be written without the aid of the imagination, which relates them. Once read, poetry, a product of the imagination, is added to our store of memories. Gerard thus narrows the gap between the writing and reading of history and poetry in ways that suggest how the processes of memory and imagination may have become conflated in the reconstitution and reception of the Ossian epics.

Henry Home, Lord Kames—Hume's distant cousin, Smith's patron, and long-term president of the Edinburgh Philosophical Society—both

fostered and lauded Macpherson's quest for and publication of the Ossian epics. Kames was familiar not only with Rousseau's writings but also with those of his own philosophical entourage from Joseph Addison through Burke.[27] David Marshall describes Kames's 1762 *Elements of Criticism* as "less original than representative of the critical conventions and commonplaces of its time,"[28] the same conventions that informed the composition of the epics themselves. In the chapter "Emotions Caused by Fiction," Kames claims that because we tend to trust our senses, we are inclined to believe in objects or events that we have witnessed firsthand and to remember those that create a strong impression, inducing emotion.[29] He evokes two instances that approach, or approximate, such lived experience: memory and fiction. Kames differentiates "reflective remembrance," which is transient and vague, from the "complete idea of memory," which is vivid and enduring, enabling us to conjure an image via an "act of intuition." In the latter case, "there is no past nor future: a thing recalled to the mind with the accuracy I have been describing, is perceived . . . as existing at present." Kames calls this phenomenon ideal (as opposed to real) presence, likening it to a waking dream that we perceive as though spectators or eyewitnesses. He extends the notion of ideal presence to fiction, for vivid descriptions likewise enable us envision what we hear or read, giving us the impression that we are witnessing them directly. Here, too, all sense of past and future is lost as the account merges with an ideal present. Both instances involve a loss of awareness that we are remembering or reading.[30]

Kames does not consider it important, in engaging the emotions of the reader, whether the story be true or false (history or fable, authentic or hoax). He goes still further, suggesting that fables are more successful than history in inducing emotion and credence, which is why historians must describe or narrate vividly.[31] If unaware that we are remembering, we lose the critical capacity to distinguish between memory and imagination, between representational and constructive memory. We thus relive the past as though it were present regardless of whether or not the past actually transpired. Because our emotional investment and credence are greater in objects that we perceive as real (even if illusory), given the vivacity of the perception, memory, or representation, the most effective fictions are those

that employ what Komáromy calls the "mnemonic imagination." These fictions engage the emotions of the reader/spectator as entirely as the "complete idea of memory," invoking its self-validating function (it is true because I remember it).[32] Privileging the effect of poetry and theater over that of painting, Kames concurs with Rousseau that successive impressions engage our sympathies more readily than simultaneous ones: "Nor is the influence of language, by means of ideal presence, confined to the heart: it reacheth also the understanding and contributes to belief."[33]

Blair describes Ossian's poetry as drawing on just such a "mnemonic imagination."

> It is the business of a poet not to be a mere annalist of Facts, but to embellish truth with beautiful, probable, and useful fictions; to copy nature . . . like painters, who preserve a likeness, but exhibit their objects more grand and beautiful than they are in reality. . . . Ossian has followed this course, and building upon true history, has sufficiently adorned it with poetical fiction for aggrandizing his characters and facts. . . . At the same time, the foundation which those facts and characters had in truth, and the share which the poet himself had in the transactions which he records, must be considered as no small advantage to his work. For truth makes an impression on the mind far beyond any fiction. . . . It is considered as an advantage of the Epic subject to be taken from a period so distant, as by being involved in the darkness of tradition, may give licence to fable.[34]

This appeal to the memory and the imagination via a blend of fact and fiction ensures that "whilst reading . . . we are transported as into a new region, and dwell among his objects as if they were all real."[35] Kames's notion of ideal presence resonates strongly with Diderot and Rousseau's aesthetics, explored in Chapter 2, and aptly describes the experience of reading the Ossian epics, in which the reader, placed in the position of the spectator, is asked to draw on the senses of sight and hearing as well as on the faculties of memory and imagination.

Blair was an equally staunch supporter of Macpherson's research, financing his trip to the Highlands and writing his *Critical Dissertation on*

the Poems of Ossian, which was widely considered a *tour de force* of literary criticism, in order to promote the epics. He penned his *Lectures on Rhetoric and Belles Lettres* in 1759 at the very time that plans for the voyage of recovery, or discovery, were being hatched.[36] Blair's discussion of sublimity in writing aptly characterizes the spectacle of nature that we have examined thus far, as depicted in natural history, painting, opera, and the novel. The converse of the picturesque, sublimity removes all sense of the frame, the stage, or any other device that delimits the representation of nature: "Remove all bounds from any object, and you immediately render it sublime." The infinite space implied by endless plains, night skies, and oceans meets these criteria. The effect is enhanced by the "exertion of power and force" found in natural phenomena such as earthquakes, volcanoes, and tempestuous storms. Disruptions of nature's apparent harmony, even if intrinsic to nature's order, thus occasion the sublime. Such vistas or phenomena, Blair asserts, should be conveyed with "strength, conciseness, and simplicity."[37] Extravagant or ornamental rhetoric only detracts from the effect. Poetic genius accordingly consists in the ability "to feel strongly, and to describe naturally."[38]

Though Blair attributes sublimity in writing to Homer, Milton, and the Scriptures, which were numbered among Macpherson's sources of inspiration, the most striking examples, he claims, are to be found in ancient, uncultivated societies, when "The genius of men was . . . prone to admiration and astonishment."[39] In his *Critical Dissertation*, Blair explains that in such early societies, when men still live dispersed, "they meet with many objects, to them new and strange." Consequently, "their wonder and surprize are frequently excited."[40] Figurative language, strong feelings, unchecked imagination, and "that enthusiasm, that vehemence and fire, which are the soul of poetry" characterize uncultivated societies. Blair thus implicitly agrees with Diderot and Rousseau that social progress was accompanied by a regression from sublimity to accuracy, imagination to understanding, passion to politeness, enthusiasm to precision, bringing with it an increase in virtue but a corresponding loss of animation and vivacity. He describes such early ages as poetic, for "before writing was invented, no other compositions, except songs or poems, could take such hold of the imagination and memory, as to be preserved by oral tradition, and handed down." The Celts were as-

sociated with the druids and the bards; the former their philosophers, the latter their poets. The respect they accorded the bards, Blair asserts, helps account for the comparative refinement of their poetry. Whereas the nature depicted in Ossian's poetry is "rude" and "uncultivated" (rocks and torrents, whirlwinds and battles, thunder and lightning), the same cannot be said of the sentiments expressed, which Blair, like Rousseau, refers to as the "voice of nature." What Blair calls the moral or sentimental sublime tempers not terror with delight, as Burke had claimed, but valor with generosity and admiration with pity.[41]

While Macpherson was familiar with Burke's *Philosophical Enquiry*, his notion of the sublime was equally indebted to other contemporary sources that associated the sublime with nature.[42] Gerard defines the sublime as follows in his *Essay on Taste*.

> Considerable *magnitude* or largeness of extension . . . is necessary to produce sublimity. It is not on a small rivulet . . . it is not on a narrow valley . . . it is not on a little hill . . . that we bestow the epithet sublime: but on the Alps, the Nile, the ocean, the wide expanse of heaven, or the immensity of space uniformly extended, without limit or termination. . . . When a large object is presented, the mind expands itself to the extent of that object, and is filled with one grand sensation, which totally possessing it . . . strikes it with deep silent wonder and admiration.[43]

While Gerard locates the sublime in nature, he is persuaded that by means of association its effects can be conveyed to a spectator through art.[44] Herein lies the paradox of the sublime. As Suzanne Guerlac remarks: "Art achieves its force of sublimity through a dissimulation of its artifice, that is, by appearing as nature."

> Art as seduction . . . implies the successful production of an impression or effect of sincerity through a strategic concealment of figures as devices of rhetorical manipulation. Thus, considered as a function of nature, the sublime implies nobility and sincerity. Considered as a

> function of art, it implies the reverse. Since the specificity of the sublime is the reciprocity of nature and art—art without art—it carries a force both of sincerity and duplicity, of truth and falsity; it implies a force that undermines precisely this opposition.[45]

This observation is particularly intriguing in the context of the Ossian controversy, during which such oppositions (nature and art, sincerity and duplicity, truth and falsity) were repeatedly undermined. "Ossian's power," Katie Trumpener asserts, "lies partly in its promise to provide unmediated access to nature and to the past."[46] Yet as Leith Davis observes, memory is "always mediated."[47] The mediation Macpherson employs, in the form of similes and songs, was designed to give the impression of immediacy associated with the experience of the sublime.

The spectacle of nature in the Ossian epics is the product of a complex network of similes, or relations (*rapports*). Blair draws a stark contrast between the similes to be found in the poetry of Ossian and Homer in his *Critical Dissertation*. While Homer's epics abound with allusions to the animal world and the "various occupations of rural and pastoral life," Ossian consistently alludes to "natural inanimate objects," including "the Sun, the Moon, and the Stars, Clouds and Meteors, Lightning and Thunder, Seas . . . Rivers, Torrents, Winds, Ice, Rain, Snow, Dews, Mist, Fire and Smoke, Trees and Forests, Heath and Grass and Flowers, Rocks and Mountains, Music and Songs, Light and Darkness, Spirits and Ghosts"—in other words, to the atmosphere, the environment, and the landscape. If readers mistakenly perceive these similes to be redundant, they have overlooked the fact that no two occurrences of the moon or the mist are alike.[48] The most straightforward comparisons liken epic heroes to nature, as in the description of Fingal's enemy Swaran: "I saw their chief, says Moran, tall as a rock of ice. His spear is like that blasted fir. His shield like the rising moon. He sat on a rock on the shore: his dark host rolled, like clouds, around him."[49] Yet by comparing Swaran to ice and his spear to a fir tree, the poem thwarts our expectations that animate and inanimate objects will be compared not to one another but among themselves. By likening the brightness of the shield to that of the rising moon and the darkness of the

army to that of gathering clouds, moreover, the poem obviates the distinction between living and nonliving, comparing them to natural phenomena or atmospheric effects.

Occasionally such comparisons arise from the difficulty the narrator or the characters experience in distinguishing mankind from nature, as in Fingal's query in in the sixth book: "But is that Cuchullin, O Fillan, or a pillar of smoke on the heath?"[50] Such momentary uncertainty can be attributed on occasion to the intervening distance or a trick of the light. When a battle takes place at dusk between Swaran, king of the Scandinavians, and Cuchullin, king of the Irish, in the first book of *Fingal*, for instance, the bard asks: "Who are these on Lena's heath that are so gloomy and dark? Who are these like two clouds, and their swords like lightning above them? . . . Who is it but Ocean's son and the car-borne chief of Erin? Many are the anxious eyes of their friends, as they see them dim on the heath. Now night conceals the chiefs in her clouds, and ends the terrible fight."[51] Neither the bard, who is recounting the battle, nor the surrounding witnesses can at first determine the identity of the warriors or distinguish between their battle and a storm. Macpherson thus appeals to the reader's imagination by enshrouding the battle in mist, eliding any visual distinction between man and nature.

The reader is of course reliant on the narrator and the characters to interpret what is seen or heard. Yet when the bard evokes the approach of Cuchullin's troops, responding to the call to arms, the troops both look and sound like the descent of turbulent mountain streams before the onset of a storm. Here again it is impossible to differentiate man, metal, fire, and water from a distance: "Their mighty hands are on their swords; and lightning pours from their sides of steel.—They came like streams from the mountains; each rushed roaring from his hill. Bright are the chiefs of battle in the armour of their fathers.—Gloomy and dark their heroes followed, like the gathering of the rainy clouds behind the red meteors of heaven.—The sounds of crashing arms ascend." Both warriors and their accoutrements—their cars and steeds—are likened to natural elements. Take for instance the mount of the "car-borne chief" Cuchullin, a simplified version of Cù Chulainn's chariot in extant ballads: "The car, the car of battle comes, like

the flame of death; the rapid car of Cuchullin. . . . It bends behind like a wave near a rock; like the golden mist of the heath. Its sides are embossed with stones, and sparkle like the sea round the boat of night. Of polished yew is its beam, and its seat of the smoothest bone."[52] The chariot itself is made of bones and wood: the skeletal remains of animals and trees. It is compared, however, to fire, water, and mist, a singular mingling of the elements. The description of the chariot shades imperceptibly into that of the horses, moreover, which are also compared to mist and studded with gems that sparkle and shine. Our inclination to consider the car-borne chief as a semantic unit is reinforced by the system of similes that joins the natural and the artificial on the one hand, animal, vegetable, and mineral on the other.

The true originality of the epics lies, however, in their evocation of a spirit world that is integrally linked to the realms of man and nature. Dating from a time between the twilight of the druids and the advent of Christianity, the Ossian epics were not considered religious, as Macpherson himself asserts in his dissertation on the poems' antiquity, for unlike the epics of Homer or Milton, there are no gods. The ghosts of dead heroes, bards, and their lovers, frequently likened to wind or flame, bear a greater resemblance to the shades of the underworld. Indeed, in his French translation of 1777, Pierre Le Tourner rendered "ghosts" as "ombres" (shades). The ghosts of the Ossian epics are fully integrated into the natural world, however. In an attempt to shield the Celts from accusations of nature worship, Macpherson specified that "they looked upon the Divinity as the soul of the world; a spirit . . . diffusing itself through all nature," but worshipped neither the heavenly bodies (elements in which the spirit was particularly concentrated) nor the "shadowy ghosts" that animated matter.[53] Blair notes that while the marvelous is a requisite component of epic poetry, "nothing is more difficult, than to adjust properly the marvelous with the probable." This balance can only be struck if the poet draws on the popular beliefs of the culture where he resides or that he represents. The ghosts of the Ossian epics fulfill this criterion admirably, for according to Blair they are both local and universal: "Ossian's mythology is, to speak so, the mythology of human nature; for it is founded on what has been the popular belief, in all

ages and countries, and under all forms of religion, concerning the appearances of departed spirits."[54]

The comparisons of dead heroes to nature are often as straightforward as those of the living heroes we saw previously. Blair remarks in particular on the ghost of Crugal as it appears to our "astonished imaginations" in the second book of *Fingal*: "His face is like the beam of the setting moon; his robes are of the clouds of the hill: his eyes are like two decaying flames. Dark is the wound of his breast. . . . The stars dim-twinkled through his form; and his voice was like the sound of a distant stream.—He is a messenger of death." The ghost of Cuchullin in the poem *Dar-thula* is similarly composed: "The sighing of his breast was frequent; and the decayed flame of his eyes terrible! His spear was a column of mist: the stars looked dim through his form. His voice was like hollow wind in a cave: and he told the tale of grief."[55] By comparing both living and dead heroes to natural elements (moon, clouds, stars; air, fire, water) the poem creates an implicit equivalence between the living and the dead that is consistently reinforced by appealing to the vantage of the reader/spectator.

The indelible association of the ghosts with the surrounding atmosphere, including mist, smoke, vapor, wind, and clouds, gives the reader the impression that they are omnipresent, as we see when the ghost of Fingal's son Fillan emerges from a host of spirits in the seventh book of *Temora*:

> From the wood-skirted waters of Lego ascend, at times, gray-bosomed mists. . . . Wide, over Lara's stream, is poured the vapor dark and deep: the moon, like a dim shield, lay swimming through its folds. With this, clothe the spirits of old their sudden gestures on the wind, when they stride, from blast to blast, along the dusky face of the night. Often, blended with the gale, to some warrior's grave, they roll the mist, a gray dwelling to his ghost, until the songs arise. . . . —Dark and mournful sat the ghost, in his gray ridge of smoke. The blast, at times, rolled him together; but the lovely form returned again.[56]

The lugubrious atmosphere of the Scottish moor makes it difficult for the characters to discern whether the warriors they see from afar, enshrouded

in mist, are in fact dead or alive. Fingal's gradual emergence from the mist in the eighth book of *Temora*, for instance, is likened to how a spirit would look to a traveler from a distance, despite the fact that Fingal is still among the living at this point in the poem.

> Now is the coming forth of the king. —First appeared the sword of Luno; the spear half issuing from a cloud, the shield still dim in mist. But when the stride of the king came abroad, with all his grey, dewy locks in the wind; then rose the shouts of his host over every moving tribe. . . . So rise the green seas round a spirit, that comes down from the squally wind. The traveller hears the sound afar, and lifts his head over the rock. He looks on the troubled bay, and thinks he dimly sees the form.[57]

Similarly, at the conclusion of *Temora*, Sul-malla is at first unable to determine whether the advancing form of Cathmor is alive or dead as his ghost initially emerges from and then definitively vanishes into the mist. In this case, however, he is in fact no more: "It was the spirit of Cathmor, stalking, large, a gleaming form. He sunk by the hollow stream, that roared between the hills. . . . Her eyes are turned to the hill; again the stately form came down. She rose, in the midst of joy. He retired in mist. Gradual vanish his limbs of smoak, and mix with the mountain-wind.—Then she knew that he fell!"[58] The epics systematically elide distinctions between discrete realms, merging the natural and the supernatural, the living and the dead, the material and the spiritual, making it difficult for us to trust our eyes.

Whereas previous epics staged contact, conversation, even copulation between gods and mortals, at times comparing each to nature, such similes seldom compromise the ability of the narrator, characters, or reader/spectator to distinguish them. So entirely is the appearance of past and present heroes interwoven with the perpetually overcast atmosphere of the Caledonian coast that they become as seamlessly merged in the Ossian epics as memory, dream, and lived experience. This equivalence is epitomized in the embedded simile: "The heroes flew like two dark clouds; two dark clouds that are the chariots of ghosts."[59] The warriors repeatedly implore

the bards to bring past heroes or lost lovers to life in their songs. Similarly, the ghosts emerge from the mist or appear in dreams to spur the warriors on to battle or to give them fair warning. Not only are real warriors at times indistinguishable from the ghosts of fallen heroes, but real ghosts, as it were, are occasionally indistinguishable from dreams of them. Connal sees the ghost of Crugal "in his rest," and Fingal asks the ghost of Fillan: "Why art thou in the midst of my dreams?"[60] In the poem *Cathlin of Clutha*, Ossian recounts the warriors' collective invocation of ghosts so as to be visited in their sleep.

> The night came down; we strode, in silence; each to his hill of ghosts: that spirits might descend, in our dreams, to mark us for the field. We struck the shield of the dead, and raised the hum of songs. We thrice called the ghosts of our fathers. We laid us down in dreams.—Trenmor came before mine eyes, the tall form of other years. His blue hosts were behind him in half-distinguished rows. Scarce seen in their strife in mist, or their stretching forward to deaths. I listened; but no sound was there. The forms were empty wind. I started from the dream of ghosts.[61]

According to Tzvetan Todorov, the confirmation that a ghost is real reveals that the fictive world is governed by the laws of the supernatural, whereas the confirmation that a ghost is but a dream reveals that the fictive world is governed by the laws of nature.[62] The occasional appearance of ghosts in dreams, like our hesitation as to whether they are living or dead, natural or supernatural, tends to render the marvelous plausible, lessening our skepticism as to their existence or encouraging us to believe in ghosts.

The Ossian epics comprise a network of similes that represent a natural world in which affinities or relations are emphasized, likening air, fire, and water; animal, vegetable, and mineral; nature, humanity, and the supernatural. The pervasive "animism" to which Blair attributes the poetry's universal appeal had its roots, I propose, not only in the belief system attributed to Ossian's contemporaries but also in Macpherson's more immediate medical, philosophical, and theological context. Blair's assertion that

"machinery ought always to have some foundation in popular belief" is as true of Macpherson's era as of Ossian's. The affinity between the Scots and the French medico-philosophical communities helped pave the way for the favorable reception of the epics across the Channel. Essential to this reception was a representation of the natural world that seamlessly integrated the physiological and the moral, the physical and the metaphysical. The fact that it was as possible to interpret the ghosts as natural (or material) as it was to consider them supernatural (or spiritual) rendered the presence of the marvelous in the epic poems more palatable. By perpetually obliging the reader/spectator to question the adequacy of their reason and the reliability of their senses, however, the epics enhanced the appeal to the imagination.

Replete with the sounds of nature, the noise of battle, and the voices of bards, warriors, and their ghosts, the Ossian epics are as resonant as they are vivid. Mulholland has studied the process by which Macpherson transferred the authenticity and passion associated with oral performance to written text by developing what he calls a "printed voice" that consists of personification, modes of address, diacritical indicators (or lack thereof), repetition, and tense shifts, enabling readers not only to see but to hear ancient Scotland.[63] Trumpener characterizes Macpherson's Highlands as an "enormous echo chamber": "The rustling, sighing, burbling, and echoing of wind, grass, and water, punctuate or accompany many Ossianic poems, serving the blind bard as a natural mnemonic to remember the voices of the dead."[64] Yet these "natural mnemonics" are inherently musical. Not only were the epics themselves thought to be sung, thus constituting an oral tradition, they also represented the practice of sung or performed memory among the bards within them, including the blind bard Ossian, Cuchullin's bard Carril, and Fingal's bard Ullin. When Cuchullin's troops lay down their arms to feast and rest, they implore Carril, the "son of songs," to lend his voice to tales from times past, accompanied on the harp. The bards recount tales of fallen heroes and lost loves, whose acts of mourning and commemoration are accomplished primarily through song. Carril recounts: "Fierce Cairbar came to the vale of the echoing Tura, where Bassolis, fairest of his sisters . . . raised the song of grief. She sung of the actions of Grudar, the youth of her secret soul.—She mourned him

in the field of blood; but still she hoped for his return. . . . Her voice was softer than the harp to raise the song of grief."[65] Not only are the epics sung; their narrative structure represents songs (Bassolis) within songs (Carril) within songs (Ossian).

The melancholy characteristic of the epics is frequently expressed as a mixed emotion, as we see in the warrior's invocation: "Carril, raise thy voice on high, and tell the deeds of other times. Send thou the night away in song; and give the joy of grief."[66] The joy of grief is neither final nor desolate but restorative and regenerative. In the poem *Caric-thura*, Fingal declares: "O bards of other times! . . . Strike the harp in my hall; and let Fingal hear the song. Pleasant is the joy of grief! It is like the shower of spring, when it softens the branch of the oak, and the young leaf lifts its green head."[67] This mixed emotion, akin to Bernardin de Saint-Pierre's *bonheur négatif* and Jean-François Le Sueur's *mélancolie heureuse*, is a form of melancholy, or nostalgia, that arises when we contemplate a tragedy from afar, from which we are somewhat removed by intervening time rather than space. The sentiment we register when listening to songs of past sorrow thus bears a close resemblance to that which we feel when contemplating a shipwreck from the safety of the shore. Scholars have traced the source of this sentiment not to Ossian himself but rather to Macpherson's familiarity with the writings of Shaftesbury, Smith, and Burke.[68] As the harp is often described as the "harp of joy," the "joy of grief" suggests that sorrow can be attenuated by setting memories to music.

Songs serve several purposes within the epic cycle. Many constitute exemplary tales of heroism and fidelity. Once battle is resumed, the bards rally the troops by inspiring them to emulate their predecessors: "Go Ullin, go, my aged bard. . . . Remind the mighty Gaul of battle; remind him of his fathers. Support the yielding fight with song; for song enlivens war."[69] The bards' role is to spur the warriors on to future glory with songs of the past. Songs are also used to seal the peace, palliating the martial spirit they once enflamed, as Fingal requests: "Raise, Ullin, raise the song of peace, and sooth my soul after battle, that my ear may forget the noise of arms."[70] Once reconciled, Swaran requests that a monument be raised to commemorate the battle, but Fingal replies that their fame will be preserved in song,

asking the bards to sing songs of past heroes as evidence that their own names will likewise be passed on to posterity: "We shall pass away like a dream. . . . Our tombs will be lost in the heath. The hunter shall not know the place of our rest. Our names may be heard in song, but the strength of our arms will cease. O Ossian, Carril, and Ullin, you know of heroes that are no more. Give us the song of other years."[71] The warriors thus mourn the loss of the sacrificial victim—Cuchullin, king of the Irish—with a song of reconciliation between the Scandinavians and the Scots. Mulholland associates these songs, which constitute a form of historical record within the epics, with what Joseph Roach has dubbed "re-performance": "a process that perpetuates collective, cultural memory."[72]

In his analysis of oral tradition as preserved in Homeric epic, Komáromy notes, echoing Kames, that we are more likely to remember experiences that are novel or rare and that catalyze strong emotion. Mnemotechnics, like the rules of rhetoric, are designed to render accounts vivid (or memorable), both for the performer and for the listener, creating a reality effect.[73] Such techniques, which include formal conventions and formulaic structures (rhythm, phrasing, imagery, plot, genre) can be found in oral cultures for they assist the bard in remembering song cycles and the audience in believing them to be true. As Komáromy asserts, however, the opposition between "original" and "copy" implicit in the telling of a story breaks down in mnemonic practice. For one thing, the bard is rarely an eyewitness to the original event. Instead, he recounts something he has heard, casting into question the identity, authenticity, or existence of the original, for the memory is not his own. Furthermore, a memory in the form of a song or story is rarely recounted in the same way twice. Instead, the bard draws on formal conventions and formulaic structures to compose a narrative that is merely "like" previous iterations, though it may be accepted as the "same." This allows the bard freedom not only to embellish but also to interpret the memory in an act of re-cognition that is frequently adapted to his audience, transitioning from a mimetic to a constructive understanding of memory.[74] This constructive memory is not that of the bard alone but of the community whose stories he tells and for whom he performs. While the past determines in part how we interpret new experiences, new experiences

in turn modify how we interpret the past. Collective constructive memory thus continues to help shape the world by which it is shaped, affecting its recollection of the past and its future.[75] Here, however, we encounter the inherent danger of constructive memory, for "memory is assumed to be reliably reproductive, but if it at the same time blends with the imagination and can be constructive, it may come to offer fiction as fact."[76]

Macpherson may have been persuaded that he was carrying on the work of the bards, identifying with Ossian himself. The tales, passed down from generation to generation through an oral tradition subject to the caveats of memory and imagination, made a final transition into modified written form before disappearing entirely, a function only a native Gaelic speaker who had mastered written English could perform, particularly given his familiarity with and investment in Highland culture. While Macpherson's translation of the epics from Gaelic to English and from poetry to prose was deemed acceptable, his transposition of them from ballad to epic went too far. Yet as Gidal notes: "Epic poetry is, in its origin, an act of translation, a movement from rhapsodic performance to editorial collation and transcription for the taste and judgment of a later age."[77] The form Macpherson bestowed on the poems of Ossian brought them to the attention of a far broader reading public than the original ballads could have reached, prompting the surrounding European nations to acknowledge and seek to preserve their Celtic roots. Adapting the performance to the audience was an acknowledged function of the bard. By endowing setting with sublimity, nature with vitality, images with vivacity, characters with sensibility, and prose with economy, Macpherson catered to eighteenth-century tastes, ensuring the epics' international appeal.[78]

In his *Encyclopédie* entry "Imagination," Voltaire identified memory as the source of imagination. In his *Lettre sur les aveugles*, Diderot identified memory as the faculty on which the blind are forced to rely. The blind bard, then, becomes not only the repository and conduit of cultural memory through oral tradition but reliant upon it as the wellspring of his imagination.[79] Yet how does the blind bard distinguish between fragments of memory and figments of the imagination? Reader/spectators of the Ossian epics, like beholders of the Ossian paintings, are hard put to determine

FIGURE 14. François Gérard (1770–1837), *Ossian Evokes the Phantoms on the Banks of the Lora*. 1801. Oil on canvas, 180.5 × 198.5 cm.
Châteaux de Malmaison et Bois-Préau. Erich Lessing / Art Resource, New York

what they are seeing through the blind bard's mind's eye. The backdrop of François Gérard's 1801 *Ossian évoque les fantômes au son de la harpe sur les bords du Lora* (*Ossian Evokes the Phantoms on the Banks of the Lora*) recalls the overcast skies, moonlit clouds, distant ruins, and turgid waters of Claude-Joseph Vernet's seascapes (Figure 14). The intervening figures emerging from the mist and seated on clouds represent without question fallen heroes and lost loves, but are they memories, dreams, ghosts, or atmospheric effects? And is the bard in a state of recollection, reverie, or melancholy, or is he merely blind? As Thomas Grey notes, Ossian's harp below is echoed by the celestial harps of ghostly bards above.[80] Similarly, the clouds

Ossian evokes, on which the ghosts are seated, are palpably different from the clouds that form part of the Highland landscape. In this painting, we thus encounter the layering of Ossian's historical present and the Caledonian past, which is the subject of his song. Like other blind seers, Ossian is not only a repository of cultural memory but also something of a visionary or prophet, a gift that corresponds to contemporary Highland belief in second sight. As the Ossian epics were appropriated and naturalized by the French, they became indelibly linked to their Gallic past as well as to their postrevolutionary future. Representing the ruins of poetics, the epics deployed what Diderot called the poetics of ruins, "reconstructing the past in order to imagine the France of the future," to borrow Daniel Brewer's phrase.[81] What gave the Scots renewed pride after the crushing defeat of the Jacobite rebellion gave the French renewed hope after the questionable outcome of the Revolution. Furnishing the French with a fresh source of inspiration compatible with the cult of nature and sensibility, the epics served as a means of reconciling the factions that threatened France's social cohesion in the wake of civil strife: the cultures of the North with those of the South, revolutionaries with aristocrats, the forces of secularism with the spirit of Christianity, and reason with its monsters.

THE POETICS OF RUINS

To account for the favorable reception of the Ossian epics in France, we must first grasp how Scotland came to be associated with or to serve as a viable substitute for Italy, not only in Rousseau's anthropology but also in the rhetoric of the French Revolution and in the symbols of Empire. The process of acculturation through which the French came to perceive the Scots past as their own was gradual. In his *Lettre sur la musique française* of 1753, Rousseau cast the very basis of French cultural identity and national pride into question by claiming that the French language was unmusical, as we saw in Chapter 2. Characterizing French as a monotonous, conventional language full of harsh consonants and silent vowels, he famously, or infamously, contrasted it to the natural, passionate, supple, accentuated lyricism of Italian. While Rousseau's *Essai sur l'origine des langues* was not published until after his death, his *Lettre sur la musique française* was promptly dis-

seminated throughout Europe. Persuaded that a cultural nation was defined by its language, Macpherson suggested that Scottish Gaelic was older and purer than Irish Gaelic, that the descendants of the first wave of Gaelic Celts inhabited Scotland, and that successive waves of Celtic-derived nations had settled Britain, France, and Germany. According to Matthew Gelbart, when quoting Rousseau's *Lettre* "Scottish writers cast their own country in the natural role Rousseau had assigned to Italy."[82] Scotland thus became to England what Italy was to France, the more authentic font of cultural identity, descended directly from the Celts as the Italians were from the Romans, in possession of the more natural form of expression, unsullied by the strictures of monarchy and patriarchy.[83] Though cultural rivalry with Italy remained strong in France throughout the opera quarrels of the 1750s and 1770s, the rest of Europe rapidly came to identify the simple, natural melodies that Rousseau valorized as a vehicle of authentic expression with the Scots.[84] Evidence of the legitimacy of the Scottish claim to this vital role in Europe lay in the Ossian epics, which preserved a sense of cultural memory and created a sense of national identity not only for Scotland but ultimately for France.

Jean-Baptiste Suard, who published the initial translations of excerpts from Ossian's poetry into French in the *Journal étranger*, subsequently collected and reproduced them along with the commentary of scholars and translators in his *Variétés littéraires, ou Recueil de piéces tant originales que traduites* (*Literary Varieties, or Collection of Works both Original and Translated*) of 1768–1769. This collection helped identify the Scots, rather than the Italians, with the natural expression of the passions in the minds of the French. Suard's argument is twofold. First, he identifies the Ossian epics with the uncorrupted forms of expression belonging to what Rousseau referred to as the golden age, prior to the onset of agriculture and the establishment of property.

> It seems quite plausible that poetry, which for us is but an artificial language, was the simple and natural language of mankind, when languages and societies were formed. . . . It is in the poems of the Hebrews and other eastern peoples, the inhabitants of Scandina-

> via, . . . and the mountains of Scotland, that one sees poetry in the simple, naïve colors with which nature adorned her, divested of all the foreign characteristics she assumed in nations enlightened by the progress of reason and the arts.[85]

Here Suard associates eastern and northern peoples via juxtaposition. Later, however, he cites Blair's *Critical Dissertation* on the Ossian epics (which he claims was inspired by his own editorial commentary in the *Journal étranger*) as eliminating all distinction between oriental and occidental, identifying both with an era or time instead of a climate or place.

> Before writing was invented, only songs and poems were capable of appealing strongly enough to the imagination and the memory to be preserved by oral tradition and transmitted from one generation to another. . . . What used to be called oriental poetry, because some of the most ancient poems came to us from the Orient, is probably no more oriental than occidental. This style characterizes the century more than the climate and belongs, for the most part, to all nations of a certain era. The works of Ossian constitute a remarkable example.[86]

What Blair did for the British, Suard did for the French. Together they "tied the Highlanders directly to the 'ancients,' the 'orientals,' and the 'savages.'" Yet they did so via music.[87]

Suard accounts for the survival of the Ossian epics as a site of cultural memory passed down through oral tradition by invoking Macpherson's explanation of why song is more effective at preserving lyrics than language devoid of musical accompaniment:

> These poems, the translator says, were set to music, and the most perfect harmony was respected; each verse was so closely linked to the verses that preceded and followed it that if a single one from a stanza was recalled it was impossible to forget the others. The cadences followed one another by such simple gradations and the words were so well adapted to the voice's natural inflections . . . that it was almost

> impossible to substitute one word for another based upon similar sounds.[88]

Sir Walter Scott later echoed the conviction that songs were more effective than poetry at preserving cultural memory within an oral tradition.[89] Referring to songs as "historical monuments . . . dedicated to the memory of mankind," Suard attributes similar monuments to the Germans. While Johann Gottfried Herder had no doubt that the Germans possessed such monuments, he was far more dubious as to their willingness to collect them and attempted to spur his compatriots to emulate Macpherson's example. Herder coined the term *Volkslied* in reference to the Ossian epics: "Ossian's poems are songs, songs of the people, folksongs, the songs of an unsophisticated people living close to the senses, songs which have been long handed down by oral tradition." Likening the Ossian epics to the song of the "five Indian nations of North America," Herder defines folk music by redefining the word *barbarous*: "Know then, that the more barbarous a people is . . . the more barbarous, that is the more alive, the more free, the closer to the senses, the more lyrically dynamic its songs will be, if songs it has."[90] He distinguishes the appeal of Scots ballads not only from the English, against whom the Scots defined themselves, but also from the Scandinavians, against whom Fingal's forces defend themselves. As Rousseau's *Essai sur l'origine des langues* became known throughout Europe, Scots ballads were increasingly associated with southern lyricism (with respect to the Scandinavians) and original song (with respect to the English). Rousseau's writings thus paved the way for the favorable French reception of what Trumpener has called Scotland's "voice-centered model" of culture.[91]

The perceived affinity or cultural rivalry between Scotland and Italy can also be seen in French national politics. Scotland and France were historically linked via the Auld Alliance, the mutual understanding in effect since the 1200s by which they were united in their opposition to England and pledged to defend one another if attacked. The Scots had intervened when the French were defeated by the English at the battle of Agincourt, assisted Joan of Arc in breaking the siege of Orléans, and formed the *garde écossaise*, or royal bodyguard, of the French kings. Most significantly, however, France

became the refuge of the exiled Stuart line of James II and his Jacobite supporters when England and Scotland were united under Hanoverian rule in the wake of the Glorious Revolution. The French supported Jacobite attempts to restore the Stuart line to the throne, backing James II in 1689 and James III in 1708. Though their support flagged during the Jacobite uprisings of 1715 and 1719—when France was at peace with England—it resumed in time for the revolt of 1745, which the Jacobites launched on behalf of Charles Edward Stuart in anticipation of French political and financial support.[92] When this support failed to materialize, the uprising foundered, never to be renewed. Yet the Jacobite rebellions continued to play a role in the European cultural imaginary, despite—or perhaps because of—their crushing defeat.

Macpherson experienced the '45 as a child and was sympathetic to the Jacobite cause. Murray Pittock characterizes the suggestion that the Ossian epics reconfigured the Jacobite experience in the post-Culloden era as "a canard of Macpherson revisionism."[93] Defined as supporters of the Stuart line, the Jacobites included English, Irish, and Welsh as well as Scots, yet the image of the '45 as pitting Scots Highlanders against British red coats persisted.[94] Histories differentiating the ancestors of the English, the Scots (further divided into Highlanders and Lowlanders), the Irish, and the Welsh arose in the wake of the uprising, written by Jacobite supporters Thomas Carte, author of *A General History of England (1747–55)* and Macpherson himself, author of *Introduction to the History of Great Britain* of 1771. While the Scots and the Irish both laid claim to Ossian, Macpherson definitively reclaimed him for the Scots.[95] The Ossian epics similarly differentiate the northern peoples by chronicling the exploits of Fingal, king of the Caledonians, who assists Cuchullin, king of the Irish, in defeating their mutual enemy Swaran, king of the Scandinavians, thereby establishing the Caledonians, ancestors of the Scots Highlanders, as possessing a language, culture, and spirit unto themselves. The Caledonians distinguished themselves, moreover, as the only European people to have successfully defied the Romans. Their staunch resistance to Roman conquest was perhaps the origin of comparisons between the Celtic and Greco-Roman traditions and those of their Scots and Italian descendants. Such comparisons continued

throughout the eighteenth century, when Edinburgh was dubbed the new Athens and Ossian hailed as the new Homer.

Linking the Jacobites to other insurrections throughout Europe and the colonies is by no means self-evident in either political or religious terms. Branded as outsiders by virtue of their Scots, Catholic, Tory status and mythologized as once and future kings,[96] Stuart propaganda began to shift in the 1740s as "Bonnie Prince Charlie" came to be portrayed with what Pittock has called a "hint of radical chic," self-styling himself as Roman republican on the one hand, Scots barbarian on the other. As his image changed and the base of his support became predominantly lower-middle class, the Jacobite rebellions were increasingly associated with popular uprisings and separatist movements elsewhere in Europe, including the Corsican nationalists. James Boswell, a Jacobite sympathizer, "toyed with the idea of making Charles Edward king of Corsica."[97] Most notably, however, Pasquale Paoli, the Corsican separatist whom Napoleon and his brothers idolized with a cultlike faith in their youth, became the ideological leader of what were known as the Corsican Jacobites, among whom Napoleon's family numbered.

The Genoese ceded Corsica to France in 1768, just fifteen months before Napoleon was born. While French by birth, he was of Italian descent and identified strongly as Corsican until he became a fervent supporter of the French Revolution, gradually Frenchifying and then shedding his surname Buonaparte and replacing his native Italian with French. While the Jacobite rebellions may have had particular cultural resonance for Napoleon given his Corsican heritage, he may also have been sensitive to the blend of Roman and Celtic references in Jacobite propaganda for he chose a similar blend for his own state propaganda years later. Jean-Louis David, first painter to the First Consul, established the neoclassical style in France, painting heroes of antiquity and commemorating Napoleon's coronation and victories on the battlefield. Napoleon also commissioned works by the young artists emerging from David's studio, including François Gérard, Anne-Louis Girodet, and Jean-Auguste-Dominique Ingres, who provided him with three full-scale representations of the Ossian epics. Whether destined for the walls of Josephine's Château de Malmaison or for his bedroom ceiling

in the Quirinal Palace in Rome, Napoleon consistently privileged works depicting Ossian's dream of Scots heroes, for "as Alexander had chosen Homer and Augustus Virgil, so he had settled on Ossian."[98] Though the legitimacy of both the Stuart line and the aspiring emperor were predicated, to some extent, on a "'heterogeneous amalgam' of divine right and popular sovereignty," a phenomenon of identification, as in the case of Macpherson, may also have been at work.[99]

Napoleon first read the Ossian epics in Melchiore Cesarotti's Italian translation of 1763, which he carried with him on his various campaigns and thereafter to St. Helena. He could have read Cesarotti's commentary on the epics in the original Italian or in Suard's French translation, or even have heard of it from Cesarotti himself, whom he knew personally and who referred to him as the "Emperor of the Celts."[100] In his commentary on the epics, Cesarotti distinguishes between two kinds of truth, particular and universal, contending that unlike history, which represents what is, poetry ought to portray what could or should be, providing a model of perfection. He then distinguishes two brands of perfection, or heroism: natural and social. Though Cesarotti has greater respect for natural heroism, or raw emotion refined by reason, which gives rise to universal justice and benevolence, he expresses a certain admiration for the excess of patriotic fervor that leads the hero of a given society at a given moment to aspire to surpass the merely human. Both poetic and moral perfection is achieved, he claims, by combining these two forms of heroism, which are united in the character of Fingal. King of the Caledonians, forefather of the Highlanders, father of Ossian, and the subject of his song, Fingal represents the ideal combination of humanity, which he acquires from nature, with love of glory, which he acquires from society.[101] Robert Morrissey has uncovered the prehistory of the passion that came to inform Napoleon's sense of self, describing his economy of glory as "an affirmation of the individual in his or her relationship with the collectivity, glory enabled a reconciliation of the irreconcilable, personal interest with the general interest, precisely because a concern with self could and should take the path of emulation."[102] If Charlemagne was one figure worthy of emulation, Fingal was another,

and it is of such models of heroism predicated on love of glory that Ossian sings and dreams.

The Ossian epics proved equally appealing to the other end of the political spectrum, represented by Napoleon's nemesis, Germaine de Staël. Napoleon notoriously denounced Staël's works as immoral, anti-French, and anti-Catholic, exiling her from Paris for her novel *Delphine* and burning the first edition of her philosophical treatise *De l'Allemagne* (*Of Germany*). Staël in turn perceived Napoleon not as a hero imbued with love of glory but as a tyrant imbued with ambition or vanity.[103] Staël provides a fitting endpoint for my study, for her mother, Suzanne Necker, was the intimate friend and correspondent of Buffon. Staël read Diderot's *Salons* in Friedrich Melchior Grimm's *Correspondence littéraire* while in exile and came to writing through one of the first recognized acts of literary criticism, her comprehensive analysis of Rousseau's *oeuvre*.[104] Emerging from her mother's salon to become a *salonnière* at Coppet and a philosopher in her own right, Staël proposed the third major climate-based analysis of the origin of government, language, and culture after Montesquieu's *Esprit des lois* and Rousseau's *Essai sur l'origine des langues*. In *De la littérature* (*On Literature*) of 1800, Staël contrasts the northern and southern literary traditions emblematized by Ossian and Homer. She associates the melancholy spirit of the North with the Scots Highlanders' Caledonian forebears, and the enthusiasm of the south with the Italians' Greco-Roman ancestors. Describing the Ossian epics as "a collection of popular songs sung in the mountains of Scotland," she accounts for their international appeal by reinforcing their association with the natural expression of the passions, in counter-distinction to Homeric poetry: "The emotions caused by Ossianic poetry can be reproduced in every nation because their means of moving [the listener] are taken from nature, but a prodigious talent is needed to introduce Greek mythology into French poetry without affectation."[105] The poets of antiquity "lacked a powerful means of inducing emotion, namely melancholy and sensibility. . . . [The] literature of the north had not yet rendered somber images appealing. The human species had not yet reached, so to speak, the age of melancholy." By confining themselves to emulating the Greco-Roman tradition, Europe in general and France in particular

run the risk of losing access to the natural genius associated with the age of melancholy, she states, reminding the French of the significance of their northern heritage.[106] A correspondent and protégé of Suard and reader and admirer of Herder, Staël transformed the French reception of the Ossian epics from a site of cultural memory and national identity into a vision of the future of French poetry, philosophy, and politics.

Staël makes two significant departures in *De la littérature* from Rousseau's prior division of Europe into northern and southern climes that we examined in Chapter 2, first by relegating France to the South, then by questioning whether the South is more passionate. While Rousseau associated the South with passion and the North with need in his *Essai sur l'origine des langues*, Staël replaces the term *besoin* (need) that he used to characterize northern peoples with the term *douleur*, variously translated as "pain" or "sorrow": "Northern peoples are less preoccupied with pleasure than with pain; and their imagination is all the richer." Enhancing the opposed sensations of pain and pleasure to a sustained distinction between northern melancholy and southern enthusiasm, Staël questions the association between enthusiasm and genius, valorizing instead the relationship between melancholy and imagination. Characterizing the "imagination of the north" as "that which takes pleasure on the seashore, at the sound of the wind, in the wild heather; that which carries the soul, tired of its fate, towards the future, towards another world," she considers the pervasive melancholy of northern literature to be the characters'—and by extension the readers'—inevitable response to the "spectacle of nature." Staël describes this spectacle as "gloomy and cloudy," the soil as "acrid," and the sky as "dreary," yet because the melancholy it occasions arises naturally, she claims, it is readily communicable to the inhabitants of all nations.[107] It is, moreover, closely linked to memory, for "memories are always moving, and . . . when one wishes to make tears flow, one should recall the past."[108]

Despite its gloomy atmosphere and melancholy disposition, Staël displays a marked predilection for the literature of the North, whose poetry she considers conducive to the development of philosophy, genius, and the spirit of a free people.

> Independence was the first and only joy of northern peoples. A certain pride, a detachment from life, to which the bitter soil and the bleak sky give rise, must have rendered servitude intolerable, and long before the theory of constitutions and the advantage of representative government were known in England, the warrior spirit of which the Erse and Scandinavians sing with such enthusiasm, gave mankind a prodigious idea of his individual strength and force of will. Independence existed for each before liberty was won for all.[109]

Northerners displayed a penchant for self-sacrifice rather than self-interest that rendered them capable of consecrating themselves to humanitarian causes, incarnating the force of what Gidal dubs "civic melancholy." Pausing to consider the relevance of the northern invasions to her own historical moment, Staël likens the spirit of the North to the revolutionaries and that of the South to the aristocrats:

> Allow me to stop here to call attention to an affinity that struck me between this era and the French Revolution. The nobility . . . enjoyed all the advantages of a distinguished education, but prosperity had softened them, and they gradually lost the virtues that justified their social preeminence. The men of the people, on the other hand, had but a rough civilization and customs that the laws constrained but that licence returned to their natural ferocity. . . . The victors . . . share several characteristics with the men of the north, the vanquished are analogous to . . . the inhabitants of the south.[110]

While the nobility showed signs of the Southerners' moral depravity, "le peuple" demonstrated the Northerners' moral fortitude.

Staël likewise attributes the freedom of the people to eloquence of expression. Wondering why eloquence has been reviled rather than lauded since the Revolution, Staël concedes that it has, on occasion, been placed in the service of vice rather than virtue. She distinguishes between form and content, however: "I think . . . one could contend that everything

that is eloquent is true, that is to say that when pleading a bad cause, it is the reasoning that is false." The eloquence of modern philosophy—which Staël likens to the beauties of tragic art, the sounds of celestial music, and the enthusiasm of war songs—is significantly enhanced by melancholy of expression, which appeals to the sensibilities of the listener. This form of expression necessitates a certain distance from worldly affairs.

> In that which characterizes eloquence, the movement that inspires it, the genius that develops it, great independence from everything that surrounds us is required, at least momentarily. We must elevate ourselves above the danger, if it exists, of the opinion we are attacking, of the people we are combatting, of everything aside from conscience and posterity. Philosophical thought naturally elevates us to the point where expression of truth becomes easy, where the image and the energetic words capable of conveying it come easily to the mind animated by the purest flame. This elevation does not detract from the vivacity of the sentiments, from the ardor so necessary to eloquence, the ardor that endows it with an irresistible accent and energy.[111]

Philosophy, like eloquence, requires a certain capacity for abstraction or transcendence, the ability to derive the universal from the particular. This elevation, or distance, recalls that from which tempests and shipwrecks must be viewed if we are to empathize with the victims without feeling directly implicated or threatened. It is at this moment that "the melancholy imagination makes us momentarily happy, by enabling us to envision the infinite," occasioning a "divine emotion," Staël declares, recalling our previous discussion of philosophical insight, poetic inspiration, and the "sentiment of divinity."[112] This infinite, which takes the melancholy imagination as its point of departure, consists in eliminating or bypassing the limits of reason and the senses.[113] Staël thus rejoins Rousseau, who considered the power of persuasion to be essential to the acquisition and preservation of liberty in a republic.

Staël associates the Caledonians not only with the spirit of the revolution, the freedom of the people, and the power of expression in general,

but more specifically with women's freedom of expression. In a chapter devoted to women of letters, Staël asserts that the goal of a republic should be to advance enlightenment, including that of its *citoyennes*: "Nevertheless, since the Revolution, men have thought that it was politically and morally useful to reduce women to the most absurd mediocrity." In so doing, the French have succeeded not in returning their women to "the simplicity of early times" but merely in reducing them to the level of the English, whose women read nothing, know nothing, and have nothing to say. This chapter contains what Madelyn Gutwirth has identified as Staël's most "ringingly egalitarian statement": "To enlighten, instruct, perfect women as men, nations as individuals, remains the best means to all reasonable ends, to all social and political relations whose durable foundation one wishes to ensure." Without enlightened women, Staël warns, there will be no forum of public opinion, which serves to assuage men's passions and spur them on to great deeds: "In France, men will never be sufficiently republican to be able to do entirely without women's natural pride and independence."[114]

Staël differentiates contemporary English society from its Caledonian forebears, lauding the northern invaders (including the Erse and Scandinavians) for fostering women's education, liberty, and equality.[115] In nomadic times, she asserts, when the Northerners were perpetually at war, "women were better educated than men because they had more leisure time. Men loved them, were faithful, and made them the objects of their cult. They acquired sensibility through love." Once they settled down, regulating society according to religious principles, an era of domestic felicity began: "It was then that women became full partners in human relations. It was then that true domestic happiness was discovered. . . . The independence of the object of his affections enhanced man's felicity; he could believe himself loved for a free being chose him, a free being obeyed his wishes." Here, then, we find the model of what Staël sought in the relationship between the sexes. Women, she maintained, should be educated in order to reinforce and protect their virtue, making them more suitable companions for their spouses and tutors for their children. The possibility of reconciling education and equality with domestic happiness is one of her most cherished, if elusive, ideals, without which women are caught between the state of nature

and the state of society. Neither the Greeks nor the Romans offered such a model of women's personal fulfillment and civic role.[116]

This vein in Staël's analysis resonates with the role of women in the Ossian epics. Not only are women intrinsic to the action but they suffer tragic fates. Their stories frequently take the form of interpolated tales of constancy, jealousy, and putting love to the test. Some women die for men, others die at their hands or take their own lives, while still others simply fade away. Whether women of action, wielding bow and sword, or the subject of men's memories, they are of uniformly melancholy disposition, both mournful and mourned. Yet women in the Ossian epics are also bards. Though told by men, the tales echo with the sound of women's voices. Chief among these is Ossian's daughter-in-law, Malvina, whom Davis describes as "the addressee of many of Ossian's poems and, more importantly, a bard in her own right and Ossian's poetic heiress until her own premature demise."[117] As Ossian says when addressing Malvina in *The War of Caros*: "Bring me the harp, O maid, that I may touch it when the light of my soul shall arise—Be thou near, to learn the song; and future times shall hear of Ossian." Betrothed to Oscar, Malvina sincerely mourns him when he falls, hearing his voice and accosting his ghost: "Thou dwellest in the soul of Malvina, son of mighty Ossian. My sighs arise with the beam of the east; my tears descend with the drops of night. I was a lovely tree, in thy presence, Oscar, with all my branches round me; but thy death came like a blast from the desart, and laid my green head low." Ossian, who overhears her mourning the loss of her vital force, cautions her against letting grief get the upper hand: "Thou hast heard the music of the bards, and thy song is lovely. It is lovely, O Malvina, but it melts the soul. There is a joy in grief when peace dwells in the breast of the sad. But sorrow wastes the mournful . . . and their days are few."[118] Despite Ossian's warning, Malvina does not find joy in grief. Nor does she survive her sorrow, mourned in turn by Ossian's father Fingal, as Girodet's luminous sketch of the pair attests (Figure 15). Thereafter, Malvina is frequently figured as a beam of light, the sound of a voice, or a harp resounding in the wind. Malvina, who inspired a series of studies by Girodet and gave her name to one of Sophie Cottin's heroines, may also have served as a source of inspiration for Staël's Corinne.

FIGURE 15. Anne-Louis Girodet de Roussy-Trioson (1767–1824), *Fingal Mourning Over the Body of Malvina*, from Ossian's *Berrathon*. 1810. Black chalk with brush and black ink and brown wash heightened with white gouache, 18.4 × 25.7 cm.

Art Institute of Chicago. Gift of Celia and David Hilliard in honor of Jay Clarke, 2006.412

Staël gathered the raw materials for *Corinne ou l'Italie* (*Corinne, or Italy*)—variously described as a travelogue, a novelogue, an ethnography, or an autoethnography—during her travels through Italy in the years 1805–1807. The final product is derived from her extensive reading and her first-hand observation of the cultures of the North and South while in exile. Staël's heroine declares: "The best and most elegant translation of Ossian is by Cesarotti," praising the anomalous yet appealing blend of Scots melancholy and Italian lyricism.[119] *Corinne ou l'Italie* comprises many similar instances of the fusion of the northern and southern literary traditions as Staël charts the course for the modern novel. Corinne is of mixed heritage—British on her mother's side, Italian on her father's—and falls in love with Oswald, a Scots nobleman on the Italian tour. Oswald, in turn, must choose

between the Italian Corinne and her English half-sister Lucile. At the height of their courtship, Corinne performs an Italian translation of Shakespeare's *Romeo and Juliet*. Like Cesarotti's translation of the Ossian epics, the play is a perfect blend of British substance and Italian style. At a crucial impasse in their relationship, Corinne takes Oswald on a tour of her private art collection at Tivoli. The last stop features two paintings: one representing the spirit of the south, that of Cincinnatus invited to command the Roman armies, the other representing the spirit of the north, that of Caïrbar's son asleep on his father's tomb. The latter, one of George Augustis Wallis's lost Ossianic landscapes, depicts a bard in the distance arriving to commemorate the ghost of Caïrbar's father. As I have analyzed in detail elsewhere, Corinne brings the painting to life by singing Scots romances and accompanying herself on the harp, enabling Oswald to mourn his father.[120] It is significant that Corinne plays the harp as opposed to the lyre in this scene, for while the lyre is coded Greco-Roman, the harp is indelibly associated with Scots bards. Corinne is therefore fluent in both national musical idioms: Scots and Italian. She also proves adept at channeling the enthusiasm of the south and the melancholy of the north in turn.

Corinne's first improvisation during her coronation at the Capitol is famously modeled on that of Corilla Olympica, Italian poet laureate, and is replete with enthusiasm. Her description of her state of inspiration involves the elevation and capacity for abstraction that Staël associates with eloquence: "I feel I am a poet . . . when my soul is uplifted, when from on high it despises selfishness and baseness, in short, when a great deed would be easier for me. It is then that my verses are better. I am a poet when I admire, when I despise, when I hate not out of personal feelings, not for my own sake, but for the dignity of humankind and the glory of the world."[121] Corinne's last improvisation, immortalized in Gérard's 1819 painting *Corinne au Cape Misène* (*Corinne at Cape Miseno*), which depicts the author dressed as her heroine, is of a distinctly different tenor, however. Here, too, we can discern a phenomenon of identification, though not, as in the case of Napoleon, with the heroism of Fingal but rather with the martyrdom of Malvina. Apprehending Oswald's departure, Corinne turns her thoughts to the fates of women unhappy in love: "Some memories

of love, some women's names, also demand your tears." She remembers those who have lost their heroes, the object of their cult: "These unhappy creatures, wandering like shades on the devastated shores of the eternal river, long to land on the other bank. In their long solitude, they question the silence, and ask all nature, this starry sky as well as this deep sea, for a sound of a cherished voice, for an accent they will hear no more." Though the examples she cites are Roman, the image Corinne conveys of sighing women, restless souls, and the voices of lost lovers is hauntingly Ossianic. It is an image with which she strongly identifies, moreover, anticipating her role as muse, mourner, and sacrificial victim: "What happens when absence or death isolates a woman on the earth? She languishes, she falls."[122] The craggy terrain surrounding Mount Vesuvius—which erupted repeatedly throughout the eighteenth century—bears a greater resemblance to northern landscapes than to southern climes, and the melancholy tone of Corinne's improvisation appeals to the English rather than the Italians in her audience.[123] She leaves us with a striking depiction of scorned talent as Ossianic shade: "Thus, frightened by the surrounding desert, talent searches all over the surrounding universe but finds nothing like itself. Nature responds to it no longer; ordinary people take for madness the malady of the soul which can no longer breathe enough air, enough emotion, enough hope, in this world."[124]

Though set in Italy and evocative of its Roman past, Staël infuses her heroine's Italian lyricism with the melancholy spirit and the philosophical poetry of the north, putting us in mind of Mary Sheriff's rapprochement of the iconography of the inspired sibyl and the blind bard.[125] In so doing she recalls not only Italian women's Roman forebears but also British women's Caledonian ancestors, who garnered the love and respect of their life companions yet retained their independence, intoned their songs of sorrow, and were duly mourned. Buoyed by her Italian enthusiasm throughout the first part of the novel, Corinne falls victim to melancholy in the second. She attributes this shift to her encounter with Oswald: "There are only two distinct ways of feeling nature: animate it like the ancients . . . or, like the Scottish bards, yield . . . to the melancholy prompted by the uncertain and the unknown. Since I have known you, Oswald, the northern way appeals

to me."[126] The symbol of their doomed love affair becomes, appropriately, a cloud passing over the moon.[127] Corinne's capacity for suffering proves to be in direct proportion to her capacity for empathy, and her genius succumbs to her acute powers of observation, memory, and imagination as they turn their focus inward. As Staël remarks in *De la littérature*: "A certain degree of emotion can foster talent, but long and weighty pain stifles the genius of expression, and when suffering has become the habitual state of the soul, the imagination loses the very need to convey what it feels."[128]

Like Malvina, Corinne loses her vital force, ceases to savor the joy of grief, and is wasted by the sorrow of the mournful. Consequently, she loses the capacity for elevation and abstraction, for casting beyond the particular to the universal that Staël associates with eloquence and that is akin to poetic inspiration and philosophical insight, unable to empathize with the suffering of others while preoccupied with her own.

> How far she was then from her talent for improvisation! . . . As she felt incapable of diverting her thoughts from her own situation, she depicted what she was suffering. But she no longer expressed the general ideas, the universal feelings, which appeal to the hearts of all humanity. It was the cry of pain, which in the end becomes monotonous. . . . It expressed unhappiness, but there was no longer any talent. Admittedly, to write well you need a genuine emotion, but it must not be destructive. Happiness is necessary for everything and the most melancholy poetry has to be inspired by a kind of vigor which assumes strength and intellectual pleasures. Genuine grief is by nature infertile.[129]

Staël thus draws a distinction between the relative fertility of melancholy (*malheur*), attenuated by happiness, and the infertility of true pain or sorrow (*douleur*). Yet while Corinne's powers of expression may be compromised—as evidenced by the fragmenting of her writing and the silencing of her song—at no point does she lose her creative and critical faculties.[130] Instead, she dedicates them to the education of a young Englishwoman, her niece Juliette, who has the potential to reconcile domestic happiness with the ability to sing melancholy Scots ballads with all the verve of an Italian *improvisatrice*.

Napoleon styled himself as the heir to the French Revolution while Staël denounced him as its betrayer. Despite their ideological differences, both embraced the Ossian epics as the model and the emblem of modern French society and the arts. If Napoleon exercised what Morrissey has called a politics of fusion, in which he sought to reconcile the old and the new, the Celtic and the Roman, Staël articulated an aesthetics of fusion, a reconciliation of north and south, melancholy and enthusiasm.[131] Yet they did so via a return to religion. With the Concordat of 1801, Napoleon negotiated an administrative peace with the Church of Rome that, while considered one of the worst reversals of Revolutionary principles, was a crucial factor in creating continuity with the past. Similarly, Staël attributed the fusion of the spirits of the north and south to the advent of Christianity, holding out hope for a similar reconciliation in her day.

> Christianity linked the people of the north and south; it merged, so to speak, opposed customs in a common opinion and, reconciling enemies, made them into nations in which the energetic fortified the character of the enlightened and the enlightened developed the minds of the energetic. . . . How fortunate we would be to find, as at the time of the northern invasions, a philosophical system, a virtuous enthusiasm, a strong and just legislation that would constitute, as Christianity did, the opinion in which the victors and the vanquished could unite![132]

Toward the end of *De l'Allemagne*, Staël aligns not only civic melancholy but also virtuous enthusiasm with the spirit of self-sacrifice, opposing it to the egotism Rousseau found so objectionable. Resisting the association of enthusiasm with fanaticism, she attributes the latter to concern for public opinion and the former to the desire for universal harmony. Glossing the term as *Dieu en nous* (God within us), Staël defines it as what renders us capable of devotion, whether to a divinity, another being, or a cause. Both melancholy and enthusiasm—which she numbers among the "exalted sentiments"—are conducive to altruism in Staël's philosophy.[133]

For both Napoleon and Staël, the Ossian epics were the source of a new mythology, one not hackneyed by overuse but fundamentally compatible

with the principles of Enlightenment and the spirit of the Revolution. In the epics, we find both the sublime savage, as Macpherson has been called, and the elements of Enlightenment sociability, as Adam Potkay has shown, as well as models of heroism and martyrdom with which Napoleon and Staël could identify. Like many others, they perceived the French Revolution as a moment of transition between the ancient and the modern, leaving them to define what modernity would entail. For Napoleon, it involved a crucial legitimizing move, in which he linked the new regime to prior civic models. For Staël, it involved a spiritualization of the secular. Regardless of whether modern society took the form of a republic, a constitutional monarchy, or an empire, it should ideally inspire and enable men and women to fulfill their love of and potential for glory, an aspiration that Staël found both compatible with and conducive to genius.

One of the chief distinctions between the Ossian epics and those of Homer and Milton, as we have seen, was the absence of deities, per se. The French *philosophes*, indeed, had initially embraced Ossian's poetry on the grounds that it was not religious. As early as 1761, Grimm commented in the *Journal étranger* on the surprising lack of religious references in the poetry: "Something still more remarkable, in these poems, is that we find in them no trace of religion or cult."[134] According to Paul Van Tieghem, the absence of religious references in Ossian's poetry likewise constituted the grounds for Diderot's enthusiasm for the discovery, leading him to try his hand at translating the first fragments to appear in the *Journal étranger*: "What a blessing for a deist century thus to find the image of a civilization that is both primitive, heroic, and a perfect stranger to Christianity!"[135] The Ossian epics came onto the scene between the waning of the Greco-Roman and the advent of the Christian marvelous, each of which, according to the Encyclopedists, left something to be desired. They were infused, moreover, with the aesthetics that Diderot and Rousseau had anticipated in their art, theater, and music criticism, which Jacques Chouillet has characterized as "Ossianism avant la lettre."[136]

Staël likewise embraced the presence of a marvelous she found compatible with nature in the Ossian epics, describing it as "deist" and associating it not with superstition but rather with "exalted reason," remarking: "The

ghosts leaning upon the clouds are but memories animated by perceptible images." Yet she found the spirit that pervades the epics to be far more compelling than the mythological characters that people Homer's works: "It has been said that there are no religious ideas in Ossian. There is no mythology, but one consistently finds an elevation of the soul, a respect for the dead, a confidence in a life to come; sentiments much more analogous to the character of Christianity than to the paganism of the south."[137] Having weighed but rejected the term *mythology* to describe Ossian's poetry, Staël replaces it with *religion*. Religion, she argues, has the potential to infuse human nature with the creativity it lacks.

> But I ask enlightened thinkers, if there were a means of linking morality to the idea of a God without this means ever becoming an instrument of power in the hands of men, wouldn't a religion so conceived be the greatest happiness that one could grant human nature; human nature that every day becomes more arid, more pitiful, and that each day breaks some of the ties formed by delicacy, affection, and kindness?[138]

Staël thus makes the transition from the previous generation's questioning of the role of the marvelous in modern literature to her own generation's conviction that the spirit of modern literature is to be found in religion via her interpretation of the Ossian's epics.

Toward the end of *De la littérature*, Staël hails a new vein of writing with which she finds the Ossian epics to be particularly compatible. Attributing the "ability to feel and to depict nature" to the literature of the North, she likens it to the philosophical bent of French poetry. Her examples include the works that have comprised my corpus.

> A new genre of poetry exists in the prose works of J.-J. Rousseau and Bernardin de Saint-Pierre: the observation of nature's relations to the sentiments she induces in mankind. . . . The memories of the sound of the waves, the obscurity of the clouds and the terrified birds are inseparable from the description of the sentiments that filled the soul

> of Saint-Preux and Julie. . . . The fertile nature of the Île de France, its variegated vegetation, . . . the terrifying storms that follow close upon the calmest days, are united in our imagination with the return of Paul and Virginia.[139]

Staël characterizes this novel form of prose poetry, which privileges nature and sentiment, indelibly united in the memory and imagination of the reader, as philosophical and the only viable substitute for the Greco-Roman marvelous.

The Ossian epics' revised frame of reference also suggested itself to Le Sueur, whose penchant for church music we explored in Chapter 3, bringing us full circle to the operatic stage. Le Sueur had managed to weather the various changes in regime leading from monarchy to empire and became musical director of the Tuileries Chapel under Napoleon Bonaparte. His five-act tragic opera *Ossian, ou les Bardes* was first performed in 1804 for the inauguration of the Académie Impériale de Musique, for which the emperor awarded him the newly minted Légion d'Honneur. According to Jean Mongrédien, "Le Sueur had the privilege of introducing Celtic and Scandinavian mythology to the French operatic stage," which would later serve as a source of inspiration for Richard Wagner's Valhalla.[140] His interest in biblical and Homeric subjects was well established and he may have been sensitive to the resonances that have since been recognized in Macpherson's style. Like Staël, Le Sueur and his librettists Palat Dercy and Jacques-Marie Deschamps reconceived the Ossian epics as a religious subject. David Charlton notes the antithetical nature of this shift with respect to the original subject matter: "Ossian and his people worshipped no gods. On this, Macpherson is categorical. . . . However, in the opera as we have it . . . religious motivation is one of the pivotal forces."[141] A brief comparison of the source material with the opera brings the singularity of this shift to the fore.

The gist of Le Sueur's opera is drawn from the poem *Calthon and Colmal*.[142] While the opera conserves the confrontation between Ossian and Dunthalmo's armies, it deemphasizes the age-old animosity between the warring clans, converting the central conflict of the opera from political

to religious. The Scandinavian aggressors are described as Odin worshippers, as the chief of the bards reveals: "Odin's altar replaces a gentle, happy cult."[143] The cult they have replaced, that of the pacific Caledonians, is a form of natural theology. The bard Rosmor describes their sun worship in his final injunction to Ossian on behalf of his persecuted people: "Return to them under your happy, protective empire / The revered cult of which they were deprived."[144] The opposition between the two faiths is rendered complete by associating Odin not only with war, as is customary, but with death and night: "Oh divinity of death! / You who surround, ceaselessly, both night and shadows [*ombres*]."[145] The Scandinavian's worship of war, death, and night has thus gained a false ascendancy over the Caledonians' worship of peace, life, and day. The importance of this religious controversy to the opera's plot is rendered even greater by its association with the opera's central love triangle: "We want Rosmala to betray her faith, / Let her forget Ossian who returns to defend her, / Let her marry Mornal on Odin's altar!"[146] Marriage to the enemy is therefore to be consecrated on the altar of the enemy's god, and the test of the heroine's fidelity becomes a test of faith.

Though somewhat atypical of eighteenth-century opera plots, the opposition of false gods to sun worship in *Ossian, ou les Bardes* hearkens back to Jean-Philippe Rameau and Louis de Cahusac's Masonic *Zoroastre* that I analyzed in Chapter 1. The centrality of the religious conflict anticipates French grand opera, moreover, justifying Charlton's situating of the work between Rameau and Romanticism. Charlton identifies Rousseau's *Devin du village* and *Essai sur l'origine des langues* as the source of the contrasting melodies that Le Sueur attributes to the Scandinavians and Caledonians, placing him squarely within the tradition I have been tracing. He notes, however, that Le Sueur's attribution of dulcet tones to the Caledonians directly contradicts Rousseau's association of harsh consonants and muted vowels with the languages of the North.[147] Yet if we consider that the Caledonians, though a northern people, are southern with respect to the Scandinavians, who are repeatedly characterized as "Northerners" in the opera, Le Sueur's attribution of lyricism to the Caledonians remains faithful to both Rousseau and Macpherson.

It was the act-4 staging of Ossian's dream in a vast cavern constituting the holding ground for Odin's sacrificial victims that garnered the vociferous admiration of contemporary audiences, however. Dream sequences, or *sommeils*, like storm scenes, were among the privileged loci of the marvelous on the operatic stage, a genre at which Rameau had excelled. Hailed as the new Orpheus, Ossian's bardic song was set to an unprecedented orchestration of twelve harps. Left alone in the cave, Ossian, dressed in a white tunic and laurel wreath reminiscent of the Greco-Roman and Christian traditions, anticipates his pending fate and life after death: "Open for me, pure and happy resting place, / Airborn fields, brilliant azure palaces, / Where the warrior rejoins his inclinations and his arms, / The bard his crown, and beauty its charms, / Divine ancestors, dear and sacred heroes, / Ah! welcome the son who celebrated you." At this point, Ossian falls asleep and dreams the scenario he evokes in his song, as the stage directions indicate.

> While Ossian sleeps, the objects he just described, that he often sang about, occupy his thoughts. The scenery consists of approaching clouds. The aerial palace opens, first revealing the heroes and lesser bards. . . . The sound of their divine harps blends with the voices of heroes' daughters. In the distance can be seen the palace of Thunder formed of columns of clouds and transparent walls, across which celestial fires can be seen running.[148]

This is the scene that is thought to have inspired Ingres's 1813 painting *Le Songe d'Ossian* (*Ossian's Dream*) (Figure 16). The following stage direction, corroborated by contemporary descriptions of the unusual backlit white scrim, suggests that Ingres may have seen a performance of the opera: "The tableau expands, the light becomes brighter, and the heroes and greater bards can be seen. The heroes, seated on thrones of vapor, are armed with lances and shields."[149] Visible in Ingres's painting are the fallen heroes, bards, and women bearing lances, shields, and harps and seated on "thrones of vapour." Though Gérard's Ossian painting is also thought to have inspired Ingres's, the latter accentuates the horizontal two-tier structure, eliminating all features on the vertical plane emblematic of the passage

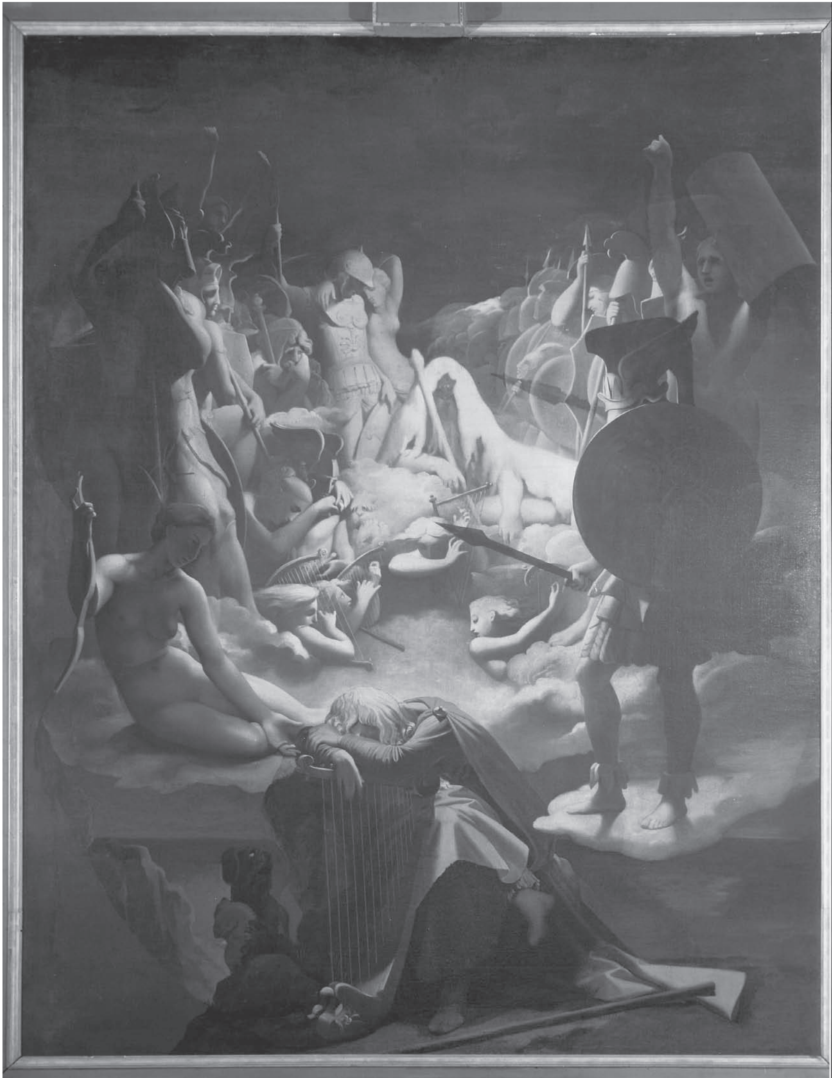

FIGURE 16. Jean Auguste Dominique Ingres (1780–1867), *Ossian's Dream*. 1813. Oil on canvas, 348 × 275 cm.

Musée Ingres, Montauban, France. Erich Lessing / Art Resource, New York

of time (moonlight, ruins, a stream), as natural setting is replaced by stage set, landscape gives way to dreamscape, and history reverts to mythological painting accompanied by an increased eeriness of light, flattening of depth, and plasticity of form. While the statuesque ghosts are supported by sturdy clouds, the clouds themselves neither arise from nor are visibly supported by anything, evoking the intervention of stage machinery, or the *merveilleux*.

THE SCIENCE OF FOLKLORE

Napoleon's fascination with the Ossian epics inspired similar quests on the French side of the Channel, notably that of Jacques Cambry, who published his 1799 *Voyage dans le Finistère*, (*Journey to Brittany*) in which he documented Breton lore after the fashion of Macpherson, dedicating his subsequent *Monuments celtiques, ou recherches sur le culte des pierres* (*Celtic Monuments*) to Napoleon. It also gave rise to the establishment of the Académie Celtique in 1804, whose mission was to discover France's Gallic roots and whose inaugural act was to revisit the Ossian controversy by reviewing the Highland Society of Scotland's findings.[150] The documents the Highland Society assembled to determine the authenticity of the epics included testimony from Blair, Ferguson, Home, and Hume as well as Andrew Gallie and Lachlan Macpherson of Strathmashie, who had assisted Macpherson in collecting, collating, and translating his materials. The committee's exhaustive review of the evidence revealed that, while Macpherson was perhaps "guilty" of omission, modification, and embellishment of the poetic fragments, he had not in fact invented the epics out of whole cloth.[151] The accuracy of Macpherson's claims clearly hinged on the vagaries of contemporary understanding of translation. When characterizing eighteenth-century translation practices in Britain and France, Mary Helen McMurran remarks: "In general, we cannot assume that a translation came directly from an original, or suppose a translation provided a literal or complete rendering of its source, because it was common enough for translators not only to alter the text but also to add some original work to it."[152] The status of oral versus written culture and of literal versus creative translation was in flux at the time. So, too, was the distinction between historical truth and historical faith. In glossing Samuel Richardson's definition of historical faith, which

we examined in Chapter 2, Nicholas Paige notes the similarity between Richardson's and Rousseau's techniques: "Richardson's desired posture is very close to the one Rousseau will devise and execute for *Julie*: the letters should be presented as genuine, but without intent to deceive (there is properly speaking no hoax)."[153] This statement prompts us to consider the nature of Macpherson's claims in the context of the pseudofactual regime of the novel. One of the most intriguing aspects of Macpherson's purported "hoax" is that, far from claiming to be the author of the epics, he defended their authenticity, and his own integrity, by insisting that he was but the translator of works that he had supposedly found. This claim resembles the stance that authors characteristically assumed at the time in their paratextual material. Whereas admitting to being the author of the works and thereby laying claim to Ossian's poetic genius might have been more egregious still, the public took issue with the fact that Macpherson maintained his claim to be but the translator of the epics until the bitter end, leading certain readers to invest his claim not with historical but with actual faith. Having initially taken Macpherson at his word, the public subsequently decried his pretense as dishonest. Macpherson's unwillingness either to produce the originals in question or to nuance his claims carried the notion of historical faith too far, it would seem, which had the boomerang effect of increasing skepticism.

Ironically, the director of the committee that investigated the authenticity of the epics was Henry Mackenzie, whose 1771 novel *The Man of Feeling* opens with the same conceit. The narrator cum editor explains that the work is a "medley" consisting of a "bundle of little episodes, put together without art" that lack only the name of Richardson (or, as he stated in the first edition, Rousseau) on the cover to make him weep.[154] Trumpener interprets Mackenzie's "reverent parody" as part of the Ossian epics' impact on the novel, particularly Gothic fiction. Yet the pseudofactual regime was already well established before the "hoax" was ever perpetrated, making the public outcry all the more unaccountable.[155] Macpherson's relative guilt or innocence remains difficult to determine, for it seems to turn on a question of authorial "intent to deceive," leading us toward the intentional fallacy. What we can conclude, however, is that Macpherson successfully employed the very methods used in philosophy and aesthetics to (re)constitute a

harmonious whole (epic) from inferred relations among parts (ballads), conveying a spectacle, or simulacrum, of nature that rendered the marvelous plausible. These relations included the network of similes connecting the various elements (earth, air, fire, and water), kingdoms (animal, vegetable, and mineral), and realms (living and dead) that the epics comprise. In *The Sublime Savage*, Stafford remarks: "The vogue for *Ossian* can be seen as part of a subconscious reaction against the scepticism of David Hume and the French *philosophes*, which seemed to threaten the traditional frameworks of belief. The world of *Ossian* was remote and mysterious, haunted by ghosts and surrounded by mists and darkness. It was the complete antithesis of the Enlightenment."[156] Yet Hume and the philosophes both paved the way for and momentarily embraced the epics, which in many ways corresponded precisely to what they had been seeking. The Ossian epics harnessed the energies of unkempt, unspoiled, unframed nature, vivid imagery, and vocal utterance with which French philosophers and politicians alike wished to infuse the national spirit, providing them with a new origin myth that could be interpreted as either secular or religious and was preserved in the concrete historical remains of their language, topography, and culture.

The Académie Celtique attested to the legitimacy of Ossian's poetry (if not of Macpherson's translation) in the following terms: "The authenticity of the poetry of this illustrious bard, at least for the most part and at heart, is therefore incontrovertible. . . . One can no more doubt the authenticity of Ossian's poetry than that of the Iliad, the Odyssey, the Edda, and even the Bible," characterizing the latter as "ancient monuments of primitive religion."[157] Whether monuments of primitive religion or infused with the Christian spirit, the Ossian epics suggest that the impulse to eradicate religion and superstition had been replaced in the course of the century with the impulse to collect, preserve, and valorize them as alternative sources of artistic inspiration and national identity, rivaling that of the Greco-Roman tradition.[158] In a fascinating reversal, the members of the Académie Celtique cast themselves not as the perpetrators but as the victims of cultural imperialism by identifying with their Celtic past. The language in which they contrast their Celtic to their Greco-Roman heritage is telling.

> The fame of the ancient Celtic splendor encountered no greater obstacle, in the course of the centuries, than the pride of the Greeks and the Romans. . . . Masters of the world, the former by virtue of their knowledge, the latter by dint of their arms, they wanted all pleasure and glory to date from their era. . . . This vain principle once recognized, however, we can but assume that the influence of Athens and Rome . . . constantly served but to degrade, vilify, debase, and obliterate the memory of the people whose creativity, philosophy, courage and even magnificence they found insulting.[159]

Opposing the glory of the Celts to the vanity of the Greeks and Romans, the Académie Celtique credited the former with having fostered geniuses on the order of Zoroaster and Pythagorus. Accusing the English of being usurpers, the Académie pointed to the physical and linguistic remains of their Celtic past as evidence that France, not England, was situated on the seat of ancient Gaul.[160]

Though Macpherson's reluctance to articulate or corroborate his methods cast the authenticity of the Ossian epics into doubt, it also whetted the public taste for antiquarianism in general and Celticism in particular and was responsible for the establishment of folklore institutes whose mission was to put such methodological guidelines into place. The Académie's methods included philology and etymology used to identify the remains of the Celtic language (from which they hoped to reconstruct a lost original), which was particularly well preserved in Breton tales, songs, and legends. They considered these remains to be monuments of the past akin to the stones the Celts left in their wake. To facilitate the study of forms, or morphology, they devised the first questionnaire concerning customs and traditions, inscriptions and monuments, superstitions and beliefs.[161] The category "Questions about other beliefs and superstitions" inquired about local songs, dances, and musical instruments; proverbs, tales, and legends; saints, witches, and apparitions; natural phenomena (eclipses, comets, meteors) and nature worship (trees, rivers, caves).[162] Though the Académie did not survive the fall of Napoleon, the techniques it employed were retained

by the Société des Antiquaires de France to which it gave rise, whose mission was broadened to linguistic, geographical, and historical research on the Celts, the Greco-Romans, and the Middle Ages with a particular interest in ancient Gaul. The Académie was the first of its kind to undertake an empirical study of folklore in France, fostering similar methods among its corresponding members, including one Jacob Grimm.[163] The tensions we have seen in the reception of the Ossian epics, the hesitation as to whether to invest them with historical faith or faith *tout court* was thus symptomatic of the gradual shift in the perception of folklore from superstition to science. Whereas the French would once have asked whether the lore itself were true or false, factual or fictional, it was now considered true, or factual, because it existed, because someone once believed it, or at least ritually recounted it, investing folklore with a cultural legitimacy it had previously been denied, an instance of "sedimented practice" that entails the slippage if not from make-believe to belief then certainly from *fake* to its cognate *fact*.[164]

Girodet's painting for the Salon of 1802, *Apothéose des héros français morts pour la patrie pendant la guerre de la Liberté* (*Ossian Receiving the Ghosts of the French Heroes*) emblematizes this changing of the guard (Figure 17). On the one hand, the painting represents Girodet's rivalry with Gérard, for he switched his subject from Hercules to Ossian once he learned of Gérard's Salon entry. On the other, it represents Girodet's rupture with their master, David, whose neoclassical style he quotes on the right side of the painting while radically departing from it on the left, pioneering a romantic style that David publicly disavowed. The sharp contrast in styles, which might first strike us as differentiating the living from the dead, proves misleading, for Ossian welcomes the ghosts of French heroes into what is frequently referred to as the "Celtic Elysium." Gone is the distinction between the living bard and the dead heroes and lost loves of whom he sings and dreams that we saw in the paintings by Gérard and Ingres. As in the epics themselves, we are therefore hard put to distinguish between past, present, and future. While the painting has been read as representative of Napoleon's foreign policy, it can also be read in light of other works of Ossian-inspired philosophy and art, not all of which square so easily with Napoleon's politics. Though we may be inclined to read the painting

FIGURE 17. Anne-Louis Girodet de Roussy-Trioson (1767–1824), *Ossian Receiving the Ghosts of the French Heroes.* 1802. Oil on canvas, 192 × 182 cm.
Châteaux de Malmaison et Bois-Préau. Erich Lessing / Art Resource, New York

from left to right, Girodet renders Fingal's troops in his unprecedented romantic style—contrasting the Celts' luminous, white-clad, forward-leaning gesture of welcome to the Scandinavians' shadowy, recoiling stance of rejection—reserving the established neoclassical style for Napoleon's generals, the winged victory, and the French cockerel. The past is thus cast in a more innovative style than the present, giving us pause. The apparent entente between the blind bard and the sighted generals raises the question,

moreover, of which is the repository of cultural memory, which the social visionary. Staël's writings would encourage us to read the left of the painting as representing both France's Gallic past and its ideal future, for, like others of her generation, she proposed to replace Homer with Ossian. As we have seen, contemporary viewers may have been tempted to associate the left of the painting with the Celts and the right with the Romans, the left with the Gauls and the right with the Franks, the left with the revolutionaries and the right with the aristocrats, yet both Napoleon and Staël based their hopes for France's future on the fusion of the two. We may be tempted to associate the faculties of memory and imagination with the left and reason with the right, yet each was meant to inform the other. Reconciliation of the halves of the painting, as exemplified, from the bottom up, in the toast, the nuzzling dogs, the olive branches, the embrace, and the dove of peace rescued from the grasp of the avenging eagle, was necessary not only in terms of philosophy and aesthetics but also for the sake of France's cultural cohesion in the wake of civil war, providing a model for the future of the modern state, modern art, and the modern novel, as well as a necessary corrective to the perceived opposition between the Enlightenment and Romanticism, verisimilitude and the marvelous.

Epilogue

A Theater of Enchantment

E.T.A. Hoffmann, author of the philosophical dialogue "The Poet and the Composer," was an aspiring composer and music critic in his own right before becoming internationally renowned for his fantastic fiction. He penned his essay "The Complete Machinist" while Napoleon's armies were invading Prussia. In it, he considers not the spectacle of nature but rather the nature of spectacle. Recalling the sense of awe he sustained as a child when he went to the opera, he declares that the "foolish premise" at the time was that "scenery and stage effects should unobtrusively blend with the drama, so that the total effect would transport the spectator, as though on invisible wings, right away from the theatre to the fantastical land of poetry." The "total effect" Hoffmann evokes—anticipating Wagner's "total art" or Mallarmé's "total look"—is one of perfect illusion, to which the scenery and stage effects were meant to contribute. With all the critical distance and twenty-twenty hindsight afforded by adulthood, Hoffmann, or rather his mouthpiece Johannes Kreisler, scoffs at the follies of his youthful sense of wonder. Addressing the opera machinist directly, he warns that "poets and musicians find themselves in a highly dangerous alliance against the public. They have set themselves no less a task than to wrench the spectator out of the real world, where he feels quite at home, and . . . to torment him with all the sensations and passions that are most injurious to his health." Asking who could remedy this deplorable state of

affairs, Kreisler suggests that it is up to the machinists themselves to defend humanity against the pernicious influence of poets and musicians.[1]

Kreisler goes on to compile a list of possible ways to dispel illusion. These include inserting the wrong piece of scenery or intervening curtains that disrupt the "so-called truth" that is in fact deceptive, "a street-scene in the middle of a rocky desert, or a dark forest inside a temple" for instance. The imminent collapse of precariously positioned components of the scenery is another effective technique, which has the added advantage of winning the audience's sympathies for the endangered singers. This strategy helps ensure that the vocalists are perceived as actors on a stage throughout the performance rather than misperceived as characters in a story. Warning the audience before frightening them with loud noises (gun shots, cannon fire, thunderclaps) also helps ensure that they are never actually afraid. Finally, of course, all the mechanisms responsible for transporting gods and natural phenomena on- and offstage as well as for producing lighting and sound effects must be clearly visible from the audience.[2] Read straight, Kreisler's commentary seems to anticipate Bertolt Brecht's destruction of the fourth wall. Read ironically, it constitutes a powerful argument in favor of maintaining it. Evoking Bottom's desire to announce, prior to the performance of *Pyramus and Thisbe*, that the play we are about to see in Shakespeare's *A Midsummer Night's Dream* is fictional, Hoffmann suggests that the critique of stage illusion (or praise of disenchantment) is equally absurd.

Readers of Walter Benjamin's essay "The Work of Art in the Age of Mechanical Reproduction" are aware of the political implications of an aesthetics of absorption versus distraction. Enchantment carries connotations of passivity, deception, and—above all—the suspension of critical faculties. Yet at no point in the course of my study has this been the goal of eighteenth-century aesthetic innovation and reform. Instead, wonder, enthusiasm, melancholy, and the "sentiment of divinity" were consistently theorized as compatible with, even reliant on, curiosity, reason, analysis, and judgment. Though the artworks I have investigated at times received the official sanction of the monarchy or the empire, their political messages are difficult if not impossible to reconcile with absolutist, colonial, or imperial regimes (the art of David's students is arguably more complex than

that of their master). The natural theologies the philosophers, artists, and composers in my study explored are accompanied instead by an investment in the egalitarian reign of merit and virtue in small-scale republics or enlightened monarchies characteristic of the period's utopian rather than dystopian urges. These societies, whether in Bactria, Geneva, Mauritius, or Caledonia, were meant to serve as models for rethinking French society and politics. Spectators were encouraged to play an active role in this rethinking. Forced to question the accuracy and adequacy of their sensory perceptions and critical assumptions, the aesthetics of enchantment was designed to render them more, not less, critically aware. Binding the external to the internal senses, as it were, the aesthetics I have explored obliged spectators to draw on their combined faculties of reason, memory, and imagination before exercising their powers of judgment. If their credence was not forcibly induced, neither was it precluded. The extremes of Revolutionary festivals and Pyrrhonian skepticism, though admittedly a risk, were not in fact among the period's envisioned reforms.[3] These were to be found instead in the cultural institutions that owe their modern form to this era, which employed the aesthetics of enchantment in the name of science, art, religion, and folklore.

In *Le Génie du Christianisme* (*The Genius of Christianity*) of 1802, Chateaubriand looks back on the eighteenth century and advances an intriguing argument. The ancients, he claims, were unable to observe and represent nature, for their vision was distorted by the very mythological figures with which they peopled the universe. Not until Christianity posed a serious challenge to paganism did the advent of descriptive poetry and landscape painting become possible: "The spectacle of the universe did not make the Greeks and Romans feel the emotions it conveys to our soul. Instead of the setting sun, whose lengthening rays sometimes illuminate a forest, sometimes send a golden tangent over the rolling arc of the sea; instead of these tricks of the light, that retrace the miracle of creation every morning, the ancients could see nothing but a uniform *machine d'opéra*."[4] The progress of the Christian marvelous was delayed, however, by the eighteenth century's irreligion, which Chateaubriand deems incompatible with the ability to appreciate nature's marvels that attest to the existence of God. Associating

incredulity with the rise of reason and science and with the death of sensibility and eloquence, he declares he would like to have written an *Histoire naturelle religieuse* that would have counterbalanced modern materialist tendencies.[5] Remarkably, the animal he would have chosen to feature is the beaver, the object of Buffon's *admiration*.[6] He offers, moreover, two tableaux of nature reminiscent of Diderot's and Rousseau's promenades, one a seascape en route to America, the other a landscape in the vicinity of Niagara Falls.[7] Finally, he evokes the poetics of ruins: "No ruin has a more picturesque effect than this debris. Under a cloudy sky, in the midst of winds and tempests, on the banks of this sea whose storms Ossian sang."[8] Chateaubriand singles out Bernardin de Saint-Pierre as the only truly Christian poet of the previous era, praising Virginie's exemplary death and proposing, after Bernardin's example, that religion itself be numbered among the passions.[9] In the course of his discussion, it becomes clear, however, that the authors in my corpus, regardless of their religious persuasion, belonged to this interim period—between the waning of the pagan and the advent of the Christian marvelous—when the ability to observe and represent nature's marvels prevailed. The purported irreligion of their age did not prevent these authors, moreover, from paving the way for Chateaubriand.

Studies such as Hugo's *Préface à Cromwell* and Mikhail Bakhtin's introduction to *Rabelais and his World* lead us to conclude that the marvelous was never eradicated any more than the grotesque, though it proved to be equally protean. To realize this, we have but to consider the *gloires*. One of the most characteristic machines on the operatic stage, the clouds depicted in Figures 5 and 6 that were employed for the entrance and exits of the Greco-Roman gods, like the chariots, were also the most loudly decried. And yet the glory did not disappear, nor was it replaced; it was simply repurposed. Gluck added *dei ex machina*, necessitating its use, to the Iphigenia operas he wrote for Paris in compliance with spectator demand. Glories were also used to decorate altarpieces in cathedrals throughout France, though in this instance they bore not gods but angels (whether *putti* or cherubim), visible in Figure 13. The same artists were employed in redesigning France's opera houses and cathedrals, as we see in the case of Servandoni, and in immortalizing myth and religion, as we see in the case

of Falconet. If we consider the Ossian paintings, particularly Figures 14 and 16, we encounter yet another instance of glories, this time bearing neither Greco-Roman gods nor Christian angels but rather Scots ghosts. Ghosts seated on clouds, which bore them like chariots, as Macpherson repeatedly tells us. Whereas Vernet effectively deployed moonlight, clouds, and water to convey a panoply of atmospheric effects from calm to tempestuous, the Ossian paintings emerging from David's workshop conveyed a nature populated by spirits, emblematic of memories of the past and visions of the future, putting yet another spin on the notion of how history should be recounted or portrayed. While Gérard's painting is *like* a glory, Ingres's painting is *of* a glory, blurring distinctions between genres by infusing history painting with special effects. Opera and epic, like religion and "superstition," were not eclipsed but rather revitalized in the course of the century, finding their place on the walls of the Imperial Palace, on the stage of the Académie Impériale de Musique, and in the archives of the Académie Celtique, founded to sanction and preserve them.

When not transporting gods, angels, and ghosts, clouds were as often as not harbingers of foul weather, momentary discord, or disruptions of natural harmony. Storms, like earthquakes and volcanoes, as we have seen, were a recurrent feature of the spectacle of nature, inducing emotions that verged on and contributed to theorizations of the sublime.[10] The Lucretian scenario I discussed in the Introduction, to which we have repeatedly returned, recurs in Kant's *Critique of Judgment*, featuring once again what Marmontel called the natural marvelous.

> Bold, overhanging, and, as it were, threatening rocks, thunderclouds piled up the vault of heaven, borne along with flashes and peals, volcanoes in all their violence of destruction, hurricanes leaving desolation in their track, the boundless ocean rising with rebellious force, the high waterfall of some mighty river, and the like, make our power of resistance of trifling moment in comparison with their might. But, *provided our own position is secure*, their aspect is all the more attractive for its fearfulness; and we readily call these objects sublime, because they raise the forces of the soul above the height of vulgar

> commonplace, and discover within us a power of resistance of quite another kind, which gives us courage to measure ourselves against the seeming omnipotence of nature.[11]

Kant acknowledges the wonder, enthusiasm, and melancholy occasioned by such vistas, emphasizing their ability to engage the imagination, yet locates the sublime not in nature itself but rather in the sense of intellectual superiority we derive from its contemplation, which compensates for our sense of physical vulnerability.[12] Restricting our understanding of eighteenth-century aesthetics to Kant thus leaves us with the impression of man's dominion over nature, which the Jena Romantics subsequently strove to nuance. Yet Staël, who met Goethe, Schiller, Schelling, and the Schlegel brothers on her travels and introduced their works to the French in *De l'Allemagne*, noted that the Jena Romantics, some of whom were also members of the Groupe de Coppet, shared the devolutionary perspective Rousseau espoused in his *Lettre sur la musique française*, including dismay at the rationalization of philosophy and the refinement of civilization and nostalgia for the lost vitality of nature, mythology, and figurative expression.[13]

In *Topographies of the Sacred*, Kate Rigby contrasts the "Enlightenment mechanists" to the "romantic organicists," positing nature's "first rebirth" at the turn of the nineteenth century. As we have seen, however, the sensationalist and vitalist appreciation of *rapports*, correlation, or interdependence in nature began much earlier, coinciding with the publication of Pluche's *Spectacle de la nature* and Voltaire's introduction of "Lockean-Newtonianism" into France.[14] The recent interest in environmental (or ecocritical) aesthetics encourages us to hearken back to the intervening period, yet Kant frequently remains the starting point for these studies. Like Buffon, Ronald Hepburn grounds the aesthetic contemplation of nature in relations among particular forms and perceptions as well as with respect to an observer, who is integrated into nature's harmony by virtue of this contemplative activity.[15] Valuable contributions by Arnold Berleant, Allen Carlson, and Noël Carroll, among others, remind us that the contemplation of nature was, historically, predicated on a sense of disinterestedness that did not preclude knowledge about, appreciation of, engagement with, or immersion in nature.[16] Carlson proposes a natural environmental model that valorizes the

knowledge—akin to that of a naturalist or ecologist—that we bring to a natural setting, giving us a sense of its foci and boundaries, its design or order, rendering aesthetic appreciation possible. Such contextualizing information, he notes, can be provided by the natural sciences, mythology, or folklore.[17] Carroll emphasizes the significance of emotional response, for he considers "being moved by nature" to be both compatible and commensurate with a naturalist's knowledge, characterizing emotion as "a mode of nature appreciation that is available between science and religion."[18] A renewed appreciation of nature's mysteries, or what lies beyond the bounds of sensory perception, cognition, and affect lends fresh importance to the role of imagination and insight.[19] As my study has demonstrated, natural history, philosophy, theology, and aesthetics were not deeply divided in the eighteenth century any more than cognitive and noncognitive positions were opposed. A more nuanced understanding of the French Enlightenment may therefore serve to inform, inflect, or attenuate current debates as critics consider the ethical implications of environmental aesthetics.

My analysis has focused on pre-Kantian, pre-Hegelian aesthetics, when nature and sensibility were valorized, yet something of what Kant refers to as the "supersensible destination" of the century has remained palpable throughout. The notion of nature as spectacle precluded the kind of Promethean attitude often attributed to the period.[20] As I have argued, naturalists, philosophers, artists, and composers perceived nature, harmony, and beauty in terms of relations (*rapports*). The awareness that certain things lie beyond the realm of reason and the senses, beyond human understanding—behind the scenes, as it were—encouraged speculation, interpretation, or divination, uniting what would subsequently become divergent fields of inquiry. The aim of the aesthetics of the time was to transform spectators into participants, whether in the natural ("real") world or in possible ("ideal") worlds. The aesthetics of enchantment addressed the problem of the pale copy, infusing the representation of nature with the marvelous, the real with the ideal, the secular with the spiritual, inducing emotions akin to those sustained in the presence of nature and reality itself, and enough faith, historical or otherwise, for the audience to take part in the thought experiments common to the domains of natural history and philosophy, religion, and the arts.

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Notes

INTRODUCTION

All translations from the original French are mine unless otherwise indicated.

1. For the impact of the Abbé Pluche's *Spectacle de la nature*, which went through 59 editions, see Barbara Stafford, *Artful Science: Enlightenment Entertainment and the Eclipse of Visual Education* (Cambridge, MA: MIT Press, 1994), 159.

2. Noël-Antoine Pluche, *Le Spectacle de la nature* (Paris: Frères Estienne, 1764–1770), vol. I, viii–x.

3. Lorraine Daston notes that Pluche was "content to describe only 'the exterior decoration of the world' without plumbing hidden causes." "Attention and the Values of Nature in the Enlightenment," in *The Moral Authority of Nature*, ed. Lorraine Daston and Fernando Vidal (Chicago: Chicago University Press, 2003), 107.

4. These can be compared to what David W. Bates calls "spatial metaphors of knowledge." *Enlightenment Aberrations: Error and Revolution in France* (Ithaca, NY: Cornell University Press, 2002), 31-2.

5. Robert Markley, *Fallen Languages: Crises of Representation in Newtonian England, 1660–1740* (Ithaca, NY: Cornell University Press, 1993), 39–45; and Steven Shapin, "Robert Boyle and Mathematics: Reality, Representation and Experimental Practice," *Science in Context* 2.1 (1988): 24.

6. Jessica Riskin, *The Restless Clock: A History of the Centuries-Long Argument over What Makes Living Things Tick* (Chicago: University of Chicago Press, 2016), 2–9. Riskin provides a necessary corrective to our understanding of the clockwork metaphor by recalling the apparent agency of medieval machines that informed the writings of René Descartes and Gottfried Leibniz, inspired Jacques de Vaucanson's lifelike automata of the 1730s, and corresponded to the perception of nature as organized rather than designed (21–23, 44–50, 103–6, 110–11, 118–22, 178–83).

7. Tita Chico, *The Experimental Imagination: Literary Knowledge and Science in the British Enlightenment* (Stanford, CA: Stanford University Press, 2018), 9–10.

8. Markley, *Fallen Languages*, 43.

9. Larry Laudan, *Science and Hypothesis: Historical Essays on Scientific Methodology* (Berlin: Springer, 1981), 32, 38, 48, 64–67.

10. In the spirit of Enlightenment philosophical experiments that can be repeated at home, the reader can enter "book of nature" and "spectacle of nature" (first in English, then in French) for 1700–1800 into the Google Ngram Viewer with a standard smoothing of 3. The spike coincides with the publication of Pluche's best seller, then mounts through the end of the century with a series of predictable peaks occurring in 1748, 1754, 1765, and 1773.

11. David Marshall, *The Frame of Art: Fictions of Aesthetic Experience, 1750–1815* (Baltimore: Johns Hopkins University Press, 2005), 12–13.

12. Jonathan Israel, *Radical Enlightenment: Philosophy and the Making of Modernity 1650–1750* (Oxford: Oxford University Press, 2002), 464.

13. Riskin, *Restless Clock*, 81; Pierre Hadot, *The Veil of Isis: An Essay on the History of the Idea of Nature*, trans. Michael Chase (Cambridge, MA: Harvard University Press, 2006), 98.

14. Marshall disavows the narrative that charts the rise of disinterestedness or detachment from the philosophy of Shaftsbury to the walls of the museum. Instead, he asserts that "the effect of an aesthetic perspective is not the separation of the realm of art but rather a blurring of the boundaries between the realm of art and whatever is defined in opposition to art: nature, reality, real life" (*Frame of Art*, 4).

15. Joseph Addison, *Spectator* no. 411.

16. Addison, *Spectator* nos. 414, 419.

17. Addison, *Spectator* no. 420.

18. Max Weber, "Science as a Vocation," *Daedalus* 87.1 (1958): 111–34, 112, 114, 133.

19. Max Horkheimer and Theodor Adorno, *Dialectic of Enlightenment*, trans. John Cumming (New York: Continuum Publishing, 1995), 3. Julia. Simon acknowledges the accuracy of Horkeimer and Adorno's characterization of the Enlightenment, but contends that Rousseau and Diderot unsuccessfully attempted to forestall the regression of society. *Mass Enlightenment: Critical Studies in Rousseau and Diderot* (Albany, NY: State University of New York Press, 1995), 4–5.

20. Bruno Latour, *We Have Never Been Modern*, trans. Catherine Porter (Cambridge, MA: Harvard University Press, 1993).

21. Jason Ā. Josephson-Storm attributes this selective reading primarily to the Frankfurt School. He asserts unilaterally: "The single most familiar story in the history of science is the tale of disenchantment. . . . I am here to tell you that as broad cultural history, this narrative is wrong." *The Myth of Disenchantment: Magic, Modernity, and the Birth of the Human Sciences* (Chicago: Chicago University Press, 2017), 3, 41–4.

22. Josephson-Storm, *Myth of Disenchantment*, 56–7.

23. Darrin McMahon, *Divine Fury: A History of Genius* (New York: Basic Books, 2013), 79.

24. Charly Coleman, *The Virtues of Abandon: An Anti-Individualist History of the French Enlightenment* (Stanford, CA: Stanford University Press, 2014).

25. Joshua Landy and Michael Saler, introduction to *The Re-Enchantment of the World: Secular Magic in a Rational Age*, ed. Joshua Landy and Michael Saler (Stanford, CA: Stanford University Press, 2009), 1–7.

26. Landy and Saler, introduction *to Re-Enchantment*, 8.

27. See the entries on "Enchantement" by Mallet, Jaucourt, and Cahusac in Denis Diderot and Jean le Rond D'Alembert, eds., *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*, ARTFL Encyclopédie Project, ed. Robert Morrissey and Glenn Roe (Chicago: University of Chicago, Autumn 2017 edition), http://encyclopedie.uchicago.edu/.

28. See "Merveilleux," *Encyclopédie*, 10: 393-5.

29. On this subject, see also Nicolas Boileau's "Art Poétique," Diderot's *Salon de 1767*, and Voltaire's *Essai sur la poésie épique*, respectively.

30. Ariosto and Tasso also integrated the Christian marvelous into their poetry, but both were eclipsed by Milton. On the perpetuation of the marvelous in epic poetry, see Jean-Marie Roulin, *L'Épopée de Voltaire à Chateaubriand: poésie, histoire, et politique* (Oxford, UK: Voltaire Foundation, 2005).

31. For my discussion of the crisis of language, see the introduction to my book *Narrative Interludes: Musical Tableaux in Eighteenth-Century French Texts* (Toronto: University of Toronto Press, 2006). See also Sophia Rosenfeld, *A Revolution in Language: The Problem of Signs in Late Eighteenth-Century France* (Stanford, CA: Stanford University Press, 2001).

32. Jean-François Marmontel, "Vraisemblance" in *Supplément de Panckoucke*, ARTFL Encyclopédie Project, ed. Robert Morrissey and Glenn Roe (Chicago: University of Chicago, Autumn 2017 edition), http://encyclopedie.uchicago.edu/, 4:1000, 1002.

33. Daston defines natural theology as "the worship of God through the study of his works" ("Attention and the Values of Nature in the Enlightenment," 105).

34. Steven Shapin and Simon Schaffer, *The Leviathan and the Air Pump: Hobbes, Boyle, and the Experimental Life* (Princeton: Princeton University Press, 2011), 51, 67.

35. Stephen Gaukroger, *The Emergence of a Scientific Culture: Science and the Shaping of Modernity 1210-1685* (Oxford: Oxford University Press, 2006), chapter 10.

36. Gaukroger notes that Boyle, Newton, Sydenham, and Malebranche, whose thought impacted Locke's writing of his *Essay Concerning Human Understanding*, concurred in their conviction that natural philosophy was unable to determine first causes, stating: "Causation can be horizontal: bodies can act on other bodies and in such cases no recourse is needed to underlying causal structure" *The Collapse of Mechanism and the Rise of Sensibility* (Oxford: Oxford University Press, 2010), 160–63, 171.

37. Though Bates is primarily interested in false associations of ideas, or errors of conjecture, he remarks that "knowledge for Locke is that process of discovering connections" (*Enlightenment Aberrations*, 49).

38. John Locke, *An Essay Concerning Human Understanding* (London: Penguin Books, 1997), 472.

39. Locke, *Essay*, 603–5.

40. Locke, *Essay*, 587–9.

41. Locke, *Essay*, 579, 606–7.

42. According to Daston, by the late seventeenth century, "observation examined nature as presented to the senses (with or without the aid of instruments), while experiment revealed hidden effects or causes." "The Empire of Observation, 1600–1800," *in Histories of Scientific Observation*, ed. Lorraine Daston and Elizabeth Lunbeck (Chicago: University of Chicago Press, 2011), 86.

43. Gaukroger, *Collapse of Mechanism*, 439.

44. David Hume's critique can be found in *A Treatise of Human Nature* (bk. 1, part iii, sec. 6) and in his revised *Enquiry Concerning Human Understanding*, ed. Stephen Buckle (Cambridge: Cambridge University Press, 2007), sec. 4.

45. Hume, *Enquiry*, 42–6.

46. Hume, *Enquiry*, 28, 32–3. My emphasis.

47. Hume, *Enquiry*, 47–53, 75–6, 92–5.

48. Devin Griffiths recently called attention to this privileged mode of scientific thinking—specifically to harmonic analogy—beginning with Erasmus Darwin in the 1790s, in *The Age of Analogy: Science and Literature Between the Darwins* (Baltimore: Johns Hopkins University Press, 2016), 27–50. My study indicates that it began much earlier.

49. Bates, *Enlightenment Aberrations*, 39, 65. Bates notes that "Condillac was trying to establish intricate, and by no means mechanical, relations among basic sensory experience, an increasingly complex range of mental operations, the identity of the self, and . . . an elusive universal or divine reality" (57).

50. Étienne Bonnot de Condillac, *Essay on the Origin of Human Knowledge*, ed. and trans. Hans Aarsleff (Cambridge: Cambridge University Press, 2001), pt. 1, sec. 2, chaps. 1 and 5.

51. Condillac, *Essay*, pt. 1, sec. 2, chap. 3. Condillac discusses the power of conjecture in the fourth book of his *Cours d'études* (1769–1773), designed for the Duke of Parma and entitled *L'Art de raisonner. Oeuvres de Condillac*, vol. 8 (Paris: Chez Guillaume, 1798), 232, 240.

52. Anne C. Vila considers Bonnet to represent "eighteenth-century Francophone sensationalism," noting that his mode of philosophical analysis is often identified with Condillac, Buffon, and Diderot. *Enlightenment and Pathology: Sensibility in the Literature and Medicine of Eighteenth-Century France* (Baltimore: Johns Hopkins University Press, 1998), 31. Scholars have compared Bonnet and Diderot's fiber economies and models of organic order as "systems" or "networks." T. Cheung,

"Omnis fibra ex fibra: Fibre Economies in Bonnet's and Diderot's Models of Organic Order," *Early Science Medicine* 15.1–2 (2010): 66–104.

53. Charles Bonnet, *Contemplation de la nature*, vol. 1 (Amsterdam: M.-M. Rey, 1764), lxviii, 16, 30.

54. Bonnet, *Contemplation*, 209.

55. Vila, *Enlightenment and Pathology*, 46; and Peter Reill, *Vitalizing Nature in the Enlightenment* (Berkeley, CA: University of California Press, 2005), 139–40, 148.

56. Of the new language of chemistry, Reill states: "Unlike the mechanists who viewed chemical reactions in terms of collisions between opposing forces of different shapes, sizes, and mass, the proponents of elective affinity couched their explanations of chemical change in the language of generation, reproduction, and relationship" (*Vitalizing Nature*, 77).

57. Swiss anatomist and physiologist Albrecht von Haller first drew this distinction. Haller is credited with having brought about the shift from mechanism to vitalism in physiology (Vila, *Enlightenment and Pathology*, 15–16; and Reill, *Vitalizing Nature*, 130).

58. Vila, *Enlightenment and Pathology*, 16, 47.

59. Vila, *Enlightenment and Pathology*, 2. Riskin accordingly defines "sentiment" as "an emotional 'movement' in response to a physical sensation" in *Science in the Age of Sensibility: The Sentimental Empiricists of the French Enlightenment* (Chicago: Chicago University Press, 2002), 1.

60. Reill, *Vitalizing Nature*, 7–8. Reill proposes these terms as translations or analogues of "elective affinity" (76–7, 83, 141).

61. Michel Foucault, *Les Mots et les choses* (Paris: Gallimard, 1990), 63.

62. Foucault, *Les Mots et les choses*, 36.

63. Foucault, *Les Mots et les choses*, 175. When defining the classical *epistème*, Foucault likens three systems of representation—language, economics, and natural history—all of which are predicated on the tension between relationships of similarity (among signs) and difference (between signifier and signified).

64. Gary Tomlinson, *Music in Renaissance Magic* (Chicago: Chicago University Press, 1993), 53, 144.

65. Tomlinson, *Music in Renaissance Magic*, 44–47, 53, 63–5, 84–7, 96–7, 117. Tomlinson notes the resulting profusion of "metaphors of harmony" to describe the world, including that of the vibrating string (50, 86).

66. Tomlinson, *Music in Renaissance Magic*, 246.

67. Downing Thomas, *Aesthetics of Opera in the Ancien Régime, 1647–1785* (Cambridge: Cambridge University Press, 2002), 184–7.

68. Jerome Stolnitz, "On the Origins of 'Aesthetic Disinterestedness,'" *The Journal of Aesthetics and Art Criticism*, 20.2 (1961): 143.

69. Georg Wilhelm Friedrich Hegel, *Aesthetics: Lectures on Fine Art*, vol. 1, trans. T. M. Knox, (Oxford, UK: Clarendon Press, 1975), 1.

70. Nicholas Paige proposes the term "proto-aesthetics" to refer to the pre-Hegelian use of the term. *Before Fiction: The Ancien Régime of the Novel* (Philadelphia: University of Pennsylvania Press, 2011), 118. I prefer to retain the term "aesthetics," employing it in a period-specific sense.

71. Riskin, *Science in the Age of Sensibility*, 15.

72. Louis Marin, *Sublime Poussin* (Stanford, CA: Stanford University Press, 1999), 120, 121. Catastrophe was first aestheticized in the eighteenth century, giving rise to ample philosophical and theological speculation. Anne-Marie Mercier-Faivre and Chantal Thomas, eds. *L'invention de la catastrophe au XVIIIe siècle: du châtiment divin au désastre naturel* (Paris: Droz, 2008), 7–9.

73. Nicolas Boileau, preface to Longinus, *Traité du sublime ou du merveilleux dans le discours*, cited in Nicholas Cronk, *The Classical Sublime: French Neoclassicism and the Language of Literature* (Charlottesville, VA: Rookwood Press, 2002), 81. Cronk calls attention to the significance of Jules Brody's comparison of Boileau's translation to Longinus's original, stipulating that for Boileau, nature and art, reason and insight were not opposed and that, if anything, he was inclined to enhance "qualities of intensity, spontaneity, and enthrallment" as well as "the writer's power to cast a spell, create a gripping illusion" (93).

74. Longinus, *On Sublimity*, trans. D. A. Russell (Oxford: Clarendon Press, 1965), 20–24, 29–30. Longinus references storm scenes and passages from Homeric epic in which "the mythical element . . . predominates over the realistic" (13).

75. Suzanne Guerlac notes a "significant continuity between Burke and Longinus in this suggestion of an intimate relationship between the powers of language (logos) and nature." *The Impersonal Sublime: Hugo, Baudelaire, Lautréamont* (Stanford, CA: Stanford University Press, 1990), 7–8. Yet Emily Brady emphasizes "the period's clear break with the Longinian tradition of defining the sublime in terms of style" in *The Sublime in Modern Philosophy: Aesthetics, Ethics, and Nature* (New York: Cambridge University Press, 2013), 19.

76. Lucretius's *De rerum natura* was first printed in France in 1514, followed by several notable sixteenth-century editions and seventeenth-century translations into the vernacular. Lucretian philosophy was closely associated with epicureanism and atomism, but was considered compatible with natural theology and, to a certain extent, with Christianity. Lucretius figured prominently in Michel de Montaigne's consideration of sense perception in "L'Apologie de Raimond Sebond." As Nicholas Hardy notes, "Lucretius found admirers throughout the early modern period. . . . They were all capable of treating the *De rerum natura* as a natural theology *manqué*." "Is the *De rerum natura* a Work of Natural Theology? Some Ancient, Modern, and Early Modern Perspectives," in *Lucretius and the Early Modern*, ed. David Norbrook, Stephen Harrison, and Philip Hardie (Oxford: Oxford University Press, 2016), 213, 220. Among these early-modern admirers, some of whom acknowledged and others of whom denied the existence

of God, were Bacon, Gassendi, Descartes, Boyle, Leibniz, Newton, Hume, Burke, and Kant. Monte Johnson and Catherine Wilson, "Lucretius and the History of Science," in *The Cambridge Companion to Lucretius*, ed. Stuart Gillespie (Cambridge: Cambridge University Press, 2007), 131–48.

77. Stephen Greenblatt, *The Swerve: How the World Became Modern* (New York: Norton, 2011), 8.

78. Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* (Oxford: Oxford University Press, 1998), II: 6.

79. Jonathan Sheehan and Dror Wahrman, *Invisible Hands: Self-Organization and the Eighteenth Century* (Chicago: University of Chicago Press, 2015), 26, 29.

80. Gaukroger, *Collapse of Mechanism*, 33.

81. Lucretius, *The Nature of Things*, trans A. E. Stallings (London: Penguin Classics, 2007), bk. 2.

82. Jean-Baptiste Dubos cites Lucretius in *Réflexions critiques sur la poësie et sur la peinture*, pt. I, sec. 2 (Geneva: Slatkine Reprints, 1967), 12–14.

83. Dubos cites Aristotle as first having observed that what would induce horror in life induces pleasure in art (*Réflexions critiques*, pt. I, sec. 3, p. 29).

84. Voltaire, "Curieux" in *Questions sur l'Encyclopédie* [1752], in *Collection complette des oeuvres de M. de Voltaire*, vols. 23 and 24 (Geneva: Cramer, 1768–1777).

85. Voltaire, "De la loi naturelle, et de la curiosité" in *L'A, B, C ou Dialogues entre A, B, C. Traduits de l'anglais de M. Huet* [1768] in *Oeuvres complètes*, vol. 22, *Dialogues et entretiens philosophiques* (Paris: Crapelet, 1818), 228. Adrienne M. Redshaw explains that Voltaire identified with Lucretius's critique of religious fanaticism yet was wary of his espousal of materialist atheism in "Voltaire and Lucretius," *Studies on Voltaire and the Eighteenth Centur*y 189 (1980): 19–43.

86. Burke, *Philosophical Enquiry*, 36, 41–4.

87. While the notion of disinterestedness is often attributed to Immanuel Kant, Stolnitz traces its origins to eighteenth-century British philosophy, most notably in the writings of Addison, Shaftesbury, Burke, Gerard, and Alison ("Aesthetic Disinterestedness," 131–43).

CHAPTER ONE

1. Bernard de Fontenelle, *Entretiens sur la pluralité des mondes habités*, in *Oeuvres complètes*, ed. Alain Niderst, vol. 2 (Paris, Fayard, 1991), 20.

2. Fontenelle, *Entretiens*, 21.

3. See Daniel Mornet, "Les Enseignements des bibliothèques privées (1750–1780)," *Revue d'histoire littéraire de la France* 17 (1910): 460–77. The two works of natural history are listed third and fourth, ahead of Diderot's *Encyclopédie* and the works of Voltaire and Rousseau (chart, 460).

4. Lorraine Daston and Katharine Park, *Wonders and the Order of Nature, 1150–1750* (New York: Zone Books, 1998), 110.

5. Natural history cabinets took the form of large pieces of furniture or small rooms equipped with open, closed, or glassed-in shelves and drawers designed for storage and display. Arthur Macgregor, *Curiosity and Enlightenment: Collectors and Collections from the Sixteenth to the Nineteenth Century* (New Haven: Yale University Press, 2007), 50.

6. Daston and Park, *Wonders*, 331, 360.

7. Sarah Tindal Kareem, *Eighteenth-Century Fiction and the Reinvention of Wonder* (Oxford: Oxford University Press, 2014), 35, 37–40.

8. Though Buffon met Hume in 1738, the latter soon thereafter pronounced his *Treatise on Human Nature* stillborn. His more succinct and successful *Enquiry Concerning Human Understanding*, subsequently known to Diderot and Rousseau, appeared in 1748, the year before the first volumes of Buffon's *Histoire naturelle*. John Lyon acknowledges the "Humean quality" of Buffon's writings, postulating that he may have been familiar with Hume's *Treatise* or *Philosophical Essays Concerning Human Understanding*. "The 'Initial Discourse' to Buffon's *Histoire naturelle*: The First Complete English Translation," *Journal of the History of Biology* 9.1 (1976): 141. Adam Smith's discussion of wonder in "Principles Which Lead and Direct Philosophical Enquiries Illustrated by the History of Astronomy" was written prior to 1751 but not published until 1795. Lord Kames's *Elements of Criticism*, which appeared in 1762, figures in Chapter 4.

9. René Descartes, [1860], *Passions de l'âme* (Chicago: University of Chicago ARTFL electronic edition, 2009), art. 53, p. 43. Descartes numbers wonder, love, hate, desire, joy, and sadness among the "pure" passions (art. 69, p. 52).

10. Daston and Park, *Wonders*, 16.

11. Descartes, *Passions de l'âme*, art. 70, p. 52.

12. Descartes, *Passions de l'âme*, art. 71, p. 53.

13. Descartes, *Passions de l'âme*, art. 73, p. 54. My emphasis.

14. "We also note that those who have no natural inclination towards this passion are ordinarily quite ignorant." Descartes, *Passions de l'âme*, art. 75, p. 55.

15. Luce Irigaray, *Éthique de la différence sexuelle* (Paris: Les Éditions de Minuit, 1984), 76, 84.

16. Stephen Greenblatt, "Resonance and Wonder," *Bulletin of the American Academy of Arts and Sciences* 43.4 (1990): 30, 32.

17. For this critical narrative, see in particular Graham Sadler's entries in the *New Grove Dictionary of Opera*. In *Metaphysical Song: An Essay on Opera* (Princeton: Princeton University Press, 1999), Gary Tomlinson contrasts the early-modern understanding of music to that of the Renaissance, characterizing early-modern opera (like the early-modern subject) as deeply bifurcated by the Cartesian divide, a state that persisted until Mozart's Don Giovanni "leaped across the distance," once again bringing the realm of metaphysics within reach (133). I suggest that the realm of metaphysics remained in play.

18. Admitted to the Division of Mathematical Sciences (Mechanics) of the Académie des Sciences in 1733 for his contribution to geometrical probability, Buffon

transferred to the Division of Physical Sciences (Botany) in 1739 for his work on trees. Jeff Loveland, "Georges-Louis Leclerc de Buffon (1707–1788)," in *Writers of the French Enlightenment*, vol. 1, ed. Samia Spencer (Detroit: Thomson Gale, 2005), 60–1; and *Rhetoric and Natural History: Buffon in Polemical and Literary Context* (Oxford, UK: Voltaire Foundation, 2001), 4, 9.

19. Loveland, "Georges-Louis Leclerc de Buffon," 59–67.

20. A resurgence of critical interest in Buffon's role can be seen in the recent works of Jeff Loveland, John Lyon, Peter Reill, Jacques Roger, Hanna Roman, Phillip Sloan, E. C. Spary, and Joanna Stalnaker.

21. George-Louis Leclerc, Comte de Buffon, *Histoire naturelle générale et particulière: avec la description du Cabinet du Roy* (Paris: L'Imprimérie Royale, 1749), 1: 14.

22. Buffon, *Histoire naturelle*, 1: 9.

23. Buffon, *Histoire naturelle*, 1: 22–3, 25, 29–30, 37. Reill suggests that the probable source of the term "rapport" in Buffon's writings was Étienne François Geoffroy's *Table des differents rapports observés en chimie entre différentes substances*, which was presented to the Académie des Sciences in 1718 (*Vitalizing Nature*, 272, n52).

24. Buffon, *Histoire naturelle*, 1: 6, 31. For Buffon's acknowledgment of the limitations of sight, see the section "Le sens de la vue."

25. Buffon, *Histoire naturelle*, 1: 31–2. This account of the amnesiac in *Premier Discours* can be compared to the description of the first man at the moment of creation that Buffon imagines in the discussion "Les sens en général" (*Histoire naturelle*, 3: 364–70). Riskin discusses the latter, in which Buffon envisions man's sensory and sensual awakening, as one of several responses to Molyneux's problem in *Science in the Age of Sensibility*, 48–9, and to Descartes's second "Méditation" in *Restless Clock*, 164–5.

26. Buffon, *Histoire naturelle*, 1: 30.

27. Buffon, *Histoire naturelle*, 1: 55. It was this distinction between different kinds of truth that the Sorbonne demanded Buffon recant.

28. Buffon, *Histoire naturelle*, 1: 57.

29. Buffon, *Histoire naturelle*, 1: 5, 50–1.

30. Buffon acknowledges that this method may be applicable only to fields in which the physical world remains fairly abstract, such as astronomy or optics (*Histoire naturelle*, 1: 59).

31. Reill, *Vitalizing Nature*, 55–6, 62.

32. Buffon, *Histoire naturelle*, 1: 11–12.

33. E. C. Spary states that Buffon disapproved of arguments from design, which predicated the existence of a creator on the marvels of creation. She notes, however, that the *Histoire naturelle* "appealed to both camps," read as natural theology by some and atheism by others. *Utopia's Garden: French Natural History From Old Regime to Revolution* (Chicago: University of Chicago Press, 2000), 30.

34. Buffon, *Histoire Naturelle*, 2: 533–4.

35. Buffon, *Histoire naturelle*, 1: 5.

36. Diderot, "Cabinet d'histoire naturelle," *Encyclopédie*, 2: 489–90.

37. We see the same tendency to privilege first comparative anatomy and then visualization in Daubenton's description of the Cabinet du Roi that Joanna Stalnaker identifies in his descriptions of quadrupeds. *The Unfinished Enlightenment: Description in the Age of the Encyclopedia* (Ithaca, NY: Cornell University Press, 2010), 44–47.

38. Diderot, "Cabinet d'histoire naturelle," 2: 492.

39. Buffon, *Histoire naturelle*, 1: 67–8.

40. Though we usually associate the aesthetic criterion of verisimilitude with fiction, John Bender argues that it constituted the standard against which both the new science and the new novel were measured in *Ends of Enlightenment* (Stanford: Stanford University Press, 2014), 38–56.

41. Albrecht von Haller, foreword to the German edition of *Histoire naturelle*, trans. Phillip R. Sloan, in *From Natural History to the History of Nature*, ed. John Lyon and Phillip R. Sloan (Notre Dame: University of Notre Dame Press, 1981), 300, 307.

42. Haller, foreword, 301, 303, 305. While hypotheses are "not the truth," they may nevertheless "lead to it."

43. Buffon, *Histoire naturelle*, 1: 70.

44. Buffon, *Histoire naturelle*, 1: 467.

45. Buffon, *Histoire naturelle*, 1: 491.

46. Buffon, *Histoire naturelle*, 1: 493–4.

47. Buffon, *Histoire naturelle*, 1: 497–8.

48. Buffon, *Histoire naturelle*, 1: 503–4.

49. Buffon, *Histoire naturelle*, 1: 488–9.

50. Benoît De Baere notes that while Buffon referred to such catastrophes as "accidental"—or exceptions to the natural order—in the early volumes of his *Histoire naturelle*, he had fully integrated them into the temporal order of nature by the time of his *Époques de la nature*. See "L'Écriture de la catastrophe dans l'*Histoire naturelle* de Buffon. Sciences de la terre, esthétique, anthropologie," *Lettres Romanes* 61.3–4 (2007): 187–95.

51. Buffon, *Histoire naturelle* (1753), 4: 91–2.

52. Buffon, *Histoire naturelle*, 4: 98.

53. Buffon, *Histoire naturelle*, 4: 94–5.

54. Buffon, *Histoire naturelle* (1760), 8: 283.

55. Stalnaker, *Unfinished Enlightenment*, 50–51.

56. Buffon, *Histoire naturelle*, 8: 307–10, 320, 335.

57. Stalnaker, *Unfinished Enlightenment*, 60–7.

58. Buffon, *Histoire naturelle*, 8: 288–9, 292–3, 307.

59. On Diderot's interest in the polyp, see Wye Allenbrook, *The Secular Commedia: Comic Mimesis in Late Eighteenth-Century Music* (Berkeley, CA: University of California Press, 2014), chap. 1.

60. Buffon, *Histoire naturelle*, 8: 294.

61. Kareem notes that the current understanding of "admiration" as an emotion experienced when in the presence of greatness can be found in Addison and Steele's *Spectator* nos. 412–13, 415 (*Eighteenth-Century Fiction and the Reinvention of Wonder*, 39). The French use of the term was slower to evolve.

62. Buffon, *Histoire naturelle*, 8: 298.

63. Buffon, *Histoire naturelle* (1754), 11: 4.

64. Buffon, *Discours sur le style, suivi de L'art d'écrire* (Paris: Climats, 1992), 40–41. Stalnaker analyzes the significance of this distinction, to which I have simply restored the contemporary sense of the word *admiration* (wonder) (*Unfinished Enlightenment*, 63).

65. Buffon, "Essais d'arithmétique morale," in *Histoire naturelle*, *Supplément* (1777), 4: 49–50.

66. Concerning the evolution of Buffon's religious convictions, Jacques Roger concludes: "Buffon's Catholicism was but an external posture, inspired in part by prudence, in part by the conviction that the preservation of society lay in the maintenance of its religious beliefs. Buffon did not believe that the Bible was an authority in scientific matters, nor that it was an inspired Book, whose letter must be obeyed. He did not believe in the individual immortality of the soul. For a long time he believed that thought was independent of matter, and this belief, along with the order he discovered in Nature, led him to the notion of a supreme Intelligence that created and ordered the Universe. But this belief disappeared in the first years of his life, and eternal Nature took the place of God the Creator. This is how, we believe, we can sum up Buffon's spiritual convictions." Introduction to *Les Époques de la nature*, *Mémoires du Muséum national d'histoire naturelle, Sciences de la Terre*, vol. 10 (Leiden: Brill, 1988), cxii.

67. For the content of Buffon's exchange with the Faculty of Theology of Paris, see Lyon and Sloan, *From Natural History to the History of Nature*, 285–93.

68. Buffon, *Histoire naturelle, contenant Les Époques de la nature* (1778), 12: 42.

69. Buffon, *Époques de la nature*, 12: 51.

70. Buffon, *Époques de la nature*, 12: 56–7.

71. Jean-Philippe Rameau, *Traité de l'harmonie réduite à ses principes naturels* (Paris: Imprimeur du Roy pour la musique, 1722), 1.

72. While Simon acknowledges Condillac and D'Alembert's recognition of Rameau as an empiricist and the inclusion of experiments in his theory, she emphasizes the mathematical basis of much of his reasoning. *Rousseau Among the Moderns: Music, Aesthetics, Politics* (University Park, PA: Penn State University Press, 2013), chap. 3, 80–87.

73. Rameau, *Démonstration du principe de l'harmonie* (Paris: Durand, 1750), 7–11. Thomas Christensen initially conflates these two moments, citing them as an instance of Cartesianism, yet later differentiates between them, recognizing the Lockean overtones of the second stage of Rameau's thought experiment. *Rameau and Musical Thought in the Enlightenment* (Cambridge: Cambridge University Press, 1993), 12, 217.

74. Rameau, *Démonstration*, 15.

75. Rameau, *Démonstration*, 20. The fact that Rameau went on to deduce all of musical composition from a single principle has led scholars to associate his scientific method with that of Descartes. Yet Charles Dill draws attention to the "new emphasis on sensory experience" in Descartes's first treatise, *Compendium musicae*, in which he posits the listener's physiological response to sound. Descartes's own thinking about music thus leant itself to subsequent sensationalist inflections more readily than his more famous treatises. "Rameau's Cartesian Wonder," *Eighteenth-Century Music* 14.1 (2017): 33. See also Kate Von Orden, "Descartes on Musical Training and the Body," in *Music, Sensation, and Sensuality*, ed. Linda Phyllis Austern (London: Routledge, 2002), 17–38.

76. Rameau integrated this sensationalist allegory into "Mémoire où l'on expose les fondemens du système de musique théorique et pratique," which he read before the Académie des Sciences in 1749, publishing the revised version the following year as *Démonstration du principe de l'harmonie.*

77. Rameau, *Traité de l'harmonie*, 2. Christensen credits Diderot with introducing the notion of *rapports* into Rameau's writings when they collaborated on his "Mémoire," but Rameau had in fact identified *rapports* as the basis of musical harmony from the outset.

78. Rameau, *Génération harmonique ou Traité de musique théorique et pratique* (Paris: Prault fils, 1737), 8–9.

79. Rameau asserts that the existence of the *corps sonore* can be confirmed by our senses of hearing, sight, and touch (*Démonstration*, 22). Geoffrey Burgess affirms that "Rameau never lost sight of the *corps sonore* as a Lockean principle: that is, an empirical, sensorial phenomenon that lodges the ratios of the harmonic series in the ear." "Enlightening Harmonies: Rameau's *corps sonore* and the Representation of the Divine in the *tragédie en musique*," *Journal of the American Musicological Society* 65.2 (2012): 446.

80. Even D'Alembert—the geometer for whose benefit Rameau sought to recast his theory in Cartesian terms—likened Rameau's principle of harmony to Newton's theory of gravity, hailing Rameau as the "Newton of music" in the prospectus to the *Encyclopédie* (Christensen, *Rameau and Musical Thought*, 36–7, 40).

81. Rameau, *Épitre qui précède la Génération harmonique*, 3.

82. Rameau, *Observations sur notre instinct pour la musique* (Paris: Prault, fils, 1754), vi.

83. Rameau may also be responding to Rousseau's *Lettre sur la musique française*, circulated in 1753. In 1755, Rameau would publish *Erreurs sur la musique dans l'Encyclopédie*, which served as a corrective to Rousseau's 1749 entries on music. See Cynthia Verba, *Music and the French Enlightenment: Reconstruction of a Dialogue 1750–1764* (Oxford, UK: Clarendon Press, 1993), 39–40; and Simon, *Rousseau Among the Moderns,* chap. 3.

84. Rameau, *Observations*, viii.

85. Rameau, *Erreurs sur la musique*, 219–20, cited in Verba, *Music and the French Enlightenment*, 39.

86. James Johnson associates the mimetic understanding of music that prevailed in the first half of the century—the conviction that music imitates nature or the passions—with Rameau, attributing the conversion to an appreciation of musical expression (with its accompanying cult of tears) to the reform opera of Christoph Willibald Gluck. *Listening in Paris: A Cultural History*. As Verba establishes in *Music and the French Enlightenment*, chap. 3, Rameau was already actively engaged in a midcentury debate with Rousseau over whether to attribute musical expression to harmony or melody, however.

87. Rameau, *Observations*, 62–3, 78, 102–3, 105.

88. Verba, *Dramatic Expression in Rameau's Tragédie en musique: Between Tradition and Enlightenment* (Cambridge: Cambridge University Press, 2013), 26, 28, 45. Verba suggests that Rameau's theory characterizes his compositional practice of the previous two decades. It is thus descriptive rather than prescriptive.

89. Dill, "Rameau's Cartesian Wonder," 32, 39, 41–6.

90. Burgess likens Rameau's use of the *corps sonore*, which he refers to as the "metamorphosis chord" or the composer's "musical magic wand," to the deployment of machines (or the *merveilleux*) on the stage of the opera, defining them as "device[s] founded on natural principles, but capable of revealing the supernatural" ("Enlightening Harmonies," 405, 410, 442).

91. Buffon's amnesiac transitions from a variant of Condillac's statue to a variant of the Pygmalion myth as he discovers another being, like himself, who comes to life in response to his touch, leading to what Stalnaker calls his sexual awakening (*Histoire naturelle*, 3: 370; *Unfinished Enlightenment*, 65).

92. Rameau, *Pigmalion*, *acte de ballet*, (Paris, 1748), 21–5.

93. Dill, "Rameau's Cartesian Wonder," 47.

94. Mary Sheriff glosses the shared passion of sculpture and sculptor as astonishment in *Moved by Love: Inspired Artists and Deviant Women in Eighteenth-Century France* (Chicago: University of Chicago Press, 2004), 163. I interpret it as wonder instead.

95. Like Servandoni and Algieri, Boucher was employed as a set designer for the Opéra in the years 1737–1739, and 1744–1748. He designed sets for Lully's *Atys*, *Armide*, *Persée*, and *Thésée* as well as for Rameau's *Castor et Pollux*, *Naïs*, and *Fêtes*

d'Hébé, among others. Ellen G. Landau, "'A Fairytale Circumstance': The Influence of Stage Design on the Work of François Boucher" *Bulletin of the Cleveland Museum of Art* 70.9 (1983): 362. His creations were intended to contribute to the marvelous effects. Though most of his work for the theater has been lost, his decor for Destouches's *Issé*, displayed at the Salon of 1742, remains a stunning example. Matthias Auclair, *Rameau et la scène* (Paris: BNF, 2014), 58–9.

96. Charles Dill, *Monstrous Opera: Rameau and the Tragic Tradition* (Princeton: Princeton University Press, 1998), 111.

97. Louis de Cahusac, *La Danse ancienne et moderne, ou Traité historique de la danse* (Paris: Desjonquères, 2004), 49.

98. Cahusac, *Traité historique de la danse*, 241–2.

99. Cahusac, *Traité historique de la danse*, 199.

100. "Here . . . a new principle is joined to those of Aristotle; here wonder is added to terror and pity." Jean-Jacques Rousseau, "Opéra," *Dictionnaire de Musique*, in *Oeuvres complètes*, vol. 5, *Écrits sur la musique la langue et le théâtre*, ed. Bernard Gagnebin and Marcel Raymond (Paris: Gallimard, 1995), 952.

101. Claude Lévi-Strauss, *Look, Listen, Read*, trans. Brian C. J. Singer (New York: Basic Books, 1997), 122.

102. See Pellegrin, preface to *Hippolyte et Aricie*; and Thomas, *Aesthetics of Opera*. For the emergence of French opera from the taste for *pièces en machines*, see Étienne Gros, "Les Origines de la tragédie lyrique," *Revue d'histoire littéraire de la France* 35.2 (1928): 162, 167, 191.

103. Cahusac, *Traité historique de la danse*, 203.

104. Cahusac, "Enchantement," *Encyclopédie*, 5: 619.

105. Addison, *Spectator*, no. 315.

106. Kareem, *Eighteenth-Century Fiction and the Reinvention of Wonder*, 51.

107. Cahusac's assertion that extraordinary beings (gods, heroes, personified passions, animated nature) necessitate extraordinary modes of expression (music, song, dance) is an example of this internal logic. Others include the convention that gods descend from above (necessitating the use of ropes, wheels, and pulleys) and that demons ascend from below (necessitating the use of elevators and trap doors). The marvelous effects employed must be warranted by and consistent with the characters, the setting, and the plot. They must also be prepared and graduated so as not to shock the spectator. For a more extensive discussion of the "vraisemblance du merveilleux," see Catherine Kintzler, *Poétique de l'opéra français de Corneille à Rousseau* (Paris: Minerve, 1991), chap. 2. Also see my article, "*La Vraisemblance du merveilleux*: Operatic Aesthetics in Cazotte's Fantastic Fiction," *Studies in Eighteenth-Century Culture* 34 (2005): 173–95, and chapter 2 of my book, *Narrative Interludes.*

108. Jean-François Marmontel, "Merveilleux," *Supplément*, 3, 906–8.

109. Kintzler, *Poétique de l'opéra*, 296.

110. Graham Sadler, "Rameau and the Orchestra," *Proceedings of the Royal Music Association* 108 (1981–82): 62.

111. Caroline Wood, "Orchestra and Spectacle in the 'tragédie en musique' 1673–1715: Oracle, 'sommeil,' and 'tempête,' *Proceedings of the Royal Music Association* 108 (1981–82): 25–46.

112. Cuthbert Girdlestone, *Jean-Philippe Rameau: His Life and Work*, rev. ed. (NY: Dover, 1969), 337.

113. David Buch, *Magic Flutes and Enchanted Forests: The Supernatural in Eighteenth-Century Musical Theater* (Chicago: University of Chicago Press, 2009), 57–60, 66. Buch assigns Rameau to the second of three "ages of the marvelous" associated with Lully, Rameau, and Gluck.

114. Burgess notes that Rameau expanded the *corps sonore* in the transition from *Pigmalion* to *Zoroastre* from the major triad to the seventh chord, liminally situated between consonance and dissonance ("Enlightening Harmonies," 410). He draws a direct correlation between the *corps sonore* and instances of white magic in Rameau and Cahusac's collaborations, remarking that "in *Zoroastre* virtually every reference to the word *enchantement* elicits an allusion to the *corps sonore*" (414–15).

115. Victoria Johnson, *Backstage at the Revolution: How the Royal Paris Opera Survived the End of the Old Regime* (Chicago: Chicago University Press, 2008), 156.

116. For the history of the renovations of the Palais-Royal opera, see Barbara Coeyman, "Opera and Ballet in Seventeenth-Century French Theaters: Case Studies of the Salle des Machines and the Palais-Royal Theater," in *Opera in Context: Essays on Historical Staging from the Late Renaissance to the Time of Puccini*, ed. Mark A. Radice (Portland, OR: Amadeus Press, 1998), 37–71.

117. Castil-Blaze, *L'Académie impériale de musique: Histoire littéraire, musicale, choréographique, pittoresque, morale, critique, facétieuse, politique, et galante de ce théatre de 1645 à 1855*, vol. 1 (Paris: Théatres Lyriques, 1855), 175–6.

118. Johnson, *Backstage at the Revolution*, 157. Marc Olivier suggestively reads Servandoni's spectacles as a "staging of the cabinet of curiosities aesthetic" for their establishment of a metonymic relationship between nature, art, and technology. "Jean-Nicolas Servandoni's Spectacles of Nature and Technology," *French Forum* 30.2 (2005): 31–47, 37.

119. The models (*maquettes*) of the sets from Rameau's operas that Algieri made between 1757 and 1760, now conserved at the château de Chambord, constitute some of the only remaining evidence of the period's operatic decor. See Jérôme de La Gorce, *Féeries d'opéra: décors, machines et costumes en France: 1645–1765* (Paris: Éditions du Patrimoine, 1997), 22.

120. The volume of the *Encylopédie* in which the plates are contained was not published until 1772, when Rameau's operas were seldom reprised.

121. John Bender and Michael Marrinan, *The Culture of Diagram* (Stanford: Stanford University Press, 2010), chaps 2 and 3. Bender and Marrinan consider how

the viewer/reader negotiates the "eruption of whiteness" that separates the data in diagrams, establishing correlations among things in order to process meaning (71). Though most of the works I examine belong, strictly speaking, to a culture of representation, I am interested in the role of correlations in the epistemology and aesthetics that subtend them.

122. Dill, *Monstrous Opera*, 97–8, 107, 120. Verba also focuses on the premières: "Whatever the merits or basis of the revisions, they tend to obscure the element of design" (*Dramatic Expression*, 5).

123. Dill, *Monstrous Opera*, 109, 116. Dill describes these shared aesthetic convictions as the "semiotics of the nonverbal" achieved through the combination of music and dance (121).

124. See my article, "Marvelous Machines: Revitalizing Enlightenment Opera," *Opera Quarterly* 27.1 (2011): 66–93, 76–7.

125. Burgess nevertheless identifies Rameau as a providential deist ("Enlightening Harmonies," 429–41).

126. Diderot, "Perses, Philosophie des," *Encyclopédie*, 12: 423.

127. Burgess, "Enlightening Harmonies," 403–4; and Sylvie Boissou, *Jean-Philippe Rameau,* Les Boréades, *ou, La tragédie oubliée* (Paris: Klincksieck, 1992), 102.

128. Rameau and Cahusac, *Zoroastre* [1749] (Paris: Gerard Billaudet, 1999), 63–4.

129. Rameau, *Zoroastre*, 75–8.

130. Rameau, *Zoroastre*, 47–50.

131. Rameau, *Zoroastre*, 52.

132. Rameau, *Zoroastre*, 114–19.

133. Rameau, *Zoroastre*, 125.

134. Rameau, *Zoroastre*, 22.

135. Rameau, *Zoroastre*, 121.

136. "The theater represents part of the walls of the city of Bactria" (Rameau, *Zoroastre*, 138).

137. Rameau, *Zoroastre*, 144, 147–9.

138. Burgess notes, accordingly, that the pronouncement is devoid of its "sanctifying halo" in the form of the *corps sonore* ("Enlightening Harmonies," 415).

139. Rameau, *Zoroastre*, 220–1.

140. Rameau, *Zoroastre*, 285–6. The chorus of priests in act 4, scene 4 identifies the presiding sentiment of Abramane's reign and revenge as terror.

141. Rameau, *Zoroastre*, 314–7.

142. Rameau, *Zoroastre*, 319.

143. Rameau, *Zoroastre*, 317–21, 322–6.

144. Burgess, "Zoroastre, ou faire la lumière sur la Tragédie en musique," trans. Sylviane Rué, in *Jean-Philippe Rameau, Zoroastre* (Paris: Les Arts Florissants, 1998), 9–10.

145. Rameau's operas on tragic subjects also conform, for the most part, to the Enlightenment privileging of merit over birth. Employing a sort of "if the shoe

fits, wear it" logic, they levy a critique of tyranny (king as villain) that can easily double as praise for the current regime (king as hero) if need be. Their function is therefore to keep any monarch who threatens to err on the side of despotism in line. For the significance of "The Opera King," see Thomas, *Aesthetics of Opera*, chap. 2; also see Olivia Bloechl, *Opera and the Political Imaginary in Old Regime France* (Chicago: University of Chicago Press, 2017).

146. Rameau, *Zoroastre*, 87–90.

147. Rameau, *Zoroastre*, 155.

148. Rameau, *Zoroastre*, 22, 161, 311.

149. See Margaret Jacobs, *The Origins of Freemasonry: Facts and Fictions* (Philadelphia: University of Pennsylvania Press, 2005), chap. 3.

150. Burgess, "Enlightening Harmonies," 417, 420, 426.

151. Cahusac, "Geste," *Encyclopédie*, 7: 652.

152. Cahusac, "Décoration," *Encyclopédie*, 4: 701.

153. Cahusac, "Chars," *Encyclopédie*, 3: 184. For the marked French taste for "maritime and celestial chariots" as well as "majestuous glories" from the time of Jean Berain on, see La Gorce, *Féeries d'opéra*, 19.

154. Cahusac, "Geste," *Encyclopédie*, 7: 652.

155. Diderot, *Entretiens sur Le Fils naturel*, in *Oeuvres*, ed. André Billy (Paris: Gallimard, 1951), 1245.

156. Diderot, *Entretiens*, 1259.

157. "I regret to see it conflated with the burlesque genre and eliminated from the system of nature" (Diderot, *Entretiens*, 1259).

158. See "Merveilleux," *Encyclopédie*, 10: 393–5.

159. Diderot, *Entretiens*, 1261, 1263.

160. Cahusac is thought to have been the librettist of *Les Boréades*, Rameau's last lyric tragedy, which featured a conflict between personified winds as well as ballets of the elements, but was not performed during his lifetime.

161. Diderot, *Entretiens*, 1264.

162. Pannill Camp, *The First Frame: Theatre Space in Enlightenment France* (Cambridge: Cambridge University Press, 2014), 128, 135.

163. Camp, *First Frame*, 4, 144, 151. Camp asserts that "the most concentrated period of theatre architecture reform in the history of France" was driven by a "spectator-centric reform agenda" in keeping with empirical and sensationalist philosophy (128, 165). The reforms were predicated on "a sense of alignment between a philosophical view of the natural world and the spectator's encounter with the stage" (5, 145).

164. Pierre Patte, *Essai sur l'architecture théâtrale, ou de l'ordonnance la plus avantageuse à une salle de spectacles, relativement aux principes de l'optique et de l'acoustique* (Paris: Moutard, 1782), 3. See also Camp, *First Frame*, 167.

165. Charles Nicolas Cochin, *Lettres sur l'Opéra* (Paris: L. Cellot, 1781), 68.

166. Thomas, *Aesthetics of Opera*, 274.

167. Cochin, *Projet d'une salle de spectacle pour un théâtre de comédie* (London: Charles-Antoine Jombert, 1765), 17.

168. Cochin, *Lettres sur l'Opéra*, 69–71.

169. Thomas, *Aesthetics of Opera*, 275, 278.

170. Pierre Boullet, *Essai sur l'art de construire les théâtres, leurs machines et leurs mouvemens* (Paris: Théâtre des Arts, 1801), 14.

171. Boullet, *Essai*, vii–viii, 6.

172. Boullet, *Essai*, 93, 103.

173. Boullet, *Essai*, 70, 105–6.

174. Boullet, *Essai*, 92.

175. Marian Hobson, *The Object of Art: The Theory of Illusion in Eighteenth-Century France* (Cambridge: Cambridge University Press, 1982), 145.

176. Hobson, *Object of Art*, 43, 52.

177. Spary, *Utopia's Garden*, 223. Spary attributes Antoine-Laurent de Jussieu's "choice of *rapports* to describe classificatory practice" to Geoffroy's use of the term as a synonym for "affinities" in his 1718 memoir presented to the Académie des Sciences: "De Jussieu's project of natural history as a search for *rapports* became fruitful in the early 1790s" (197–9). Yet Reill proposes the same origin for Buffon's use of the term, which preceded de Jussieu's by several decades (*Vitalizing Nature*, 45, 85).

178. Greenblatt, "Resonance and Wonder," 34.

179. *Second Raport fait par la Commission des Travaux publics au Comité du Salut public relativement au Jardin des plantes*, MS 457: 5. See also Spary, *Utopia's Garden*, 225.

180. *Second Raport*, MS 457: 4 and *Seconde adresse des officiers du jardin des plantes à l'Assemblée nationale*, 105–6.

181. *Second Raport*, MS 457: 5. For the implications of the term "regeneration" see Mona Ozouf's entry in *A Critical Dictionary of the French Revolution*, ed. François Furet and Mona Ozouf (Cambridge, MA: Harvard University Press, 1989).

182. See Spary's analysis of the breakdown of the patronage system in *Utopia's Garden*, 158–73. For the egalitarian conception of the National Museum of Natural History's administration, see *Seconde adresse*, 104.

183. Daston and Park, *Wonders*, 358.

CHAPTER TWO

1. Diderot, *Entretiens sur Le Fils naturel*, 87; Vila, *Enlightenment and Pathology*, 180. Vila likens this figure to the *médecin-philosophe*, capable of channeling patients' symptoms while providing their written diagnosis (164). Suzanne Simonin displays the same capacity in *La Religieuse.*

2. For a lengthier analysis of this moment see Chapter 1 of my book *Narrative Interludes.*

3. Though Dorval is often considered to be Diderot's *porte-parole*, Blandine McLaughlin suggests that Rousseau served as the model for Dorval instead. "A New Look at Diderot's 'Fils naturel,'" *Diderot Studies* 10 (1968): 109–19. Marshall also remarks that this scene "evoked Rousseau himself." "Rousseau's *Pygmalion* and the Theatre of Autobiography," in *Rousseau on Stage: Playwright, Musician, Spectator*, ed. Maria Gullstam and Michael O'Dea (Oxford, UK: Voltaire Foundation, 2017), 171.

4. Jean Starobinski, *Diderot, un diable de ramage* (Paris: Gallimard, 2012), 344.

5. Diderot, *Salon de 1763*, in *Oeuvres complètes*, vol. 10, ed. Jules Assézat and Maurice Tourneux (Paris: Garnier, 1875–77), 160.

6. According to McMahon, "Jean-Jacques Rousseau, . . . seemed to embody the belief in original genius; and Denis Diderot . . . proved to be one of its most penetrating and eloquent analysts" (*Divine Fury*, 84).

7. See Diderot's *Essai sur le mérite et la vertu* in *Oeuvres complètes*, vol. 1, ed. Assézat and Tourneux, 50, n1, also cited in Diderot's *Encyclopédie* entry on antediluvian philosophy (I: 494); and Rousseau, *Rousseau Judge of Jean-Jacques*, in *The Collected Writings of Rousseau*, vol. 1, ed. Roger D. Masters and Christopher Kelly, trans. Judith R. Bush, Christopher Kelly, and Roger D. Masters (Hanover, NH: University Press of New England, 1990), 9.

8. Jan Goldstein, "Eighteenth-Century Smear Words in Comparative National Context," in *Enthusiasm and Enlightenment in Europe, 1650–1850*, ed. Lawrence E. Klein and Anthony J. La Vopa (San Marino, CA: Huntington Library Press, 1998), 29. In his study of the antecedents of British romanticism, Jon Mee similarly refers to enthusiasm as the "monstrous alter ego of eighteenth-century civility," emphasizing its pathological rather than its heretical nature. *Romanticism, Enthusiasm, and Regulation: Poetics and the Policing of Culture in the Romantic Period* (Oxford: Oxford University Press, 2005), 24, 28.

9. Addison associated enthusiasm with superstition in *Spectator* no. 2, denouncing the two as "weaknesses of Human Reason." Cited in Mee, *Romanticism, Enthusiasm, and Regulation*, 35.

10. Goldstein, "Eighteenth-Century Smear Words," 33–5.

11. Anthony Ashley-Cooper, Earl of Shaftesbury, *A Letter Concerning Enthusiasm*, in *Characteristics of Men, Manners, Opinions, Times*, ed. Lawrence Eliot (Cambridge: Cambridge University Press, 1999), 26.

12. Shaftesbury, *Letter Concerning Enthusiasm*, 27.

13. Shaftesbury, *Letter Concerning Enthusiasm*, 26.

14. Shaftesbury, *Letter Concerning Enthusiasm*, 25. Sarah Eron remarks: "The moving forces of affect are always real insofar as they are catching, whether they are derived from authentic feeling or from the force of the spectacle." *Inspiration in the Age of Enlightenment* (Newark: University of Delaware Press, 2014), 47.

15. Shaftesbury, *Letter Concerning Enthusiasm*, 5.

16. Riskin recounts that Rousseau introduced Condillac to Diderot, who assisted him in publishing his *Essai*. Their encounter was followed by weekly dinners (*Restless Clock*, 167–8).

17. Condillac, *Essay*, 76, 140–41.

18. Condillac, *Essay*, 63–4, 66.

19. Condillac, *Essay*, 61.

20. See John W. Davis, "The Molyneux Problem," *Journal of the History of Ideas* 21.3 (1960): 398–402.

21. Carlos Duflo provides a materialist reading of this conversation in *Diderot, Philosophe* (Paris: Honoré Champion, 2003), 139–51, as does Andrew Curran in *Diderot and the Art of Thinking Freely* (New York: Other Press, 2019), 79–83. Kate E. Tunstall questions the adequacy of this conclusion, as I do here, in *Blindness and Enlightenment: An Essay* (Oxford, UK: Bloomsbury Publishing, 2011), 15. On this subject, also see Riskin, *Science in the Age of Sensibility*, chap. 2; and Curran, *Sublime Disorder: Physical Monstrosity in Diderot's Universe* (Oxford, UK: Voltaire Foundation, 2001), chap. 2. Interestingly, Curran defines the skeptic as someone who, after profound study of a question, admits not his refusal to believe but his "inability to decide" (*Diderot*, 73).

22. Diderot, *Lettre sur les aveugles*, in *Oeuvres*, 839–40.

23. Diderot, *Lettre sur les aveugles*, 842–3.

24. Diderot, *Pensées sur l'interprétation de la nature*, in *Oeuvres complètes*, vol. 9, ed. Jean Varloot (Paris: Hermann, 1981), 29–30, 39.

25. Diderot, *Pensées sur l'interprétation de la nature*, 48. Wilda Anderson characterizes Diderot as "an empiricist in that he was interacting continually with physical nature to divine a truth within it," in *Diderot's Dream* (Baltimore: Johns Hopkins University Press, 1990), 209. She glosses the term *subodorer* (or *pressentir*) as a "special interactive rational but alogical intuition" (205).

26. See Pierre Saint-Amand's discussion of the role of interpretation, conjecture, or hypothesis in Diderot's *théorie des rapports* in *Diderot: Le Labyrinthe de la relation* (Paris: Vrin, 1984), 35.

27. Anderson, *Diderot's Dream*, 21. See also Roland Mortier, "Diderot entre les 'Têtes froides' et les 'Enthousiastes,'" *Man and Nature/L'Homme et la nature* 6 (1987): 4–6.

28. Diderot, *Pensées sur l'interprétation de la nature*, 43. See also Anderson, *Diderot's Dream*, 19.

29. Diderot, *Éléments de physiologie*, ed. J. Mayer (Paris: Didier, 1964), 255.

30. Diderot, *Pensées sur l'interprétation de la nature*, 50. The definition of analogical thinking that Diderot provides in *Éléments de physiologie*—"the comparison of things that have been or are in order to predict those that will be"—is akin to divination (236).

31. Jacques Chouillet, *La Formation des idées esthétiques de Diderot*, 110–15. Andrew H. Clark notes that "Shaftesbury emphasizes relations rather than cause and effect." *Diderot's Part: Aesthetics and Physiology* (Aldershot, UK: Ashgate, 2008), 91.

32. Diderot, "Principes généraux d'acoustique," in *Oeuvres complètes*, vol. 9, ed. Assézat and Tourneux, 84.

33. Béatrice Didier, "L'Écoute musicale chez Diderot," *Diderot Studies* 23 (1988): 64–5.

34. See Diderot, "Principes généraux d'acoustique," 104, as well as his entry "Beau," published in 1752 (*Encyclopédie*, 2: 179), and his *Traité du beau*, published in 1765 (*Oeuvres*, 1096).

35. Anderson likens the training required for the painter in search of the ideal model to that of the natural philosopher, characterizing this process of trial and error as one of *tâtonnement.* (*Diderot's Dream*, 204–8).

36. Diderot, *Pensées sur l'interprétation de la nature*, 72. My emphasis.

37. Diderot, *Essais sur la peinture* in *Oeuvres esthétiques de Diderot*, ed. Paul Vernière (Paris: Bordas, 1988), 674–8. My emphasis. As Diderot explains in his 1771 "Sur les Leçons de clavecin par M. Bemetzreider," "a sound . . . can become anything it pleases in relation to any other sound." *Oeuvres complètes*, vol. 19, *Musique*, ed. Jean Mayer and Pierre Citron (Paris: Hermann, 1983), 404.

38. Clark notes that "viewing the work of art as a network of relationships was not new, as the work of Crousaz, André, and others make clear, but while these *rapports* confirmed preexisting structures that they brought into relationship, Diderot's *rapport* is dynamic and ultimately subjective" (*Diderot's Part*, 98).

39. Clark, *Diderot's Part*, 90–91; and Eron, *Inspiration in the Age of Enlightenment*, 61–2.

40. Clark, *Diderot's Part*, 96. Clark calls attention to Diderot's "expansion of Shaftesbury's musical metaphor" in a note to his translation of the *Inquiry* (101–2). It gave rise to the image of the philosopher-harpsichord in *Le Rêve de d'Alembert* that Anderson has identified as a model of analogical thinking (*Diderot's Dream*, 48–9).

41. Diderot, *Pensées philosophiques*, ed. R. Niklaus (Geneva: Droz, 1950), 3–5.

42. Diderot, *Essais sur la peinture*, 717. Diderot's ability to reconcile morality with emotional intensity is frequently misunderstood. An example of such a critical misunderstanding can be found in William Reddy's *Navigation of Feeling: A Framework for the History of Emotions* (Cambridge: Cambridge University Press, 2001), 165.

43. Starobinski, *Diderot, un diable de ramage*, 360–1.

44. On this subject, see Sheriff, *Moved by Love*, chap. 1; and Coleman, *Virtues of Abandon*, 181–5.

45. Louis de Cahusac, "Enthusiasm," *The Encyclopedia of Diderot & d'Alembert Collaborative Translation Project*, trans. Sarah Kennedy. (Ann Arbor: Michigan Publishing, University of Michigan Library, 2006), http://hdl.handle.net/2027/spo.did2222.0000.683. Originally published as "Enthousiasme," *Encyclopédie*, 5: 719–22.

46. Sheriff traces this association of the enthusiasm of the artist and the spectator to Roger De Piles, following Longinus (*Moved by Love*, 22–4), contending that enthusiasm became the answer to the question "What moves the artist to create, the spectator to respond?" (15). Coleman concurs: "The viewers' response, then, should echo the enthusiasm of the artist" (*The Virtues of Abandon*, 187). I call attention to the affinities between the enthusiasm of the artist and the identification of the spectator.

47. According to Voltaire, "this faculty relies on memory" ("Imagination," *Encyclopédie*, 8: 560).

48. John D. Lyons, *Before Imagination: Embodied Thought from Montaigne to Rousseau* (Stanford, CA: Stanford University Press, 1996), 2–3, 5.

49. See also Sheriff, *Moved by Love*, 29–30; and Coleman, *The Virtues of Abandon*, 180.

50. Voltaire, "Imagination," *Encyclopédie*, 8: 562.

51. In his entry on enthusiasm in painting, Jaucourt replaces De Piles's characterization of the passion as a "picturesque *furor*" with the equally vivid yet far less objectionable "picturesque *verve*." For Diderot's familiarity with and indebtedness to De Piles, see Gita May, "Diderot et Roger de Piles" *PMLA* 85.3 (1970): 444–55.

52. Louis de Jaucourt, "Verve," *Encyclopédie*, 17: 186. See also Charles Batteux, *Les Beaux-arts réduits à un même principe* (Paris: Durand, 1746), 30–3.

53. Joseph Roach remarks that this process characterizes Diderot's approach to the arts and the sciences in *The Player's Passion: Studies in the Science of Acting* (Newark: University of Delaware Press, 1985), 125–6. He notes the intervention of David Garrick in Diderot's *Salon de 1767*, which suggests that the ideal model also exists in the mind's eye of the actor. It is based on a store of memories on which the imagination may draw.

54. Diderot, "Sur le génie," in *Oeuvres esthétiques de Diderot*, 20. Mortier recalls the distinction Rameau's nephew draws between mediocrity and genius, attributing to the latter a "pénétration extraordinaire et presque divine" ("Diderot entre les 'Têtes froides' et les 'Enthousiastes,'" 9).

55. See Suzanne Pucci, *Sites of the Spectator: Emerging Literary and Cultural Practise in Eighteenth-Century France* (Oxford, UK: Voltaire Foundation, 2001), 91–7, and Sheriff, *Moved by Love*, 142, 165–70. Pucci remarks that because Pygmalion was transformed from royalty to artisan in the eighteenth century, "the dual role Spectator/creator is indeed specific to the period" (91).

56. David Morgan, *Images at Work: The Material Culture of Enchantment* (Oxford: Oxford University Press, 2018), 32–3.

57. Diderot's *Salons* appeared in Friedrich Melchior Grimm's *Correspondance littéraire*, distributed throughout the European courts, far from the annual art exhibits in the Salon Carré du Louvre that he described. For Diderot's vision of

how to bring art to life by material means, see Curran's discussion of the transformation of Falconet's *Pygmalion* from statue to humus to living organisms in *Le Rêve de d'Alembert* (*Diderot and the Art of Thinking Freely*, 240–41).

58. Vien's painting is also known by the French title *La Prédication de Saint Denis*, translated as *St. Denis Preaching in Gaul.*

59. Diderot, *Ruines et paysages: Salon de 1767*, ed. Else Marie Bukdahl, Michel Delon, and Annette Lorenceau (Paris: Hermann, 1995), 273. Diderot had already suggested as much two years earlier in *Essais sur la peinture*, 720.

60. Diderot, *Salon de 1767*, 98–99.

61. According to Clark, "nature is movement, a pure potentiality" (*Diderot's Part*, 109).

62. Diderot, *Salon de 1767*, 100.

63. Diderot, *Salon de 1767*, 432. See also 107, 265, 266, 273.

64. Diderot, *Salon de 1767*, 276; Addison, *Spectator* no. 160; and McMahon, *Divine Fury*, 82–3.

65. Diderot, *Salon de 1767*, 453.

66. Diderot, *Salon de 1767*, 177.

67. See Michel Delon, "Joseph Vernet et Diderot dans la tempête," *Recherches sur Diderot et sur l'*Encyclopédie 15 (1993): 38; and George Levitine, "Vernet Tied to a Mast in a Storm," *Art Bulletin* 49.2 (1967): 93–100.

68. Diderot, *Essais sur la peinture*, 725–7. Diderot suggests that if the term "genre painter" were reserved for those who imitate dead nature and "history painter" were bestowed upon those who imitate living nature, Vernet would qualify as a history painter.

69. Diderot's "Promenade Vernet" is so deservedly renowned that one hesitates to revisit its familiar sites. Norman Bryson identifies it as a crucial stage in Diderot's development of "a concept of harmony grounded in the theory of *rapports*," in *Word and Image: French Painting in the Ancien Régime* (Cambridge: Cambridge University Press, 1981), 201–2. Julie Hayes situates it "in a space between sequentiality and simultaneity, analysis and analogy" in "Sequence and Simultaneity in Diderot's 'Promenade Vernet' and 'Leçons de clavecin,'" *Eighteenth-Century Studies* 29.3 (1996): 293. Kenneth Berri characterizes the rivalry between *Pictura* and *Poesis* in the promenade in "Diderot's Hieroglyphs," *SubStance* 29.2 (2000): 69, 76, 81. Michael Fried identifies it as the passage in Diderot's *Salon de 1767*, where "the fiction of physically entering a group of paintings received its fullest, most intensive development" in *Absorption and Theatricality: Painting and Beholder in the Age of Diderot* (Chicago: Chicago University Press, 1988), 122. Coleman foregrounds the "dispossessive lexicon" of spiritual self-abandonment in Diderot's fourth site featuring Vernet's *Occupations du rivage* in *Virtues of Abandon*, 189–92. Clark emphasizes the significance of the beholder's perception of the relationship between parts when analyzing Diderot's seventh site featuring Vernet's *Port de*

mer au clair de lune in *Diderot's Part*, 98–9. While my own reading is informed by and closely related to these studies, all of them retain the awareness of the paintings as such, of which Diderot constantly risks losing sight, and none venture to interpret the ensuing dreamscape.

70. Marshall, *Frame of Art*, 25.

71. Marshall, *Frame of Art*, 17.

72. Diderot, *Salons de 1767*, 185. Hobson suggests that the "Promenade Vernet" oscillates not only between art and nature but also between naive and sophisticated readings (*Object of Art*, 58).

73. Bryson notes that harmony exists in nature in the play of light and color and can be introduced into nature through the composition on the canvas. He distinguishes between natural and aesthetic harmony, both predicated on the perception of *rapports*, offering the example of Chardin's still lifes (*Word and Image*, 201–3). While Bryson places the term *harmonie* (and the related terms *rapports* and *accords*) "at the centre of Diderot's post-1769 aesthetic" (200), my discussion indicates that Diderot's use of the terms dates from the 1740s.

74. Diderot, *Salons de 1767*, 183. Anderson remarks that Diderot "moves from the initial moment of unified "astonishment" first to the dynamic exploration characteristic of "admiration" and finally to the moment of "poetic creation." "The observer reacts, then interacts, then acts" (*Diderot's Dream*, 191). Duflo evokes an "anthropologie de l'étonnement" (*Diderot, philosophe*, 365–9), yet as we have seen, the momentary suspension of the beholder's faculties is more in keeping with wonder than surprise, or astonishment, which, in the case of Dorval and Diderot, rapidly gives way to enthusiasm.

75. See Burke, *Philosophical Enquiry*, 53. For evidence that Diderot read Burke prior to writing "Promenade Vernet," see May, "Diderot and Burke: A Study in Aesthetic Affinity," *PMLA* 75.5 (1960): 527–39. Though Diderot retains Descartes's term (*admiration* as opposed to *étonnement*), while Burke privileges the term *astonishment*, both apply the terms to the sublime in nature rather than the phenomenon of the unknown cause.

76. Diderot, *Salon de 1767*, 211–12. Sheriff notes the passage from wonder to enthusiasm at the sixth site (*Moved by Love*, 24–5). Suspended movement corresponds more to the former than to the latter, however.

77. Diderot, *Salon de 1767*, 185.

78. Diderot, *Salon de 1767*, 178.

79. Diderot, *Salon de 1767*, 183.

80. Diderot, *Salon de 1767*, 189–90.

81. Diderot, *Salon de 1767*, 192–3. See also Duflo's discussion of this "mise en scène" in *Diderot, philosophe*, 374. I understand this discussion to be part of the dramatization of an implicit rivalry between painter and poet.

82. Diderot, *Salon de 1767*, 214–16, 218, 222.

83. Vernet's *Claire de lune* and *naufrages* that Diderot describes in *Salon de 1767* have unfortunately been lost. I have therefore chosen two paintings that bear a close resemblance to these descriptions as well as to one another, so that the reader can appreciate the close affinities and salient differences between his harbor scenes and shipwrecks. I discuss Vernet's last shipwreck, *The Death of Virginie*, in detail in Chapter 3.

84. Diderot, *Salon de 1767*, 225–7.

85. Hobson notes the tension between Diderot's tendency to decry *papillotage* in theory while indulging in it in practice, citing "Promenade Vernet" as a prime example (*Object of Art*, 57–8).

86. Diderot, *De la poésie dramatique* in *Oeuvres esthétiques de Diderot*, 213.

87. Diderot, *De la poésie dramatique*, 217.

88. Diderot, *De la poésie dramatique*, 219.

89. Diderot, *De la poésie dramatique*, 218.

90. For an exhaustive account of Diderot's familiarity with Lucretius's *De rerum natura*, see Johan Werner Schmidt, "Diderot and Lucretius: The *De Rerum Natura* and Lucretius's Legacy in Diderot's Scientific, Aesthetic, and Ethical Thought," *Studies on Voltaire and the Eighteenth Century* 208 (1982): 183–294. Oddly, Schmidt omits the oblique yet recognizable reference in the "Promenade Vernet." Diderot is thought to have served as "editor at large" for La Grange and Naigeon's translation, which was discussed at Baron d'Holbach's salon and published in 1768, the year after Diderot's *Salons de 1767* and the year before he began work on *Le Rêve de d'Alembert*, his most overtly Lucretian work. Russell Goulbourne, "Diderot and the Ancients," in *New Essays on Diderot*, ed. James Fowler (Cambridge: Cambridge University Press, 2011), 18–20.

91. Diderot, *Salon de 1767*, 195–7.

92. Diderot, *Salon de 1767*, 199–200. Adrienne Lecouvreur was an actress famed for her *sensibilité* and her imaginative and emotional identification with (absorption in) her roles.

93. Burke, *Philosophical Enquiry*, 55–6.

94. Diderot, *Salon de 1767*, 177.

95. Delon, "Joseph Vernet et Diderot dans la tempête," 31. Delon emphasizes the importance of verbs of perception in Diderot's descriptions of Vernet's tempests, stating: "The tableau erupts into a series of scenes, it becomes a narrative" (33–4). He remarks: "Our taste for cruel spectacle arises not from visceral sadism but from moral activism" (34–5).

96. Diderot, *Salon de 1767*, 230.

97. Diderot, *Salon de 1767*, 231.

98. Diderot, *De la poésie dramatique*, 241.

99. Diderot, *Salon de 1767*, 233–5. See Burke's discussion of obscurity, vastness, infinity, and succession in *Philosophical Enquiry*, 54–5, 65–70.

100. Diderot, *Pensées détachées sur la peinture*, in *Oeuvres esthétiques*, 772.

101. Starobinski, *Diderot, un diable de ramage*, 362. Starobinski's description of the philosopher-poet rejoins Vila's description of the *médecin-philosophe*: "a hybrid being—part supersensitive energumen, part rational philosopher" (*Enlightenment and Pathology*, 164). François Pepin likens Diderot's conceptions of the poet and the philosopher, both of whom, along with the genius, must be capable of enthusiasm and analysis, contrasting them to the théosophe, an enthusiast incapable of sustaining or regaining critical distance. "Diderot et la conjecture expérimentale, ou comment concilier l'extravagance de l'enthousiaste et la prudence de l'authentique génie," *MLN* 129.4 (2014): 760–61, 770–74.

102. As Marin notes, "the natural 'reality' of the tempest is equally shared between the written text and the painted picture. And this is how things that are not imitable come to be perfectly imitated and how a common admiration grips the reader of the description of the tempest and the viewer of the painting" (*Sublime Poussin*, 131).

103. See in particular Alexandra Cook, "Rousseau's 'Spectacle de la Nature' as Counterpoint to the 'Theatre du Monde': A Consideration of the *Lettre à d'Alembert* from the Standpoint of Rousseau's Botanical Enterprise," in *Rousseau on Arts and Politics: Autour de la Lettre à D'Alembert*, *Pensée libre* 6 (1997): 23–32; James Swenson, *On Jean-Jacques Rousseau* (Stanford, CA: Stanford University Press, 2000); and Jacques Berchtold, "*Le Spectacle de la nature* chez Jean-Jacques Rousseau," in *Écrire la nature au XVIIIe siècle: Autour de l'Abbé Pluche*, ed. Françoise Gevrey, Julie Boch, Jean-Louis Haquette (Paris: Presses de l'Université Paris-Sorbonne, 2006), 275–94.

104. Rousseau, *The Confessions*, in *Collected Writings*, vol. 5, ed. Christopher Kelly, Roger D. Masters, and Peter G. Stillman, trans. Christopher Kelly (1995), 136.

105. Rousseau, *Confessions*, VIII: 295.

106. Rousseau, *Confessions*, XII: 535; IX: 350, 393.

107. Rousseau, *Confessions*, III: 95–6.

108. Rousseau, *Reveries of the Solitary Walker*, in *Collected Writings*, vol. 8, ed. Christopher Kelly, trans. Charles E. Butterworth, Alexandra Cook, and Terence E. Marshall (2000), 58–9. For a discussion of the term *reverie*, see Coleman, *Virtues of Abandon*, 176, 244.

109. Rousseau, *Reveries*, 47.

110. Germaine de Staël, *De l'Allemagne* (Paris: Garnier-Flammarion, 1968), II: 276–7.

111. Rousseau, *Reveries*, 67.

112. Rousseau, *Emile or On Education*, in *Collected Writings*, vol. 13, ed. and trans. Christopher Kelly and Allan Bloom (2010), II: 243.

113. Rousseau, *Emile*, III: 353–4.

114. Rousseau, *Emile*, III: 357.

115. Rousseau, *Emile*, IV: 434–5, 442.

116. Rousseau, *Emile*, IV: 437.

117. Rousseau, *Confessions*, XII: 538.

118. "How is it that their soul does not raise itself with ecstasy a hundred times a day to the author of the marvels that strike them?" (Rousseau, *Confessions*, XII: 538).

119. Rousseau, *Emile*, IV: 441.

120. Rousseau, *Emile*, IV: 459. Germaine de Staël associates Rousseau's penchant for music and botany in letter V of her *Lettres sur les ouvrages et le caractère de J.-J. Rousseau in Oeuvres de jeunesse*, ed. Simone Balayé and John Isbell (Paris: Desjonquères, 1997), 79–82, stating "often at the end of a beautiful day, in pastoral retreats, under a starry sky, the spectacle of nature seemed to speak to the soul of virtue, goodness, and hope."

121. Rousseau, *Lettre sur la musique française*, in *Oeuvres complètes*, vol. 5, *Écrits sur la musique la langue et le théâtre*, ed. Bernard Gagnebin and Marcel Raymond (Paris: Gallimard, 1995), 318; and *Julie, or the New Heloise*, in *Collected Writings,* vol. 6, ed. and trans. Philip Stewart and Jean Vaché (1997), pt. II, letter xxiii.

122. On the increasingly overt opposition between Rameau and Rousseau, see Downing Thomas, *Music and the Origins of Language* (Cambridge: Cambridge University Press, 1995), 91–7, 117, 126, 131–8. See also Verba, *Music and the French Enlightenment*, chaps. 2 and 3; and Simon, *Rousseau Among the Moderns*, chap. 3.

123. Rousseau, *Examen de deux principes* in *Oeuvres complètes*, vol. 5, 352–3, 358–9. Simon calls attention to the tension between Rousseau's characterization of music as both a natural expression of the passions and a conventional sign system in *Rousseau Among the Moderns*, 52.

124. On Rousseau's familiarity with Pluche's *Spectacle de la nature*, see David Charlton, *Opera in the Age of Rousseau: Music, Confrontation, Realism* (Cambridge: Cambridge University Press, 2012), 136–9; and "The Melodic Language of *Le Devin du village* and the Evolution of *opéra-comique*," in *Rousseau on Stage*, 183.

125. Pluche, *Spectacle de la nature*, VII: 106–7, 112–13, 117–19.

126. See Thomas's discussion of the dates of Rousseau's drafting of the *Essay* (*Music and the Origin of Language*, 83–5).

127. Rousseau, *Essay on the Origin of Languages*, in *Collected Writings,* vol. 7, ed. and trans. John T. Scott (1998), 289.

128. Rousseau, *Essay*, 321–2.

129. Rousseau, *Essay*, 293–4, 296, 318–19, 331–2.

130. Rousseau, *Essay*, 326.

131. Rousseau, *Essay*, 291–2.

132. Rousseau, *Essay*, 306.

133. Rousseau, "Opera," *Dictionary of Music*, in *Collected Writings,* vol. 7, 448.

134. Rousseau, "Récitatif oblige," *Dictionnaire de musique*, in *Oeuvres complètes*, vol. 5, 1013.

135. Diderot considered emotional intensity to be most poignantly conveyed through the breakdown of speech: "What affects us in the spectacle of a man animated by some great passion? His speeches? Sometimes. But what always moves us are his cries, his inarticulate words, broken voice, intermittent monosyllables,

some sort of murmuring in the throat from between clenched teeth" (*Entretiens sur Le Fils naturel*, 1230).

136. *Pygmalion*, in *Collected Writings*, vol. 10, ed. and trans. Allan Bloom, Charles Butterworth, and Christopher Kelly (2004), 234.

137. Marshall, "Rousseau's *Pygmalion*," 163.

138. Gullstam characterizes *Pygmalion* as yet another of Rousseau's attempts to outdo Rameau in "Pygmalion's Power Struggles: Rousseau, Rameau and Galathée" in *Rousseau on Stage*, 119–37. I focus less on the self-loss and more on the communion with others that the movement *hors de soi* allows, distinguishing my work from Coleman's.

139. Felicity Baker, "The Anthropological Foresight of the *Lettre sur les spectacles*," in *Rousseau on Stage*, 46. Marshall also notes that this moment elides the distance between actor and role ("Rousseau's *Pygmalion*," 174).

140. Rousseau, *Letter to d'Alembert*, in *Collected Writings*, vol. 10, 268.

141. Rousseau, *Letter to d'Alembert*, 286–7.

142. Rousseau, *Emile*, IV: 494–5.

143. Rousseau, *Emile*, IV: 366.

144. Rousseau, *Emile*, IV: 362. See Lyons' discussion of Émile's "nascent" imagination and sensibility during adolescence (*Before Imagination*, 193–205).

145. The description of the tutor's cultivation of pity in *Emile* suggests that Rousseau wrote this passage shortly after revising his *Essay*, whose terminology it shares.

146. Rousseau, *Emile*, II: 98.

147. Tanguy L'Aminot aptly notes that Émile's enthusiasm is not innate but acquired, cultivated, in "L'Enthousiasme dans *Émile*," *L'Esprit Créateur*, 52.4 (2012): 128.

148. Rousseau, *Emile*, IV: 492.

149. Rousseau, *Emile*, IV: 493, translated as "my work." Like Lyons, L'Aminot concludes that "Émile is thus not educated in enthusiasm" ("L'Enthousiasme dans *Émile*," 126–7). Émile's gradual sensibilization to the spectacle of nature as he begins to perceive and interpret relations proves an exception to this rule, however.

150. Rousseau acknowledges his affinity for these characters, saying of himself: "I find in him today the features of Émile's Mentor. Perhaps in his youth I would have found those of Saint-Preux" (*Rousseau Judge of Jean-Jacques*, 90).

151. Rousseau, *Julie*, V: v, 484.

152. See in particular Nicholas Paige, *Before Fiction: The Ancien Régime of the Novel* (Philadelphia: University of Pennsylvania Press, 2011), chap. 4. Paige states, with reference to the readers of rather than the characters in *Julie*: "Identification does not lie in becoming what you are not—as in the old model of emotional transport—but in recognizing what you already are" (127). Yet Rousseau continues to employ the language of transport in instances when the "boundary separating

spectator from actor" is removed. Paige characterizes removing the boundary as "bad" and respecting the boundary as "good" (134). Its removal is not unilaterally "bad" on the level of the story, however, any more than in the context of the *fête champêtre.*

153. Rousseau, *Julie*, I: xxiv, 70.

154. Rousseau, *Julie*, I: xxxviii, 95.

155. Rousseau, *Julie*, II: xi, 183.

156. Rousseau, *Emile*, IV: 450.

157. Rousseau, *Julie*, I: xxxii, 83.

158. Rousseau, *Julie*, III: xviii, 299 and xx, 309.

159. Rousseau, *Julie*, IV: xii, 406.

160. Rousseau, *Julie*, V: ii, 436.

161. Rousseau, *Julie*, VI: vii, 555.

162. Rousseau, *Julie*, II: xvii, 205–6.

163. Rousseau, *Julie*, II: xxiii, 230.

164. Rousseau, *Julie*, II: xvii, 207–8.

165. Rousseau, *Julie*, II: xxiii, 232–6.

166. Rousseau reiterates this claim in the entry "Opéra" in his *Dictionnaire de musique*, 957.

167. Swenson notes that Saint-Preux's description of untamed nature in his letters on the Valais and the Meillerie in Books I and IV mirror the description of Julie's cultivated garden (*On Jean-Jacques Rousseau*, 142–3).

168. Similarly, in Book IV of his *Confessions*, Rousseau states "I need torrents, rocks, fir trees, dark woods, mountains, rugged paths to climb and descend, on all sides of me precipices that scare me very much" (145).

169. Rousseau, *Julie*, II: xxiii, 63, 65.

170. Rousseau, *Julie*, IV: xvii, 424–5.

171. Rousseau, *Julie*, IV: xi, 387–8. Stewart and Vaché translate *enthousiasme involontaire* as "spontaneous ecstasy," effacing the link to the preceding discussion. Tinian and Juan Fernandez were tropical desert islands in the South Pacific to which I refer briefly in Chapter 3. On this subject, see Jonathan Lamb, *Preserving the Self in the South Seas, 1680–1840* (Chicago: University of Chicago Press, 2001), 226–7.

172. Rousseau, *Julie*, IV: xi, 388, 390, 393.

173. Catherine Cusset suggests, to the contrary, that enchantment cannot withstand analysis but dissipates as soon as the means of achieving the effect are explained in "Cythère et l'Elysée: jardin et plaisir de Watteau à Rousseau," *Dalhousie French Studies* 29 (1994): 67–9.

174. Rousseau, *Julie*, IV: xi, 394.

175. Rousseau, *Julie*, IV: xi, 398–9. This forms part of what Jean-François Perrin refers to as "the therapy of M. de Wolmar to disenchant love," which he notes is ultimately unsuccessful. "De l'amour électif comme réel absolu: Mémoire

et passion dans *La Nouvelle Héloïse* de J.-J. Rousseau," *Eighteenth-Century Fiction*, 26.2 (2013–2014): 191.

176. Rousseau, *Julie*, I: xlviii, 108. Rousseau sustained a similar conversion experience between drafting his *Lettre sur l'opéra italien et français*, which he is thought to have written around 1745, and his *Lettre sur la musique française*, circulated in 1753.

177. Rousseau, *Julie*, I: xlviii, 109–10. For the elimination of the distinction between signifier and signified, see Daniel C. Johnson, "La polémique musicale dans *Julie ou la Nouvelle Héloïse* de Jean-Jacques Rousseau," in *Jean-Jacques Rousseau, politique et nation*, ed. Musée Jean-Jacques Rousseau (Paris: Champion, 2001), 563.

178. Rousseau, *Julie*, I: lii, 117.

179. As Saint-Preux himself states when he later joins Julie for an evening of music: "For my part, I am convinced that of all harmonies, there is none so agreeable as singing in unison" (Rousseau, *Julie*, V: vii, 499). Like the *recitative obligé*, the duet constitutes another of Rousseau's musical ideals, as can be seen in the entry "Duo" in his *Dictionnaire de musique* and in the duet between Colin and Colette in *Le Devin du village*. See Charlton's analysis in "The Melodic language of *Le Devin du village*."

180. Rousseau, *Julie*, II: xvii, 209–10.

181. Rousseau, *Emile*, V: 570–71.

182. Marshall refers to this moment as "a double illusion of self-love, in which Pygmalion and Galathée discover themselves in each other and in the reflected regard of each other" ("Rousseau's *Pygmalion*," 169). For further resonance between *Julie* and *Pygmalion* see 172–4.

183. Rousseau, *Julie*, I: liii, 119. Rousseau characterizes his own relationship with Mme de Warens in similar terms yet reverses the roles, casting himself as her creation (Rousseau, *Confessions*, V: 186).

184. Rousseau, second preface to *Julie*, 10.

185. Rousseau, *Julie*, III: xx, 307.

186. Rousseau, second preface to *Julie*, 11.

187. Diderot, *Entretiens sur Le Fils naturel*, 1204–5.

188. Camp, *First Frame*, 90–91.

189. Once the fourth wall is broken and the artist or the actor becomes aware of the spectator's presence, Diderot states: "I don't know what will become of illusion" (*De la poésie dramatique*, 231).

190. Rousseau, *Essay*, 314.

191. Rousseau, *Letter to d'Alembert*, 344.

192. Paige questions the notion of "situating credulity or transparency or immediacy at the heart of Julie's success" (*Before Fiction*, 136). Hobson states: "Nature, truth, and illusion are dialectically matched, and finally resolved into an idealising conception of art's truth" (*Object of Art*, 154).

193. Diderot, *De la poésie dramatique*, 236.

194. Diderot, *De la poésie dramatique*, 212.

195. Rousseau, *Discourse on the Origin of Inequality*, in *Collected Writings*, vol. 3, ed. and trans. Judith R. Bush, Roger D. Masters, Christopher Kelly, and Terence Marshall (1993), 19.

196. Diderot, *Éloge de Richardson* in *Oeuvres*, 1067–8.

197. Paige, *Before Fiction*, 30.

198. Diderot, *De la poésie dramatique*, 215, 219–20.

199. Diderot, *Pensées détachées sur la peinture*, 831.

200. Diderot, *Éloge de Richardson*, 1064. See Paige's discussion of the wart trick (*Before Fiction*, 151). Paige questions the critical assumption that Diderot transitioned from a pro- to an anti-illusionist stance in the course of his career: "Nothing in his novelistic works suggests that Diderot aimed at destroying the theory of art as illusion" (140–41). Nathalie Kremer associates Diderot with an aesthetic turning point, stating: "Verisimilitude no longer serves the purpose of idealizing truth (typical of the classical doctrine), but becomes fidelity to real truth [*vrai-réel*]. It permits an illusion of the real but not a total illusion (which induces error)." *Vraisemblance et représentation au XVIIIe siècle* (Paris: Honoré Champion, 2011), 302.

201. Diderot, *Éloge de Richardson*, 1060–61.

202. Marshall, *Frame of Art*, 5.

203. Rousseau, *Emile*, V: 587.

204. In Pepin's words, "the imaginary is that which tends to become real" ("Diderot et la conjecture expérimentale," 190). Denise Schaeffer remarks that Sophie is particularly adept at keeping this double perspective in mind, displaying better judgment than Émile, in *Rousseau on Education, Freedom, and Judgment* (University Park: Pennsylvania State University Press, 2014), 147, 156–7.

205. Diderot, *Paradoxe sur le comédien*, (Paris: Gallimard, 1994), 40.

206. Roach charts Diderot's trajectory from a proponent of artistic sensibility to a proponent of critical judgment in an effort to account for the supposed "change of heart" that took place prior to writing the *Paradoxe sur le comédien*, which he refers to as a "one-sided dialogue" (*The Player's Passion*, 20, 122, 133). In the chapter "Forgetting Theater," Marshall reminds us, however, that the *Paradoxe* is a dialogue between two schools of thought (labeled first and second) about the art of acting and that the decision to ally Diderot indelibly with one side of the conversation is not Diderot's but our own. *The Surprising Effects of Sympathy: Marivaux, Diderot, Rousseau, and Mary Shelley* (Chicago: University of Chicago Press, 1988), chap. 4.

207. Mortier concurs that Diderot "seems to distinguish between the phases of the creative process, in which a first movement of enthusiasm is then tempered by composure [*sang-froid*] and transposed into the ideal model" ("Diderot entre les 'Têtes froides' et les 'Enthousiastes,'" 14). As Sheriff notes, the "second" requests that allowance be made for those rare instances when the actor is transported by his act, transporting the spectator in turn (*Moved by Love*, 33). The "first" rather grudgingly concedes that such instances of uncharacteristic yet shared self-forgetting, or alienation, though rare, do occur (Diderot, *Paradoxe sur le comédien*, 106).

208. Diderot, *Paradoxe sur le comédien*, 50.

209. Citing Richard Kearney, *The Wake of Imagination: Toward a Postmodern Culture* (Abingdon, UK: Routledge, 1998), Zsolt Komáromy characterizes this transition, in reference to Kant's aesthetics, as follows: "The imagination becomes a power of human consciousness that is not merely reproductive, but productive of reality . . . and as such it becomes a counterterm to memory." *Figures of Memory: From the Muses to Eighteenth-Century British Aesthetics* (Lewisburg, PA: Bucknell University Press, 2011), 5.

210. Diderot, *Entretiens sur Le Fils naturel*, 1243.

CHAPTER THREE

1. George Corsane Cuninghame, "The Shipwreck of the St. Géran," in *The New Monthly Magazine and Universal Register*, vol. 89 (London: Chapman and Hall, 1850), 441.

2. Cuninghame, "The Shipwreck of the St. Géran," 439–43; and Allister Macmillan, *Mauritius Illustrated: Historical and Descriptive Commercial and Industrial Facts, Figures, & Resources* (Papeete, Tahiti: Société Nouvelle des Éditions du Pacifique, 1991), 126–8.

3. D. G. Charlton, *New Images of the Natural in France* (Cambridge, UK: Cambridge University Press, 1984), 56.

4. Jacques-Henri Bernardin de Saint-Pierre, préambule to *Paul et Virginie* (Paris: Editions Gallimard, 2004), 30.

5. For an overview of the novel's success, influence, and reception, see Simon Davies, "*Paul et Virginie* 1953–1991: The Present State of Studies," *Studies on Voltaire and the Eighteenth Century* 317 (1994): 256–58.

6. Fabienne Moore, *Prose Poems of the French Enlightenment: Delimiting Genre* (Aldershot, UK: Ashgate, 2009), 137–44.

7. Jean Fabre, "*Paul et Virginie* pastorale," in *Lumières et Romantisme* (Paris: Klincksieck, 1963), 167–200. Jörn Steigerwald considers *Paul et Virginie* to represent the genre's apogee and its rebirth. "Arcadie historique: *Paul et Virginie* de Bernardin de Saint-Pierre, entre classicisme et préromantisme," trans. Olivier Mannoni and Françoise Mancip-Renaudie, *Revue germanique internationale* 16 (2001): 86.

8. Jean-Pierre Claris de Florian, *Essai sur la pastorale*, in *Oeuvres de M. de Florian*, vol. 1, *Estelle et Galatée* (Paris: F. Dufart, 1805), 141–2.

9. Florian, *Essai sur la pastorale*, 138.

10. See "The Opera National Lyrique," review, *Dwight's Journal of Music*, Boston, January 20, 1877, vols. 35–36, 372–3.

11. Ornella Volta, À la recherche d'un fantôme: *Paul et Virginie* d'Erik Satie," *Revue internationale de musique française* 29 (1989): 47–70.

12. Though Bernardin's destination was Fort-Dauphin in Madagascar, which was meant to be rebuilt as a colony run along utopian principles, he jumped ship in Mauritius. Jason Wilson, introduction to Jacques-Henri Bernardin de Saint-Pierre, *Journey to Mauritius*, trans. Jason Wilson (Oxford, UK: Signal Books, 2002), 7.

13. Bernardin de Saint-Pierre, *Journey to Mauritius*, 98.

14. Wilson, introduction, 8; and Bernardin, *Journey to Mauritius*, 126, 148.

15. Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism 1600–1860* (Cambridge, UK: Cambridge University Press, 1996), 13, 177, 232–3. Grove notes that Bernardin shared Rousseau's tendency to deify nature (245), but emphasizes the reciprocity of their influence as they met before Rousseau penned his *Rêveries*. He situates their interest in islands in the broader French cult of *robinsonnades* (227–35). Such writings frequently combined empiricism and utopianism.

16. Grove, *Green Imperialism*, 197–8, 219–21, 244–5.

17. Grove, *Green Imperialism*, 216–17, 222.

18. Grove, *Green Imperialism*, 244, 252–3.

19. Bernardin de Saint-Pierre, *Journey to Mauritius*, 227.

20. Louis-Antoine de Bougainville, *Voyage autour du monde* (Paris: Folio Classique, 1982), 46–7.

21. Bernardin de Saint-Pierre, *Journey to Mauritius*, 125.

22. Bernardin de Saint-Pierre, *Journey to Mauritius*, 81.

23. Bernardin de Saint-Pierre, *Journey to Mauritius*, 109–111.

24. Bernardin de Saint-Pierre, *Journey to Mauritius*, 114.

25. Bernardin de Saint-Pierre, *Journey to Mauritius*, 229.

26. Stalnaker, *Unfinished Enlightenment*, 76, 85–94.

27. Bernardin de Saint-Pierre, *Harmonies de la nature* (Paris: Méquignon-Marvis, 1815), I: 376.

28. Malcolm Cook, "Harmony and Discord in *Paul et Virginie*," *Eighteenth-Century Fiction* 3.3 (1991): 210.

29. Bernardin de Saint-Pierre, *Journey to Mauritius*, 115.

30. Bernardin de Saint-Pierre, *Harmonies de la nature*, I: 374.

31. Bernardin de Saint-Pierre, *Harmonies de la nature*, I: 372; II: 12.

32. Bernardin de Saint-Pierre, *Journey to Mauritius*, 182.

33. Bernardin de Saint-Pierre, *Journey to Mauritius*, 86–7.

34. Bernardin de Saint-Pierre, *Harmonies de la nature*, III: 8.

35. Bernardin de Saint-Pierre, *Journey to Mauritius*, 227.

36. Bernardin de Saint-Pierre, *Journey to Mauritius*, 100–101.

37. Bernardin de Saint-Pierre, *Paul and Virginia*, trans. John Donovan (London: Peter Owen, 2005), 63. Stalnaker relates Bernardin's descriptions in *Études de la nature* to the "double metaphor" of the sketch and the ruin (*Unfinished Enlightenment*, 71–5).

38. Bernardin de Saint-Pierre, *Journey to Mauritius*, 131. The caption also anticipates that of Moreau le jeune's famed 1787 illustration of the mutilated Surinam slave for the first posthumous edition of Voltaire's *Candide*: "This is the price we pay for the sugar you eat in Europe." Moreau le jeune's frontispiece for Bernardin de Saint Pierre's travelogue similarly depicts a mutilated slave presenting a copy of

the *Code Noir* to the author in protest against the flagrant neglect of its provisions that Bernardin denounces in his account. See Letter 12: Port Louis 25 April 1769, "On Blacks," 126–33.

39. See Giulia Pacini, "Environmental Concerns in Bernardin de Saint Pierre's *Paul et Virginie*," *Interdisciplinary Studies in Literature and Environment* 18.1 (2011): 87–103.

40. Françoise Lionnet, "Shipwrecks, Slavery, and the Challenge of Global Comparison: From Fiction to Archive in the Colonial Indian Ocean," *Comparative Literature* 64.4 (2012): 452.

41. Bernardin de Saint-Pierre, *Journey to Mauritius*, 158.

42. Bernardin de Saint-Pierre, *Paul and Virginia*, 64.

43. Bernardin de Saint-Pierre, *Études de la nature*, ed. Colas Duflo (Saint-Étienne, France: Publications de l'Université de Saint-Étienne, 2007), 243, 257, 259.

44. Bernardin de Saint-Pierre, *Études de la nature*, 226–7.

45. Bernardin de Saint-Pierre, *Études de la nature*, 253.

46. Bernardin de Saint-Pierre, *Études de la nature*, 259–60.

47. Bernardin de Saint-Pierre, *Études de la nature*, 233. In his *Harmonies de la nature*, Bernardin places the artist and the scientist at a similar remove from nature, equally reliant on appearances, which can be deceptive (*Harmonies de la nature*, II: 372–3).

48. Bernardin de Saint-Pierre, *Études de la nature*, 58.

49. Bernardin de Saint-Pierre, *Études de la nature*, 64–5. Jean-Michel Racault analyzes the relationship to the observer in "L'homme et la nature chez Bernardin de Saint-Pierre," *Dix-huitième siècle* 45 (2013): 305–28.

50. Bernardin de Saint-Pierre, *Paul and Virginia*, 59.

51. Stalnaker characterizes Bernardin's "perception of harmonic relationships in nature" as a "new approach to natural history," linking it to vitalism in the natural sciences (*Unfinished Enlightenment*, 70, 78–90).

52. Bernardin de Saint-Pierre, *Études de la nature*, 260–61.

53. Diderot, "Harmonie," Encyclopédie, 8: 50.

54. Bernardin de Saint-Pierre, *Études de la nature*, 263, 265–6.

55. Bernardin de Saint-Pierre, *Études de la nature*, 268.

56. Bernardin de Saint-Pierre, *Études de la nature*, 284–5.

57. Bernardin de Saint-Pierre, *Harmonies de la nature*, III: 3. Bernardin includes theology among the sciences (III: 4).

58. Bernardin de Saint-Pierre, *Études de la nature*, 267. For a religious interpretation of this subject, see Cook, "Harmony and Discord," 205–16.

59. Bernardin de Saint-Pierre, *Études de la nature*, 277. Steigerwald explains the pastoral origin of "the valley of Tempe," tracing it to Theocritus ("Arcadie historique," 83).

60. Bernardin de Saint-Pierre, *Études de la nature*, 280.

61. Bernardin de Saint-Pierre, préambule to *Paul et Virginie*, 30.

62. The narrator identifies this site as the same as those I examine subsequently: "Virginia . . . went out and sat down on this very spot where we are now" (*Paul and Virginia*, 84).

63. Bernardin de Saint-Pierre, *Paul and Virginia*, 84.

64. Bernardin de Saint-Pierre, *Paul and Virginia*, 74.

65. Bernardin de Saint-Pierre, *Paul and Virginia*, 39–40.

66. Bernardin de Saint-Pierre, *Études de la nature*, 282.

67. Bernardin de Saint-Pierre, *Études de la nature*, 438–9, 457.

68. Bernardin de Saint-Pierre, *Études de la nature*, 453–4.

69. Bernardin de Saint-Pierre, *Paul and Virginia*, 67.

70. Bernardin de Saint-Pierre, *Harmonies de la nature*, II: 336–7.

71. Bernardin de Saint-Pierre, *Paul and Virginia*, 68.

72. Bernardin de Saint-Pierre, *Paul and Virginia*, 68.

73. Bernardin de Saint-Pierre, *Harmonies de la nature*, II: 443.

74. Bernardin de Saint-Pierre, *Études de la nature*, 444, 465.

75. Bernardin de Saint-Pierre, *Études de la nature*, 320–21, 465–7. On this subject, see Delon, "Le Bonheur négatif selon Bernardin de Saint-Pierre," *Revue d'Histoire littéraire de la France* 89.5 (1989), 791–801.

76. Bernardin de Saint-Pierre, *Études de la nature*, 320–21.

77. Bernardin de Saint-Pierre, *Paul and Virginia*, 118–21.

78. Bernardin gives slight preference to poetry over painting based on its ability to signify sequentially rather than simultaneously: "Poetry owes its advantages over painting entirely to the harmony between objects, which it renders more noticeable by isolating them and expressing their successive modulations. Otherwise, the two employ the same laws" (*Études de la nature*, 274–5). He remarks that tempests are the only modern artworks to successfully portray movement (279).

79. Bernardin de Saint-Pierre, préambule to *Paul et Virginie*, 69–70.

80. Diderot, *Salon de 1767*, 195.

81. Bernardin de Saint-Pierre, *Paul and Virginia*, 97–8.

82. Bernardin de Saint-Pierre, *Paul and Virginia*, 132.

83. Bernardin de Saint-Pierre, *Études de la nature*, 468.

84. Bernardin describes the ocean as the new frontier in his "*Mémoire sur la nécessité de joindre une ménagerie au Jardin national des plantes de Paris* (Paris: Didot, 1792), 27–8.

85. Bernard Germain de Lacépède, *Histoire naturelle, générale, et particuliére, avec la description du Cabinet du roy. Poissons* (Paris: Chaz Plassan, 1798), I: ii–iii.

86. Lacépède, *Histoire naturelle des poissons*, I: x.

87. For more on Lacépède, Le Sueur, and their shared musical context and influences, see Ora Frishberg Saloman, "Aspects of 'Gluckian' Operatic Thought and Practice in France: The Musico-Dramatic Vision of Le Sueur and La Cépède

(1785–1809) in Relation to the Aesthetic and Critical Tradition" (New York: Columbia University Press, 1970).

88. See Jean Mongrédien, "*Paul et Virginie*: La tentation de l'opéra-comique (1794)," in *Jean-François Le Sueur: Contribution à l'étude d'un demi-siècle de musique française (1780–1830)* (Las Vegas, NV: Peter Lang, 1980), I: 308–48.

89. See David Charlton, "Genre and Form in French Opera," in *The Cambridge Companion to Eighteenth-Century Opera*, ed. Anthony R. DelDonna and Pierpaolo Polzonetti (Cambridge: Cambridge University Press, 2009), 166–69; and Michael O'Dea, "Rousseau's Ghost: *Le Devin du village* at the Paris Opera, 1770–1779," in *Rousseau on Stage*, 209–26.

90. O'Dea, "Rousseau's Ghost," 218–19.

91. See Magnus Tessing Schneider, "The Judgment of Rousseau: *Paride et Elena* by Gluck and Calzabigi (Vienna, 1770)," in *Rousseau on Stage*, 262. See also my article "Marvelous Machines."

92. Bernard Germain de Lacépède, *La Poétique de la musique*, (Geneva: Slatkine Reprints, 1970), I: 79–81.

93. Lacépède, *Poétique*, I: 85.

94. Lacépède, *Poétique*, I: 178.

95. Lacépède, *Poétique*, I: 104.

96. Lacépède, *Poétique*, II: 25–6.

97. Lacépède, *Poétique*, I: 115, 118, 121, 143, 148.

98. Lacépède, *Poétique*, I: 146.

99. Lacépède, *Poétique*, I: 178–9.

100. Lacépède, *Poétique*, I: 6, 9–10, 14–17.

101. Lacépède, *Poétique*, I: 97.

102. Thomas, *Aesthetics of Opera*, 295.

103. Lacépède, *Poétique*, I: 18.

104. The meaning here is pathetic in the sense of full of pathos (Lacépède, *Poétique*, I: 24).

105. Lacépède, *Poétique*, I: 26.

106. Lacépède, *Poétique*, I: 31.

107. Lacépède, *Poétique*, II: 285–6.

108. Jean-François Le Sueur cites the quotation from Piron that served Lacépède as an epigraph to *Poétique de la musique*: "Our genius lies in sensitivity [*sensibilité*]." See *Exposé d'une musique une, imitative, et particulière à chaque solemnité* (Paris: Veuve Hérissant, 1787), IV: 15.

109. See the section "De la pastorale lyrique" in Lacépède, *Poétique*, II: 289–303. For evidence of the frequent comparison of the two tales, see Davies, "*Paul et Virginie*: The Present State of Studies," 259.

110. Le Sueur, *Exposé,* III: 44–9; IV: 37–9. In a footnote, Le Sueur emphasizes the originality of his call for dramatic unity not in opera, where he was preceded by Rousseau, Gluck, Chabanon, and Lacépède, but in church music (IV: 32).

111. Le Sueur, *Exposé*, I: 44–5, 71.
112. Le Sueur, *Exposé*, II: 16–19.
113. Le Sueur, *Exposé*, I: 44–5.
114. Le Sueur, *Exposé*, IV: 10.
115. Diderot calls the novelist the "painter of nature" (*Éloge de Richardson*, 1064, 1068), and Sade states: "The novelist is the man of nature; she created him to be her painter." *Idée sur les romans*, in *Les Crimes de l'amour*, ed. Michel Delon (Paris: Gallimard, 1987), 43–4.
116. Le Sueur, *Exposé*, III: 12–13.
117. Le Sueur, *Exposé*, III: 3.
118. Le Sueur, *Exposé*, III: 24–5.
119. Le Sueur, *Exposé*, III: 5, 7, 29.
120. See James Johnson, *Listening in Paris*, and John Neubauer, *The Emancipation of Music from Language: Departure from Mimesis in Eighteenth-Century Aesthetics* (New Haven, CT: Yale University Press, 1986).
121. Le Sueur, *Exposé*, III: 23.
122. Le Sueur, *Exposé*, III: 26.
123. Le Sueur, *Exposé*, IV, 8.
124. Le Sueur, *Exposé*, IV: 38–42.
125. Le Sueur, *Exposé*, III: 11, 15.
126. Le Sueur, *Exposé*, IV: 80.
127. Le Sueur, *Paul et Virginie, ou Le Triomphe de la vertu* (Toulouse, France: chez Croshiles-Calvert, 1794), 200. Here, as elsewhere, the original spelling has been respected. Rousseau defines "rythmopée" in his *Dictionnaire de musique*: "Rythmopée was to rhythm what mélopée was to melody. Its object was movement or the time it marked—the divisions, order, and combination—in order to move, modify, or calm the passions" (1027).
128. Lacépède, *Poétique*, I: 191–2; and Le Sueur, *Exposé*, IV: 18, 44–5.
129. Cited in Thomas, *Aesthetics of Opera*, 222.
130. According to Laurent Garcin, "what Richardson was in his books, I would like a composer to be in the theater" (cited in Thomas, *Aesthetics of Opera*, 222).
131. Thomas, *Aesthetics of Opera*, 221–2, 226.
132. Le Sueur, *Exposé*, IV: 40–41.
133. Lacépède, *Poétique de la musique*, I: 43–4.
134. Hume, *Enquiry*, 47–8.
135. Komáromy, *Figures of Memory*, 174–7.
136. Hume, *Enquiry*, 48–53; Morgan, *Images at Work*, 27–8.
137. Hume, *Enquiry*, 52–3.
138. Hume, *Enquiry*, 74–6.
139. Hume, *Enquiry*, 52–3, 122–3.
140. Hume, *Enquiry*, 102.
141. Bernardin de Saint-Pierre, *Mémoire*, 4–5, 49.

142. Bernardin de Saint-Pierre, *Mémoire*, 1, 7–13, 47–8.

143. Bernardin de Saint-Pierre, *Mémoire*, 3.

144. Bernardin de Saint-Pierre, *Mémoire*, 13, 26–7, 31–2, 36, 39–40. Bernardin draws a distinction between living and dead plants and animals (32–3).

145. Bernardin de Saint-Pierre, *Mémoire*, 24.

146. Bernardin de Saint-Pierre, *Études de la nature*, 335.

147. Bernardin de Saint-Pierre, *Études de la nature*, 486. On the rapprochement between nature and the divine, see also Isabelle Droit, "Le 'Ciel terrestre' de Bernardin de Saint-Pierre dans *Paul et Virginie*," *Le Ciel du romantisme cosmographies, rêveries*, actes du colloque de Cerisy-la-Salle (2004): 359–75. Droit explores the system of metaphors and comparisons that link humans and nature in the novel (361–2), a subject I investigate in the next chapter with respect to the Ossian epics. Kurt Wiedemeier claims that Bernardin was "neither Catholic, nor deist, nor a skeptic, nor atheist," but rather professed a "sentimental theism." *La Religion de Bernardin de Saint-Pierre* (Fribourg: Éditions universitaires, 1986) (cited in Davies, "*Paul et Virginie*: The Present State of Studies," 250).

148. Bernardin de Saint-Pierre, *Harmonies de la nature*, II: 394, 482.

149. Bernardin de Saint-Pierre, *Harmonies de la nature*, II: 455–6. Bernardin makes this remark in order to break with Descartes's characterization of animals as passive machines, endowing them instead with intellectual, sensitive, and moral faculties (*Harmonies de la nature*, II: 455, 432).

150. Bernardin de Saint-Pierre, *Paul and Virginia*, 98.

151. Bernardin de Saint-Pierre, *Harmonies de la nature*, I: 343.

152. Bernardin de Saint-Pierre, *Études de la nature*, 461–2, 485–7.

153. Bernardin de Saint-Pierre, *Études de la nature*, 461.

154. Bernardin de Saint-Pierre, *Études de la nature*, 487.

155. Pluche, *Spectacle de la nature*, VII: 137–42.

156. Lacépède, *Poétique*, II: 307–9, 311.

157. John McManners, *Church and Society in Eighteenth-Century France*, vol. 1 (Oxford, UK: Clarendon Press, 1998), 470.

158. Lacépède, *Poétique*, II: 314–16.

159. Lacépède, *Poétique*, II: 320.

160. Lacépède, *Poétique*, II: 313–14.

161. Le Sueur, *Exposé*, I: 45.

162. Le Sueur, *Exposé*, I: 27, 30.

163. Le Sueur, *Exposé*, II: 19–21; and Lacépède, *Poétique*, II: 316–18.

164. Le Sueur, *Exposé*, IV: 43–50.

165. Le Sueur, *Exposé*, IV: 27–9.

166. Le Sueur, *Exposé*, IV: 35–6.

167. Anthony Kubiak, *Stages of Terror: Terrorism, Ideology, and Coercion as Theatre History* (Bloomington: Indiana University Press, 1991), 48–9, 52; and "Virtual Faith," *Theatre Survey* 47.2 (2006): 271–6, 272.

168. Christopher Semk, *Playing the Martyr: Theater and Theology in Early Modern France* (Lewisburg, PA: Bucknell University Press, 2017), 86.

169. McManners, *Church and Society*, 437, 440–41.

170. Michael Paul Driskel, "By the Light of Providence: The Glory Altarpiece at St. Paul's Chapel, New York City," *The Art Bulletin*, 89.4 (2007): 721.

171. McManners, *Church and Society*, 469.

172. McManners, *Church and Society*, 447.

173. McManners, *Church and Society*, 465–7.

174. McManners, *Church and Society*, 457–8.

175. Cook, "La Composition de *Paul et Virginie*: Un manuscrit inconnu," *Eighteenth-Century Fiction* 28.1 (2015): 172.

176. Bernardin de Saint-Pierre, *Paul and Virginia*, 47, 66.

177. Bernardin de Saint-Pierre, *Paul and Virginia*, 81, 89.

178. Bernardin de Saint-Pierre, *Paul and Virginia*, 105.

179. Bernardin de Saint-Pierre, *Paul and Virginia*, 135.

180. Bernardin de Saint-Pierre, *Paul and Virginia*, 123.

181. Bernardin de Saint-Pierre, *Paul and Virginia*, 132.

CHAPTER FOUR

1. Fiona Stafford, *The Sublime Savage: A Study of James Macpherson and the Poems of Ossian* (Edinburgh: Edinburgh University Press, 1988), 96–8, 114.

2. "Based on appealing to oral traditions and foreign voices." James Mulholland, *Sounding Imperial: Poetic Voice and the Politics of Empire, 1730–1820* (Baltimore: Johns Hopkins University Press, 2013), 26.

3. See the contributions of Fiona Stafford and Howard Gaskill, as well as Richard B. Sher, "'Those Scotch Impostors and their Cabal': Ossian and the Scottish Enlightenment," *Man and Nature/L'homme et la nature* 1 (1982): 55–63; and Thomas M. Curley, *Samuel Johnson, the Ossian Fraud, and the Celtic Revival in Great Britain and Ireland* (Cambridge: Cambridge University Press, 2009).

4. Allan Beveridge, "Robert Burns and Melancholy," in *Scottish Medicine and Literary Culture, 1726–1832*, ed. Megan J. Coyer and David E. Shuttleton (Leiden: Brill, 2015), 146, 153. See also, in the same volume, Wayne Wild "The Origins of a Modern Medical Ethics in Enlightenment Scotland: Cheyne, Gregory, and Cullen as Practitioners of Sensibility," 54.

5. Charles Wolfe, "Sensibility as Vital Force or as Property of Matter in Mid-Eighteenth-Century Debates," in *The Discourse of Sensibility: The Knowing Body in the Enlightenment*, ed. Henry Martyn Lloyd (Berlin: Springer, 2014), 2. Wolfe sketches out a "topography of the problem of sensibility as property of matter or of vital force in mid-eighteenth-century debates" that encompassed the medico-philosophical communities of Germany and Switzerland as well as Scotland and France (3). The entry "Animal" in the *Encyclopédie* along with Diderot's *Eléments de physiologie* attest to his interest in Whytt.

6. Clark identifies the other chief influence on Diderot's *Eléments de physiologie* as John Brown, Scots physician and tutor for the Cullen family. See Clark on Whytt and Brown's influence on Diderot's *Eléments de physiologie* (*Diderot's Part*, 53–8).

7. Wild, "The Origins of a Modern Medical Ethics," 50.

8. Vila, *Enlightenment and Pathology*, 31.

9. Lorin Anderson, "Charles Bonnet's Taxonomy and Chain of Being," *Journal of the History of Ideas* 37.1 (1976): 46; and Arthur Lovejoy, *The Great Chain of Being: The Study of the History of an Idea* (Cambridge, MA: Harvard University Press, 2009), chap. 8.

10. Jeremy Schmidt, *Melancholy and the Care of the Soul: Religion, Moral Philosophy, and Madness* (Burlington, VT: Ashgate, 2007), 28, 41, 185.

11. Stephanie Shirilan, *Robert Burton and the Transformative Powers of Melancholy* (Burlington, VT: Ashgate, 2015), 70.

12. Schmidt, *Melancholy*, 35, 43, 46, 186. Robert Burton embraced Galenic medical theory in *Anatomy of Melancholy*, understanding melancholy as a pathology of the body and soul (34–5). George Cheyne proposed to treat both in *The English Malady*, considering himself a physician and a philosopher (182). Religion could thus be both cause and cure.

13. Shirilan, *Robert Burton*, 75–7, 101–10, 138. Shirilan traces Burton's response to Lucretius and Longinus, positing what she calls a "melancholic sublime" as part of the recommended course of treatment (147–58).

14. Eric Gidal, "Civic Melancholy: English Gloom and French Enlightenment," *Eighteenth-Century Studies* 37.1 (2003): 24–7, 30, 32–4, 36. Gidal asserts that "writers from Prévost and Voltaire through Montesquieu and Staël transformed melancholy from a sign of humoral imbalance, intellectual genius, or religious vocation into both a symptom and cause of political freedom and national identity" (25–6).

15. Gidal, "Melancholy, Trauma, and National Character: Mme de Staël's *Considérations sur les principaux événements de la Révolution française*," *Studies in Romanticism* 49.2 (2010): 275–6, 291.

16. Komáromy, *Figures of Memory*, 110.

17. Stafford, *Sublime Savage*, 26–30, 66–7.

18. Hugh Blair, preface to *Fragments of Ancient Poetry*, in James Macpherson, *The Poems of Ossian and Related Works*, ed. Howard Gaskill (Edinburgh: Edinburgh University Press, 1996), 5.

19. A second trip to Mull and the coast of Argyll proved less fruitful (Stafford, *Sublime Savage*, 116–21, 123). See also Thomas A. McKean, "The Fieldwork Legacy of James Macpherson," *Journal of American Folklore* 114.454 (2001): 449–50, 457.

20. Macpherson, preface to *Fingal*, in *Poems of Ossian*, 36.

21. Stafford, *Sublime Savage*, 119, 122. See Stafford's table of surviving Gaelic manuscripts (184).

22. Stafford, *Sublime Savage*, 124–5.

23. These include Samuel Johnson's *Journey to the Western Islands of Scotland*, which led him to conclude that the epics were a forgery; Malcolm Laing's defamatory 1805 edition of the poems, in which he traces various passages to their source of inspiration in Homer, Milton, and the Bible; and Derick Thomson's equally painstaking efforts to identify the Gaelic ballads on which Macpherson drew. J. F. Campbell's *Popular Tales of the West Highlands* (1860), in which he reprints the contemporary collections amassed by Alexander Pope (1739), Donald MacNicol (1755), Jerome Stone (1755), and Archibald Fletcher (1750), helps contextualize Macpherson's efforts (Stafford, *Sublime Savage*, 63). On the Ossian controversy, see Jack Lynch, *Deception and Detection in Eighteenth-Century Britain* (Aldershot, UK: Ashgate, 2008).

24. J. F. Campbell, *Popular Tales of the West Highlands*, cited in Stafford, *Sublime Savage*, 126.

25. Alexander Gerard, *An Essay on Taste* (London: Millar, Kincaid, and Bell, 1759), 173–4.

26. Gerard, *An Essay on Genius* (London: Strahan and Cadell, 1774), 251–5, 271, 277.

27. Peter Jones, introduction to *Elements of Criticism*, by Henry Home, Lord Kames (Indianapolis: Liberty Fund, 2005), I: xiv–xvii.

28. Marshall, *Frame of Art*, 42.

29. Kames, *Elements of Criticism*, I: 67.

30. Kames, *Elements of Criticism*, I: 67–9.

31. Kames, *Elements of Criticism*, I: 70–71.

32. Komáromy, *Figures of Memory*, 194–9.

33. Kames, *Elements of Criticism*, I: 72, 74.

34. Blair, *A Critical Dissertation on the Poems of Ossian* in *Poems of Ossian*, 362.

35. Blair, *Critical Dissertation*, 378.

36. Blair's biographer suggests a pattern of mutual influence (Stafford, *Sublime Savage*, 97).

37. Blair, *Lectures on Rhetoric* (Jacob B. Moore, 1827), 18–19, 24, 31.

38. Blair, *Critical Dissertation*, 398.

39. Blair, *Lectures on Rhetoric*, 25.

40. Blair, *Critical Disseration*, 346. Kames draws a helpful distinction between these emotions: "Surprise . . . in several respects differs from wonder: unexpectedness is the cause of the former emotion, novelty is the cause of the latter" (*Elements of Criticism*, I: 186).

41. Blair, *Critical Disseration*, 346, 350–51, 354, 356, 395–6.

42. Rachel Zuckert emphasizes this difference in "The Associative Sublime: Gerard, Kames, Alison, and Stewart," in *The Sublime: From Antiquity to the Present*, ed. Timothy M. Costelloe (Cambridge: Cambridge University Press, 2012), 66.

43. Gerard, *Essay on Taste*, II: ii.

44. Brady notes: "Gerard's approach draws on ideas from both the internal sense theorists (Shaftesbury, Hutcheson) and the philosophers who emphasize

imagination and association, such as Addison and Hume" (*The Sublime in Modern Philosophy*, 19–21).

45. Guerlac, *The Impersonal Sublime*, 2.

46. Katie Trumpener, *Bardic Nationalism: The Romantic Novel and the British Empire*, (Princeton: Princeton University Press, 1997), 107.

47. Leith Davis, following Marianne Hirsch and Valerie Smith (2002), "Memory Studies and the Eighteenth Century," *Literature Compass* 16.2 (2019), 5. Mulholland remarks: "Although no text is unmediated, the fantasy of unmediated voices has driven literary experimentation for centuries" (*Sounding Imperial*, 2).

48. Blair, *Critical Dissertation*, 384–5. Blair also refers to these as "analogies and associations of ideas" (383).

49. Macpherson, *Poems of Ossian*, 55.

50. Macpherson, *Poems of Ossian*, 103.

51. Macpherson, *Poems of Ossian*, 60.

52. Macpherson, *Poems of Ossian*, 56, 59. Thomson cites Donald Macleod's eyewitness account of the recitation, recording, and translation of this passage, which he states falls short of the original. *The Gaelic Sources of Macpherson's "Ossian"* (Edinburgh: Oliver and Boyd, 1952), 19–20.

53. Macpherson, *An Introduction to the History of Great Britain and Ireland* (London: Strand, 1771), 157, 169–70.

54. Blair, *Critical Dissertation*, 365, 368.

55. Macpherson, *Poems of Ossian*, 65, 141.

56. Macpherson, *Poems of Ossian*, 279.

57. Macpherson, *Poems of Ossian*, 287.

58. Macpherson, *Poems of Ossian*, 291–2.

59. Macpherson, *Poems of Ossian*, 78.

60. Macpherson, *Poems of Ossian*, 65, 279.

61. Macpherson, *Poems of Ossian*, 295.

62. See Tzvetan Todorov, *Introduction à la littérature fantastique* (Paris: Broché, 1970), chaps. 2–3.

63. Mulholland, "James Macpherson's Ossian Poems, Oral Traditions, and the Invention of Voice," *Oral Tradition* 24.2 (2009): 401; and *Sounding Imperial* (28, 95). For Mulholland's discussion of the ghosts' disembodied voices, see *Sounding Imperial*, 102–5. He notes that authors of this period "accepted the authenticity and passion of oral voices, while simultaneously understanding the sophisticated means by which that authenticity was constructed" (10).

64. Trumpener, *Bardic Nationalism*, 70–71.

65. Macpherson, *Poems of Ossian*, 61–2.

66. Macpherson, *Poems of Ossian*, 61.

67. Macpherson, *Poems of Ossian*, 158.

68. See Howard Gaskill, "The 'Joy of Grief': Moritz and Ossian," *Colloquia Germanica* 28.2 (1995): 101–25.

69. Macpherson, *Poems of Ossian*, 86.

70. Macpherson, *Poems of Ossian*, 99.

71. Macpherson, *Poems of Ossian*, 101.

72. Mulholland, “James Macpherson’s Ossian Poems,” 405, and *Sounding Imperial*, 107. “The bard shall preserve their names, and repeat them to future times” (Macpherson, *Poems of Ossian*, 62).

73. Komáromy, *Figures of Memory*, 47–9.

74. Komáromy, *Figures of Memory*, 94, 98–103.

75. Komáromy, *Figures of Memory*, 105–6, 108. It is this referentiality to the world by which it is produced and that it is thought to represent that distinguishes constructive memory from the creative imagination (106, 110).

76. Komáromy, *Figures of Memory*, 54.

77. Gidal, *Ossianic Unconformities: Bardic Poetry in the Industrial Age* (Charlottesville, VA: University of Virginia Press, 2015), 36.

78. On this subject, see John Dwyer, “The Melancholy Savage: Text and Context in the Poems of Ossian,” in *Ossian Revisited*, ed. Howard Gaskill (Edinburgh: Edinburgh University Press, 1991).

79. Trumpener describes oral tradition as a kind of “blind memory” (*Bardic Nationalism*, 97).

80. Thomas S. Grey, “*Fingal’s Cave* and Ossian’s Dream: Music, Image, and Phantasmagoric Audition,” in *The Arts Entwined: Music and Painting in the Nineteenth Century*, ed. Marsha Morton and Peter L. Shmunk (Abingdon, UK: Routledge, 2016), 75.

81. Daniel Brewer, *The Enlightenment Past: Reconstructing Eighteenth-Century French Thought* (Cambridge: Cambridge University Press, 2008), 123–4. Reversing this direction, Trumpener states: “In an era dominated by a rhetoric of progress, nationalists insisted on looking backward; new visions of futurity gave rise to new visions of the past” (*Bardic Nationalism*, 30). For the epics’ role in the history of the genre as well as in the history of France see the “modern epilogue” to David Quint’s *Epic and Empire: Politics and Generic Form from Virgil to Milton* (Princeton: Princeton University Press, 1993).

82. Matthew Gelbart, *The Invention of “Folk Music” and “Art Music”: Emerging Categories from Ossian to Wagner* (Cambridge: Cambridge University Press, 2007), 62, 69.

83. Maryon McDonald remarks: “As England, in the 18th century, took off into industrialisation and scientific progress, so the Anglo-Saxon, riding what we would now see as the Protestant ethic, came to embody progress, civilization, and materialism; the Celt, by contrast, swathed in druidical and Ossianic mist, retreated into a primitive, peripheral, and ‘natural’ world.” “A Deadly Linguistics? Tales from the Celtic Fringe,” in *Divided Europeans: Understanding Ethnicities in Conflict*, ed. Tim Allen and John Eade (Leiden: Brill, 1999), 312.

84. Gelbart, *Invention of “Folk Music” and “Art Music,”* 73.

85. Jean-Baptiste Suard, *Variétés littéraires, ou Recueil de pièces tant originales que traduites* (Geneva: Slatkine Reprints, 1969), I: 182–4.

86. Suard, *Variétés littéraires*, I: 202–4.

87. Gelbart, *Invention of "Folk Music" and "Art Music,"* 64.

88. Suard, *Variétés littéraires*, I: 188–9.

89. Gelbart, *Invention of "Folk Music" and "Art Music,"* 161. According to Gelbart, "Macpherson supported his ideas about the oral transmission of extended poetry primarily by claiming that the bards deliberately introduced mnemonic qualities to facilitate faithful transmission in sung performance" (160).

90. *Suard, Variétés littéraires*, I: 189. Johann Gottfried Herder, "Extract from a Correspondence on Ossian and the Songs of Ancient Peoples," trans. Joyce P. Crick, in *German Aesthetic and Literary Criticism: Winckelmann, Lessing, Hamann, Herder, Schiller, and Goethe*, ed. H. B. Nisbet (Cambridge: Cambridge University Press, 1985), 155–6.

91. As opposed to Samuel Johnson's "literacy-based notion of culture" (Trumpener, *Bardic Nationalism*, 33).

92. See Christopher Duffy, *The '45: Bonnie Prince Charlie and the Untold Story of the Jacobite Rising* (London: Weidenfeld and Nicholson, 2003), chap. 1.

93. Murray Pittock foregrounds the imagery that the Jacobite legend and the Ossian epics share, including the sword (or steel), comparisons of heroes to trees, and evocations of stags and the hunt. "James Macpherson and Jacobite Code," in *From Gaelic to Romantic: Ossianic Translations*, ed. Fiona Stafford and Howard Gaskill (Amsterdam: Rodopi, 1998), 41.

94. Duffy, *The '45*, 47. See, for instance, David Morier's famed depiction of the decisive Battle of Culloden, fought near Inverness in the Scots Highlands.

95. Macpherson, preface to *Fingal*, 37.

96. Howard Weinbrot, *Britannia's Issue: The Rise of British Literature from Dryden to Ossian* (Cambridge: Cambridge University Press, 1993), 42.

97. Pittock, "Poetry and Jacobite Politics," 81–2.

98. Timothy Wilson-Smith, *Napoleon and His Artists* (London: Constable, 1996), 167.

99. Robert Morrissey, *The Economy of Glory: From Ancien Régime France to the Fall of Napoleon* (Chicago: University of Chicago Press, 2013), 139.

100. Henry Senn, "Folklore Beginnings in France, the Académie Celtique: 1804–13," *Journal of the Folklore Institute* 18.1 (1981): 24.

101. See Suard's French translation of the notes to Cesarotti's commentary, "Lettre sur une traduction italienne des poésies erses," *Variétés littéraires*, IV: 110–11.

102. Morrissey, *The Economy of Glory*, 3.

103. Staël unfavorably contrasts ambition and vanity to the love of glory in her treatise on the passions. See *De l'influence des passions sur le bonheur des individus et des nations* (Paris: Rivage, 2000), 55–107.

104. See Vila's chapter "Melancholy, Genius, and Intellectual Identity: The Cases of Rousseau and Staël," in *Suffering Scholars: Pathologies of the Intellectual in Enlightenment France* (Baltimore: Johns Hopkins University Press, 2018).

105. Germaine de Staël, *De la littérature* (Paris: Flammarion, 1991), 207–8.

106. Staël, *De la littérature*, 127, 197.

107. Staël, *De la littérature*, 205–6.

108. Staël, *De la littérature*, 115.

109. Staël, *De la littérature*, 202, 205–6.

110. Staël, *De la littérature*, 168–70. Interest in France's Celtic origins predated the rise of Napoleon, coinciding with the advent of the French Revolution. Jean-Yves Guiomar attributes this interest in part to the writings of Nicolas de Bonneville, including his *Histoire de l'Europe moderne* of 1789 and *De l'esprit des religions* of 1791. Bonneville valorized France's northern heritage, evoking "the ancient Gauls, the Bretons, the Germans, the Scandinavians, and all the peoples of northern Europe," whom he revered for their spiritual union with nature and their spirit of democracy. Guiomar asserts that "over the course of the Revolution, the originally Celtic character of France was confirmed as never before." "La Révolution française et les origines celtiques de la France," *Annales historiques de la Révolution française* 287.1 (1992): 63–85.

111. Staël, *De la littérature*, 401–4. Mulholland notes that "eloquence was associated with the natural power of speech, with the heroic past, and with the changing capacities of readers to imagine reading texts as audible performances" (*Sounding Imperial*, 21).

112. Staël, *De la littérature*, 361, and *De l'Allemagne*, II: 278. According to Jaucourt in his *Encyclopédie* entry on the sublime, "Longinus sometimes confuses the sublime with great eloquence, which consists in the felicitous audacity of thought and in the vehemence and enthusiasm of passion" ("Sublime," *Encyclopédie*, 15: 568).

113. See Stéphanie Genand's discussion of a key passage from Staël's *De l'Allemagne* in *La Chambre noire: Germaine de Staël et la pensée du négatif* (Geneva: Droz, 2017), 29.

114. Staël, *De la littérature*, 335–8; and Madelyn Gutwirth, "Madame de Staël, Rousseau, and the Woman Question," *PMLA* 86.1 (1971): 104.

115. Macpherson drew this distinction in *Introduction to the History of Great Britain*, 206–8. See also Karen O'Brian, *Women and Enlightenment in Eighteenth-Century Britain* (Cambridge: Cambridge University Press, 2009), 128–9.

116. Staël, *De la littérature*, 165, 171, 332. Staël notes that "The Greeks never expressed, never knew the first sentiment of human nature: friendship in love. . . . What the Greeks understood by friendship existed between men, but they did not know, their morals prevented them from imagining, that women could be their intellectual equals, submissive in love, companions for life, happy to consecrate their faculties, their days, their sentiments, to completing another's existence" (*De la littérature*, 100). She then adds that the same applies to the Romans (129).

117. Davis, "Malvina's Daughters: Irish Women Poets and the Sign of the Bard," in *Ireland and Romanticism: Publics, Nations, and Scenes of Cultural Production*, ed. Jim Kelly (Basingstoke: Palgrave, 2011), 142.

118. Macpherson, *Poems of Ossian*, 187.

119. Staël, *Corinne, or Italy*, trans. Sylvia Raphael (Oxford: Oxford University Press, 2009), 109.

120. Catherine Jones refers to this scene as evidence that "in *Corinne* . . . Staël transports bardic culture from Scotland to Italy." She also notes the resemblance of this scene to Glorvina's performance in Sydney Owenson's *The Wild Irish Girl*. "Madame de Staël and Scotland: *Corinne*, Ossian and the Science of Nations," *Romanticism* 15.3 (2009): 247–8.

121. Staël, *Corinne, or Italy*, 46.

122. Staël, *Corinne, or Italy*, 236–7.

123. "But the English who had heard Corinne were filled with admiration for her" (Staël, *Corinne, or Italy*, 238).

124. Staël, *Corinne, or Italy*, 237. Note that Staël, like Le Tourneur, uses the term *ombres* (shades) for the ghosts in the Ossian epics.

125. Sheriff, "The Many Faces of Germaine de Staël" in *Staël's Philosophy of the Passions: Sensibility, Society, and the Sister Arts*, ed. Tili Boon Cuillé and Karyna Szmurlo (Lewisburg, PA: Bucknell University Press, 2013), 205–36.

126. Staël, *Corinne, or Italy*, 301.

127. Staël, *Corinne, or Italy*, 191, 404.

128. Staël, *De la littérature*, 186.

129. Staël, *Corinne, or Italy*, 355–6.

130. Gidal emphasizes, after Margaret R. Higonnet, that melancholy does not impede one's powers of analysis. "Mme de Staël and the Sociology of Melancholy," in *The English Malady: Enabling and Disabling Fictions*, ed. Glen Colburn (Cambridge: Cambridge University Press, 2008), 25. Also see Higonnet "Suicide as Self-Construction," in *Germaine de Staël: Crossing the Borders*, ed. Madelyn Gutwirth, Avriel Goldberger, and Karyna Szmurlo (New Brunswick, NJ: Rutgers University Press, 1991), 69–81. As Karen de Bruin has persuasively argued, it is this aspect of Corinne's mixed heritage, the melancholy imagination of the north, that enables her to fulfill Staël's definition of a "superior woman," for her crowning at the Capitol at the beginning of the novel is ultimately surpassed by her martyrdom at the end. "Melancholy in the Pursuit of Happiness: *Corinne* and the *Femme Supérieure*," in *Staël's Philosophy of the Passions*, 75–94. Genand suggests that Staël herself fared somewhat better than her heroine, for she was able to "vivre le négatif comme un bénéfice" (*La Chambre noire*, 35).

131. Genand addresses the dialectic between Staël and Napoleon and between melancholy and enthusiasm in Staël's *oeuvre*, suggesting that despite her experience of the self-alienation of civil war, she nevertheless shared Rousseau's ideal of unity (*La Chambre noire*, 27).

132. Staël, *De la littérature*, 169–70.

133. Staël, *De l'Allemagne*, 301–2, 308.

134. Friedrich Melchior Grimm, "Lettre adressée aux auteurs du *Journal étranger*," *Journal étranger* (December 1761): 46.

135. Paul Van Tieghem, *Les Influences étrangères sur la littérature française* (Paris: PUF, 1967), 122.

136. Chouillet notes the key role Diderot played in anticipating and diffusing the Ossian epics in France, calling attention to the poetry's resonance with Diderot's aesthetics in *Entretiens sur le fils naturel* and *Discours sur la poésie dramatique*, which I discussed in Chapter 2, and to Diderot's contribution of some of the earliest translations of the poetry to the *Journal étranger* in December 1761. "Diderot: Poet and Theorist of the Homer and Ossianist Revival," *British Journal for Eighteenth-Century Studies* 5.2 (1982): 227–8.

137. Staël, *De la littérature*, 207 (see author's note), 210.

138. Staël, *De la littérature*, 211–12.

139. Staël, *De la littérature*, 235, 358–9.

140. Mongrédien, "Ossian ou les bardes," in *The New Grove Dictionary of Opera*, Grove Music Online, 2001.

141. David Charlton, "Ossian, Le Sueur and Opera," in *French Opera 1730–1830: Meaning and Media* (Aldershot, UK: Ashgate, 2000), 45.

142. Macpherson, *Poems of Ossian*, 171–5.

143. Le Sueur, *Ossian ou les Bardes* (Paris: Ballard, 1804), I: i, 3.

144. Le Sueur, *Ossian ou les Bardes*, V: vi, 63.

145. Le Sueur, *Ossian ou les Bardes*, V: ii, 60.

146. Le Sueur, *Ossian ou les Bardes*, III: i, 25–26.

147. Charlton, "Ossian, Le Sueur and Opera," 42.

148. Le Sueur, *Ossian ou les Bardes* (New York: Garland, 1979), IV: iii, 382–4, 388–9.

149. The stage directions specify: "The raised part of the theater should be veiled with a light, transparent scrim that softens objects, making them look farther away" (Le Sueur, *Ossian ou les Bardes,* IV: iii, 409). Thomas Grey links the phatasmagoria of the Ossian paintings and opera to contemporary use of magic lanterns to create ghostly visual and lighting effects. "Fingal's cave and Ossian's Dream," 74–86.

150. Senn, "Folklore Beginnings in France," 23–4. McDonald remarks: "The Academy's members set themselves the task of establishing the old map of Celtic Europe as historical precedent for the modern territorial claims of the Napoleonic Empire" ("A Deadly Linguistics?" 311). See *Report of the Committee of the Highland Society of Scotland Appointed to Inquire into the Nature and Authenticity of the Poems of Ossian by Henry Mackenzie* (Edinburgh: Constable, 1805).

151. Thomson's research has since revealed that *Fingal* is based on twelve ballads and *Temora* on one (*The Gaelic Sources of Macpherson's Ossian*). *Temora* may be more fully informed by Macpherson's historical research, as history writing became the genre he subsequently pursued.

152. See Mary Helen McMurran, *The Spread of Novels: Translation and Prose Fiction in the Eighteenth Century* (Princeton, NJ: Princeton University Press, 2010), 1, 5, 7, 16. McMurran attributes the rise of the novel to the eighteenth-century's role as a "juncture" or "hinge" between premodern and modern translation practices (7).

153. Paige, *Before Fiction*, 10.

154. Henry Mackenzie, *The Man of Feeling*, ed. Brian Vickers (Oxford: Oxford University Press, 1987), 4–5.

155. Trumpener, *Bardic Nationalism*, 112.

156. Stafford, *Sublime Savage*, 174.

157. *Mémoires de l'Académie Celtique* (Paris: Fournier, 1807), 1: 52–8.

158. Nicole Belmont notes the evolution in collection practices in the course of the century from keeping inventories of "superstitions" that are geographically or temporally distant for the purposes of denouncing them to preserving them. Introduction to *Aux sources de l'ethnologie française: L'académie celtique* (Paris: CTHS, 1995), 9–10, 13.

159. *Mémoires de l'Académie Celtique*, 8–9. As Senn states, "Celticism, especially in France and Britain, provided a . . . record of cultural progenitors to rival Greece and Rome and indeed predate them" ("Folklore Beginnings in France," 23–4).

160. *Mémoires de l'Académie Celtique*, 13–14.

161. Senn, "Folklore Beginnings in France," 26–7.

162. *Aux sources de l'ethnologie française*, 33–5. In her introduction, Belmont notes that "monument" refers to that which commemorates, or preserves memory, whether physical, verbal, or gestural, likening it to the etymological origins of the term "superstition" (15).

163. Senn, "Folklore Beginnings in France," 29, 31.

164. Morgan, *Images at Work*, 28.

EPILOGUE

1. E.T.A. Hoffmann, "The Complete Machinist," in *E.T.A. Hoffmann's Musical Writings: Kreisleriana, The Poet and the Composer, Music Criticism*, ed. David Charlton (Cambridge: Cambridge University Press, 1989), 115–7.

2. Hoffmann, "The Complete Machinist," 117–20.

3. On the role of the rhetoric of natural cycles (destruction/regeneration) in the Revolution, see Mary Ashburn Miller, *A Natural History of Revolution: Violence and Nature in the French Revolutionary Imagination, 1789–1794* (Ithaca, NY: Cornell University Press, 2011).

4. François-René de Chateaubriand, *Génie du Christianisme* (Paris: Garnier-Flammarion, 1966), I: 315.

5. Chateaubriand, *Génie*, II: 25–7, 47.

6. Chateaubriand, *Génie*, I: 158.

7. Chateaubriand, *Génie*, I: 181–4.

8. Chateaubriand, *Génie*, II: 45.

9. Chateaubriand, *Génie*, I: 301–3. Compare the scene of Virginie's death to the vision of the Christian marvelous that Chateaubriand provides of the holy Virgin appearing among shipwrecked mariners in the midst of a storm (331).

10. Linking the revolutionary sublime, acknowledged by Burke at the time and by critics since, to its operatic counterpart, Sarah Hibberd notes that, apart from the Revolution itself, "France receives little attention in narratives about the sublime." "Cherubini and the Revolutionary Sublime," *Cambridge Opera Journal* 24.3 (2012): 318. I hope to have helped fill this lacuna.

11. Immanuel Kant, *Critique of Judgment*, ed. Nicholas Walker, trans. James Creed Meredith (Oxford: Oxford University Press, 2007), 91. My emphasis.

12. Kant, *Critique of Judgment*, 92, 99–102.

13. Staël, *De l'Allemagne*, II: 74.

14. The Romantic critique of "enlightenment rationalism and mechanistic science" as an "ideology of scientific objectivity that demands that we close off our emotions, imagination, and capacity for empathy . . . in our dealings with the things whose inner workings we seek to understand" is clearly undeserved, as my study has shown. See Kate Rigby, *Topographies of the Sacred: The Poetics of Place in European Romanticism* (Charlottesville: University of Virginia Press), 22.

15. Ronald Hepburn, "Contemporary Aesthetics and the Neglect of Natural Beauty," in *The Aesthetics of Natural Environments*, ed. Allen Carlson and Arnold Berleant (New York: Broadview Press, 2004), 59.

16. Arnold Berleant glosses engagement not as disinterested contemplation of but as sensory immersion in the natural world. He also characterizes humanity not as observers but as participants. "The Aesthetics of Art and Nature," in *Aesthetics of Natural Environments*, 83.

17. Allen Carlson, "Appreciation and the Natural Environment," in *Aesthetics of Natural Environments*, 64–73; and "Appreciating Art and Appreciating Nature," in *Landscape, Natural Beauty, and the Arts*, ed. Salim Kemal and Ivan Gaskell (Cambridge: Cambridge University Press, 1993), 215–6, 220–3.

18. Noël Carroll, "On Being Moved by Nature: Between Religion and Natural History," in *Aesthetics of Natural Environments*, 91, 101–2. Carroll states succinctly: "Being moved by nature in certain ways is one way of appreciating nature; Carlson's environmental model is another. I'm for coexistence" (90).

19. Stan Godlovitch, "Icebreakers: Environmentalism and Natural Aesthetics," in *Aesthetics of Natural Environments*, 108–26; and Brady, "Imagination and the Aesthetic Appreciation of Nature," in *Aesthetics of Natural Environments*, 156–69.

20. Hadot, *Veil of Isis*, 95.

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LITERARY STUDIES

The Enlightenment remains widely associated with the rise of scientific progress and the loss of religious faith, a dual tendency that is thought to have contributed to the disenchantment of the world. In this wide-ranging book, Tili Boon Cuillé questions the accuracy of this narrative, investigating the fate of the marvelous in the age of reason.

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Stanford University Press sup.org

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