

Introduction

IN HIS *OBSERVATIONS*, a part of Descartes' fragmented early notebook later published under the title *Cogitationes Privatae*, he writes as follows: "In the year 1620 I began to understand the fundamental principles of a wonderful discovery."¹ This sentence can be interpreted as a symbolic expression of the essence of that attitudinal change which occurred in the European history of ideas during the period covered by the essays of the present volume. In the course of this process a radically new way of approaching reality evolved, which slowly became dominant first in natural philosophy (i.e., science) and then in other branches of philosophy, as well as in ethics and the philosophy of religion. Its principles essentially contributed to the formation of what Charles Taylor recently characterized as the pre-ontology of modern secular culture.² The consequences of this shift are very complex and our contemporary debates are in many respects directly related to the challenges it created. The bioethical and political disputes over the problem of human engineering and the related dilemmas concerning human self-instrumentalization are new waves of this movement that originated in that early modern paradigm shift.³ Jürgen Habermas draws a parallel between the debates over genetic engineering and the cultural turns that evolved from the Copernican and the Darwinian paradigm shifts.⁴

Evidently the detailed analysis of the processes that constitute the historical bridge between these questions, as well as the intellectual

1. *The Philosophical Writings of Descartes*, 3 vols., eds. R. Stoothoff and D. Murdoch (Cambridge: Cambridge University Press, 1985–1991) [henceforth abbreviated CSM] 1:3; *OEuvres [de Descartes]*, 11 vols., eds. Ch. Adam and P. Tannery (Paris: Cerf 1897–1909¹, Vrin, 1964–1974², Vrin, 1996³) [henceforth abbreviated AT] 10:216.

2. Charles Taylor, *A Secular Age* (Cambridge: Harvard University Press, 2007) 3.

3. Cf. Jürgen Habermas, "The Debate on the Ethical Self-Understanding of the Species," in Habermas, *The Future of Human Nature* (Cambridge: Polity, 2003) 16–100, 53.

4. *Ibid.*, 54.

chains that link them together, would surpass the limits of the present endeavor. However, we hope that the essays of this book may illuminate important aspects of the early history of the developments of modernity. Originally we were surprised to realize that the specific problem at the core of this volume (namely, the systematic discussion of the problem of wonder in early modern thought) is relatively underrepresented in the scholarship. However, in the last several years, discussion on the theme has grown.⁵ We think that the relevance of the question and its intellectually inspiring nature can be shown not merely by its historical aspects but also by its implicit but fundamental importance for the contemporary context.

We must mention here a general characteristic of this trend: what we define as *naturalization*, or the continuously manifest tendency to rationalize reality. Simultaneously, however, we must refer to corresponding revisions of naturalization's cognitive capacities (or, in Spinoza's terminology, the improvement of human understanding) and delimitations of its consequences. The representation of the question of wonder has an intrinsic relation to these occurrences. According to Leszek Kolakowski, the early modern paradigm shift was brought about by a cultural moment that preceded scientific motifs. In his view, this shift was due to the preference for *libido dominandi* over the search for meaning in the universe and in our lives.⁶ In his view, striving for dominance over nature was the consequence of this unbalanced order of preferences, and this caused a decline in religion. In a sense, then, naturalization replaces religion. Correspondingly, the dominance of a specific form of rationality and the complementary aversions toward the

5. See, for example, Lorraine Daston and Katherine Park, *Wonders and the Order of Nature 1150–1750* (New York: Zone Books, 1998); Philip Fisher, *Wonder, the Rainbow, and the Aesthetics of Rare Experiences* (Cambridge: Harvard University Press, 1998); Mary Baine Campbell, *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca: Cornell University Press, 1999); Laurence Renault, *Descartes ou la félicité volontaire. L'idéal aristotélicien de la sagesse et la réforme de l'admiration* (Paris: PUF, 2000); Neil Kenny, *The Uses of Curiosity in Early Modern France and Germany* (Oxford: Oxford University Press, 2004); *Curiosity and Wonder from the Renaissance and the Enlightenment*, eds. R. J. W. Evans and A. Marr (Aldershot: Ashgate, 2006); Jonathan P. A. Snell, *Rhetoric and Wonder in English Travel Writing* (Aldershot: Ashgate, 2006).

6. Leszek Kolakowski, *Modernity on Endless Trial* (Chicago: University of Chicago Press, 1990) 98. See also *Curiosité et Libido sciendi de la Renaissance aux Lumières*, 2 vols., eds. Nicole Jacques-Chaquin and Sophie Houdard (Paris: Ophrys, 1998).

symbolic aspects of human knowledge were really constituents of these disenchanting tendencies.

In his cardinal work, *The Legitimacy of the Modern Age*, Hans Blumenberg (1920–1996) elaborates another way of interpreting the situation,⁷ in a thorough analysis that we may characterize as an intellectual-historical survey of the problem of the “knowing how” of approaching the world, from which follows a kind of ethics of knowing. This essentially belongs to the formation of the intellectual climate of the early Middle Ages and Scholasticism. In Augustine—not independently from his anti-Manichean strife—the ancient pagan desire for knowledge becomes theologically embroiled and subsumed into a general religio-ethical imperative. The theological themes of sin and salvation became inscribed into the discourse concerning the use of human intellectual abilities, and the topic of *curiositas* became an element of the Augustinian paradigm determined by the differentiation between *frui* and *uti*.⁸ According to Hans Blumenberg’s working hypothesis, the question of secularization and the accompanying debates on the legitimacy of modernity are to be addressed in light of the dilemma over the transformation of these teleologically saturated religio-ethical and theological perspectives brought about as a decline or a fulfilment of the original vision. The present volume does not aim to decide these metathematic quandaries. However, we think that in the time of “embryo politics,” it is worth reconsidering those processes that resulted in the advent of a posthuman future and a cybernetic mythology.

The ambiguities about the epistemic and intellectual status of wonder were themselves generated by these processes. Part one of this book—on the historical, scientific, and religious contexts—explores what the famous Dutch historian Johan Huizinga called *Herfsttij der Middeleeuwen* (the “autumn of the Middle Ages”).⁹ As Elisabeth Blum and Paul Richard Blum demonstrate in chapter 1, the situation was multilayered, and the religious factor played a decisive role in the formation of the precon-

7. Hans Blumenberg, *The Legitimacy of the Modern Age*, trans. Robert M. Wallace (Cambridge: MIT Press, 1983). This book was originally published as *Die Legitimität der Neuzeit* in 1966 and was revised in 1976.

8. *Ibid.*, 313.

9. See Johan Huizinga, *The Autumn of the Middle Ages*, trans. Rodney J. Payton and Ulrich Mammitzsch (Chicago: University of Chicago Press, 1996). Huizinga’s original was published in 1921.

ditions of the modern approach.¹⁰ In the examples of Marsilio Ficino, Giovanni Pico della Mirandola, Pietro Pomponazzi, Henry Cornelius Agrippa of Nettesheim, Giordano Bruno, Francesco Patrizi, Tommaso Campanella, and Francisco Suárez, the authors show how different, often conflicting spiritual, religious, and philosophical tendencies shaped these conditions, and this combined background makes a nuanced account necessary for understanding the problem of wonder. As Koen Vermeer also points out in chapter 2, there were different trends inasmuch as the discourse on human acquaintance with the different layers of reality is concerned, and the formulating of specific attitudes implies not merely a decline in the discussion of the question of wonder, but also in its reformulation and dissemination, so to speak. Vermeer describes this movement as one between enchantment and disenchantment, following Max Weber's "disenchantment of the world." In his essay we are presented with much more than a philosophical or scientific overview of the question, as he develops what we might call a cultural history of wonder, describing the divergent discussions and representations of wondrous phenomena. This chapter is an important piece for the theme of the book not merely because of its detailed analysis but also because of its remarks on the ambiguities of the topic. The consideration of these ambiguities is a crucial task for all, since the twenty-first century brought a clear—no less ambiguous—re-enchantment after disenchantment.

Whereas the first two chapters look closely at the phenomena of magic mostly from the fifteenth through the seventeenth centuries (delving even as late as the eighteenth century), "physico-theology" is a leading theory of the universe in which a true scientific religious enchantment reigns, as the third chapter shows. Here Miklós Vassányi specifically discusses a large number of now-obscure thinkers in this regard, all of whom he interprets within the history of the development of "physico-theology": Walter Charleton, Matthew Barker, John Ray, archbishop François Fénelon, Bernard Nieuwentyt, William Derham, Abbé Pluche, Christian Wolff, Johann Albert Fabricius, Friedrich Christian Lesser, Pierre-Louis Moreau de Maupertuis, Sebastian Friedrich Trescho, Georges-Louis Leclerc, Comte de Buffon, Jacques-Henri Bernardin de Saint-Pierre, Johann Gottfried Herder, and William Paley.

10. See also Lorraine Daston, "Marvelous Facts and Miraculous Evidence in Early Modern Europe," *Critical Inquiry* 18 (1991) 93–124; Gaukroger, *The Emergence of a Scientific Culture*, and Taylor, *A Secular Age*.

Even so, the Cartesian passage we have quoted (“I began to understand the fundamental principles of a wonderful discovery”¹¹) remains a paradigmatic document of the naturalizing and rationalizing tendencies of the seventeenth century. It is important to see that Descartes’s discovery does not primarily concern the wonders of the universe, but the principles of science by which the universe can be understood according to a marvelous and, at the same time, disenchanting method. The rationally accessible principles of the new science—rather than the marvels of the created universe—prove to be worthy of wonder, and this implies an essential alteration not merely in the object of this specific passion but also in the understanding of the order of things. Following shortly on the death of the early modern Scholastic Francisco Suárez in 1617, many seemingly new philosophical methods arose, a number of which are shown in part 2 of this volume: “Wonder in Seventeenth-Century Europe.” Descartes’s three dreams are symbolic in this respect.

As Dorottya Kaposi argues in chapter 4, the Cartesian *use* of wonder is a very consciously developed endeavor in which the dominance of “disenchanted” knowledge, in the form of *mathesis universalis*, is palpable and became a paradigm for approaching the question of wonder and related topics in modernity. From the *Meditations* (1637) to the *Passions* (1649), Descartes develops wonder as a background to his thinking such that he describes it as the “first of all the passions.” As Tamás Pavlovits demonstrates in the fifth chapter, Pascal takes a very specific path when he diverts from both the traditional Aristotelian and the newly invented Cartesian science. He explores the wonderful nature of reality by realizing the limitedness of human reason and by articulating the idea of a general anthropological incompleteness that constitutes the core of Pascal’s philosophical attitude. All this, it is well known, generates a theological strategy that counters the dominant rationalizing and naturalizing tendencies of the epoch. Thomas Hobbes, as Jianhong Chen shows in chapter 6, also formulates wonder (or wonders) between what we might call today disenchantment and enchantment. Chen brings into the debate the revolutionary work of Hans Blumenberg, a recurring voice in the discussion of wonder, as well as Martin Heidegger’s thought. Both thinkers have changed the way we see modern philosophy. Instead of neglecting being, wonder may very well reenchant it by revealing its scientific and political undersides.

11. CSM 1:3.

Veronika Szántó takes a seemingly different path when she analyzes Milton's *Paradise Lost*. Her essay convincingly reveals that Milton's masterpiece implies a specific natural theology together with its political consequences. In chapter 7 Szántó argues—and her case is embedded in the then-contemporary natural theological context—that wonder functions as a decisive element of this Miltonian (political) theological strategy. For Milton, every dimension of existence may “reveal,” or point toward, its transcendent source, and wonder serves as the human capacity that can render the human being “sensitive” to this excess. However, as Szántó notes, according to Milton, wonder always touches upon idolatry; and this element of the Miltonian theological thesis carries fundamental political morals about the status of human political power and its legitimacy. We might also say that it touches upon the very essence of the early modern paradigm shift. As we have mentioned, in Descartes it is not only the proper use of *good sense* but also the proper and excellent use of wonder that counts as the neuralgic point of the early modern period. The different versions of these *dual conceptions* of wondering and knowing determine the philosophical and scientific, as well as the theological, character of the respective theories. In Milton the proper use of wonder points to the difference between idolatry and authentic worship.

In chapter 8, on Malebranche, Roland Breeur also discusses the theological adaptation of this question. In Malebranche, the aforementioned Cartesian dilemma together with the occasionalistic treatment of the body-mind relationship are introduced into a theological context through the discussion of the ambiguous character of curiosity. According to this French philosopher, curiosity has to do with the influence original sin exercises over our nature. Malebranche in fact thematizes the matter of orthodoxy in a direct relation with the “use of curiosity.” Curiosity belongs to our postlapsarian character, and even its seemingly positive manifestations (in so far as it is a driving force) are the restlessness of our will and our infinite desire for novelty and knowledge. The root of all these is but our broken nature. From this moral theological ambiguity of curiosity follows its generally problematic nature for Malebranche. Thus Malebranche's diagnosis anticipates Kolakowski's above-mentioned characterization of the modern paradigm shift as the rise of *libido dominandi*. In the final chapter in part two (chapter 9), Gábor Boros provides a thorough analysis of a most influential variety

of the disenchanting paradigm by revealing its Spinozist form that, despite being derived from Spinoza, can be interpreted within the general context of the “secularization” of religiously relevant forms of emotions. This Spinozist revision of the question of wonder as much as the Cartesian one represents a radical shift and demonstrates the soundness of Vermeir’s thesis in chapter 2.

Whereas method dominated seventeenth-century thinking, eighteenth-century thought could be described as a resistance to method, with the possible exception of the interpretation of physico-theology mentioned above. We hope this book will dig deeper into the sources of Enlightenment wonder than any previously published source, challenging the reading of Lorraine Daston and Katherine Park: that wonder died out in the eighteenth century.¹² In the first essay of part three, Péter Losonczy asks that question of George Berkeley and finds that wonder underlies the metaphysical and theological work of the Irish thinker. Berkeley not only attributes a crucial role to wonder in his metaphysics, but he also subscribes to the “proper-use-of-wonder” discourse—whose persistence during the early modern period this book brings into focus for the related scholarship. Berkeley entertains wonder as the instrument of authentic religiosity, which does not seek *l’art pour l’art* exercises but attends to the divine language communicated through the ordinary. We can say that besides the scientific-philosophical pillar of the discourse of wonder in early modernity, an equally important theological layer can be disclosed without which neither the complexities of the issue nor the real relevance of the former aspect can be understood. Specifically pointing out a lacuna in Daston and Park’s exceptional *Wonders and the Order of Nature*, Michael Funk Deckard next looks closely at David Hume to find an underlying strand of wonder in his epistemology and ethics. On his reading, offered in chapter 11, even the ability to wake up in the morning, whether for the philosopher, the scientist, or the religious believer, must be attended with some reason for caring; this reason is akin to wonder. Even as late as his *Dissertation on the Passions* (1757), a reworking of the *Treatise*, book 2, Hume repeated an earlier claim regarding the nature of custom: “When the soul applies itself to the performance of any action, or the conception of any object, to which it is not accustomed, there is a certain unpliability in the faculties, and a difficulty of the spirits moving in their new direction. As this difficulty

12. See their *Wonders and the Order of Nature*, chap. 6.

excites the spirits, it is the source of wonder, surprise, and of all the emotions, which arise from novelty.”¹³

This could have just as well come from Descartes, and yet much had changed during the interim. Providing a short history of the source of this surprise, Baldine Saint Girons uses Shaftesbury, Vico, Montesquieu, and Burke to show its power related to the sublime in eighteenth-century thought. Part of her book *Fiat Lux: une philosophie du sublime* (available only in French) this complex article (here translated as chapter 12) is embedded in her own Freudian theory of the sublime and sublimation. In this light, she ties Burke’s use of Homer to Freud’s *Beyond the Pleasure Principle* to show one of the central problems to be the line (if there is one) between pleasure and pain, between pleasing astonishment and terrible sublimity. It is this distinction that is a risk of testimony. Another short history comes from a Jewish perspective, which is equally inspiring and dreadful. In chapter 13, Roberta Sabbath tells a story recalling the medieval and modern trauma of the Hebraic peoples. Her story culminates in the eighteenth century, with Moses Mendelssohn’s attempting to forge a particular view of wonder unlike that of his British and German peers yet still recognizable to the Enlightenment project. Following this most meaningful story is the Enlightenment thinker par excellence: Immanuel Kant. In a remarkably accessible encapsulation of the three critiques, Patrick Frierson points to Kant’s wondrous system embodied by the awe-inspiring phrase: “the starry skies above and the moral law within.” Readers will find that chapter 14 facilitates a better understanding of Kant’s intricate system.

The disenchanted world came about through the clogging of the porosity that William Desmond examines in the concluding chapter. *Porosity* is also a central category in Charles Taylor’s analysis mentioned earlier. Desmond’s notion of porosity opens up an ontological-metaphysical understanding of the sources of wonder and helps us see the differences among and relations between astonishment, perplexity, and curiosity. In its ontological-metaphysical stress, Desmond’s sense of porosity is not like Taylor’s use of *porosity* to refer historically to forms of human life not touched by modern disenchantment. Because Desmond’s sense of porosity is ontologically constitutive, not just historically rela-

13. David Hume, *A Dissertation on the Passions; The Natural History of Religion: A Critical Edition*, ed. Tom L. Beauchamp (Oxford: Oxford University Press, 2007) 28. It is worth noting that this formulation is the same as in Hume’s *Treatise* 2.3.5.2.

tive, the possibility of wonder beyond the barbarism of reflection is never closed off. Desmond begins with Giambattista Vico's thought and moves quickly through many thinkers (including Aristotle, Schopenhauer, Nietzsche, Comte, and others) in a way that explores what was lost in the destruction of our capability to be astonished and perplexed. However, he shows that even the most extreme forms of scientism cannot dispense with a sort of curiosity derivable from wonder as astonishment. He provides the philosophical resources to renew proper mindfulness about wonder that at the same time introduces a postsecular (or posthumous) deepening of the problem with which we began. The beginning and end points merge so that the philosophical, the theological, and the scientific can engender a nexus without absorbing one another.

SAMPLE