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Witchcraft and the Sense-of-the-Impossible in Early Modern Spain: Some Reflections Based on the Literature of Superstition (ca.1500–1800)*

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■ Bodin's Witches and Marco Polo's Unicorns

For a long time, Lucien Febvre was obsessed by an arduous problem in cultural history: how could some brilliant intellectuals of the Renaissance have believed in witches? Influenced by the parallel that Lucien Lévy-Bruhl drew between child and primitive mentalities,¹ the French historian proposed an answer: in early modern times many beliefs could be upheld because a real Sense-of-the-Impossible did not exist. Febvre declared: “men in 1541 never said impossible.”² Six years later he returned to the same issue, explicitly stating the dilemma in the title of an almost forgotten paper, “Sorcellerie, sottise ou révolution mentale?” How could Jean Bodin reconcile the publication of his *Six Books of the Commonwealth* with the ridiculous witchcraft stories included in his *Démonomanie des Sorciers*? In Febvre’s view,

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¹Lucien Lévy-Bruhl, *La mentalidad primitiva* (Madrid: Akal, 1982). The original French edition was published in 1922.

²Lucien Febvre, *El problema de la incredulidad en el siglo XVI: La religión de Rabelais* (México: Uthea, 1959) 382.

Bodin could believe in the sabbat because until the middle of the seventeenth century there was no real Sense-of-the-Impossible in Western culture.³

In fact, when current scholars use early modern texts as documentary sources, they feel the same perplexity that Bodin's foolish witchcraft stories caused Febvre. In 1530, Pedro Ciruelo published in Alcalá de Henares his *Reprobación de supersticiones y hechicerías*. Throughout the book, the Spanish theologian condemns a great number of beliefs and practices: belief in the evil eye, the use of amulets, reliance on horoscopes, healing by spells, and rain-making. In this same treatise, however, Ciruelo defends the reality of the sabbat and the flight of witches.⁴ This apparent arbitrariness appears also in medical literature. In 1580, Francisco Nuñez published in Alcalá de Henares his *Libro del parto humano*. The book describes the most usual ailments affecting newborns. But, surprisingly, the thirty-first heading is, "Of the cures against witches and against all kinds of vermin that offend children."⁵

Ciruelo and Nuñez, professors of theology and medicine at the Universidad de Alcalá de Henares, classified licit and superstitious beliefs according to criteria that seem incomprehensible to us. Lucien Febvre experienced a similar bewilderment when he had to deal with Bodin's demonic convictions. There can be no doubt: a wide cultural distance separates us from a vision of the world that we ceased to share centuries ago.

When Marco Polo visited Java, he described the exotic fauna as follows:

They have many wild elephants and also unicorns, which are not smaller than elephants: their skin is like that of the buffalo and the hoof is like that of the elephant, with a great black horn in the middle of the forehead. . . . Their head is similar to that of the wild boar and they always carry it downwards, facing the earth. They rest on the silt and mud of lakes and forests and they have a very disagreeable and horrible aspect. They do not look at all like those of the legends told in our lands.⁶

³Lucien Febvre, "Sorcellerie, sottise ou révolution mentale?" *Annales* 3 (1948) 15. See also Alexandre Koyré's 1949 article, "La aportación científica del Renacimiento," reprinted in *Estudios de historia del pensamiento científico* (Madrid: Siglo XXI, 1988) 43.

⁴Pedro Ciruelo, *Reprobación de las supersticiones y hechicerías: Libro muy util y necesario a todos los buenos cristianos* (Medina del Campo, 1551) XIVv.

⁵Francisco Nuñez, *Libro intitulado del parto humano, en el qual se contienen remedios muy vtiles y vsuales para el parto difficultoso de las mugeres, con otros muchos secretos a ello pertenecientes* (Alcalá de Henares, 1580) 159v–160r: "De los remedios para contra las bruxas, y contra todo género de savandijas que offendan a los niños." This book has been edited by Andrea Bau and Fabián Alejandro Campagne and published in microfiche form (16th-Century Spanish Medical Texts, Series 12; Madison: University of Wisconsin, 1997).

⁶Quoted by Claude Kappler, *Monstruos, demonios y maravillas a fines de la Edad Media* (Madrid: Akal, 1986) 64–65.

Undoubtedly, Polo was describing the exotic rhinoceros. But the Venetian did not know the modern word. His culture gave him only one possible word to identify an animal with one horn: “unicorn.” The merchant was thus describing in meticulous detail a beast that he was actually seeing, but he was constrained by the limits of the very lexical instruments that allowed him to express himself. As Wittgenstein observed, the limits of one’s language mark the limits of one’s world.⁷ The institution of society is, at any given time, the product of the intersection of a great number of social imaginary significations. Consequently, nothing can belong to society if it does not refer to the network of significations, since everything that appears is immediately apprehended in terms of this network.⁸ That is why scientists, during great cosmological revolutions, observe a different reality when they use new instruments to look into places they had already examined.⁹

It has been a long time since we lost the capacity to speak and understand the language of early modern people. Their words, even if they formally resemble ours, do not mean the same to us. We do not see the world they saw. Historians of science use the term “incommensurability” to refer to the disjunction between paradigms that attempt to describe the same phenomenon using different vocabularies. As Mario Biagioli explains, “Two scientific paradigms competing for the explanation of a set of natural phenomena may not share a global linguistic common denominator. As a result, the very possibility of scientific communication and dialogue becomes problematic.”¹⁰ It has been held that incommensurability was something more than an unfortunate communication problem, since it played an important role in the process of scientific change during the sixteenth and seventeenth centuries.¹¹ It cannot be denied, however, that the problem of incommensurability possesses an undoubted linguistic component.

The strength of collective representations exerts a powerful coercive force on the production of meaning by individuals confronting the real world.¹² Familiar objects can thus be seen in a different way. This is why European peasants really

⁷Ludwig Wittgenstein, *Tractatus Logico-Philosophicus* (trans. Jacobo Muñoz and Isidoro Reguera; Barcelona: Altaya, 1994) 143, 145.

⁸Cornelius Castoriadis, *La institución imaginaria de la sociedad, 2: El imaginario social y la institución* (Buenos Aires: Tusquets, 1989) 312–20.

⁹Thomas S. Kuhn, *La estructura de las revoluciones científicas* (México: FCE, 1971) 176.

¹⁰Ibid., 128–211. Mario Biagioli, *Galileo, Courtier: The Practice of Science in the Culture of Absolutism* (Chicago: Chicago University Press, 1993) 211. For some discussions on the notion of incommensurability see Paul Feyerabend, “Consolations for the Specialists,” in *Criticism and the Growth of Knowledge* (ed. Imre Lakatos and Alan Musgrave; Cambridge: Cambridge University Press, 1970) 219–29; Paul Feyerabend, *La ciencia en una sociedad libre* (Madrid: Siglo XXI, 1982) 73–79; Paul Hoyningen-Huene, “Kuhn’s Conception of Incommensurability,” *Studies in History and Philosophy of Science* 21 (1990) 481–92.

¹¹Biagioli, *Galileo, Courtier*, 211–44.

¹²R. Chartier, “Pouvoirs et limites de la représentation. Sur l’oeuvre de Louis Marin,” *Annales* 49 (1994) 417.

did see devils and witches during witchcraft persecutions. On 2 January 1576, Ernald de Garralda, *alcalde perpetuo* of Burguete, testified before the royal officials of Navarra during the prosecution of Graciana de Loizu, a suspected witch. In his opinion, the woman had been unfairly accused of witchcraft. The fact that most strongly contributed to inflame suspicion against Graciana is very suggestive. *Alcalde Garralda* stated:

Francisco de Luçuriaga, sergeant . . . told them that he saw . . . how the said Graciana de Loyçu had a skirt which she soaked in the stream . . . and as she took it out of the water, a toad fell out of the skirt. . . . And that the said sergeant inquired of the said Graciana what is that, and that she, seeing the toad, was horrified and said, Jesus! And the said toad jumped into the water again and went down the stream.¹³

False beliefs are often the consequence of favorable cultural contexts, the result of a learning process rather than a psychological outburst.¹⁴ Frantic sermons by popular preachers, apocalyptic warnings by rural priests, and violent interrogations by secular judges had achieved their aim. A simple incident on the banks of a stream was turned into the chief piece of evidence against Graciana de Loizu. A toad, accidentally caught inside the clothes the woman was washing, was identified as her familiar demon. The expression that Graciana uttered in surprise when she perceived the toad—"Jesus!"—was interpreted according to the principles of the witchcraft discourse: in fact, everybody knew that witches and evil spirits usually disappeared immediately after the name of Christ or his Holy Mother was invoked.

Mythological statements may clash with the logical rules of ordinary physical experience, but they remain meaningful in the minds of individuals, as long as they share the same ideas of time and space.¹⁵ Consequently, the historian of culture should approach accusations of witchcraft as mental productions with an organization that is meaningful in itself. Leaving aside any ontological considerations, the historian of culture should concentrate on the epistemic properties of belief systems—that is, how and under what conditions such systems affect the perception and

¹³"Francisco de Luçuriaga, sargento . . . les dixo que vio. . . cómo la dicha Graciana de Loyçu, tenía una saya a remojar en el dicho regacho . . . y en sacandola del agoa, cayo de la dicha saya un sapo. . . . Y que el dicho sargento le dixo a la dicha Graciana qué es eso, y que ella, en viendo el sapo, se espanto y dixo, Jesus. Y que el dicho sapo tornó a saltar a la agoa y se fue por el regacho." Quoted by Florencio Idoate, *La Brujería en Navarra y sus documentos* (Pamplona: Institución Príncipe de Viana, 1978) 336.

¹⁴Marino Pérez Álvarez, "Análisis de la conducta supersticiosa," in *La superstición en la ciudad* (ed. Marino Pérez Álvarez; Madrid: Siglo XXI, 1993) 161.

¹⁵Edmund Leach, *Cultura y comunicación: La lógica de la conexión de los símbolos* (Madrid: Siglo XXI, 1993) 97.

interpretation of the phenomena of the social and physical universe.¹⁶ Certain events that precede and follow accusations of witchcraft are but perceptions configured by belief systems: they are not necessarily inventions but distortions, exaggerations, and reinterpretations of events of the physical world.¹⁷ The world is thus a complex of facts, not of things.¹⁸ Human beings produce logical configurations by arranging facts, and the totality of these facts forms an image of the world.¹⁹ Philosophy, in turn, points out the limits of natural science: it establishes the boundary between the thinkable and the unthinkable.²⁰ Ideas of the possible and impossible are the founding principles of any cosmology.

We live in a different world from that of our ancestors. The games, amusements, and jokes of former times appear almost incomprehensible to us. Robert Darnton has drawn attention to the peculiar sense of humor shared by Parisian apprentices in the eighteenth century. Killing cats²¹ or raping women²² caused endless laughter, the reasons for which we can barely discern. It is also difficult to understand the sense of humor of the Spanish Jesuit Martín del Río. In his *Disquisitionum magicarum*, the famous demonologist tells two brief and contrasting stories, a humorous tale and a tale of horror. Let us turn to the humorous tale. Near Tréveris, an eight-year-old girl was helping her father to plant cabbages in the orchard. Subsequently, the peasant praised the girl for her skills at domestic tasks. She then began to boast that she could perform even more surprising feats. Her father wanted to know what she meant. Stand aside, she answered, and in whichever part of the orchard you wish I will make it rain immediately. The girl made a hole on the ground and urinated in it. Then, stirring the contents, she began to mumble unintelligible words. And suddenly the rain fell.²³ When her father asked her about the source of her powers, the girl answered that her mother could do the same and more. Moved by Christian zeal, the peasant pretended that the family had been invited to a wedding. He then placed his wife and daughter on a cart, dressed in their finest clothes, and

¹⁶Hugo G. Nutini and John M. Roberts, *Bloodsucking Witchcraft: An Epistemological Study of Anthropomorphic Supernaturalism in Rural Tlaxcala* (Tucson: University of Arizona Press, 1993) 23.

¹⁷Ibid., 265. The accusations against Graciana de Loizu provide a clear example of such reinterpretation.

¹⁸Wittgenstein, *Tractatus Logico-Philosophicus*, 15.

¹⁹Ibid., 23, 29.

²⁰Ibid., 65, 67, 81, 143, 171.

²¹Robert Darnton, "La rebelión de los obreros: la gran matanza de gatos en la calle Saint-Séverin," in *La gran matanza de gatos y otros episodios en la historia de la cultura frances* (México: FCE, 1987) 83.

²²Idem, *Fraternity, or the Dangers of Geertzism* (paper read to the Facultad de Filosofía y Letras, Universidad de Buenos Aires, 26 August 1996) 5.

²³Martín del Río, *Disquisitionum Magicarum Libri Sex* (3 vols.; Lovanii, 1599) 1.155: "scrobum puerilla fodit, in eam de pedibus (vt cum Hebraeis loquar pudentius) aquam fundit, eamque bacillo turbidat nescio quid submurmurans. Et ecce tibi subito pluviam de nubibus in conditum locum."

delivered them over to the judges, so that they would pay for their heinous crime of witchcraft at the stake.²⁴

The darker phrases in exotic writings are particularly attractive to those seeking to shorten cultural distances, to penetrate strange minds, and to decipher the kind of reasoning that associates swords with chrysanthemums, rather than the swing of a pendulum with a planet's orbit.²⁵ The aspects of a past culture that most often seduce the historian are those that appear inconceivable and decidedly incomprehensible, such as the belief in witches of a Bodin, Ciruelo, or Nuñez; the criminal amusements of the Parisian apprentices; Del Río's "humorous" stories; and the accusations against Graciana de Loizu. The cultural distance created by the passage of time prevents us from understanding their fears, finding amusement in their jokes, laughing at their stories, and comprehending why the witches and unicorns that once populated their world have long since abandoned ours.²⁶

■ The Triple Order of Causalities of Traditional Christian Cosmology

In the following pages, we will suggest a different answer to the dilemma that worried Lucien Febvre: did traditional Christian cosmology lack its own Sense-of-the-Impossible? To this end we will use the evidence collected from a particular documentary corpus: the Spanish *tratados de reprobación de supersticiones*. Early modern Spanish literature of superstition presents one of the most complete historical configurations of Christian superstition doctrine. This theological genre acquired an unusual development in early modern Spain: from the treatises by Bishop Lope de Barrientos (ca. 1440) to the monumental *summae* by Benedictine Benito Jerónimo Feijóo in the eighteenth century, a sizable quantity of *tratados de reprobación de supersticiones* were printed.²⁷ The literature of superstition is prime material for our project of reconstructing the early modern Sense-of-the-Impossible, because its main task was precisely the discrimination of vain practices considered

²⁴Ibid: "zelo incitatus agricola, post paucos dies, inuitatum se ad nuptias simulans, vxorem cum gnatam, festiue nuptiali modo exornatas in currum imponit, in vicinum oppidum deuehit, & iudici tradit maleficii crimen supplicio expiaturas."

²⁵Clifford Geertz, "Géneros confusos, La refiguración del pensamiento social," in *Conocimiento local: Ensayos sobre la interpretación de las culturas* (Barcelona: Paidós, 1994) 31. I allude to Ruth Benedict's *The Chrysanthemum and the Sword: Patterns of Japanese Culture* (New York: New American Library, 1946).

²⁶For a quite different approach to the problem of witchcraft see Lyndal Roper, *Oedipus and the Devil: Witchcraft, Sexuality and Religion in Early Modern Europe* (London: Routledge, 1994) 3: "the supposed gap between ourselves and the past . . . is less complete than we sometimes suppose, and . . . the assumption of difference is not always a useful heuristic tool. Indeed, I think it has hampered our understanding of the complexity of early modern people as individuals."

²⁷The following are some of the main examples of the Spanish literature of superstition: Lope de Barrientos, *Tratado de la divinanza e de sus especies, que son las especies de la arte magica*

incapable of producing the desired effects, and because it allows us to perceive the real phenomena in which early modern intellectuals really did believe.²⁸

The solution provided by Lucien Febvre to the apparent inconsistency of pre-Enlightenment European elite culture has been strongly challenged in recent years. David Wooton believes that it is possible to find in the early exponents of the Scientific Revolution the same inconsistencies that we have habitually considered to be a characteristic of philosophers prior to Galileo, Descartes, and Newton. Robert Boyle, for example, accepted as true an observation by Rondeletius, whose wife claimed to have kept a fish alive in a glass of water for three years, without providing it any food. Even under these conditions, the animal had not only survived the test but also grown constantly in size, until he was stuck within the glass itself. The English chemist wished to believe in this story because he saw it as a solid experimental confirmation of Johann van Helmont's theory that all elements came from water. According to Wooton's thesis, when Febvre characterized as credulous points of view like Boyle's, he was evaluating the belief in isolation from the theoretical basis that supported it. Boyle's problem was not that he lacked a critical attitude toward experimental evidence, but that a false theory, although solid in appearance,

(ca. 1440); Martín de Arlés o Andosilla, *Tractatus de superstitionibus* (Lyon, 1510); Fray Martín de Castañega, *Tratado de las supersticiones y hechicerías* (Logroño, 1529); Pedro Ciruelo, *Tratado de reprobacion de supersticiones y hechicerías* (Alcalá de Henares, 1530); Fray Francisco de Vitoria, *De magia*, in *Relectiones theologicae* (Salamanca, 1557); Fray Alfonso de Castro, *De iusta haereticorum punitione* (Salamanca, 1547); Juan de Horozco y Covarrubias, *Tratado de la verdadera y falsa prophecia* (Segovia, 1588); Benito Perer, *Adversus fallaces et superstitiones artes* (Ingolstadt, 1591); Martín del Río, *Disquisitionum magicarum* (Lovaina, 1599–1600); Francisco Suárez, *De superstitione et variis modis eius*, in *De religione* (Coimbra, 1608–1609); Francisco Torreblanca y Villalpando: *Epitome Delictorum sive de magia in qua aperta vel occulta invocatio daemonis intervenit* (Sevilla, 1618); Pedro Antonio Iofre: *Prologo primero y adiciones al Tratado de Pedro Ciruelo* (Barcelona, 1628); Gaspar Navarro, *Tribunal de supersticion ladina* (Huesca, 1631); Francisco de Blasco Lanuza, *Patrocinio de angeles y combate de demonios* (Monasterio de San Juan de la Peña, 1652); Benito Jerónimo Feijóo, *Theatro critico universal* (9 vols.; Madrid, 1726–1740) and *Cartas eruditas y curiosas* (5 vols.; Madrid, 1742–1760).

²⁸See Fabián Alejandro Campagne, "Homo Catholicus, Homo Superstitiosus. El discurso anti-supersticioso en la España de los siglos XV a XVIII" (Ph.D. diss., Universidad de Buenos Aires, 1999) 47–114. The Christian doctrine on superstition was first defined by Augustine of Hippo in a famous paragraph of *De doctrina christiana* (2.20.30). Leaving aside other previous alternate models, such as that of Lactantius (*Divinarum institutionum*, IV, XXVIII), Augustine incorporates under the same label of *superstition* a number of different practices: idolatry, vain observances, medicinal amulets, divination. The audacity of the Augustinian ideological operation consists in associating a cultic practice (idolatry) with noncultic practices (the other three ritual forms). The mechanisms that allowed Augustine to unify such diverse rites were the notions of *vanitas* and *pacta cum daemonibus*. In fact, the only quality they share is their essentially vain character: they cannot produce the effects they predicate. Who, then, is expected to produce the desired effects, if these cannot be produced through natural forces, and if those practices were instituted neither by God nor by the Church? For Augustine there was no doubt: the men who carry out such practices, which

had shaped his own perception of the real world. The chemist indeed possessed a Sense-of-the-Impossible, although it does not coincide with ours.²⁹

The evidence obtained from the Spanish literature of superstition allows us to go a step beyond the solutions proposed by Wooton. Traditional Christian ontology was not only based on a Sense-of-the-Impossible different from that proposed by mechanical philosophy. The Christian Sense-of-the-Impossible found its basis in the superposition of three different ranges of the possible: the natural, the preternatural, and the supernatural orders. When Pedro Ciruelo proposed some clues for the identification of superstitious practices he declared:

Whatever thing that happens in the world, has a cause or causes from which it comes. And these are three ways, and there cannot be others apart from these: because either it comes from natural causes, which have the virtue to do it; or it comes from God who operates miraculously on natural course; or it comes from good or evil Angels, which join with the natural causes.³⁰

Ciruelo admirably summarizes the triple order of causes on which traditional Christian cosmology stands: a fact was really impossible when it simultaneously fell outside of all three existing ranges of possibility, for each one of them had its own Sense-of-the-Impossible. According to Ciruelo, any event happening in the world had to come necessarily from one of three orders of possible causes:

henceforth would be termed *vanae superstitiones*, deposit their hopes in the devil. The group of images, symbols, and characters used in such ceremonies must then be considered as signs through which the *homines superstitionis* enter into contact with the forces of evil. To sum up, according to the Augustinian model of superstition, vain practices are not based on a system of causes but on a system of signs: these possess not a causal but a semantic function. For this reason, within the frame of this Christian model of superstition—unlike other earlier and later models of superstition—it is expected that practices that are intrinsically *vanae* may indeed produce real effects. Of course, these are not achieved through natural or supernatural virtue but through the actions of the devil, who responds swiftly to produce effects stipulated beforehand whenever he observes the signs agreed upon with superstitious men (the images, symbols and characters used in the vain rituals). It was Thomas Aquinas's mission to correct some of the biggest inconsistencies of the original Augustinian ideological operation by developing the notion of a tacit covenant with the devil. In this way, he attempted to justify on a stronger basis the association of cultic and noncultic practices under the same label: *supersticio*.

In any of the Spanish *tratados de reprobación de supersticiones* of the sixteenth and seventeenth centuries, we can find this Augustinian definition: “this is the rule: that any action man does to obtain any good or prevent any evil, if what is used in it lacks natural or supernatural virtue to obtain that effect, is a vain and superstitious and diabolic operation, and if it does produce an effect it is through the secret workings of the devil. Then the man who, to obtain an effect, uses things or says words that clearly do not possess any virtue to do it is acting in vain. And if the action is vain it is superstition” (Ciruelo, *Reprobación de las supersticiones*, X v).

²⁹David Wooton, “Lucien Febvre and the Problem of Unbelief in the Early Modern Period,” *Journal of Modern History* 60 (1988) 714–23.

³⁰Ciruelo, *Reprobación de las supersticiones*, XIIr: “Qualquiera cosa, que de nuevo se faze en el mundo, tiene causa o causas de donde procede. Y estas son tres maneras, y no puede auer otras fuera destas: porque o procede de causas naturales, que tienen virtud para la hazer: o procede de

- The first order was the action of the eternal, omnipotent deity. God's intervention in the natural order ordinarily took the form of a miracle: "it comes from God who operates miraculously on the course of nature." This is the "supernatural order."
- The second order of causes corresponded to pure spirits, angels and demons. As beings created by God, they belonged to the natural order, even if their powers greatly exceeded ordinary human capacities. Their intervention in the natural order did not imply an intervention of supernatural character: "it comes from the good or evil Angels, which join with the natural causes." This was the "extraordinary natural order." From the end of the sixteenth century the term "preternatural order" was increasingly used to refer to the interventions of angels and demons in the material world.
- The third order of possible causes corresponded to the "ordinary natural order," the material world that filled the sublunar sphere: "it comes from natural causes, which have the virtue to do it."

It was during the sixteenth century that this triple distinction of causes reached its highest development. This classification, however, had demanded of Christian theology more than a millennium of intense reflection. Augustine had originally proposed a different conception. He reflected intensely on the supernatural order and on miracles in four of his works: *De Genesi ad litteram*, *De Trinitate*, *De utilitate credendi*, and *De civitate Dei*.³¹ For Augustine, there was only one real miracle, the creation. A corollary of that seminal act had been the second creation, the incarnation and resurrection of Christ. God created the world in six days *ex nihilo*, and in that moment he sowed all the possibilities for future times. Everything in the creation was, then, at the same time natural and miraculous. The most common events—the birth of a child, the flowering of a plant—are daily miracles, signs of the mysterious creative power of God acting upon his universe. Augustine stated, however, that men had grown so accustomed to these marvels that they no longer experienced any wonder. Only the most unusual manifestations of divine power are able to produce feelings of awe, but in fact, these unusual events also happen within the frame of the original creative act. Augustine explained these events by stating that God had created *seminum semina, seminales rationes* hidden in the bosom of nature, under the ordinary guise of things. These seeds occasionally cause "miracles" which seem to contradict the ordinary workings of the natural world, but which are in fact inherent in it. The most usual channel through which these hidden causes show themselves is the prayers of saints. Daily natural events are

Dios que milagrosamente obra sobre curso natural, o procede de los Angeles buenos, o malos que se juntan con las causas naturales."

³¹Benedicta Ward, *Miracles in the Medieval Mind: Theory, Record, and Event, 1000–1215* (Philadelphia: University of Pennsylvania Press, 1987) 3–19. See also Robert Bruce Mullin, *Miracles and the Modern Religious Imagination* (New Haven: Yale University Press, 1996) 9–12.

as much the work of God as are the most astonishing miracles. Only custom and routine drive human beings to classify as miracles those phenomena whose only difference from daily events is their frequency.

At first, theologians did not enlarge upon this Augustinian concept of the miraculous. A treatise by Anselm of Canterbury, *De conceptu virginali et de originali peccato*, is the earliest instance in which a change of emphasis can be found. It is not casual: Creation and Incarnation supplied the opportunity to discuss the boundaries between the natural and the supernatural. Anselm held that things could be attributed to one of three causal orders:³²

Everything that is done, if we consider it attentively, is either done by God's will alone, by nature according to the force God placed in it, or by a creature's will; and what is neither done by created nature nor by a creature's will, but only by God, should always have to be admired: so it appears that triple is the course of things: wonderful, natural, and voluntary. And the wonderful [order] is in no way inferior to the other two or to their laws, but dominates freely; and [the natural and voluntary orders] are not offended when [that wonderful order] seems to oppose them, because they possess nothing they have not previously received from it, and it gave them nothing but what was under itself. That is why the birth of a man from a virgin is neither natural nor voluntary but wonderful.³³

Thus, real facts belong to one of three orders: the wonderful or miraculous, the natural, or the voluntary. Everything that is not produced by created nature nor by the will of creatures, but only by divine will, should always have to be admired. For this reason, the birth of a man from a virgin was not a natural nor a voluntary event, but a miraculous one. In the mid-eleventh century, Anselm moved decidedly away from the relationship between nature and miracle proposed by Augustine. According to both thinkers, God remained the ultimate cause of miracles, but Anselm's novel scheme distinguished two other orders by which causes might be analyzed. Miracles were considered to be a particular class of acts through which God acted directly on the world. Voluntary and natural effects could be examined and understood in themselves.

Progressively, Saint Anselm's triple distinction—miracle, nature, will—began to impose itself on scholastic philosophy. In the thirteenth century, Albert Magnus

³²Anselm of Canterbury, *La conception virginale et le péché originel. La procession du Saint Esprit. Lettres sur les sacrements de l'Eglise. Du pouvoir et de l'impuissance* (Paris: Cerf, 1990) 162.

³³Ibid., 164: "cum igitur omnia quae fiunt, si diligentes considerentur, fiant aut sola voluntate dei, aut natura secundum vim illi a deo inditam, aut voluntate creaturae; et ea quae nec natura creata nec voluntas creaturae sed solus deus facit, semper miranda est: appetit quia tres sunt cursus rerum, scilicet mirabilis, naturalis, voluntarius. Et mirabilis quidem aliis aut eorum legi nullatenus est subditus, sed libere dominatur; necque illis facit iniuriam, quando eis obviare videtur, quia nihil habent nisi quod ab illo acceperunt, nec ille dedit eis aliquid nisi sub se. Quoniam ergo propagatio viri de sola virgine ita non est naturalis aut voluntaria sed mirabilis."

stated in his *Summa de creaturis*: “there are three kinds of causes: natural ones, whose origin is nature; voluntary ones, whose origin is will; and divine ones, whose origin is God.”³⁴ Early Aristotelian natural philosophers saw here the justification for the basis of an autonomous physics.³⁵

In his *Summa theologiae*, Aquinas bestowed canonical status upon this scheme, proposing however a modified definition of the supernatural order. A miracle is an act performed outside the natural order. But it does not suffice if something happens outside the order of a particular nature: otherwise, throwing a stone upwards would have to be considered a miracle, since this act is against the nature of the stone. Thus, a miracle is an event outside the boundaries of all created nature. Such a demonstration of power was only available to God.³⁶

In a famous passage in the *Summa contra gentiles*, Thomas established the different degrees and orders of miracles. The highest miracles are those by which God does something that nature can never do, like making the sun stand still or dividing the waters of the sea. Miracles of a second degree are those through which God does something nature can also do, but in a different sequence: animals can naturally live, see, and walk; but making them live after death, see after becoming blind, or walk after being paralyzed, can only be done miraculously by God. The third degree of miracles takes place when the deity does what nature usually does by itself, but without its operating principles: for example, an illness may be miraculously cured without the use of medicine.³⁷

The triple division of events according to natural, voluntary, and supernatural causes — suggested by Anselm and legitimated by Aquinas — became then a basic postulate of traditional Christian cosmology. In his *De angelis*, posthumously published in 1620, Spanish Jesuit Francisco Suárez observed, “we can distinguish three orders of things that can be known by men: natural things, actions of creatures’ free will, and supernatural works, which Thomas called mysteries of grace.”³⁸ The *doctor eximius* was reproducing without variation Anselm of Canterbury’s doctrine.

We have seen so far the efforts carried out by Christian theology to establish precisely the boundaries between the natural and the supernatural. One problem,

³⁴Albertus Magnus, *Summa de Creaturis* (Opera Omnia 34; Paris: Ludouicus Vives, 1899) 318: “triplicem causam. Scilicet naturalis, cuius principium es natura; et voluntarius, cuius principium est voluntas; et divinus, cuius principium est Deus.”

³⁵Lorraine Daston and Katherine Park, *Wonders and the Order of Nature* (New York: Zone Books, 1998) 109; Ward, *Miracles in the Medieval Mind*, 6–7.

³⁶Thomas Aquinas, *Summa Theologica* 1, q.119, a.4: “sed non sufficit ad rationem miraculi, si aliquid fiat praeter ordinem naturae alicuius particularis. . . . Ex hoc ergo aliquid dicitur esse miraculum, quod fit praeter ordinem totius naturae creatae. Hoc autem non potest facere nisi Deus.”

³⁷Thomas Aquinas, *Summa Contra Gentiles*, I.3, c.102.

³⁸R. P. Francisci Suárez, *De angelis* (Opera Omnia 2; Paris, 1856) 281: “tres ordines rerum cognoscibilium supra distinximus, scilicet naturalium rerum, actuum liberorum, et supernaturalium operum, quae mysteria gratiae appellantur a D. Thoma, dicta quaest. 57, art. 5.”

however, remained to be solved. The third category designated by Anselm comprised the voluntary actions of creatures. This category was not limited to the free acts of human beings. Within Christian cosmology there were other creatures whose will could cause real effects: pure spirits, separate intelligences, angels and demons. Thus, it was as essential to establish the limits between miracles and angelic powers as it was to separate precisely miracles from natural events. Saint Thomas had pointed out an essential difference between phenomena *praeter ordinem naturae* ("beyond the natural order") and *praeter ordinem totius naturae creatae* ("beyond the order of the whole created nature"). Only this last order of phenomena can be considered real miracles. Which are, then, *praeter ordinem naturae* phenomena? Once again, we find the answer in the *Summa contra gentiles*. The order imposed by God in the natural world is divided into those effects that always happen, and those effects that may happen more or less frequently, although not in all cases. Many natural causes produce their effects in the same way most of the time, though not always. At a few times, however, events happen in another way, be it through defects in the virtue of the agent, through lack of disposition of the matter, or through the intervention of a virtue stronger than the agent's. This is what happens when nature engenders a man with six fingers. Nature can trigger events of lesser as well as of greater probability, and this can occur without any change in God's providence. This order of events, which takes place within nature but as a deviation from ordinary events, is classified by Aquinas as *praeter ordinem naturae*.³⁹ These events do not escape from the natural order, for they lack the essential prerequisite, the true condition of the miracle: *praeter ordinem totius naturae creatae*.

Thomas quoted three possible origins of *praeter ordinem naturae* phenomena: by virtue of the agent, by lack of disposition of the matter, or by intervention of a virtue more powerful than the agent. This last circumstance allowed the incorporation of the actions of angels and demons into the preternatural order. Because pure spirits are created beings, the effects produced by them could not be considered miraculous.⁴⁰ Separate intelligences never acted *praeter ordinem totius naturae creatae*. But neither did their actions belong to the order of ordinary nature: the actions of separate intelligences belonged to an extraordinary natural order. Angels and demons only manipulated secondary causes and acted through them. Angelic powers could perform those effects that visibly happened in this world, manipulating bodily seeds by local movement.⁴¹ As a result, even though angels could appear to be performing something outside corporeal nature, they could do

³⁹Thomas Aquinas, *Summa Contra Gentiles*, I.3, c.99.

⁴⁰Thomas Aquinas, *Summa Theologica* 1, q.110, a.4: "quia quidquid facit angelus, vel quae-cumque alia creatura, propria virtute, hoc fit secundum ordinem naturae creatae; et sic non est miraculum."

⁴¹Ibid.: "spirituales potestates possunt facere ea quae visibiliter fiunt in hoc mundo, adhibendo corporalia semina per motum localem."

nothing outside the order of all created nature, since miracles were beyond the powers of created beings.⁴²

The triple classification of causes proposed by Pedro Ciruelo in his *Reprobación de supersticiones y hechicerías* of 1530 reflected the evolution undergone by theological thought from the mid-eleventh century. The Spanish theologian adapted the classification to his own purpose: the condemnation of superstitions. Ciruelo kept the first two categories initially proposed by Anselm of Canterbury: everything that happens in this world “either comes from natural causes” or “comes from God who acts miraculously on the course of nature.” Anxious to stress the vain character of superstitious practices, however, Ciruelo reduced the third order of causality, the effects produced by the will of creatures, to the actions of separate intelligences: “it comes from good or evil Angels, which join with the natural causes.” But Ciruelo kept the essential element: the actions of pure spirits belonged to the natural order, because they “join with the natural causes.” Given this distinction between the natural and supernatural orders, superstitious rituals alone could not produce the desired effects. Thus, if the *homines superstitionis* persisted in their vain practices, the awaited effects could only take place through the intervention of the devil.

Ciruelo did not use the category of *ordo praeternaturalis* to classify this second order of causality. Such a concept, implicit in the discourse of Thomas Aquinas, was incorporated into theological vocabulary only later. Francisco Suárez used the word erratically to refer to the actions of the angelic natures.⁴³ Finally, Martín del Río explicitly demonstrated the existence of a preternatural order in his *Disquisitionum magicarum*, published in several volumes between 1599 and 1600.⁴⁴ Del Río begins by describing the natural order:

God . . . at first, for the perfection of his universe, established the natural order, generously giving to each thing its nature and peculiar essence, and operations suitable to its own nature, which are called natural operations.”⁴⁵

The Jesuit describes then the supernatural order:

Then God added the supernatural order, which can be divided into two species. The first one is the order of grace or miraculous order, to which correspond certain works that surpass human and angelical powers: works whose principles are not in the nature of singular things but in the grace of God, in

⁴²Ibid.: “licet angeli possint aliquid facere praeter ordinem naturae corporalis, non tamen possunt aliquid facere praeter ordinem totius creaturae: quod exigitur ad rationem miraculi.”

⁴³R. P. Francisci Suárez, *De religione* (Opera Omnia 13, Paris, 1859) 559.

⁴⁴Stuart Clark, *Thinking with Demons: The Idea of Witchcraft in Early Modern Europe* (Oxford: Clarendon Press, 1997) 170.

⁴⁵Martín del Río, *Disquisitionum Magicarum*, 1.52: “Deus . . . primo statuit quandam ordinem naturae, dum rebus singulis largitus est naturam suam atque essentiam peculiarem, & singulis dedit proprias naturae congruentes operationes; quae vocantur operationes naturales, quia naturae suppositi sunt conuenientes.”

His absolute will and omnipotence. That is why they are called operations of grace and supernatural works in the strict sense of the word, or what is the same, miraculous operations.⁴⁶

As a consequence of the ignorance of common people, the third and last order could be confused with supernatural manifestations. However, it was an autonomous order of causes. The most suitable words to describe its characteristics are implicit in the vocabulary of the *Summa theologiae: ordo praeternaturalis*. Only in a broad sense could the actions of angels and demons be considered *supernaturalis*, since their causes were unknown to most people. In a stricter sense, the effects produced by pure spirits should not be confused with miracles. Del Río stated:

We have finally the marvellous order, an order in itself that does not surpass the limits of the natural order, but only its normal measure, which is unknown to all the people, or to most of them, and that is why we used to call it supernatural in the broad sense of the word; but it is more clear and precise to call it the preternatural order, to which must be related a lot of wonderful works made by good or bad angels by way of local movement, or by the sudden application of natural agents. These operations are neither repugnant to the virtues of natural things according to their essences nor do they surpass the way angelical powers operate. That is why it is preferable to consider them natural (in the broad sense of the word) rather than supernatural or miraculous (in the strict sense); or preternatural rather than violent or against nature. But illiterate people frequently consider that they are above the natural order, and usually include them among supernatural works. But they must be appropriately and precisely called preternatural, wonderful, or prodigious.⁴⁷

Praeternaturalis was the label that best described the actions carried out by angelic natures, be it through their control of local movement or through the sudden

⁴⁶Ibid.: “Deinde Deus addidit alium ordinem supernaturalem, qui potest diuidi in duas species. Prima est ordo gratiae seu miraculosus, ad quem ordinem pertinent quaedam operationes quae vires hominum & angelorum omnium exsuperant: quarum operationum principium non est rei singularis natura, sed ipsa illa Dei gratia, voluntas absoluta & omnipotentia, haec dicuntur operationes gratiae & supernaturales stricte sumpta voce, item operationes miraculosae.”

⁴⁷Ibid: “altera est ordo prodigiosus, qui ordo reipsa non excedit terminis naturalis ordinis, sed tantum dicitur excedere ratione modi, quem vel omnes homines vel plerique ignorant, & ideo solemus eum quoque vocare supernaturalem large accepto vocabulo, clarius autem ac significantius vocatur ordo praeternaturalis, ad quem referuntur multae mirificae operationes factae per bonos vel malos angelos motu locali, vel subita naturalium agentium applicatione. Quoniam vero in his, effectus naturae rerum secundum essentiam non repugnat, nec modus operandi vires angelicas exsuperat; ideo tales effectos potius sunt naturales late sumpta voce, quam supernaturales aut miraculosi proprie loquendo; & praeternaturales, quam contrarii naturae aut violenti: quia tamen vulgo censentur ordinem naturae superare, ideo solent supernaturalibus annumerari; sed proprie ac presse praeternaturales, aut miri, aut prodigiis debent vocari.”

application of some natural agent.⁴⁸ These effects had to be classified as natural rather than supernatural, as preternatural rather than contrary to the natural order (*contrarii naturae aut violenti*). In this way early modern demonologists conformed to their purposes the ontological classification originally designed by Anselm of Canterbury, who categorized events as natural, voluntary, or supernatural. The demonologists incorporated voluntary actions into the natural order. The second category, under the rubric of the preternatural order, was reserved for the actions of good and evil spirits. Martín del Río admitted that acts produced by human free will would be outside the proposed typology. He then suggested incorporating a fourth category, the *ordo hominis*. To this new order belonged the artificial effects, *rerum artificialium*, produced by human industriousness and intellect. Del Río soon admitted, however, that this human order did not transcend the limits of the natural sphere.⁴⁹ For this reason, it could be included in the latter with no complication at all.

■ The Sense-of-the-Impossible of Demonologists

The Sense-of-the-Impossible of Christian cosmology was thus grounded in the complex interaction of a triple order of causalities: either natural, supernatural, and voluntary events, according to the classification proposed by Anselm; or natural, supernatural, and preternatural events, according to the classification suggested by Ciruelo and made explicit by Del Río.

Each of these orders had a clear and definite range of possibilities. Absolute impossibility was only the result of the total impossibilities of each one of the three orders: “and these [causes],” observed Pedro Ciruelo, “are three ways, and there cannot be others” (*Y estas son tres maneras, y no puede aver otras fuera destas*). Traditional Christian cosmology did not lack a Sense-of-the-Impossible: on the contrary, it included three different orders of reality, each of which possessed its own range of possibilities. If traditional Christian thought seems excessively credulous from the point of view of the mechanical paradigm, it is not because of the

⁴⁸The term *praeternaturalis* did not have in natural philosophy the importance it attained within theological discourse, since the existence of such a kind of movement does not spring from Aristotelian physics. In spite of this, some late commentators posed the possibility of the existence of a fourth category of preternatural movements, besides natural, counternatural, and violent movements. A preternatural movement was that with respect to which the nature of a thing was indifferent. This class of physical change had its own kind of power, the *potentia neutra* or *obedientialis*. See Denis Des Chene, *Physiologia: Natural Philosophy in Late Aristotelian and Cartesian Thought* (Ithaca: Cornell University Press, 1996) 222–27. Any of the aforementioned premises could be applied to the power of local movement attributed to angelic natures, a virtue which allowed them to put into practice actions such as the flight of witches.

⁴⁹Martín del Río, *Disquisitionum magicarum*, 1.52: “quare naturali ordini accedit iste artificialis, non vero eum destruir & subseruit potius quam transcendent.”

absence of a Sense-of-the-Impossible but rather because of the overlapping of three different ranges of possibilities. The universe of premechanical cosmologies never signified enough.⁵⁰ Very often, premechanical philosophers and theologians had an excess of significations for the amount of objects they could be related to.⁵¹

The First Sense-of-the-Impossible: The Supernatural Order and the Miracle

The acceptance of divine intervention in the natural order broadened considerably the range of possible events. It did not imply, however, that the superior order of causality lacked a proper Sense-of-the-Impossible. The omnipotent quality of Christian deity was based on an essential paradox: In order to be almighty, the *potentia Dei absoluta* ("God's absolute power") had to have clear and precise limits.⁵²

In the *Summa contra gentiles*, Thomas Aquinas listed a great number of actions impossible for God. Divine will cannot want things that are impossible in themselves.⁵³ In God there is not passive but active power. The active power is ordered to do and the passive to be. This is why only those beings whose matter is subject to contrariety receive the power to become something else. Therefore, since there is no passive power in God, there is nothing he can do regarding his essence. Thus, he cannot be body nor matter. The act of passive power is movement. Therefore God, to whom passive power does not belong, cannot change. In fact, he cannot grow or diminish, nor change, nor engender or corrupt himself. Since decreasing is, in a way, corrupting, it follows that he cannot suffer decrease at all. Any defect implies privation. Thus, God cannot suffer any defect at all. Since fatigue implies lack of strength, and forgetfulness lack of memory, it is evident that he cannot grow tired or forget.⁵⁴ He cannot be defeated nor forced, since those are circumstances

⁵⁰The theoretical simplicity of this triple causal order must not make us forget the huge practical difficulties the scheme faced every time it had to discern the causal origin of extraordinary phenomena. It is already possible to find examples of this innate ambiguity in a famous fragment of *De civitate Dei* (18.18) in which Augustine reflects on the possibility of human metamorphosis. See Gareth Roberts, "The Descendants of Circe: Witches and Renaissance Fictions," in *Witchcraft in Early Modern Europe: Studies in Culture and Belief* (ed. J. Barry, M. Hester, and G. Roberts; Cambridge: Cambridge University Press, 1996) 191–92. Sometimes, as in Spanish literature of superstition with regard to *saludadores* and thaumaturgical kings, it was impossible to discern clearly whether a certain virtue had a miraculous, prenatural, or natural origin. See Fabián Alejandro Campagne, "Entre el milagro y el pacto diabólico: saludadores y reyes taumaturgos en la España moderna," in *Ciencia, poder e ideología: El saber y el hacer en la evolución de la medicina española (siglos XIV-XVIII)* (ed. María Estela González de Fauve; Buenos Aires: Universidad de Buenos Aires, 2001) 247–90. Doctors found the same problems when trying to determine the origin of monstrous births. See Jean Céard, *La nature et les prodiges: L'insolite au XVIe siècle* (Genève: Droz, 1996) 333–35.

⁵¹Claude Lévi-Strauss, "El hechicero y su magia," in *Antropología Estructural* (Barcelona: Paidós, 1992) 207–8.

⁵²Thomas Aquinas, *Summa Contra Gentiles*, I.2, c.25: "quamvis Deus sit omnipotens, aliqua tamen dicitur non posse."

⁵³Ibid., I.1, c.84 : "voluntas Dei non potest esse eorum quae sunt secundum se impossibilia."

⁵⁴Ibid., I.2, c.25.

that belong to beings who are changeable by nature. For the same reason, God cannot repent or become angry or sad, since those are attitudes that suggest passivity and defect. God cannot make the same thing be and not be at the same time. This is why God cannot make opposites exist at the same time in the same thing and in the same sense.⁵⁵ When an essential principle is removed from a thing, there usually follows the disappearance of the thing itself. If, then, God cannot make a thing be and not be at the same time, he cannot make a thing lack one of its essential principles and yet remain the same thing; for example, a man without a soul is not a man. The principles of some sciences—logic, geometry, arithmetic—are deduced from the formal principles of things; it follows that God cannot do what is contrary to these principles: for example, he cannot make a right triangle that does not have three angles equal to two right angles.⁵⁶ God cannot make the past not be, because this implies a contradiction.⁵⁷ Finally, as the culminating paradox of omnipotence, God cannot make another God, because it is the nature of a created being that its existence depends on a cause other than itself, which goes against the nature of he who calls himself God.⁵⁸ On the other hand, it is impossible that what must necessarily be should not be: then God cannot make himself not exist, not be good, not be happy; because he necessarily wants to exist, to be good, to be happy. God cannot want any kind of evil and therefore cannot sin.⁵⁹ The will of God cannot be changeable: he cannot therefore prevent from happening what he wants to happen. “Cannot prevent” has in this case a different meaning from the previous examples. In those situations, God could not want or do in absolute terms. But in the last example, God can do or want, if we take into consideration his absolute power, but he cannot if it is presupposed that he wants the opposite.

From the twelfth century onwards, the appearance of a clear distinction between the *potentiae Dei absoluta et ordinata*, “the absolute and ordained powers of God,” complicated even more the subtle intricacies surrounding the problem of divine omnipotence.⁶⁰ The will of deity to act within the frame of the general principles established by himself, to act within an order of things effectively created, began

⁵⁵Ibid.

⁵⁶It is known this last statement does not reproduce an opinion universally accepted by scholastic thought. The relationship between the will of the creative deity and mathematical truths was the cause of arduous debate until well into the seventeenth century. See Margaret Osler, *Divine Will and the Mechanical Philosophy: Gassendi and Descartes on Contingency and Necessity in the Created World* (Cambridge: Cambridge University Press, 1998) 163–67; and Francis Oakley, *Omnipotence, Covenant, and Order: An Excursion in the History of Ideas from Abelard to Leibniz* (Ithaca: Cornell University Press, 1984) 84–90.

⁵⁷Thomas Aquinas, *Summa Contra Gentiles*, I.2, c.25.

⁵⁸Ibid.: “Deus non potest facere Deum. Nam de ratione entis facti est quod esse suum ex alia causa dependeat. Quod est contra rationem eius quod dicitur Deus.”

⁵⁹Ibid., I.2, c.25.

⁶⁰Oakley, *Omnipotence, Covenant, and Order*, chs. 2–4.

to be considered as “God’s ordained or ordinary power.”⁶¹ Being omnipotent, God retains his ability to do many things that he does not wish to do, that he has never done, and that he will never do. God can do all that does not imply contradiction, but such recognition of the magnitude of divine power never implies that God would act against his revealed nature and his will. What God wishes to do is equivalent to what he has ordered (whether it has been revealed to mankind or not), and events and circumstances can never be such that God would have acted differently. Even miracles are not incursions upon the absolute power of God, since even if the ordered natural laws have been suspended, that suspension has been foreseen and predetermined by God. Miracles are reminders of the contingency of natural order. According to the nominalists, miracles should not inspire mistrust in the universal order established by God nor in the reasonableness of divine acts.⁶² In this way, God will never condemn a pious man, nor will he justify a sinner *de potentia ordinata*, even if he could do it *de potentia absoluta*. If the “principle of contradiction” limits the *potentia Dei absoluta*, the “principle of sufficient reason” is one of the clearest limits of the *potentia Dei ordinata*.⁶³ Nominalism even managed to apply this logic to the analysis of the peculiar causality of Christian sacraments. According to this interpretation, the sacraments do not cause an effect by their own nature, but on the basis of a covenant more or less legally established. *De potentia absoluta*, the sacraments do not produce grace, just as the good acts performed in state of grace do not merit eternal life. *De potentia ordinata*, sacraments produce grace and good actions merit salvation. This peculiar version of sacramental causality refuted the doctrine of Aquinas, for whom the sacraments were an efficient cause of grace, by having received a supernatural virtue from God.⁶⁴ Thus, although deity was forced to act in a certain way, divine omnipotence was preserved.

The Second Sense-of-the-Impossible: The Preternatural Order and the Intervention of Angels and Demons

Until the end of the seventeenth century there were not many natural philosophers who dared to deny the existence of a peculiar kind of natural beings: pure spirits. Some authors, however, dared to criticize the principles of the orthodox angelology established by Thomas Aquinas. The challenges were of various kinds. A few philosophers directly held the physical impossibility of the existence of immaterial beings.⁶⁵ For Leonardo da Vinci a spirit could not exist in itself without a body,

⁶¹ Amos Funkenstein, *Theology and the Scientific Imagination from the Middle Ages to the Seventeenth Century* (Princeton: Princeton University Press, 1986) 121–52.

⁶² William Courtenay, “Covenant and Causality in Pierre d’Ailly,” *Speculum* 46 (1971) 95 n. 4.

⁶³ Funkestein, *Theology and the Scientific Imagination*, 180–82, 191, 198–201.

⁶⁴ Courtenay, “Covenant and Causality,” 98–99.

⁶⁵ Lynn Thorndyke, *A History of Magic and Experimental Science* (10 vols.; New York: Columbia University Press, 1934) 5.100–3, 567–68; 6.518–19, 570; D. P. Walker, *Spiritual and Demonic Magic from Ficino to Campanella* (London: Warburg Institute, 1958) 107–11.

“because if the spirit is an incorporeal being, it should be called a vacuum, and a vacuum does not exist in nature.”⁶⁶ The radical Aristotelianism of Pietro Pomponazzi also drove him to support the metaphysical impossibility of intelligences without material bodies. On the other hand, from a gnoseological point of view, Pomponazzi could not find any plausible way through which these pure spirits could apprehend and know the essence of singular things.⁶⁷ For Thomas Hobbes, the same notion of immaterial substance was terminologically absurd: not even the deity could be thought of as an immaterial entity.⁶⁸

A second branch of heterodox angelology avoided supporting the nonexistence of separate intelligences, but denied their capacity to act in the material world. Several authors arrived at this conclusion through different ways. For Gianfrancesco Ponzinibio, the Passion of Christ deprived the devil of all his power over the world.⁶⁹ In a similar way, the Catholic priest Cornelius Loos considered as imaginary all the actions that orthodox demonology attributed to evil spirits.⁷⁰ Reginald Scot proposed a completely spiritual interpretation of the devil, limiting his acting capacity to the internal human soul.⁷¹ Some sectarians went a step further and considered demons as a metaphor for the bad feelings that assailed the believer’s soul.⁷²

⁶⁶*The Notebooks of Leonardo da Vinci* (ed. J. P. Richter; 2 vols.; New York: Dover, 1970) 1.307: “perchè se lo spirito è quantità incorporea, questa tal quantità è detta vacuo, e il vacuo non si da in natura.”

⁶⁷Fina Pizarro, “La unificación de la naturaleza en P. Pomponazzi,” in *Filosofía y ciencia en el Renacimiento* (Santiago de Compostela: Universidad de Santiago de Compostela, 1988) 46; the reactions of Aristotelian orthodoxy against Pomponazzi’s thesis can be found in G. Zarnier, *Richerche sulla diffusione e fortuna del “De Incantationibus” de Pietro Pomponazzi* (Florencia: La Nuova Italia Editrice, 1975) ch. 3.

⁶⁸See Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life* (Princeton: Princeton University Press, 1985). I quote from the French edition: *Leviathan et la pompe à air* (Paris: La Découverte, 1993) 94–100.

⁶⁹Clark, *Thinking with Demons*, 328. For a synthesis of the skeptical positions of Ponzinibio see Henry Charles Lea, *Materials Toward a History of Witchcraft* (3 vols.; New York: Thomas Yoseloff, 1957) 1.377–82; Julio Caro Baroja, *Las brujas y su mundo* (1961; repr., Madrid: Alianza, 1990) 139.

⁷⁰Lea, *Materials Toward a History of Witchcraft*, 2.602–3; Brian Levack, “The Decline and End of Witchcraft Prosecutions,” in *Witchcraft and Magic in Europe: The Eighteenth and Nineteenth Centuries* (ed. Bengt Ankarloo and Stuart Clark; Philadelphia: University of Pennsylvania Press, 1999) 21, 34; Clark, *Thinking with Demons*, 211.

⁷¹David Wootton, “Reginald Scot/Abraham Fleming/The Family of Love,” in *Languages of Witchcraft: Narrative, Ideology and Meaning in Early Modern Culture* (ed. Stuart Clark; London: Macmillan Press, 2001) 120–24; Sidney Anglo, “Reginald Scot’s *Discoverie of Witchcraft*: Scepticism and Sadduceism,” in *The Damned Art: Essays in the Literature of Witchcraft* (ed. Sidney Anglo; London: Routledge and Kegan Paul, 1977) 106–39; Clark, *Thinking with Demons*, ch. 15; Keith Thomas, *Religion and the Decline of Magic* (London: Penguin, 1991) 684.

⁷²Thomas, *Religion and the Decline of Magic*, 683; Christopher Hill, *The World Turned Upside Down: Radical Ideas during the English Revolution* (London: Maurice Temple Smith, 1972) ch. 8.

But it was left to the Dutch minister Balthasar Bekker to propose one of the most widespread versions of heterodox angelology, by combining Cartesian metaphysics with a historical-critical approach to biblical exegesis.⁷³ In the four volumes of *De betooverte Werel* (*The Enchanted World*), published from 1691 onwards, Bekker defended several theses that had a great influence on the philosophers of the Enlightenment:⁷⁴ it was impossible rationally to prove the existence or nonexistence of angels, as well as to explain their capacity of action over bodies or material entities; the Bible confirmed the existence of angels, but said very little about their true nature; many actions attributed figuratively to angels were performed by God, by men, or by nature; God could have created independent spirits to whom he attributed functions beyond the scope of human capacity to know; after their frustrated rebellion against the deity, evil spirits were thrown to hell, where they awaited the Final Judgment in chains; the erroneous popular image of the devil stemmed from the faulty exegesis of a small number of obscure biblical passages, begun in the final centuries of the first millennium B.C.E., since Satan was absent from earlier biblical books.⁷⁵

Christian ontology remained apart from these debates, accepting as a basic assumption the existence of pure spirits and their possible intervention in the natural order.⁷⁶ The great number of stories related to angels in the Scriptures generally refer to a function, rather than to an ontological category. Angels were the messengers of the deity. In fact, such was the meaning of the Greek word ἄγγελος, chosen by the Septuagint to designate the Hebrew word נֶשֶׁת. The relevant novelty of patristic angelology was thus to transfer a function to a category of being.⁷⁷ The early church fathers reached an agreement upon the creatureliness of angels: the divine messengers were at an infinite distance from God.⁷⁸ They did not reach a similar agreement, however, as to the nature of angels. Many renowned theologians, among them Augustine of Hippo, considered that these beings had to possess some kind of body. Some fathers, however, supported the absolute immateriality of angels: John Chrysostom, Pseudo-Dionysius, and John Damascene.⁷⁹

⁷³ Andrew Fix, *Fallen Angels: Balthasar Bekker, Spirit Belief, and Confessionalism in the Seventeenth-Century Dutch Republic* (Kluwer Academic Publishers, 1999) 59–66.

⁷⁴ See Paul Hazard, *La crisis de la conciencia europea* (Madrid, Alianza, 1988) 147. Voltaire's admiration for Bekker's work led him to add his name to his *Dictionnaire Philosophique*.

⁷⁵ See Jeffrey Burton Russell, *The Devil: Perceptions of Evil from Antiquity to Primitive Christianity* (1977; repr., Ithaca: Cornell University Press, 1987) 174–220.

⁷⁶ In fact, the angelology of A. Rosmini (1797–1855), one of the last great contributions to the history of the subject, may be considered as a sophisticated philosophical attempt aiming not only at proving the existence of angels from deductive arguments but also at justifying ontologically their close relation with the world of matter. See Renzo Lavatori, *Gli angeli: Storia e pensiero* (Genova: Marietti, 1991) 200–2.

⁷⁷ *Ibid.*, 51.

⁷⁸ *Ibid.*, 71–72.

⁷⁹ *Ibid.*, 91–111.

Scholasticism did not inherit, then, a solution to the problem of the nature of angels. In the twelfth century, Bernard of Clairvaux acknowledged his incapacity to solve the dilemma, but favored corporality. However, the spirit of the times seemed to lean towards incorporality: Peter Lombard, and Hugh and Richard of Saint Victor suggested it. It was left to Thomas Aquinas to establish definitively the incorporeity of separate intelligences. To a certain degree, he laid the foundations of Christian angelology on new principles.⁸⁰

Like the supernatural order, the world of angels and demons also possessed a clear and precise Sense-of-the-Impossible. Conscious of the dangers of dualism, demonologists laid special emphasis on the great distance between divine and angelic powers. Even the most extreme expressions of modern demonology, following the publication of the *Malleus maleficarum*, are but long lists of actions impossible to demons. Those polemicists who increased the powers available to Lucifer, such as Jean Bodin, were usually not trained theologians.⁸¹

Book 2 of Jesuit Martín del Río's *Disquisitionum magicarum* is an exhaustive listing of the concrete limits of the devil's powers. Evil spirits could not change the quantity of bodies in such a way that an intermixing of parts took place, nor place the same body in two separate places, or two bodies in the same place at the same time. Neither could they transform the body of one species into that of another, endow animals with discursive thought, return youth to the old, or resurrect the dead.⁸²

The Jesuit Benito Perer devoted a whole chapter of his *Adversus fallaces et superstitiones artes* (Ingolstadt, 1591) to describing the natural impossibilities that limited the powers of Satan, the kinds of things the devil cannot perform either by the actions of magicians or by himself.⁸³ The control of local movement allows pure spirits to perform astonishing feats. Their powers, however, have clear limits. As parts of the created universe, demons cannot destroy or subvert the order of the cosmos, since the parts do not have any power to alter the totality in which they are integrated.⁸⁴ Therefore, demons cannot make two bodies be in the same place

⁸⁰For a synthesis of Thomistic angelology see Jean-Marie Vernier, *Les anges chez Saint Thomas d'Aquin* (Paris: Nouvelles Éditions Latines, 1986) and David Keck, *Angels and Angelology in the Middle Ages* (New York: Oxford University Press, 1998).

⁸¹See Sophie Houdard, *Les sciences du diable: Quatre discours sur la sorcellerie* (Paris: Cerf, 1992) 57–103. On the power of provoking true transformations, defended by Jean Bodin, see Caroline Oates, “Metamorfosis y licantropía en el Franco-Condado, 1521–1643,” in *Fragmentos para una historia del cuerpo* (3 vols.; Madrid: Taurus, 1993) 2.331.

⁸²Martín del Río, *Disquisitionum magicarum, quaestiones* 17, 18, 20, 23, 29.

⁸³Benedicti Pererii, *Adversus fallaces et superstitiones artes, id est, de magia, de observatione somniorum, et de divinatione astrologica* (Lugduni, 1603) 40: “quas res daemon nec per Magos, nec per seipsum possit efficere.”

⁸⁴Ibid.: “sunt enim Daemones partes universi, pars autem non habet vim atque potestatem in totum cuius est pars.”

at the same time or a body be simultaneously in two places. The demon cannot create a vacuum,⁸⁵ nor move bodies at a distance,⁸⁶ nor is he able to move a body from one point to another without passing through the middle.⁸⁷

Benito Perer accepts that the devil can produce surprising effects by manipulating natural objects. Separate intelligences, however, are ringed by impossibilities in this field also. The demon cannot produce immediately any substantial or accidental form, for as a noncorporeal spirit, he cannot immediately alter corporeal matter;⁸⁸ nor create objects from nothing;⁸⁹ nor produce any effect through any cause or instrument, just as doctors cannot heal any illness using any medicine;⁹⁰ nor suddenly produce animals according to perfect sizes and virtues—that is, adult or fully developed animals—since manipulation of the sperm allowed a natural birth but not accelerated growth;⁹¹ nor return the dead to life.⁹²

This extraordinary natural order, however, not only implies a developed Sense-of-the-Impossible: it also possesses its own range of possibilities. Although angelic and demonic natures have clear limitations, they can nevertheless carry out extraordinary feats. We can now begin to solve the dilemma that worried Febvre, the incomprehensible acceptance of the flight of witches by some brilliant Renaissance thinkers. By his own spiritual nature, the devil could easily carry human beings through the air. This is what the angel had done, when he carried Habakkuk through the air holding him only by one of his hairs, not performing however a supernatural act. The Spanish Franciscan Martín de Castañega, author of *Tratado de las supersticiones y hechicerías* (Logroño, 1529), stated:

We read that the angel took Habakkuk from Judea to Babylon with the food that he took . . . to feed Daniel, who was in Babylon in the cave of the lions; and he says that the angel took him by a hair of his head, only to show the virtue and power of the angel to carry a man . . . so . . . we read and find that

⁸⁵Ibid., 41: “Non possunt facere ut detur vacuum, cum vacuum tollat coniunctionem, connexionem atque subordinationem omnium partium universi, in quo eius conservatio atque gubernatio consistit.”

⁸⁶Ibid.: “non potest daemon distans a corpore, illud movere secundum locum: quia movens & mobile debent esse simul.”

⁸⁷Ibid.: “Non potest transferre corpus de extremo ad extremum, & non per medium.”

⁸⁸Ibid.: “non potest immediate alterare materiam corpoream, unde formae naturales educuntur.”

⁸⁹Ibid.: “non potest aliquid creare ex nihilo, tum quia id requirit infinitam virtutem activam, qualam Deus solus habet.”

⁹⁰Ibid., 42: “sicut medicus non potest per quamlibet medicinam, quemlibet morbum sanare, nec artifex per quaevis instrumenta quodcumque voluerit opus perficere.”

⁹¹Ibid.: “non potest animal producere subito secundum perfectam magnitudinem & virtutem eius: denique quod superat vires agentium naturalium, quodque naturali eorum dispositioni & ordinis repugnat, & ad quod virtus agentium naturalium nullo modo se extendit, id fieri a Daemone nequam potest.”

⁹²Ibid., 43: “non potest mortuos ad vitam revocare.”

the demon and any angel, good or bad, by his virtue and natural power can take any man, who would be obedient to this, God allowing, through the airs, waters and seas.⁹³

For these reasons, Castañega asked himself, “why should we doubt this, there being in the devil power and in the man obedience, if God allows it and gives license to it?”⁹⁴

As Spanish parish priest Gaspar Navarro observed in his *Tribunal de superstición ladina*, the marvels the devil was able to perform had their origin in his peculiar natural power. Only “the vulgar and barbaric people and the foolish populace, who do not discern, nor reach this, hold them as miracles.”⁹⁵ These acts were only apparent prodigies. Pure spirits could perform them without any effort:

[The devil] takes a corporeal thing from one place to another, and he does this with the strength, impulse and natural virtue that he has over corporal entities. . . . And the reason is that the Demon is a true spirit, superior to all corporal things, and they obey the spirituels. . . . And thus he will be able with his speed and power to move a hill from one part to another, given license from God. . . . And he can also . . . take the wind from its own region and cause great tempests in the sea. . . . He can also carry in the air the human bodies, as we see the good Angel did with Habakkuk. . . . And the same can the Demon do, for he has the proper nature and the natural virtue of the good Angels: and as he knows all the natural things and their virtues, he can by applying *activa passivis* do things that when seen by those who do not know what he can do and his power, are thought of as miraculous.⁹⁶

⁹³Fray Martín de Castañega, *Tratado de las supersticiones y hechicerías* (ed. Fabián Alejandro Campagne; Colección de libros raros, olvidados y curiosos 2; Buenos Aires: Facultad de Filosofía y Letras/Universidad de Buenos Aires, 1997) 67: “Leemos que el angel llevó a Abacuc de Judea a Babilonia con la comida que llevaba . . . para [dar] de comer a Daniel, que estaba en Babilonia en la cueva de los leones; y dice que lo llevó de un cabello de la cabeza, sólo para denotar la virtud y poder del ángel para llevar a un hombre . . . así . . . leemos y hallamos que el demonio y cualquier angel bueno o malo, por su virtud y poder natural puede llevar a cualquier hombre, que para eso estuviese obediente, permitiéndolo Dios, por los aires, aguas, y mares.”

⁹⁴Ibid., 69: “por qué hemos de dudar de ello, habiendo en el demonio potencia y en el hombre obediencia, si Dios lo permite y da para ello licencia.”

⁹⁵Gaspar Navarro, *Tribunal de Sypertencion Ladina. Explorador del saber, astucia, y poder del Demonio: en que se condena lo que suele correr por bueno en Hechizos, Agüeros, Ensalmos, vanos Saludadores, Maleficios, Conjuros, Arte Notoria, Cavalist, y Paulina, y semejantes acciones vulgares* (Huesca, 1631) 28r: “[sólo] la gente vulgar y barbara y el vulgo necio, que no dicerne, ni alcança esto, los tienen por milagros.”

⁹⁶Ibid., 11r and 11v: “[El demonio lleva] vna cosa corporal de vn lugar a otro, y esto con la fuerça, impulso, y virtud natural, que tiene sobre las corporales. . . . Y la razon es porque el Demonio es verdadero espíritu, superior a todas las cosas corporales, y ellas obedecen a las espirituales. . . . Y assi podra con su velocidad, y potencia mouer un monte de vna parte a otra supuesta la licencia de Dios. . . . Tambien podra . . . coger el viento de su region propia, y causar grandes tempestades en el mar. . . . Puede tambien llevar por los ayres los cuerpos humanos, como vemos lo hizo el

Benito Perer also listed the effects the devil could naturally perform. Through their control of local movement, demons can perform real feats from the point of view of limited human abilities. Evil spirits can cause extremely powerful winds and unleash severe tempests, excite the sea, or start earthquakes;⁹⁷ suddenly remove material objects from the sight of men or make them invisible through optical devices;⁹⁸ make statues, trees and animals speak as human beings;⁹⁹ adopt any shape they wish;¹⁰⁰ change and perturb bodily humors, causing severe disturbances and illnesses;¹⁰¹ manipulate the fantasies of people while they sleep.¹⁰²

The Third Sense-of-the-Impossible: The Natural Order

The last Sense-of-the-Impossible belonged to the natural order, the animate and inanimate material substances that filled the sublunar sphere. The idea of nature is in itself a constructed notion. As G. E. R. Lloyd observed, nature was not waiting to be discovered by pre-Socratic philosophers or by the authors of the Hippocratic corpus. It had to be invented. And once invented, it often had to be redefined.¹⁰³ Proof of this constructed character is the fact that such a notion cannot be found in every ancient culture.¹⁰⁴

A vague notion of physical law supported premechanical cosmologies. Aquinas states that the power of everything that operates through natural necessity is determined towards an effect. And this is why all that is natural happens always in the same way, unless there is an obstacle (*nisi sit impedimentum*).¹⁰⁵ From this perspective, the third range of the possible seemed equivalent to the single Sense-of-the-Impossible proposed by the mechanical philosophy. Aquinas's expression

Angel bueno con Abacuc. . . . Y lo mismo podra hacer el Demonio, pues tiene la propia naturaleza, y virtud natural que los Angeles buenos: y como conoce todas las cosas naturales y sus virtudes dellas, puede aplicando activa passivis hacer cosas que los que las veen, y no saben lo que el puede y su potencia, les parece milagrosas.”

⁹⁷Benedictus Pererius, *Adversus fallaces et superstitiones artes*, 31: “potest terram magnis motibus concutere, vel immittendo vehementem aliquem spiritum in cavernas terrae, vel in illis inclusum vehementissime agitando.”

⁹⁸Ibid.: “potest daemon subito res praesentes e conspectu hominum subtrahere, atque ita reddere invisibiles.”

⁹⁹Ibid., 32: “possunt facere, vt statuae, arbores animalia loquantur more humano.”

¹⁰⁰Ibid., 35: “potest daemon varia corpora varie formata assumere.”

¹⁰¹Ibid., 36: “possunt concitare & conturbare humores, vel spiritus qui sunt in corpore humano . . . qua re gravissimos morbos & acerbissimos cruciatuſ efficiunt.”

¹⁰²Ibid.: “possunt dormientium phantasmata movere.”

¹⁰³G. E. R. Lloyd, *Methods and Problems in Greek Science* (Cambridge: Cambridge University Press, 1991) 418, 432.

¹⁰⁴Des Chene, *Physiologia*, 218.

¹⁰⁵Thomas Aquinas, *Summa Contra Gentiles*, I.2, c.22.

“unless there is an obstacle,” however, reminds us where the main difference lies: in the cosmological vision of the Christian believer, this third order of the natural world lacked complete autonomy. The two ranges of the possible belonging to the ontologically superior orders could overlap, changing the ordinary workings of nature and generating new natural possibilities (angelic and demonic interventions) or supernatural possibilities (the miracle). This circumstance explains why Febvre supposed that early modern European culture lacked a real Sense-of-the-Impossible.

Nature is a relative concept, relative as regards the kind of phenomena considered natural. This means that the notion of nature does not originate in but rather presupposes a boundary between the phenomena that are proper to the natural order and those that are not. This boundary is pretheoretical, or, at least, prior to the study of physics *per se*. Its meaning derives partly from what is not included in the natural category: for the world as a whole, the supernatural; for individual things, the preternatural.¹⁰⁶

Consequently, unlike the previously discussed orders of causalities, the natural order did not have to define the space of the impossible but the sphere of the possible. If miracles and preternatural interventions were to be identified as such, it was necessary to be able to make an exact judgment of the boundaries between the natural order and the other two.¹⁰⁷ Natural philosophy had to exhaust the range of phenomena potentially possible inside the natural order. Only then was it legitimate to consider potential effects of supernatural and preternatural origin. The third range of the possible thus had to determine the “extraordinary” phenomena that could nonetheless be explained by referring to the hidden secrets of nature; it had to establish the natural phenomena that, in spite of their unusual and prodigious character, should not be attributed to miracles or to angelic intervention.¹⁰⁸

Premechanical paradigms, however, only partially fulfilled these high requirements. Until the rise of modern science, natural philosophy lacked a unified empirical deductive system based on mathematical models. This circumstance

¹⁰⁶See Des Chene, *Physiologia*, 218.

¹⁰⁷See Peter Dear, “Miracles, Experiments and the Ordinary Course of Nature,” *Isis* 81 (1990) 672.

¹⁰⁸The strategy of exhausting the possibility of a natural cause before resorting to explanations taken from the other two orders was systematically used by the defenders of suspected witches in seventeenth-century Scotland. Occasionally, the suspects were acquitted; see Christina Larner, *Enemies of God: The Witch-Hunt in Scotland* (Baltimore: Johns Hopkins University Press, 1981) 178–91. In the Catholic countries the Roman and Spanish Inquisitions began to adopt a similar criterion in the seventeenth century. See Carlo Ginzburg, *I Benandanti: Stregoneria e culti agrari tra cinquecento e seicento* (Turin: Einaudi, 1966). (I quote from the French translation: *Les batailles nocturnes* [Paris: Flammarion, 1984] 192); and from Gustav Henningsen, *El abogado de las brujas: Brujería vasca e Inquisición 1609–1614* [Madrid: Alianza, 1983] 313–39).

prevented common agreement regarding the limits between the natural, the preternatural, and the supernatural.¹⁰⁹ This limitation hindered the empirical utility of a cosmology based on a triple range of possible causalities. But in no case did this limitation imply the absence either of a logical or of an empirical Sense-of-the-Impossible previous to the triumph of the Scientific Revolution. The triple order of causalities geometrically increased the spectrum of plausible phenomena.¹¹⁰ The sphere of the impossible, however, continued to enjoy a secure place.

On the other hand, even leaving aside the possibility of angelic or divine interventions, this third natural range of the possible also differs greatly from the mechanical paradigm. The natural order was determined by any of the pre-mechanical cosmologies current before the rise of modern science. Owing to this, phenomena such as planetary influences or the evil eye were part of the natural order in the eyes of many sixteenth-century scholars. These events found clear explanation within the third range of the possible, without requiring the invocation of preternatural or supernatural causalities. It was thus plausible to find naturalistic explanations to justify the existence of a causal relationship between the appearance of comets and the death of kings, as did Cardinal Pierre d'Ailly in his commentary on Aristotle's *Meteorologica*.¹¹¹

Even if the study of hidden qualities did not correspond to *scientia*—that is, a discipline devoted to the analysis of regular phenomena—these qualities caused distant effects that could be clearly proved:¹¹² the influence of the moon on tides, the attraction of iron by magnets and the sensation of the sun's heat on the skin. Phenomena such as these indicated the plausibility of the existence of secret forces exerting their virtue from a distance, without apparent contact between the objects involved.¹¹³ Interested in the explanation of particular natural phenomena and preoccupied with the exploration of new therapeutic powers hidden in nature,

¹⁰⁹See C. R. Phillips III, “*Nullum Crimen sine Lege*: Socioreligious Sanctions on Magic,” in *Magica Hiera: Ancient Greek Magic & Religion* (ed. Christopher Faraone and Dirk Obbink; New York: Oxford University Press, 1997) 268.

¹¹⁰Anne Blair, *The Theater of Nature: Jean Bodin and Renaissance Science* (Princeton: Princeton University Press, 1997) 95.

¹¹¹Laura Ackerman Smoller, *History, Prophecy and the Stars: The Christian Astrology of Pierre d'Ailly, 1350–1420* (Princeton: Princeton University Press, 1994) 46.

¹¹²From the end of the fourteenth century natural philosophy acknowledged the necessity of incorporating the study of hidden qualities and extraordinary phenomena. See William Eamon, *Science and the Secrets of Nature: Books of Secrets in Medieval and Early Modern Culture* (Princeton: Princeton University Press, 1994) 269–350; and Daston and Park, *Wonders and the Order of Nature*, 110–20.

¹¹³For a classic contribution to this field see Mary Hesse, *Forces and Fields: The Concept of Action at a Distance in the History of Physics* (London: Nelson, 1961).

medical doctors were the first to integrate marvels and wonders into the field of natural philosophy.¹¹⁴

Although it is usual to identify the concept of hidden qualities with hermetism and neo-Platonism, the notion strongly penetrated Aristotelian natural philosophy, and it is still possible to identify their influence in many early exponents of the mathematical-scientific paradigm. Until the end of the seventeenth century, hidden causality was a notion shared by the main exponents of the three rival cosmological paradigms.¹¹⁵

One of the most widespread formulations of a theory of the operation of hidden qualities was the principle of sympathies and antipathies. The Spanish Jesuit Juan Eusebio Nieremberg, author of two treatises on natural history, *Curiosa Filosofia* (Madrid, 1630) and *Oculta Filosofia: De la simpatía y antipatía de las cosas . . .* (Madrid, 1638),¹¹⁶ defined these bonds as follows: "there are some insensitive

¹¹⁴See Daston and Park, *Wonders and the Order of Nature*, 137–46. We find a precise definition of the notion of hidden qualities as it was conceived by medical doctors in Arnau de Villanova's *Speculum introductionum medicinalium* (see Nancy G. Siraisi, *The Clock and the Mirror: Girolamo Cardano and Renaissance Medicine* [Princeton: Princeton University Press, 1997] 151 n.6).

¹¹⁵One of the greatest efforts to incorporate the study of hidden qualities with the field of Aristotelian natural philosophy was carried out by Nicolas Oresme. See Roberto Albarés, "Proporción y configuración en Nicolás Oresme: el *Tractatus de Configurationibus*," in *Filosofía y Ciencia en el Renacimiento* (Santiago de Compostela: Universidad de Santiago de Compostela, 1988) 131–40; Bert Hansen, *Nicole Oresme and the Marvels of Nature: A Study of His De causas mirabilium* (Toronto: Pontifical Institute of Mediaeval Studies, 1985) 74–85; and Daston and Park, *Wonders and the Order of Nature*, 130–32. Even in the Coimbran's commentary on Aristotle's *Physics*, references to Hermes and Orpheus are frequent (Charles B. Schmitt, *Aristotle and the Renaissance* [Cambridge: Harvard University Press, 1983] 98). As for the exponents of the new science, Francis Bacon planned a whole treatise on the topic of hidden causes (*Aditus ad historiam sympathiae et antipathiae rerum*) of which he completed only the introduction (Clark, *Thinking with Demons*, 223). Although he expressed his doubts elliptically, Robert Boyle also doubted the capacity of the mechanical paradigm to explain all natural phenomena. In his *Tracts about the Cosmical Qualities of Things* (1671), he suggests that the complexity of interactions in the world could not be explained solely in terms of the movements of particles of inert matter colliding against each other and exchanging energy according to the laws formulated by Descartes. The English philosopher thought that it was possible to assume the existence of certain effluvia of exotic nature in the earth and the air that were capable of altering bodies by giving them properties of relationship, such as gravity, magnetism, fermentation, and other chemical qualities. (See John Henry, "Boyle and Cosmical Qualities," in *Robert Boyle Reconsidered* (ed. Michael Hunter; Cambridge: Cambridge University Press, 1994) 131–34. Many of Newton's statements were perceived by his own contemporaries as deviations from the naturalist basis of the scientific revolution; see Keith Hutchison, "Supernaturalism and the Mechanical Philosophy," *History of Science* 21 (1983) 297–98; and Richard S. Westfall, "Newton and Alchemy," in *Occult and Scientific Mentalities in the Renaissance* (ed. Brian Vickers; Cambridge: Cambridge University Press, 1984). In any case, unlike those who followed hermetic and Aristotelian paradigms, mechanical scientists always stated that the effects of such hidden virtues could be predicted and quantified accurately, even if their causes remained unknown.

¹¹⁶These are two extremely eclectic works which blended elements from both the Aristotelian philosophy and hermetic and mechanical paradigms. See Jaime Marco Frontelo, "Ciencia y tradición

virtues and efficiencies—others call them spiritual qualities, although they are but material—that imperceptibly and insensibly exhale natures from themselves.”¹¹⁷ Most of the singular properties of stones, plants, and animals are nothing but these “silent virtues, through which many sympathies and marvels happen.”¹¹⁸ In this way, the attraction of iron by the magnet, the therapeutic power of music, and the love and hate between certain animals could be explained. Bizarre phenomena, such as corpses of murdered people bleeding in the presence of their killers, could also find a natural explanation according to this theory of hidden natural qualities:

with particular qualities or insensible exhalations . . . which some bodies emit, great marvels are performed, . . . altering bodies that are somewhat distant. . . . Malevolence, indignation, envy, and hate [between] the dead person and [the] killer can alter their bodies in such a way that, by the imprinting of antagonistic qualities, they [i.e. the bodies] will physically alter with notable effect when they face each other again. . . . In this way also the blood from the corpse is physically altered by antagonistic qualities between the dead person and the killer, which spread at a proportionate distance.¹¹⁹

The evil eye was also a natural effect caused at a distance. It was accepted as real fact by the main medical authorities.¹²⁰ Again, doctors explained the phenomenon within the natural order. The effects of the evil eye were produced by a peculiar form of contagion, as Dr. Francisco Nuñez stated: “in some people a certain substance that poisons comes out of their bodies . . . or a voice, or a smell, or a respiration,

en Madrid en el siglo XVII: la idea de naturaleza en Juan Eusebio Nieremberg,” *Torre de los Lujanes* 24 (1993) 173–86.

¹¹⁷Juan Eusebio Nieremberg, *Curiosa filosofia y questiones natrvalles*, in his *Obras Filosoficas* (Sevilla, 1686) 3.297v: “ay unas virtudes y eficacias insensibles, otros las llaman qualidades espirituales, si bien no son sino materiales, que imperceptible, e insensiblemente despiden de si las naturalezas.”

¹¹⁸Ibid., 3.321v: “virtudes calladas, sucediendo por ellas muchas simpatias y maravillas.”

¹¹⁹Juan Eusebio Nieremberg, *Oculta Filosofia: De la simpatia y antipatia de las cosas*, in *ibid.*, 3.334r: “con qualidades particulares, o exhalaciones insensibles . . . que embian algunos cuerpos de si, se obran grandes maravillas . . . alterando cuerpos, que estan algo distantes Porque la malevolencia, indignacion, y embidia, y odio, o de qualquier modo la adversion del muerto, y matador, puede alterar sus cuerpos, de manera, que imprimiendoles opuestas qualidades, fisicamente se alteren con notable demonstracion, quando se carean de nuevo. . . . Assi tambien la sangre del cadaver se altera fisicamente por qualidades opuestas entre el muerto, y matador, que se esparcen a proporcionado espacio.”

¹²⁰Juan Paniagua, “Tradición y renovación en la obra del doctor Chanca,” *Asclepio* 30–31 (1979) 365–69; F. Salmon and M. Cabré, “Fascinating Women: The Evil Eye in Medical Scholasticism,” in *Medicine from the Black Death to the French Disease: History of Medicine in Context* (ed. R. French, J. Arrizabalaga, A. Cunningham, and L. García Ballester; Aldershot: Ashgate, 1998) 53–84.

and some breath.”¹²¹ Such a property of contagion was also used to explain the harmful character of menstrual fluids.¹²²

When writing their treaties, Nieremberg or Nuñez were teaching lessons on natural philosophy, in accordance with the basic principles of the diffused premechanical cosmologies. Their task was to discern the natural possibilities of certain strange phenomena. Only when philosophers did not find natural causes to explain some prodigious event was it permissible to introduce the preternatural and supernatural orders. Only then could God, angels, and demons take the stage.

■ The Answer to the Challenge: A New Modern Christian Sense-of-the-Impossible

Christian theology reacted swiftly against the challenge from the restrictive Sense-of-the-Impossible proposed by early modern science: it generated a new Christian Sense-of-the-Impossible. This new cosmological conception began to spread slowly from the eighteenth century onwards thanks to the work of exponents of a new enlightened version of Christianity. Noteworthy in the field of Catholic philosophy are Benedictine polemicist Dom Augustin Calmet and Benito Jerónimo Feijóo, as well as the Italian priest Ludovico Antonio Muratori. Feijóo displayed his analytical spirit in his *Teatro Crítico Universal* (1726–1740), as well as in the *Cartas eruditas y curiosas* (1742, 1760). Calmet, on his part, was the author of *Dissertation sur les apparitions des anges, des démons, et des esprits* (1746) and *Dissertation sur les revenants en corps, les excommuniés, les oupires ou vampires, brucolaques, etc.* (1751). Similar enlightened pretensions were held by *Della forza della fantasia umana*, which Muratori published in Venice in 1753. In the Protestant field, theologians like Bekker contributed to this new Christian Sense-of-the-Impossible, though occasionally with a greater degree of radicalization than his Catholic colleagues.¹²³

This modern Christian Sense-of-the-Impossible maintained the triple typology of causal orders. The existence of God and pure spirits is still an implicit premise of the theological discourse. But the main difference between the traditional Sense-of-the-Impossible and the modern Christian Sense-of-the-Impossible was that the first two orders—the supernatural and the preternatural—were significantly reduced. They slowly ceased to be considered a latent possibility, with which people had to live permanently, to become a remote and rare possibility. The necessary divine permission that the devil required to fully display his natural angelic powers, a licence that had always been a tacit assumption even in the most

¹²¹Francisco Nuñez, *Libro del parto humano*, 166r: “del cuerpo les sale alguna substancia que inficiona, . . . o voz, o olor, o respiracion, y algun aliento.”

¹²²Ibid., 166v.

¹²³See Fix, *Fallen Angels*.

radical versions of Christian demonology, became very restricted. Miracles, in turn, became increasingly extraordinary events.¹²⁴

In the time of the early Christian Church, miracles were the essential proof of the divinity of Christ, and of the truth of his evangelical message as well as of the personal sanctity of its preachers. Caesarius of Arles was convinced that miracles happened all the time.¹²⁵ Pope Gregory shared these points of view. His *Vita Sancti Benedicti* was an endless list of continuous miracles. Saint Benedict could barely take a step without performing some supernatural effect.¹²⁶ Saints who did not perform numerous miracles were ignored and their public cult did not succeed.¹²⁷ For centuries a close relation was established between miracles and daily life.¹²⁸ But from the fourteenth century onwards, the Church slowly began to head in a new direction.¹²⁹ After the official organization of the process of canonization, the ecclesiastical hierarchy placed a greater emphasis on the virtues of saints, rather than on the miracles they performed.¹³⁰ The diffusion of prodigies of less local origin, such as those performed by the Virgin, was encouraged.¹³¹ Sacramental marvels tended to eclipse miraculous cures.¹³² Hagiographies reflected more intimate portraits of the saints.¹³³

The Spanish Benedictine Benito Jerónimo Feijóo gave particular attention to the rejection of false miracles. He declared the following rule: “whenever there is at hand a natural cause to which one can attribute the effect, it should not be reputed miraculous.”¹³⁴ Not even in the time of the apostles had there been an abundance of true miracles.¹³⁵ Nevertheless, Feijóo believed that there had been real miracles after the apostolic era, although he confessed that it was very difficult to determine their existence: “great prudence and exquisite sagacity are required

¹²⁴ Robert Bruce Mullin, *Miracles and the Modern Religious Imagination* (New Haven: Yale University Press, 1996) 9–32; 58–82; 108–37.

¹²⁵ Aron Gurevich, *Medieval Popular Culture: Problems of Belief and Perception* (Cambridge and Paris: Cambridge University Press/Editions de la Maison des Sciences de l’Homme, 1995) 23.

¹²⁶ Valerie I. J. Flint, *The Rise of Magic in Early Medieval Europe* (Princeton: Princeton University Press, 1991) 376.

¹²⁷ Gurevich, *Medieval Popular Culture*, 43–44. The best example is Saint John the Baptist.

¹²⁸ Pierre-André Sigal, *L’homme et le miracle dans la France médiévale (Xie–XIe siècle)* (Paris: Cerf, 1985) 265–87.

¹²⁹ André Vauchez, *The Laity in the Middle Ages: Religious Beliefs and Devotional Practices* (Notre Dame, Ind.: University of Notre Dame Press, 1993) 238–41.

¹³⁰ Ward, *Miracles in the Medieval Mind*, 185–91.

¹³¹ Ibid., 132–33, 155.

¹³² Vauchez, *The Laity in the Middle Ages*, 242.

¹³³ Ward, *Miracles in the Medieval Mind*, 171–76.

¹³⁴ Benito Jerónimo Feijóo, “Campana y crucifijo de Lugo,” in *Obras escogidas del P. Fray Benito Jerónimo Feijóo y Montenegro* (Biblioteca de Autores Españoles 56; Madrid, n.p., 1924) 520: “siempre que haya á mano causa natural á que atribuir el efecto, no se debe reputar milagroso.”

¹³⁵ Benito Jerónimo Feijóo, “Milagros supuestos,” in *ibid.*, 121.

to discern if it is a deception, and great philosophical knowledge is also required to find out if the effect that is admired is superior to the forces of nature.”¹³⁶

Feijóo was extremely demanding of the proof required to determine the existence of a true miracle. In any case, the theologian had to demand the opinion of natural philosophers: “it is not enough that the learned be so only in theology; because an effect is miraculous when it exceeds the forces of the whole of nature, and this knowledge depends on philosophy.” In *De beatificatione et canonizatione servorum Dei*, Pope Benedict XIV only quoted philosophers as sources of authority. Even heretics like Francis Bacon and Robert Boyle, observed Feijóo, were mentioned in the papal document.¹³⁷

Feijóo was unmerciful toward even the most traditional and venerable cults. The processes of canonization had to be as rigorous as possible. The experimental method had to be applied without exceptions: “the fame of the perfect incorruption of the body of Saint Catharine of Bologna had spread throughout Europe when the canonization of this saint began. . . . When, however, for the purpose of canonization it was required to conduct the visual examination of the wonder, in which three celebrated doctors took part, among them the famous Marcelo Malpighio, only imperfect incorruption was found, which may derive from natural causes.”¹³⁸ No doubts should remain about the exceptional character of miracles. Feijóo confessed that throughout his life he had witnessed only one true miracle:

It happened that, having left the Church after praying, a poor woman . . . carried a tender son in her arms. . . . When she was coming down, a friar of great strengths . . . hurled a ball with all his force, which fell on the child the woman was carrying, leaving him dead or unconscious. In fact, to me as to all the rest it looked like a perfect corpse. . . . The woman, in tears, returned speedily to the Church and to the Saint’s altar to implore his intercession in the restitution of her son. . . . After a very short while we saw the woman leaving with her child in her arms, and he had not only recovered wholly but even had a festive and smiling countenance. I do not pretend to have this as a resurrection. But it is at least evident that it was a miraculous cure from the blow, for even if it did not end in fracture (which is difficult to conceive), but only in concussion, which must at least have been quite strong, considering

¹³⁶Ibid, 118: “es menester una prudencia y sagacidad exquisita para discernir si hay engaño, y un conocimiento filosófico grande para averiguar si el efecto que se admira es superior a las fuerzas de la naturaleza.”

¹³⁷Benito Jerónimo Feijóo, “Examen de milagros,” in *ibid.*, 526–27: “ni basta que los doctos lo sean meramente en teología; porque el que un efecto sea milagroso consiste en que supere enteramente las fuerzas de la naturaleza, y este discernimiento pende de la filosofía.”

¹³⁸Ibid., 527: “en toda Europa estaba extendida la fama de la perfecta incorrupción del cuerpo de santa Catalina de Bolonia cuando se empezó a tratar de la canonización de esta santa. . . . Sin embargo, cuando para el efecto de la canonización se hubo de llegar al examen ocular del prodigo, en que intervinieron tres famosos médicos, y entre ellos el célebre Marcelo Malpighio, no se halló más que aquella incorrupción imperfecta, que puede provenir de causas naturales.”

it deprived the child of consciousness, the pain from the blow should have lasted a long time, which certainly did not happen, as testified by the smiling and festive face of the infant.¹³⁹

Feijoo declared six principles for differentiating between miraculous and natural cures:¹⁴⁰ the cured illness should be serious and naturally incurable; it should not have been declining in the period before the cure; if natural remedies have previously been applied they should have failed; the cure should have been sudden and instant, total and perfect; finally, recovery must be permanent, with no relapse. The severity in the examination of miraculous cures, which had always constituted an important part of assumed miracles, considerably limited divine intervention within the natural order. This evolution coincided with the more rigorous control of popular devotion urged by the Counter-Reformation.¹⁴¹

The Benedictine developed at length the basic principle of the new Christian Sense-of-the-Impossible: possibility does not equate to reality. Feijoo stated: “the possibility of a thing can never be the principal reason, nor even an auxiliary, for believing in its existence. Not even God can make everything that is possible exist; although there is nothing possible that He cannot make exist. There is a long distance between the possible and the believable.”¹⁴² It is not necessary to explain

¹³⁹Ibid., 525: “Sucedío, que habiendo salido de la Iglesia, de hacer oración, una pobre mujer plebeya . . . llevaba un tierno hijuelo en los brazos. . . . Al tiempo que la mujer bajaba, un condiscípulo mío de grandes fuerzas . . . disparó con toda su pujanza una bala, la cual cayó sobre el niño que llevaba la mujer en los brazos, dejándole no sé si muerto o desmayado. En realidad, así a mí como a todos los demás se nos presentó perfecto cadáver. . . . La mujer, llena de lágrimas, volvió presurosa a la Iglesia y al altar de el Santo a implorar su intercesión para la restitución de su hijo. . . . A muy breve rato vimos salir a la mujer con su niño en los brazos, y éste, no sólo recobrado enteramente, pero aún con semblante festivo y risueño. No pretendo yo que ésto fuese resurrección. Pero es por lo menos evidente que fue curación milagrosa de el daño que causó el golpe, pues aún cuando de él no resultase fractura o dislocación notable (lo que es algo difícil concebir), si sólo contusión, la cual no pudo menos de ser bien fuerte, respecto de que privó de sentido al niño, el dolor de ella debía durar mucho tiempo, lo cual ciertamente no sucedió, como testificó el rostro risueño y festivo del infante.”

¹⁴⁰Benito Jerónimo Feijoo, “Sobre la multitud de milagros,” in *ibid.*, 515.

¹⁴¹See Ángel Fábrega Grau, “El P. Pedro Gil, SJ (m.1622), y su colección de vidas de Santos,” *Analecta Sacra Tarracensis* 31 (1958) 5–23; Virgilio Pinto Crespo, “La actitud de la Inquisición ante la iconografía religiosa: Tres ejemplos de su actuación,” *Hispania Sacra* 61–64 (1978/1979) 1–38; William Christian Jr., *Apariciones en Castilla y Cataluña (Siglos XIV-XVI)* (Madrid: Nerea, 1990) 199–236; Jean-Michel Sallmann, *Chercheurs de trésors et jetueuses de sorts. La quête du surnaturel à Naples au XVIe siècle* (Paris: Aubier, 1986) 85–191; Peter Burke, “How to be a Counter-Reformation Saint,” in *The Historical Anthropology of Early Modern Italy* (Cambridge: Cambridge University Press, 1987) 48–62; and Alain Boureau, “Une vie de saint dans la durée: La légende de saint Eustache,” in *L'événement sans fin: Récit et christianisme au Moyen Age* (Paris: Les Belles Lettres, 1993) 108–35.

¹⁴²Fray Benito Gerónimo Feyjoo y Montenegro, *Teatro Crítico Universal o Discursos varios en todo genero de materias, para desengaño de errores comunes* (Madrid, 1777) 5.8: “la posibilidad

the consequences this last rule had for the identification of true miracles. Therefore, the Benedictine concluded: “it is useless to resort to possibility to persuade verisimilitude, and give the right to any narrator to believe his admirable stories, just because there is no impossibility in what he narrates.”¹⁴³

A second modern Sense-of-the-Impossible arose from the eighteenth century onwards. In addition to the scientific-rationalistic discourse, which excluded from its basic premises the hypothesis of miraculous intervention in the natural order,¹⁴⁴ the new enlightened versions of Christianity produced a new range of the possible: without renouncing the triple order of causalities, they restrained with such force the field of action of the first two orders that they were transformed into explanatory mechanisms of last resort.¹⁴⁵ As a consequence, in the greater part of ordinary circumstances both Senses-of-the-Impossible—the scientific and the modern Christian—may even overlap.¹⁴⁶

When did this new Christian Sense-of-the-Impossible begin to appear? Lucien Febvre had a brilliant intuition when he held that a key element could be found in the reactions against the satanized stereotype of the sabbat. The predecessors of the modern Christian Sense-of-the-Impossible, in many aspects a precursor of the

de una cosa nunca puede ser regla, ni aun coadyuvante, para creer su existencia. Ni aun Dios puede hacer, que todo lo posible exista; aunque no hay posible alguno a quien no puede hacer existir. Dista muchas leguas lo posible de lo verosímil.”

¹⁴³Ibid., 5.9–10: “es vano recurrir a la posibilidad para persuadir la verisimilitud, y dar derecho a qualquier relacionero, para que le creamos cosas admirables a titulo de que no hay imposibilidad alguna en lo que cuenta.”

¹⁴⁴Some relevant scientists, particularly those working before 1750, refused to exclude from their cosmological premises the hypothesis of miraculous intervention into the natural order. Robert Boyle and Isaac Newton are clear examples. See R. M. Burns, *The Great Debate on Miracles: From Joseph Glanvill to David Hume* (Lewisburg, Pa.: Bucknell University Press, 1981) 12–16, 52–69 and appendix; Clark, *Thinking with Demons*, 299–304; Hutchison, “Supernaturalism and the Mechanical Philosophy,” 297–333; J. J. MacIntosh, “Locke and Boyle on Miracles and God’s existence,” in *Robert Boyle Reconsidered* (ed. Michael Hunter; Cambridge: Cambridge University Press, 1994) 205–9; Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago: University of Chicago Press, 1994) 331–33; and Francis Oakley, “Christian Theology and the Newtonian Science: The Rise of the Concept of the Laws of Nature,” *Church History* 30 (1961) 433–57.

¹⁴⁵Nutini and Roberts (*Bloodsucking Witchcraft*, 33) declare in this respect: “when a magical complex has become a mechanism of last resort, it no longer entails continuous social or psychological consequences. Nor does it play a role in conditioning the group’s perceptions. But the complex may occasionally surface under extraordinary conditions and may even color for some time the actions of the group.”

¹⁴⁶On the attitude toward miracles adopted by the enlightened philosophy, particularly in relation to David Hume’s contributions, see Ian Hacking, *El surgimiento de la probabilidad: Un estudio filosófico de las ideas tempranas acerca de la probabilidad, la inducción y la inferencia estadística* (Barcelona: Gedisa, 1995) 203–25; Lorraine Daston, *Classical Probability in the Enlightenment* (Princeton: Princeton University Press, 1988) 296–369; Burns, *The Great Debate on Miracles*, 142–246.

scientific-rationalistic sense, were the intellectuals who dared confront the early modern radical demonology. Particularly in Spain, moderate theologians raised their voices from very early times.¹⁴⁷ Controversies between skeptics and those who defended the reality of the sabbat continued during the whole sixteenth century.¹⁴⁸ But it was the polemics caused by the *auto de fe* in Logroño (1610) that definitely changed the position of the Supreme Council of the Inquisition. Commissioned by the Holy Office, humanist Pedro de Valencia wrote in 1611 his *Discurso acerca de los cuentos de las brujas y cosas tocantes a magia*. Valencia's central argument began to precipitate the collapse of the traditional Sense-of-the-Impossible. His efforts were particularly strong in reducing the field of action of the second order of causalities, the preternatural. The author did not deny that angels had natural powers ontologically superior to those of human nature. He only doubted that God should permit angels and demons to exercise them frequently. Thus, Pedro de Valencia held "that it cannot be denied that it is possible for evil angels when they are allowed, as it is for good angels when they are sent, to take bodies and carry them in a very short time through the air."¹⁴⁹ Yet, there had also been very few occasions on which God had given licence to the devil to act in the material world:

Note with prudent judgment how short a license God gave the devil, and in which occasions and to what ends, to perform cases of marvelous performances that should seem above nature: once in so many long centuries did he allow the devil . . . to resist the liberation of the people of Israel . . . operating with the magicians of the Pharaoh in competition with Moses. . . . So, too, in confirmation and victory of the Gospel and of his first vicar Saint Peter, did God permit one magician alone, Simon Samaritan, to perform such extraordinary marvels.¹⁵⁰

¹⁴⁷See, for example, Lope de Barrientos, *Tractado de la divinanza e sus especies, que son las especies de la arte magica*, cited in Paloma Cuenca Muñoz, *El Tratado de la Divinanza de Lope de Barrientos: La magia medieval en la visión de un obispo de Cuenca* (Cuenca: Ayuntamiento de Cuenca, 1994) 188.

¹⁴⁸William Monter, *La otra Inquisición: La Inquisición española en la Corona de Aragón, Navarra, el País Vasco y Sicilia* (Barcelona: Crítica, 1992) 301–24; Idoate, *La Brujería en Navarra*, 23–143.

¹⁴⁹Pedro de Valencia, *Discurso acerca de los cuentos de las brujas y cosas tocantes a magia*, in *Proceso a la brujería. En torno al Auto de Fe de los brujos de Zugarramurdi, Logroño, 1610* (ed. Manuel Fernández Nieto; Madrid: Tecnos, 1989) 104: "no se puede negar ser posible, como a los angeles buenos cuando son mandados, a los malos cuando son permitidos, arrebatar a los cuerpos y llevarlos en brevísimo tiempo por el aire."

¹⁵⁰Ibid., 124–25: "Advertase con juicio prudente cuan corta licencia y en que ocasiones y con que fines daba Dios entonces al demonio para hacer muestras de obras maravillosas y que pareciesen mas que naturales: una vez en tan largos siglos permitió que el demonio . . . resistiese a la liberacion del pueblo de Israel . . . obrando con los magos de Faraon en competencia con Moises. . . . Asi tambien, para confirmacion y victoria del Evangelio y de su primer vicario san Pedro, permitio Dios que un mago solo, Simon Samaritano, hiciese tan extraordinarias maravillas."

The difference between the old and the new versions of the Christian Sense-of-the-Impossible can be noted here. The Franciscan Martín de Castañega declared in 1529 that the mere fact that angelic natures had the power to carry men through the air allowed us to declare that the phenomenon really happened: “why are we to doubt it, if the demon has the power and man the obedience, if God allows it and gives license for it.”¹⁵¹ Pedro de Valencia, on the other hand, accepted that pure spiritual natures had great natural powers, but he did not consider it licit to identify possibility with reality, rejecting the reasoning of theologians who “adduce what is possible for the devil” to support the real existence of witches and sabbats. Inquisitor Alonso de Salazar y Frías, whose writings changed once and for all the attitude of the Spanish Inquisition regarding witchhunts, used very similar arguments. In his *Memorial cuarto*, dated 3 October 1613, the skeptical inquisitor declared:

And neither does it improve by finding out that the Demon can do this and that, repeating at every step the theory of his angelic nature, without any profit; it is also useless that theologians consider those things as facts already proved, which only serves as an unprofitable bother, for nobody doubts them; the problem lies in believing that in any individual case the particular acts have taken place as the witches say they have.¹⁵²

Based on these reasons, Pedro de Valencia proposed a very similar rule to that declared by Benito Jerónimo Feijóo a century later:

it is . . . cautious and wise to doubt of things that may happen in many ways, in which of these ways things actually happened. And the presumption is always through the ordinary way, human and natural, if the fact does not fulfill the necessary requirements of miracles or supernatural events.¹⁵³

In the modern Christian Sense-of-the-Impossible, however, the loss of preeminence of the preternatural order could never progress until its complete elimination, at least without severe risks. Feijóo approved these precautions. He even considered that the *Canon Episcopi* was apocryphal, because the much debated fragment denied in a universal way the possibility of the witches’ flights.¹⁵⁴ Even if his new

¹⁵¹Fray Martín de Castañega, *Tratado de las supersticiones y hechicerías*, 69.

¹⁵²Quoted by Gustav Henningsen, *El abogado de las brujas*, 308: “Y tampoco mejora con averiguar que el Demonio puede hacer esto y aquello, repitiendo cada paso sin provecho la teoría de su naturaleza angelica; y que tambien digan los doctores por asentadas estas cosas, que solo sirven ya de fastidio inutil, pues nadie las duda; sino en creer que en el caso individuo hayan pasado como los brujos las dicen de cada acto particular.”

¹⁵³Pedro de Valencia, *Discurso acerca de los cuentos de las brujas*, 104: “en cada caso es . . . prudente y debido, el dudar de las cosas que pueden acontecer de muchas maneras, de cual de ellas acontecio la de que se trata. Y la presuncion esta siempre por la via ordinaria, humana y natural, no averiguandose con los requisitos necesarios milagro o exceso sobre lo natural y comun.”

¹⁵⁴See Campagne, “*Homo Catholicus, Homo Superstitiosus*,” 369–73.

Christian Sense-of-the-Impossible considered that earthly interventions of angels were very rare, the Benedictine understood the perils of denying natural powers to pure spirits. If the impossibility of angelic natures to act in the material world were accepted, their very existence would soon be in doubt.¹⁵⁵ This was just a step away from denying the reality of the other spiritual beings, God among them.¹⁵⁶

Skeptical Spanish humanists and theologians, who dared challenge early modern radical demonology, weakened with their criticism the second order of the possible: in this way, without reaching the extreme position of denying the existence of angelic natures or their ability to produce real effects in the material world, they eased the task of the enlightened Christian polemicists of the eighteenth century.¹⁵⁷ This is why Feijoo was able to concentrate on the redefinition of the first range of the possible, the belief in miracles. Alonso de Salazar and Pedro de Valencia had already shown the way. Thus, Spanish intellectual history acquires a key importance in the understanding of the cultural development of early modern Europe, an importance whose real effects are only beginning to be unveiled.¹⁵⁸

In this modern Christian Sense-of-the-Impossible, the miracle was slowly displaced by a less dramatic conception of divine supernatural intervention. The effusions of grace were limited to the routine acts of the sacramental celebrations, the daily miracle of the Mass and transubstantiation.¹⁵⁹ The interventions of pure

¹⁵⁵An alternative was to argue that, although it was impossible for pure spirits to act in the material world, their intervention could nevertheless take place thanks to the supernatural intervention of the deity. This thesis was held by some Dutch theologians critical of Bekker's angelology (Fix, *Fallen Angels*, 96).

¹⁵⁶English polemists like John Glanvill, who maintained at the end of the seventeenth century that it was possible for pure spirits to intervene in the material world, reasoned similarly (Clark, *Thinking with Demons*, 136).

¹⁵⁷For some new revisionist perspectives on the Spanish Renaissance period as a whole and the interactions between scholasticism and humanism, including a consideration of Pedro Ciruelo, among other theologians, see Lu Ann Homza, *Religious Authority in the Spanish Renaissance* (Baltimore: Johns Hopkins University Press, 2000).

¹⁵⁸It is probable that the *Instructio pro formandis processibus in causis strigum sortilegiorum et maleficiorum*, written in 1623 by the Holy Roman Office, reflects the influence of the 1614 Spanish instructions. These Roman instructions circulated widely in manuscript version until they were published with commentary in 1655. The Italian text seems to have had greater practical influence in putting a halt to European witch hunts than the Spanish instructions did. See Bengt Ankarloo and Stuart Clark, eds., *Witchcraft and Magic in Europe: The Middle Ages* (Philadelphia: University of Pennsylvania Press, 2002) 17; Ruth Martin, *Witchcraft and the Inquisition in Venice, 1550–1650* (Oxford: Basil Blackwell, 1989) 71–72, 201–2; Ginzburg, *I Benandanti*, 193; and John Tedeschi, "Inquisitorial Law and the Witch," in *Early Modern European Witchcraft: Centres and Peripheries* (ed. Bengt Ankarloo and Gustav Henningsen; Oxford: Clarendon Press, 1993) 83–118.

¹⁵⁹According to the Catholic view, the normal way in which God supernaturally related to the world was sacramentally. Miracles were exceptional signs, occasional reminders of the reality of the supernatural. Hence only a few were needed to accomplish this purpose" (Mullin, *Miracles and the Modern Religious Imagination*, 120).

spirits also acquired less spectacular characteristics. It is not coincidental that the domestic cult of the invisible but nonetheless efficient guardian angel began to grow in the mid-seventeenth century.¹⁶⁰

The principles of this modern Christian Sense-of-the-Impossible still hold in twentieth-century Catholic theology. In its 1941 edition, the *Dictionnaire de Théologie Catholique* proposed a double rule to apply in case of doubt about the origin of certain extraordinary effects: “first rule: when there is doubt if a fact was produced by a natural cause or by the devil, we must attribute it to the forces of nature, because many of them are unknown even to the learned.”¹⁶¹ Hence, an effect of doubtful origin should always be presumed to be of natural rather than preternatural origin. But it should still be possible to distinguish between the preternatural and the supernatural orders: “second rule: if the effect is not due to a natural cause, we have the following doubt: does it come from God or from the devil? We must then attribute it to the devil, because we must not presume miracles so easily.”¹⁶² Thus, on the rare occasions in which the natural origin of a phenomenon could be discarded, the intervention of a separate intelligence, rather than a supernatural miracle, should be presumed. If the devil’s interventions are extremely rare, miracles are rarer still. The possibility of supernatural and preternatural effects is essentially retained, but miracles and angelic interventions are deemed to be extraordinarily rare phenomena.

Conclusion

Before speaking a new language, it is necessary to understand it. But first of all, it is necessary to become aware of the obstacles that hinder communication. The dilemma that Lucien Febvre stated in his 1948 article, regarding the belief in witches—“Sottise ou révolution mentale?”—posed a key question for the comprehension of pre-Enlightenment European cultural history. Febvre understood that the proper answer was not *sottise*: he saw that a *révolution mentale* separated us from the philosophers and theologians of early modern Europe.

¹⁶⁰See B. Dompnier, “Des anges et des signes: Littérature de dévotion à l’ange gardien et image des anges au XVIIe siècle,” in *Les signes de Dieu aux XVIe et XVIIe siècles* (ed. G. Demerson et B. Dompnier; Clermont Ferrand: Faculté des Lettres et Sciences humaines de l’Université Blaise-Pascal, 1993) 211–24.

¹⁶¹P. Séjourné, “Superstition,” in *Dictionnaire de Théologie Catholique* (Paris: Librairie Letouzey et Ané, 1941) 2812: “première règle: quand on se demande si tel résultat provient d’une cause naturelle ou du démon, il faut l’attribuer aux forces de la nature, parce que beaucoup d’entre elles sont inconnues, même pour les savants.”

¹⁶²Ibid., 2813: “deuxième règle: si l’effet n’est certainement pas dû à une cause naturelle, le doute est celui-ci: vient-il de Dieu ou du démon? Il faut alors l’attribuer au démon, car les miracles ne doivent pas se présumer facilemen [sic]”

This intellectual revolution, however, did not consist in the rise of a Sense-of-the-Impossible where there had been none before. In the case of the rationalistic Sense-of-the-Impossible, the process consisted in a reduction of the three ranges of the possible into a single order of causalities, supported by the success of the scientific revolution. The true transformation resided in abandoning the triple classification of causal orders derived from traditional Christian cosmology.

In the case of the modern Christian Sense-of-the-Impossible, to whose formation certain representatives of the Spanish theological elite contributed to no small extent, the radical limitation of the field of action of two of the three ranges of the possible, the supernatural and the preternatural orders (extraordinary natural orders), allowed the third order (ordinary natural order) to acquire a degree of autonomy which it had never before held in traditional Christian theology.

From the perspective of the fundamental theoretical standpoints, the Sense-of-the-Impossible of the Jesuit Martín del Río and that of the Benedictine Benito Jerónimo Feijóo were closer to each other than to the radical empirical positions of David Hume. However, from the point of view of practical consequences, the dynamics of European intellectual development brought Feijóo and Hume closer together, closer than we are to either Jean Bodin or Del Río.

Since many of my readers may have chosen by now between the proposals of the Spanish Benedictine or the ideas of the Scottish philosopher, we must then acknowledge that we have lost the spontaneous capacity to speak the language of the humanists and theologians of the sixteenth century. This incommensurability is the reason that witches no longer fly to the sabbat, nor unicorns run on the plains of fabled Asian kingdoms.