

Shadows of the Thrown Spear:

Girolamo Cardano on Anxiety, Dreams, and the Divine in Nature

Jonathan Regier (Ca' Foscari University of Venice)*

Abstract: Girolamo Cardano (1501-1576), a preeminent natural philosopher, physician and astrologer of the sixteenth century, is known for the great diversity of his intellectual pursuits and writings. Across much of his work, we find an overriding concern with the dangers of human life, how those dangers might be foreseen, and how their effects can be mitigated. This essay begins by asking about foreknowledge of and anxiety about the future in his autobiography, the *De propria vita*, written at the end of his dramatic life. In particular, I ask about the characterization of foreknowledge there: when Cardano had devoted so much effort to working out method and sense in medicine and astrology, why do the episodes of foreknowledge in his autobiography seem so haphazard and disorienting? I will use this question to consider how Cardano viewed the limits of human knowledge and the need for divine assistance. I will then focus on his treatise on dreams, the *Somniorum Synesiorum libri quatuor*, to examine his understanding of nature as an instrument of divine warning. Finally, bringing into consideration key moments from his commentary on Ptolemy's *Tetrabiblos*, I will ask what these insights can tell us about Cardano's position on human agency in regard to the revolutions and catastrophes that he believed to be decreed by fate.

Keywords: Girolamo Cardano – prognostication – oneiromancy – astrology – fate – Ptolemy – Synesius – Casper Peucer

Anxiety and Foreknowledge in Cardano's Autobiography

When Girolamo Cardano (1501-1576) was seventy years old, after facing an Inquisition trial in Bologna, he relocated to Rome. There, he served as personal physician in quick succession to two popes, Pius V and Gregory XIII, and was admitted to the Roman College of Physicians. During these final years, he wrote his autobiography, the *De propria vita*, one of the extraordinary literary works of the sixteenth century, although it would only be published in

* Funding acknowledgment. This research has received funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement n. 893982.

1643, long after his death.¹ It is *pura historia*, writes Cardano: it teaches no lessons and is without embellishment.² To read the *De vita* can feel like strolling through a hall of mirrors. Each chapter furnishes a theme by which Cardano reconsiders his character and reorganizes his experiences: “Concerning My Own Existence,” “Guardian Angels,” and “Testimony of Illustrious Men Concerning Me,” are but a few examples. Consequently, the work has a fragmented quality, even as it feels direct and personal to the point of eccentricity. Another striking feature of the *De propria vita* is that the choice of events and details seems like a mix of the essential and the haphazard. In Cardano’s world, the haphazard can be essential. A moment of fortune, a hesitation or a glance, may mean the difference between victory and defeat, humiliation and glory, life and death. This element of his work is not simply a matter of sensibility but is at the core of his philosophy, of his views on fate and human knowledge. The *De vita*, then, does have thematic consistency quite beyond the fact that it relates a single

¹ On the *De propria vita*, see Anthony Grafton, *Cardano’s Cosmos: The Worlds and Works of a Renaissance Astrologer* (Cambridge, Mass., 1999), 178-198, and Germana Ernst, “The Mirror of Narcissus. Cardano Speaks of His Own Life,” *Bruniana & Campanelliana* 16 (2010), 451-461. Also see the introductions and notes to the modern translations: Girolamo Cardano, *The Book of My Life*, trans. Jean Stoner (New York, 1930), along with Anthony Grafton’s introduction to the 2002 reedition (New York, 2002), ix-xviii; Girolamo Cardano, *Della mia vita*, ed. and trans. Alfonso Ingegno (Milan, 1982); Jérôme Cardan, *Le Livre de ma vie / De Vita propria*, ed. and trans. Jean-Yves Boriaud (Paris, 2019).

² Girolamo Cardano, *The Book of My Life*, xviii. Please note that I follow the pagination of the 1930 edition rather than the 2002 reedition, as the former is in the public domain and freely available. Girolamo Cardano, *De propria vita*, in Cardano, *Opera omnia*, ed. Charles Spon, 10 vols. (Lyon, 1663), vol. 1, 1.

life: it is the tale of fears, worries, tragedies averted and suffered. Nearly every page is shot through by a sense that human existence means dangers and uncertainties, blind spots and quick changes of fortune. At one point, Cardano admits to seeking out physical pain, to biting his lip or pinching himself until his eyes begin to tear. Without these little torments, he explains, he is soon overcome by “a certain mental anguish, so grievous that nothing could be more distressing.”³ We might say, then, that Cardano gives us in the *De propria vita* a very comprehensive account of early modern anxiety.

There is an extensive, if mostly indirect, literature on the nature of anxiety in the Renaissance and early modernity. Ever since the Renaissance became a historical category, historians have pointed to the formative influence played by fear and uncertainty on its intellectual achievements; these forces, the argument goes, pushed historical actors into learning to change their outward appearances as conditions required, to self-fashion and self-improve, to take their destinies into their own hands.⁴ Steven Greenblatt has argued that

³ Cardano, *The Book of My Life*, 25; *De propria vita*, 6a.

⁴ Jacob Burckhardt emphasized Renaissance despotism and political instability, suggesting that these forces led to a fostering of individuality and self-improvement. Jacob Burckhardt, *The Civilisation of the Renaissance in Italy*, trans. S. G. C. Middlemore (London and New York, 1890 [1860]), esp. 130-133. It is common to link the intellectual achievements of the period to dangers posed by religious and political fracturing, war, urbanization, among other factors. See William J. Bouwsma, “Anxiety and the Formation of Early Modern Culture,” in Barbara C. Malament, ed., *After the Reformation: Essays in Honor of J. H. Hexter*, (Philadelphia, 1980), 215-246. For a recent study that seconds Bouwsma’s vision of widescale anxiety as a product of cultural instability, see Edward Muir, *The Culture Wars of the Late Renaissance: Skeptics, Libertines, and Opera* (Cambridge, Mass., 2007). Even in

“[Renaissance] self-fashioning always involves some experience of threat, some effacement or undermining, some loss of self.”⁵ For the moment, I would only highlight the importance of anxiety in the historiography and clarify that by “anxiety” I am not referring to what Cardano would consider an illness or overwhelming humoral imbalance; I am simply talking about a prolonged state of worry or dread about the future.⁶ The closest early modern cousin to anything like twentieth or twenty-first century views on anxiety as a psychological disturbance is *melancholia*, a term that in Galenic medical literature referred to a preponderance of black bile in the body. Among the common symptoms of melancholy was an overwhelming fear of death. Galen described the melancholic fear quite literally as a sort of corrosive anti-rationality. When the dark bile rises into the brain, he says, it occupies “the fortress of the rational soul;” just as nothing terrifies humans like darkness in the world around them, he goes on, the inner darkness produced by the smoky bile in the mind induces fear.⁷ Yet Cardano believed that the world

studies that question or qualify the concept of an autonomous, self-fashioning Renaissance individual, anxiety is given an important social and intellectual role, e.g., John Jeffries Martin, *Myths of Renaissance Individualism* (Hampshire, U.K., and New York, 2004), esp. 39.

⁵ Stephen Greenblatt, *Renaissance Self-Fashioning: From More to Shakespeare* (Chicago, 1980), 9.

⁶ While “*anxietas*” is commonly found, the lexical framework by which to describe a state of anxiety did not rest on a single word. “*Anxietas*”, “*cura*”, “*sollicitudo*”, and even “*metus*” could carry the sense that we ascribe to general anxiety, just as they could apply to a particular object of worry, as can our “anxiety.”

⁷ Galen, *De symptomatum causis* II.7, in Galenus, *Opera omnia*, ed. Karl Gottlob Kühn, vol. 7 (Leipzig, 1824), 203: “Caeterum quod ab atra bile rationalis animae arcem occupante timor

offered to a person of relatively sound mind (or *especially* of sound mind) a wealth of compelling reasons to fear the future. Death, he writes in his autobiography, is rightly to be feared; so are many other elements of life.⁸ If we survey the autobiography, we find that the individual, as Cardano understands him (and presumably her), lives in a network of danger and uncertainty: natural illnesses and accidents, chance events, vagaries of ambition and passion, myriad social threats, whether professional, political or familial. Here, the problem is not, as with melancholy, an interior fog within the rational faculty but instead a reasonable knowledge of possible dangers and a temporal myopia, that is, an inability to view them precisely as they approach us from the future. Hence, for Cardano, it is eminently reasonable to fear *and* to attempt foresight. His own life began, he writes in the autobiography, thanks to the failure of not one but several abortive medicines. With that danger overcome, another presented itself from the heavens. Based on his horoscope, he could have and perhaps should have been born a monster but was spared by the thinnest of astrological margins. After three days of labour, he was “torn” (*discerptus*) from his mother’s womb and promptly “revived in a bath of warm wine which might have been fatal to any other child.”⁹ The arrangement of the planets did cause

moerorque ac mortis expectatio accidant, nihil mirum: videmus enim etiam eorum, quae extra corpus sunt, nihil nos peraeque terrere ac tenebras.” See Gerrit Glas, “A Conceptual History of Anxiety and Depression,” in Siegfried Kasper et al., eds., *Handbook of Depression and Anxiety*, 2nd edition (New York and Basel, 2003), 1-47, 3-7. There is a wide secondary literature on melancholy in early modernity. For a comprehensive approach to the theme, see Angus Gowland, *The Worlds of Renaissance Melancholy: Robert Burton in Context* (Cambridge, 2006).

⁸ Cardano, *The Book of My Life*, 284; *De propria vita*, 52b.

⁹ Cardano, *The Book of My Life*, 4-5; *De propria vita*, 2a.

some lingering physical hardship. From the ages of twenty-one to thirty-one, he suffered impotence due to an unspecified problem of the genitals.¹⁰ But his horoscope was not totally bereft of advantage. He describes himself as gifted with a “harpocratic” talent, “a kind of intense and instinctive desire to prophecy.”¹¹ Fittingly, the *De propria vita* is not only the account of a life, it is also the account of the signs that present themselves along the way, usually hinting at future dangers and threats. For Cardano, “admonition is the ultimate topic of reality’s speech,” as Armando Maggi has observed.¹² The most overwhelming loss of his life, the execution of his eldest son, Giovanni Battista, was preceded (in some cases by decades) by cryptic dreams, strange marks on the body, phantom sounds and whispers, even earthquakes. As *pure history*, the *De vita* speaks to the troubling and intrusive nature of portents, and to the difficulty of interpreting them in the midst of apprehension and pressure.

Anthony Grafton has written that astrology “did more than any other single discipline to fix the shape and style” of Cardano’s autobiography.¹³ In other words, the division of the work into brief, topical chapters resembles the structure of the genitures that Cardano worked up for himself to examine how the stars influenced fundamental areas of his life: his body and

¹⁰ He was cured, he writes, “under a vow to the Blessed Virgin.” Cardano, *The Book of My Life*, 14; *De propria vita*, 4a.

¹¹ Cardano, *The Book of My Life*, 5; *De propria vita*, 2a-b.

¹² Armando Maggi, *Satan's Rhetoric: A Study of Renaissance Demonology* (Chicago, 2001), 198.

¹³ Grafton, *Cardano's Cosmos*, 184. Guido Giglioni cites the influence of Horace; see Giglioni, “Man’s mortality, conjectural knowledge, and the redefinition of divinatory practice,” in Marialuisa Baldi and Guido Canziani, eds., *Cardano e la tradizione dei saperi* (Milan, 2003), 43-65, 63-65.

temperament, the qualities of his mind, his riches, his honors and standing among elites, his children, his works. But while the autobiography shares a topical structure with the geniture, it does *not* explicitly engage with astrology. Cardano presents his nativity in the second chapter, and then we never hear of it again, nor does he pursue further astrological analysis, either of himself or anybody else.¹⁴ If there is an astrologically salient characteristic of the book, it is the *absence* of astrology. To take one example, Cardano nowhere evokes the planets in connection with Giovanni Battista's death. Yet in a treatise of twelve genitures that predates the autobiography by nearly two decades, he had traced in great detail the celestial conditions leading his son from professional success to execution as a convicted murderer.¹⁵ Why is there not even a stray mention of those very astrological conditions in the autobiography? Perhaps

¹⁴ He does note that, as a younger man, his astrological knowledge at the time had led him to conclude that he would not live past forty years-old and would certainly never reach forty-five. Cardano, *The Book of My Life*, 36; *De propria vita*, 8a.

¹⁵ Cardano's most extensive personal geniture is found in the *Liber duodecim geniturarum*. Here, he describes how the events of his son's final months, from imprisonment to execution, were "declared" in the astrological conditions. Not only was the certain death of Giovanni Battista foretold in the heavens, but also the day of execution (his fifty-third day of imprisonment) and the means. Girolamo Cardano, *Liber duodecim geniturarum*, in *Opera omnia*, vol. 5, esp. 528b-530b. For more on this work and on Cardano's astrology, see Grafton, *Cardano's Cosmos*, and Germana Ernst, "'Veritatis amor dulcissimus': Aspects of Cardano's Astrology," in William Newman and Anthony Grafton, eds., *Secrets of Nature: Astrology and Alchemy in Early Modern Europe* (Cambridge, Mass. and London, 2001), 39-68.

he wished to avoid attracting suspicion so soon after his Inquisition trial.¹⁶ But if he was sensitive about defenders of the faith, why did he speak fulsomely about all the good that his familiar spirit had done him?¹⁷ Hence, the answer to “why not more astrology?” is perhaps a matter of style and content. The *De propria vita* narrates Cardano’s life as he perceived it unfolding before him. It is very much a work devoted to the semiotic texture of experience, particularly one spent in perpetual anxiety; astrological signs simply do not crash into a person’s field of experience like dreams, marks on the body, hallucinations.

Given that the *De propria vita* is the history of dangers, worries, fears, we might ask how Cardano faced down the dark side of life. By the time he set pen to paper for his autobiography, he was renowned throughout Europe as a physician, astrologer, philosopher. He was, in other words, an expert in reading the present to predict the future and prepare oneself accordingly. We might expect that he would use the autobiography to champion his methods and his intellect, but what we actually find is something different entirely. While he never misses an opportunity to celebrate his triumphs as a physician and seeker of truth in all matters,

¹⁶ As mentioned, he had recently endured an Inquisition trial, the main accusation of which was that he embraced a kind of astrological determinism, denying free will and advocating for a view of history where the stars rule over individual and collective destinies. See Jonathan Regier, “Reading Cardano with the Roman Inquisition: Astrology, Celestial Physics, and the Force of Heresy,” *Isis*, 110 (2019), 661-679.

¹⁷ Although in the *De propria vita*, he refers to this being as a *spiritus* rather than *daemon*, the implication is clear. Elsewhere he refers to it explicitly as a demon. For Cardano on demons, the most comprehensive treatment is in Maggi, *Satan's Rhetoric*, 180-223; also see Guido Giglioni, “Fazio and His Demons: Girolamo Cardano on the Art of Storytelling and the Science of Witnessing,” in *Bruniana & Campanelliana*, 16 (2010): 463-472, esp. 469-472.

he hardly ever attributes his success to intellectual prowess. Instead, the autobiography functions as a sustained argument demonstrating his extra-rational capacities.¹⁸ What are those capacities? They come down largely to three: dreams, direct insight (*splendor*) and his guardian demon. We can consider, for example, what he has to say of the latter two, both of which he characterizes as “supra naturam” and both of which entail a sudden understanding that manifests with clarity, structure and eloquence:

And so the whole art of writing, and of extemporaneous lecturing has been the result of my demon and *splendor* (*a spiritu et splendore*). Knowledge of this sort has, nevertheless, brought me more unpopularity than reputation among men, and more glory than profit. It has contributed rather to a pleasure by no means slight or commonplace and toward lengthening my active life; it has served me well as a source of solace in so many misfortunes, as a help in adversity and as an advantage in the midst of difficulties and labors, to such an extent that it has embraced the best part of other greater branches of knowledge, and is necessary above all others for perfection and elegance.¹⁹

¹⁸ For an examination of the link between reason, prudence and divination in Cardano, see Giglioni, “Man’s mortality.”

¹⁹ Cardano, *The Book of My Life*, 247; *De propria vita*, 45b. I have lightly modified the translation.

Again and again, Cardano prizes such epistemic avenues over method and typical scholarly exertion.²⁰ Not only, then, does the autobiography emphasize the omnipresence of danger, anxiety, fear; in order to confront the risks and uncertainties of life, Cardano privileges epistemic modes that escape and surpass typical human reasoning. In other words, the limits of human reasoning are nowhere more evident for him than in our inability to glimpse oncoming dangers over the horizon. The early modern preoccupation with self-preservation, whether of the individual or the community, serves in his work to characterize the gulf between human and divine: humans are distinguished from the divine precisely in their incapacity to secure themselves from future risks. Our arts and sciences can help us to make up some of the distance, but they are not enough; we require guides that transcend reason alone.

Dreams punctuate the narrative of Cardano's life, usually announcing future threats. Sometimes, they reveal their sense only long after the fact. One, for instance, came when

²⁰ For example, see Cardano's discussion on the three forms of knowledge and the role played by *splendor* and his demon, Cardano, *The Book of My Life*, 245-246; *De propria vita*, 45a. *Splendor*, he says, constitutes "the most elemental quality of my nature, for it exhibits at one and the same time the essence of all the qualities which compose my nature" (*The Book of My Life*, 165; *De propria vita*, 30b). He claims that in mathematics, as in most intellectual pursuits, he has learned little from other men (almost nothing from Niccolò Tartaglia) and much from "that hidden force of *splendor*" (*The Book of My Life*, 267-287; *De propria vita*, 53b). In many cases, he seems to consider *splendor* and demonic intervention to be of a similar kind, perhaps with the difference that *splendor* is a special internal capacity and can be cultivated. In other cases, though, demonic messages can be accompanied by ambiguity and a disconcerting strangeness—indeed, in many cases, their messages can only be cryptic (*The Book of My Life*, 242-243; *De propria vita*, 44b).

Cardano was about thirty-three and, he says, still undecided about his direction. In this dream, he ran at the base of a mountain with a crowd of people, men and women of every age and station. “I asked, thereupon, whither we were all running, and one of the throng replied: ‘To Death.’” Cardano left the crowd and climbed the mountain, at first with difficulty and then with ease, until he reached the summit. There, he glimpsed vast expanses of sheer rock and felt the terrible fear of tumbling into the vast abyss. Forty years after, he writes, the memory of that abyss still filled him with terror. In the dream, he fled the precipice, arriving at a lonely plain where he reached the edge of a country estate and saw a rustic cottage with thatched roof. He realized that he was holding the hand of a boy, about twelve years old, who was dressed in an ash coloured suit. He then awoke. “From this vision,” he continues: “I read a manifest prophecy, pointing to the immortality of my name, to my arduous and never-ending labours, to my imprisonment, to the overwhelming fear and sadness of my life.”²¹ This dream is a good example of the ambient anxiety and pessimism that saturate his autobiography. It also evokes leitmotifs of the book: the constant shadow of death and danger, the hardships of ambition, the precarity of success.

Fear of the future or fear of death is at some level an anthropological constant. Greek philosophy had by and large sought to reduce its effects through various techniques for self-mastery. The philosopher was expected to control the passions—indeed, philosophy would teach *how* such control might be achieved through self-discipline and a correct view of reality. The great example is Socrates, in the hours before his execution by suicide, discoursing on the immortality of the soul while his followers pleaded with him to make an easy escape from

²¹ Cardano, *The Book of My Life*, 156-157; *De propria vita*, 29a.

Athens.²² We can draw from the studies of Pierre Hadot and, generalizing a bit, suggest that these philosophies of antiquity all promised something more than liberation from an overbearing, specific fear of death: as “therapeutics of passion,” they offered some means of coping with a generalized fear—that is, anxiety—about an uncertain future.²³ Christian philosophers and theologians offered their own remedies. There was, of course, the promise of resurrection and eternal life. But Christian self-management also extolled a reordering of worries. From Augustine to Karl Barth, fear of God functions as an injunction against worldly fears, albeit in a variety of ways. It is more reasonable, the Augustinian argument goes, to fear

²² Just as infamously, the Epicureans taught that death should not be feared; there was no afterlife and no divine punishment. The Stoics taught that the eventuality of death was of no concern; death was simply a feature of that natural web of cause and effect beyond our control. Aristotle’s views on the fear of death are less explicit. Moderate fear has its use, so long as it is directed toward the right things. The courageous person will rightly fear shamefulness and ignobility. But will they fear their own death? They will not, says Aristotle, if their oncoming death is a noble one. This particular absence of fear functions for Aristotle almost as the key definition of courage: “In the authoritative sense, then, a courageous man could be said to be someone who is fearless when it comes to a noble death and to any situation that brings death suddenly to hand.” Aristotle, *Nicomachean Ethics*, 3.6, 1115a-b, trans. Robert C. Bartlett and Susan D. Collins (Chicago, 2011), 55.

²³ Pierre Hadot, *Exercices spirituel et philosophie antique*, 2 edition (Paris, 1987), esp. 16-17. On Hellenistic philosophy as a therapy for the passions, including fear and anxiety, see Martha C. Nussbaum, *The Therapy of Desire: Theory and Practice in Hellenistic Ethics* (Princeton, 1994).

God and damnation than anything our world could muster against us.²⁴ Jean Delumeau has argued that ecclesiastical discourse in the early-modern period, regardless of confession, could be reduced to the relativization of bodily shock: “wolves, the sea, the stars, plagues, dearth, and wars are to be feared less than Satan and sin, and the death of the body less than that of the soul.”²⁵ In Cardano’s autobiography, strangely, we have little, say, of the Stoic use of reason to distinguish between what can and cannot be controlled, nor outside of a few exceptions does he reach for the consolations of faith. Rather, we have an appeal to the divine or supernatural as forces that can be channeled in order to shore up our safety in this world—channeled but by no means mastered or made available on demand. These forces bear surprisingly little relation to Christian prayer or rite, except on very few occasions. Instead, Cardano presents himself as a person who, to some extent through virtue and study, and to some extent for reasons unknown, has been able to draw on super-human capacities and guides. The general framework might be described as Neoplatonic, insofar as prescient dreams, the flash of unmediated knowledge, and demonic inspiration can all be found in Neoplatonic literature.

On this note, a literary inspiration for his autobiography may well be the *De somniis* (as it was known in Marsilio Ficino’s translation) of Synesius, a fourth-century Christian Neoplatonist. In a moment, we will discuss the treatise in more detail, since it serves Cardano as a precedent to his *Somniorum Synesiorum libri quatuor* [*Four Books on Synesian Dreams*]. It suffices to say that, at the outset of his own treatise on dreams and dreaming, Synesius makes

²⁴ See Augustine, *De civitate dei* XIII.2. The Marcus Dods translation (Edinburgh, 1871) can be freely accessed via Project Gutenberg. The relevant section can be found in vol. 1, <https://www.gutenberg.org/ebooks/45304>.

²⁵ Jean Delumeau, *La peur en Occident : XIV-XVIIIe siècles, une cité assiégée* (Paris, 1983), 22-23.

an important distinction between the divine, the human and the bestial. Prophecy (*vaticinium*), he says, is the greatest good, and God differs most from humans in His knowledge of the future; humans differ from the beasts in the same way.²⁶ The knowledge communicated by prophetic dreams, continues Synesius, comes from God. Hence, Synesius extols both the virtues of the imagination and of knowing God through the imagination (only a lucky few people, usually elderly, can bypass imagination and achieve a kind of direct knowledge—this capacity seems rather close to Cardano’s *splendor*, which Cardano also claimed as a fruit of his old age).²⁷ The most remarkable feature of the treatise, or at least the most pertinent here, is that Synesius does not advocate any single method or rule for interpreting dreams, but instead exhorts his readers to understand their own dreams by means of writing them down daily and thereby composing a *historia*. In other words, Synesius recommends a method of careful autobiographical narration. It is possible to see the *De propria vita* as precisely such a *historia*, an exercise for taking stock of the dreams (and other signs) that come and the many ways they foreshadow what is to unfold in waking life: “Let us employ our leisure,” writes Synesius, “in telling the

²⁶ Synesius, *On Dreams*, trans. Isaac Myer (Philadelphia, 1888), 2. In addition to the English translation, I will refer to Ficino’s Latin translation, the major sixteenth-century source. The translation was first published in Venice, in 1497 and 1516. Synesius, *De somniis [liber] translatus a Marsilio Ficino*, trans. Marsilio Ficino, in Marsilio Ficino, *Opera*, 2 vols. (Basil, 1576), vol. 2, 1968-1978, 1968.

²⁷ Synesius, *On Dreams*, 7-9; Synesius, *De somniis*, 1970. Synesius holds an Aristotelian conception of the imagination as the synthesizer of the senses. On the possibility of bypassing the imagination, see Synesius, *On Dreams*, 11; Synesius, *De somniis*, 1971. Cardano claims to have dedicated forty years to developing *splendor* before reaching mastery. Cardano, *The Book of My Life*, 246-247; *Opera omnia*, 45a-b.

events which happen to us whilst awake or during sleep; consecrate to this work a portion of your time and from it you will derive, as I have shown, inestimable advantages.”²⁸

A Cosmos Made for Dreaming

Cardano’s understanding of nature is such that he can ground and justify foreknowledge via a number of avenues. In order to trace out its general features—and particularly to appreciate its relationship with the divine—I would suggest a comparison with the view of nature that we find in another of the sixteenth century’s most impressive monuments to anxiety, an encyclopedic work on divination by Casper Peucer (1525-1602), a major early Lutheran astronomer-astrologer, physician, and historian. Peucer was Philipp Melanchthon’s son-in-law, rector of the University of Wittenberg after the latter’s death, and, to be brief, lived a life of civic activity and intrigue. Like Cardano, he spent time in prison due to religious allegations, although his incarceration was much, much longer and nakedly political. Peucer’s *Commentarius de praecipuis generibus divinationum* [Commentary on the Chief Types of Divination], is a near-endless defense of natural divination, of reading natural signs and understanding their causes in order to foretell the appearance of certain effects. The *Commentarius* can be read as an application of Melanchthon’s program to foster natural philosophy, medicine, and astrology in the Reformation university environment; after all, in Peucer’s framework, the only permissible forms of Christian divination are through the university arts and sciences that rest on the standard texts of antiquity, those of Aristotle, Galen, and Ptolemy. Peucer also follows Melanchthon in ascribing to the arts and sciences a capacity to restore in us some semblance of the intellectual and sensorial powers that we should have possessed effortlessly, had it not been for the Fall. Peucer explains how prelapsarian Adam and

²⁸ Synesius, *On Dreams*, 35; Synesius, *De somniis*, 1978.

Eve had been able to see the future with stunning accuracy thanks to the penetration of their minds and senses, and thanks to the pristine order of nature, in which all was linked as by the Homeric golden cord.²⁹ But with the Fall, humans became intellectually and physically faulty; sublunar nature, although it retained a general orderliness, became less reliable and prone to causal slippage. The result, says Peucer, is that the future turned into a dark, vague place. Humanity was invaded by “a perpetual dread of evils announced by the divine voice, and by the vast Chaos of horrible doubts and prevarications,”³⁰ and the reader might note how the effects of the Fall mirror the Galenic effects of melancholy in the brain. This is where demons stepped in. All illegitimate forms of divination, writes Peucer, are demonic tricks designed to snare men into idolatry: demons instrumentalize the fear and gullibility of humanity, convincing their victims to subvert the natural and spiritual order of things, to engage in superstition for some glimpse of the future, some semblance of better security. Peucer’s solution is, essentially, to extol the benefits of natural inquiry properly delimited—where ‘properly delimited’ means that nature and Gospel must be separated.³¹ Peucer’s God, when He speaks, does not need to rely on natural causes: He manifests himself through the Bible, its prophets and revelations; and in the rare instances when He speaks through natural prodigies,

²⁹ The “χρυσείη σειρά”; see Peucer, *Commentarius de praecipuis generibus divinationum* (Wittenberg, 1560 [1553]), 445r.

³⁰ Peucer, *Commentarius*, 9v: “Praeter haec & alia ingentia mala, simul peruasit in miseram atque irae Dei & tristissimis poenis subiectam naturam hominum, ut metus perpetuus malorum uoce diuina denunciatorum, atque ingens horribilium dubitationum & fluctuationum Chaos [...]”

³¹ This delimitation is nothing other than the Law-Gospel distinction associated with Melanchthon and others.

those signs arrive with such clarity, such a fracturing of the normal, that there can be little dispute among “learned men” about their provenance.³² Given that the only valid, reliable forms of divination available to humanity deal with physical causes, Peucer removes the possibility of predicting *in detail* the fates of individuals or kingdoms. He severs, or at least attenuates to a maximum, the link between divine understanding and human understanding of the future. Perhaps the clearest statement in the whole of the *Commentarius* on this distinction is found in the book on astrology:

Although the fate of individual people is weighed, decided and determined by God alone, and is not engraved in the stars nor communicated to any human, nor can it be examined by any of them, nevertheless, since God does use secondary and ordinary causes, nor does he always impede their actions or prohibit their effects, and although he performs many things without using them, indeed excluding them, it is not impious to consider what role physical causes play, albeit in accordance with the order imparted and established by God’s heavenly word.³³

³² Peucer, *Commentarius*, 455r-456r.

³³ Ibid., 433r: “Quanquam autem Deo soli fata singulorum deliberata, decreta, & definita, non astris insculpta, neque cuiquam communicata sunt hominum, nec a quoquam peruestigari queunt: tamen cum secundarum & ordinariarum causa[rum] ministerio utatur Deus, nec semper aut actiones earundem impediat, aut prohibeat effectiones, etsi multa peragit non adhibitis illis, imo exclusis: impium non est considerare, quid Physicae causae apponent et conferant, sed eo servato ordine, quem vox coelestis praecipit & constituit.”

Clearly, there exists a wide field of history, as it were, remaining outside the capacity of astrology—or, for that matter, any field of divination. Peucer, it should now be said, regards Cardano as a great astrological authority, including him in a list alongside Ptolemy, Julius Firmicus, and Giovanni Pontano.³⁴ Peucer would have read in Cardano a defender of Ptolemy who also advocated for astrology as natural philosophy. We even find in Cardano similar warnings about the limits of astrology. Cardano, in his commentary to the *Tetrabiblos*, writes that astrology “is far inferior to a knowledge of Fate,” meaning that astrology has trouble accounting for social and individual factors, just as it cannot account for the ways that free will alters a life, and just as it cannot reveal all of the divine plan. But when we look at the quote in context, we see a marked difference with regard to Peucer:

Hence, this knowledge [of astrology] is far inferior to a knowledge of Fate, as we have written in our book on fate.³⁵ And for this reason, it happens that many animals can better predict the future than an astrologer, as can people in a state of ecstasy and dreaming, and, even more so, oracles and casting of lots. These can know more accurately than the astrologer, since they have an image of the whole of the matter that even the wisest and most careful astrologer cannot grasp. However, their knowledge [that of animals, prophets, and oracular interpreters] is fortuitous, nor should it be compared to the knowledge of astrology, of which the art and precepts are firm.³⁶

³⁴ Ibid., 442r.

³⁵ On Cardano’s *De fato*, see the below section of this essay, “Cardano on Fate and Free Will.”

³⁶ Cardano, Commentary on Ptolemy, *Libri quatuor de astrorum iudiciis*, in *Cardano Opera omnia*, vol. 5, 105b: “Atque in hac scientia haec est longe inferior scientia Fati, ut in libro de

Predictably, oracles and dreams count as illegitimate forms of divination for Peucer: oracles are quite simply demonic; dreams are nothing more than the mind mulling over problems and possible outcomes, conjecturing via imagination.³⁷ His treatise is an attempt to purify the cosmos of precisely those ambiguous forces (with their ambiguous messages) that operate between God and humanity. It might be said that he nullifies any Neoplatonic potential in nature, whether theurgical or astrological-magical such as we find in, say, Ficino and his sources. All this is easy enough to see in how Peucer and Cardano differ on demons. The case of dreams, on the other hand, is richer and more complex, for here Cardano mixes divine messages about the future into the flow of natural forces.

If there is a crucial dream in Cardano's life, it is one that he describes in detail both in his *Somniorum Synesiorum libri* and *De propria vita*.³⁸ Cardano reports that in 1536, while he

Fato scripsimus. Et ob id contingit multa animalia magis praescribere futura, & ecstasim patientes & per somnum, & longe magis oracula, itemque sortes quam Astrologum. Exquisitius enim ista scire possunt, quam Astrologus, quoniam totius materiae imaginem habent, quam Astrologus comprehendere aliquando non potest, quamvis sagicissimus & diligentissimus. Sed tamen illorum scientia fortuita est, nec Astrologi scientiae comparanda, cuius est certa ars atque praecepta.”

³⁷ For oracles, see Book III of Peucer's *Commentarium*. For prescient dreams, see *Ibid.*, 268v-269r. The exception for Peucer are the divine dreams recounted in the Bible.

³⁸ Cardano, *The Book of My Life*, 135-137; *De propria vita*, 25a-b. Girolamo Cardano, *Les quatre livres des songes de Synesios [Somnium Synesiorum libri quatuor]*, ed. and trans. Jean-Yves Boriaud (Florence, 2008), 642-647. On Cardano and dreams, besides Boriaud's edition, also see Jacques Le Brun, "Jérôme Cardan et l'interprétation des songes," in Eckhard

was still struggling to establish a career, he had fallen into disrepute with the College of Physicians in Milan. In the summer of that year, he served as an attendant physician in the house of the powerful Count Camillo Borromeo. Despite his successes with the family, they were not paying. Given his professional troubles and lack of money, he decided to quit the appointment. A few days later, as he was riding in front of the house, he saw the Countess standing at the door. She called him in to treat a servant who then recovered promptly. Cardano swore to himself that this would be the last treatment he ever performed there. Not long after, he dreamt of an immense serpent laying on the ground and was awakened by the sheer terror that it would devour him. As it turns out, the serpent was the Borromeo family's emblem, visible as a motif in decorations outside and inside their house. Strangely, he did not make the connection upon waking. Had he done so, he says, he would have avoided the danger. Events to come, he adds, frequently appear to the dreamer in such a way that not too much is revealed, just enough that we cannot contravene Fate.³⁹ In any case, so palpable was the dream that Cardano waited anxiously all morning, unsure of where the danger would arise. After lunch, he was called again to the Borromeo house, this time to treat the Count's only son, a boy of

Kessler, ed., *Girolamo Cardano: Philosoph, Naturforscher, Artz* (Wiesbaden, 1994), 185-205; Jean-Yves Boriaud, "La place du *Traité des songes* dans la tradition onirocritique. Le problème de l'image onirique : l'*idolum* et la *uisio*" in Marialuisa Baldi and Guido Canziani, eds., *Girolamo Cardano. Le opere, le fonti, la vita* (Milan, 1999), 215-225; and Anna Corrias, "When the Eyes Are Shut: The Strange Case of Girolamo Cardano's *Idolum* in *Somniorum Synesiorum Libri IIII* (1562)," *Journal of the History of Ideas*, 79 (2018), 179-197.

³⁹ Cardano, *Les quatre livres des songes de Synesios*, 642-643: "Sed, ut dixi, saepius ea eo ordine constant, quae ventura sunt, ut tantum detegatur, quantum, ne obviam iri possit solum fati, sufficiat."

seven years old. Cardano agreed, still without realizing the connection between serpent and family. The boy seemed fine except for a light fever. However, his pulse consistently missed every fourth beat. “I did not understand,” Cardano writes, “that this announced a certain death: Galen’s work *De praesagitione ex pulsibus*, which explains the condition, had not been published, and I was not advanced enough to understand.”⁴⁰ The third day, Cardano was alerted by the Countess that the boy might be suffering from intestinal worms. He noticed clear signs of this in the respiration and decided to prescribe a medication that, he claims, had long served him well and cured many children. Yet because it contained scammony, a strong purgative, “jealous colleagues and competitors” might criticize him for administering it, especially if something went wrong outside of his control. The servant had the prescription in his hand when Cardano began to feel doubts, and he records his inner monologue:

And I said to myself, “What if the sign in the pulse signified death and my rivals said that the death was caused by drinking the medication? And what if this happened suddenly, not to speak of if he died vomiting the medicine? These people would show me little love: I am poor, hated by the college of physicians, I suffer from great jealousy, and I am without the support of allies [...]”⁴¹

⁴⁰Ibid., 644-645: “[...] quod tamen mortem certam portenderet non intellegebam; neque enim iam libri *de Pulsuum praesagiis*, qui id docent, Galeni in Latinum sermonem conversi erant, nec ego tantum profeceram tunc ut hoc possem ex illis intelligere.” In the *De vita*, he admits to lacking Galen’s books on the pulse. In the *Somnium Synesiorum*, he claims they had not yet been translated into Latin, which is incorrect (see below).

⁴¹ Ibid., 644-645: “[...] dicebamque mecum: Quid si signum hoc pulsus mortem significaret, et mortuum aemuli dicant medicamenti potione? Quid si hoc repente contingeret, et nedum

But Cardano wanted to persevere, given how the medicine had proved so effective in many other cases. By a certain measure, Cardano incarnated the prudence he describes elsewhere in the *De vita* as a steadiness of will once a choice has been made, even in the face of wavering fortune.⁴² Yet, as the servant was rushing away to fetch the medicine, Cardano's dream suddenly returned to him with the force of a lightning strike; he was in great danger of death. He called the servant back, saying that something was missing from the medicine. He hid the original prescription and wrote a new one, a mixture of emeralds, hyacinth and pearls, a medicine that would have seemed fitting for an aristocratic child.

Cornelius Agrippa (1486-1535) in his *De incertitudine et vanitate scientiarum et artium* (1530) wrote a blistering critique of physicians. They were more dangerous than the illness itself, enmeshed in perpetual rivalries with their colleagues and ready to adjust their fees and treatments according to the status of their patients.⁴³ It would be easy to make these accusations against Cardano, although not exactly as Agrippa meant them. Cardano was not really playing the opportunist. He felt himself to be in a position of social weakness, faced with some

medicamento eiecto pereat? Parum hi se me amare ostendunt, pauper sum, collegio medicorum invisus, magna laboro invidia, nullis sum affinitatibus fultus [...]"

⁴² Cardano, *The Book of My Life*, 42; *De propria vita*, 9a: "It is sometimes better to persist in a course elected, even when the course has not been too well considered, than to shift, in an effort to make a perfect choice, from course to course, albeit an intensity of zeal may importune, or the usual inconstant ebb and flow of mundane affairs may urge the change."

⁴³ For a discussion of early modern views against physicians, including those of Agrippa, see Stephen Pender, "Examples and experience: the uncertainty of medicine," *The British Journal for the History of Science*, 39 (2006), 1-28.

imminent, unseen threat; his entire approach to treating the child became an exercise in suspicion. When the boy ingested the mixture and threw up—an ominous sign—the father called the three most celebrated physicians in the city and then dressed down Cardano in front of them. But when these senior physicians checked the prescription that Cardano had drawn up, they declared it fitting and ordered the boy to continue taking it. The following morning, the boy was seized by convulsions. The father forced Cardano to remain by the boy's bedside until, after seven hours, the boy died. The father had to be restrained, crying out and blaming Cardano. Thanks to the dream, Cardano observes, he could not be held accountable on medical grounds, and so he managed to escape the house with his life.

At a basic level, the serpent story is a story of two converging signs, both of them anxiety-ridden, troubling and ambiguous: the dream and the pulse. We could say that both were signs in search of a book. The pulse could only be explained by a book that, Cardano says, had not been translated yet into Latin. This book, Galen's *De praesagitione ex pulsibus*, does warn that the boy's symptom spelled almost certain death, although Cardano was wrong about the absence of a Latin translation; the standard Renaissance translation had already been published by Simon de Colines in 1532.⁴⁴ The dream was also a sign in search of a book, but, in this case, the book did not exist; Cardano set himself to write it. The misfortune, concludes Cardano, could not have been avoided by the dream, but his death was. "[T]he children that I sired, all

⁴⁴ Hermanius Cruserius's translation of the *De praesagitione ex pulsibus* appeared in a collection dedicated to Galen's works on the pulse: Galen, *Opera de pulsibus* (Paris, 1532). For this work, see Richard J. Durling, "A Chronological Census of Renaissance Editions and Translations of Galen," *Journal of the Warburg and Courtauld Institutes*, 24 (1961), 230-305, 257.

the books that I have written, my immortal fame, all of which is thanks to this dream,” he says, noting that this dream also singularly inspired him to write the *Somniorum libri*.⁴⁵

The full title of the book is *Somniorum Synesiorum libri quatuor* or *Four Books on Synesian Dreams*. The title is of course a reference to the *De insomniis* of Synesius, the reference being both less and more than it seems. Synesius and his treatise figure infrequently in the *Somniorum libri*; yet they are at the core of the work. For Synesius, as for Cardano, prophetic dreams have a divine aspect; the knowledge that they impart draws from God. They can also be obscure, simply because to understand the divine always requires some sort of initiation into (we might say) the uncommon. At the same time, Synesius celebrates dreaming as the easiest, or at least most accessible, kind of prophecy, a point on which Cardano fully agrees.⁴⁶ One of the principle lessons (if not *the* central message) of the *Somniorum Synesiorum libri* is that our dreams can keep us safe if we know how to interpret them; and if there is anywhere in the *Somniorum Synesiorum libri* where Cardano seems to crib from Synesius, it is in the agglomeration of personal benefits that the latter claims to have received from learning to interpret dreams: in the composition of books (both in deciding what to include and how to say it eloquently) and most of all in the navigation of worldly dangers.⁴⁷ The threat of personal harm, the possibility for extricating oneself for danger, these features are baked into the definition that Cardano gives of divinatory knowledge. What we see in dreams, he tells us, is like the shadow of a thrown spear: “It is as if somebody set their attention on a coming impact,

⁴⁵ Cardano, *Les quatre livres des songes de Synesios*, 646-647.

⁴⁶ *Ibid.*, 48-49.

⁴⁷ Synesius, *On Dreams*, 26-27; Synesius, *De somniis*, 1975.

seeing that shadow approach erratically and, if possible, capable of wounding.”⁴⁸ This shadow is cast by the causal features of fate and the celestial bodies (“*umbra Fati et causarum coelestium*”), a providential structure that usually leaves room for preparation, adaptation and response.⁴⁹ Because shadows have “neither a fixed size nor boundary,” he continues, it can be very hard to say where exactly the spear is in its flight. Is it nearby or far? Is it big or small? Hence the need for expertise in reading these shadows cast by the future, a valuable expertise since dreams foretell of an oncoming impact, not a certain injury:

[...] and as with all human misfortunes, we can avoid some, and easily, and others with difficulty, and we deflect others still, although they may wound us, and there are some to which we can only succumb. It suffices for you to know that in dreams, we do not see the image of the wound but the shadow of the thrown spear. Most of the time, you can evade it, but it can rarely be avoided. Or, even if the spears are seen long in advance, they are not perceived, nor is their nature understood, nor do we know from whence they come. As when a person has understood that an enemy is plotting to kill him, if the act is near, the danger is seen, but with enemies all around—menacing, quick and closing in—and given the magnitude of the danger, the greater part of judgment fails and we are overwhelmed. Those who escape do so by using maximum wisdom long in advance. They consider what they see from a distance, and, ready in the heart of danger

⁴⁸ Cardano, *Les quatre livres des songes de Synesios*, 50-52: “[...] velut si quis ictum intendat, videns umbram illam et aberrare cum hoc potest, et vulnerare [...]”

⁴⁹ *Ibid.*, 52.

itself, they deliberate well and quickly. Indeed, many go to their ruin for ignorance of interpreting dreams, either because of negligence or contempt.⁵⁰

Cardano does differ from Synesius on certain points. For example, he believes that dreams experienced by different people can share many common images and significations; much of his treatise functions as a dream guide, as in, if you see X in a dream, that means you should expect Y in waking life. The natural philosophical framework is also very different. For Synesius, there are effectively two explanations for dreams: divinatory dreams come directly from God, when the dreamer's imagination is particularly pure; non-divinatory dreams arise by a mechanism that resembles the atomist account of dreaming.⁵¹ For Cardano, on the other hand, divine dreams do not arrive directly to the dreamer. Instead, they are mediated via

⁵⁰ Ibid., 52: “[...] velut etiam in humanis casibus; quosdam enim vitare licet, et facile, quosdam difficulter; alios declinare, licet laedaris; in quibusdam succumbere cogaris. Id ergo tibi nunc satisfaciat, non vulneris imaginem videri in somnis sed umbram excussi teli quod et vitare potes plerumque, et raro devitatur, seu quoniam si multo ante videantur, non deprehenduntur, nec sciri possunt qualia sint, nec unde veniant; velut qui in suam necem conspirari intellexit; cum vero propinquus est effectus, dignoscitur sane periculum, sed circumstantibus undique hostibus, atque imminentibus, celeritate ac propinquitate illorum, et periculi magnitudine, plerumque deest consilium atque obruimur. Ideo evadunt maxime sagaces multo ante, et qui procul inspectis bene consulunt, et qui prompti in ipso periculo celeriter et bene deliberant. Plurimi etiam periclitantur ignorantia interpretationis somniorum, vel negligentia vel contemptu [...]”

⁵¹ Synesius, *On Dreams*, 27-29; Synesius, *De somniis*, 1975-1976.

nature—yet another way that Cardano makes nature an instrument of divine signals and warnings.

The opening chapters of the *Somniorum Synesiorum libri* concern themselves with defining prophetic dreams, setting out their limits, explaining how they distinguish themselves. On these points, we can summarize Cardano’s position. Animal spirits serve as the vehicles of dreams. When we are awake, these spirits travel constantly through the body, conveying sense and motion. When we sleep, they are at rest. Dreams happen via a “vibration,” an “imperfect motion,” of these spirits.⁵² The difference between non-prophetic and prophetic dreams is simply that the former are caused by internal changes in the body of the sleeper, particularly by a build-up of humors or by movements of digestion that set them into confusion;⁵³ prophetic dreams, on the other hand, are caused by an outside factor, or, more accurately, an outside artisan: an influx descending from the supralunar realm.⁵⁴ As for the “material” of dreams, this is always composed of our memories, reshuffled, recombined, and sometimes rendered obscure, as if seen from a distance.⁵⁵ In an extraordinary paragraph, Cardano explains how the celestial influx uses our memories as if they were tiles of different colors and sizes, and with them it creates a mosaic:

Those dreams, then, produced by a superior cause are set in motion by an *influx* produced by the celestial bodies, and this influx is ordered such that it stirs images in the soul suitable for producing an impression [...] as if someone had many stones of

⁵² Cardano, *Les quatre livres des songes de Synesios*, 28-29.

⁵³ *Ibid.*, 28-33.

⁵⁴ *Ibid.*, 34-35.

⁵⁵ *Ibid.*, 28-29.

different colors and sizes, and was a skilled enough artist to know how to represent the blueprint (*ichnographia*), whatever the image, whether of men, animals, or plants.⁵⁶

In yet another passage, he uses the same analogy, although this time the constituent parts are not stones but feathers—he is referring to the feather mosaics done by, as he says, “Indians” in the New World.⁵⁷ In short, prophetic dreams occur when our memories—the people, places and things that we know—are used by an outside mind to send us a message about the unknown. The dreamer, via the influx, is quite literally inhabited by an outside mind that plays upon the spirits to reveal something on the screen of the imagination. But the connection is almost never perfect. The dreamer may not have suitable memories, in which case the influx must avail itself of a sort of symbolism. And because the influx is physical (at least by the time it reaches the dreamer), even the weather can cause a kind of distortion or weakening of the message.⁵⁸

It goes without saying that Cardano did not have a conception of anything like what is now called the unconscious. But his *Somniorum Synesiorum libri* does play a role in the

⁵⁶ Ibid., 34: “Quae ergo a superiore causa contingunt, moventur ab influxu qui a corporibus contingit coelestibus; atque hic adeo ordinatus est ut species in anima convenientes effectui procreando eo ordine moveat, ut similem speciem effectui illi conficiat, velut si quis lapillos plurimos habeat diversorum colorum ac magnitudinis, sitque adeo peritus artifex, ut quarumcunque rerum imaginem seu hominum seu animalium, aut plantarum in tabula ichnographiam repraesentare norit.”

⁵⁷ Ibid., 36-37.

⁵⁸ If all of these factors are optimal, the dream will be a flawless recreation of the future event. Cardano calls these ideal recreations “idols.” Ibid., 34-37.

twentieth-century history of psychoanalysis. Carl Jung mined the treatise extensively, searching for the archetypes in Cardano's personal dreams.⁵⁹ Jung's seminar sessions devoted to Cardano are beside the point here, since they are almost completely about Jung's system. I would only like to highlight one structural similarity in how the two conceive of dreaming: in both explanations, the communicator *surrounds* the dreamer in a certain way; the dreamer is overcome by a vast and diffuse force. In the case of Jung, that force is the unconscious with all its subversiveness. In the case of Cardano, the efficient cause is, as we have seen, the celestial influx. This influx serves an absolutely fundamental role in the cosmos. It is the force that makes elements cohere into persistent, active bodies.⁶⁰ Indeed, in the *De subtilitate*, Cardano identifies it with the soul itself. The influx is likewise capable of causing all manner of astrological effects in the sublunar world, and, as Cardano specifies in the *De rerum varietate*, it can cause melancholy, delusion and dissent in swaths of the population.⁶¹ Had Jung known about this feature, or had he even known that this influx was Cardano's *artifex somniorum* (it seems he did not), he would have almost certainly seen another vindication of his own ideas,

⁵⁹ Carl Jung, *Dream Interpretation Ancient and Modern: Notes from the Seminar Given in 1936-1941*, ed. John Peck, Lorenz Jung, and Maria Meyer-Grass, trans. Ernst Falzeder and Tony Woolfson (Princeton, 2014), 122-215. Jean-Yves Boriaud, who translated the *Somniorum* into French, has written an article-length study on Jung's use of Cardano; see Jean-Yves Boriaud, "Jung analyste de Girolamo Cardano," *Bruniana & Campanelliana*, 16 (2010), 407-428.

⁶⁰ For a discussion of the celestial influx, its proximity to the soul, and its conceptual proximity to the Ficinean *spiritus mundi*, see Jonathan Regier, "A Hot Mess: Girolamo Cardano, the Inquisition and the Soul," *HOPOS* 11 (2021), 547-563.

⁶¹ Regier, "Reading Cardano with the Roman Inquisition."

an unwitting projection of the unconscious into the world. Indeed, in his lectures on Cardano, he at one point calls the dissociated unconscious (the unconscious at its most disconnected, its least integrated) a *mens dissoluta*, a “spirit” that fills the outside world, that is falsely taken for the outside world.⁶² For Cardano, of course, the celestial influx is indeed in the world. It is moreover a physical entity. Or, rather, it is essentially incorporeal, but as it descends from the celestial region it is joined by a physical heat capable of setting our spirits in motion.⁶³ This might seem like an overly complicated mechanism, but we should pay attention when early modern thinkers make fine distinctions between incorporeal and corporeal things. Corporeality was associated with the perishable, incorporeality with the undying, with the human soul and the divine (many of Cardano’s arguments for the immortality of the soul hinge on its immateriality). The fact that the influx was essentially incorporeal means that it was itself either an intellect or the pure emanation of a celestial intelligence. For our purposes here, the key point is that the influx quite literally saturates nature with divine knowledge. Given Cardano’s epistemic and affective orientations, it comes as no surprise that our rapport with the divine, our communion with the divine mind, manifests as a kind of early-warning system.

Cardano on Fate and Free Will

Alfonso Ingegno in his study of Cardano’s philosophy asked whether *scientia fati*, as Cardano conceives of it, allows for true human liberty.⁶⁴ Ingegno was thinking specifically of how Cardano relates to Pietro Pomponazzi (1462-1525). Pomponazzi had forcefully denied that

⁶² Jung, *Dream Interpretation Ancient and Modern*, 149; Jean-Yves Boriaud, “Jung analyste de Girolamo Cardano,” 427.

⁶³ Cardano, *Les quatre livres des songes de Synesios*, 36-37.

⁶⁴ Alfonso Ingegno, *Saggio sulla filosofia di Cardano* (Florence, 1980), 51.

Aristotelian philosophy could be reconciled with the doctrine of free will: nature is a chain of causes with its source in the will of God; we are simply elements of that causal network, which affords no space for human liberty.⁶⁵ Ingegno's focus is on Cardano's astrology, and he wonders if liberty there is simply the incapacity for human observers to know exactly how sublunar nature will behave under the influence of the stars. But a wider consideration of Cardano's views of signs and prognostication would seem to support a reading of Cardano as a moderate libertarian. In his analysis of dreams, he makes it very clear that the human can avoid the worst through acquired skill and virtue. In this, he could be aligned with Alexander of Aphrodisias, whose *De fato* had asserted individual responsibility for the development of character, of virtuous or vicious habits.⁶⁶

Cardano, it seems, wrote his own *De fato* in 1533, but the manuscript was lost; he likely destroyed it after his Inquisition trial (1570-1571).⁶⁷ He refers to it frequently in other works, and often at moments when his thought would be clarified by a detailed account of fate and its relation to God, to free will, to sublunar contingency. In the last two editions of the *De libris propriis*, those of 1557 and 1562, he provides a chapter outline of the *De fato*.⁶⁸ He also gives us a brief glimpse of how he sees his predecessors—Cicero, Alexander of Aphrodisias, and Pomponazzi—on the subject of fate. Cicero, says Cardano, wrote with more elegance than philosophical acumen; Alexander got it all wrong; and Pomponazzi began his own *De fato*

⁶⁵ Pietro Pomponazzi, *Il fato, il libero arbitrio e la predestinazione*, trans. Vittoria Perrone Compagni, 2 vol. (Turin: Nino Aragno, 2004), e.g., 452-455.

⁶⁶ Alexander of Aphrodisias, *De fato*, XXVII, in R.W. Sharples, *Alexander of Aphrodisias on Fate* (London: Duckworth, 1983), 76-78.

⁶⁷ Cardano, *De libris propriis*, 53.

⁶⁸ *Ibid.*, 174-177 and 236-239.

better than he followed through on it, even if the treatise stretched to five books.⁶⁹ Interestingly, Pomponazzi seems to fare best of the three, and the first book of Cardano's *De fato* reveals affinities with Pomponazzi's Stoic-inflected determinism. Chapters four and five are titled, respectively: "The strongest possible demonstration showing that everything happens by fate;" "Things that are, when they are, happen necessarily."⁷⁰ Cardano also seems to argue for fate in the two-pronged manner of Pomponazzi—according to natural causality and to the nature of God as omniscient and omnipotent. We can appreciate, then, why he scorned Alexander, who had mounted a wide critique of Stoic determinism. But unlike Pomponazzi, we find Cardano affirming the compatibility of fate and free will. In *De fato*'s fourth book, Cardano devotes two chapters respectively to the "substance of the soul" and the "utility of free will."⁷¹ Providential history, natural history, an omniscient God, human free will—apparently, these are not discordant components of reality.

It is probably most accurate to say that Cardano's concept of fate functions less like the foundation of a philosophical edifice and more like an irrigation system specifically designed to feed into a preexisting disciplinary landscape. One of the fields that it had to service, to keep the agricultural metaphor going, was prognostication. Hence, the third book of *De fato* begins with a chapter announcing that "All divination depends on fate."⁷² Almost certainly, what Cardano means is that the possibility of divination rests on the foreknowledge and historical plan of God. Divination, he believes, reveals to the practitioner how they can maneuver within the flow of history, a point on display in his astrological writing, especially in his commentary

⁶⁹ Ibid., 236, also 177-178.

⁷⁰ Ibid., 236.

⁷¹ Ibid., 239.

⁷² Ibid., 238.

on Ptolemy's *Tetrabiblos*. For Cardano, as for Ptolemy, nature governs, but humans have latitude to respond; they can seek out a physician or astrologer, follow that advice or not. The underlying point here is that astrological influence is natural, and, in nature, stronger forces and inclinations win out over weaker ones; humans can intervene, counteracting and manipulating these forces for their own ends, although our latitude for response is often narrow.⁷³

Cardano Christianizes Ptolemy, of course; the heavens are ordered by God to bring about Christian history. Seen over its long term, the providential design of history cannot be denied—for example, the rise and fall of nations and the triumph of Christianity. But that does not equal determinism, either for Cardano or the many Christians of the period who held more or less the same view of history. Fate for Cardano is fixed in its grand structure, but individuals, especially those who understand nature and themselves, have a measure of agency. In one of the remarkable passages of his commentary on the *Tetrabiblos*, Cardano gives an astrological

⁷³ The key text underlying Cardano's view on divinatory efficacy is perhaps *Tetrabiblos* I.3: e.g., "[...] so also in the other cases, if further happenings to men are not known, or if they are known and the remedies are not applied, they will by all means follow the course of primary nature; but if they are recognized ahead of time and remedies are provided, again quite in accord with nature and fate, they either do not occur at all or are rendered less severe." Ptolemy, *Tetrabiblos*, ed. and trans. Frank Egleston Robbins (Cambridge, Mass., 1964 [1940]), 27-29. On astrology's use for self-care, see two other contributions to this special issue, Steven Vanden Broecke's "Astrological Self-Government at the Fifteenth-Century Court of Bourbon," and Silvia Manzo's "Francis Bacon on Self-care, Divination, and the Nature-Fortune Distinction." Manzo stresses how the correct use of divination, for Bacon, relies on understanding "what is in our power, and what is not."

reading to the passage from Proverbs, “The king's heart is in the hand of the Lord, as the rivers of water: he turneth it whithersoever he will.”⁷⁴ Cardano explains:

[...] whether a region is well or poorly managed comes down to the will of kings, and the accidents of kingdoms are subjected to the general assembly of the heavens; it is therefore necessary that the hearts of Princes be governed by the constellations of the heavens. But the human heart cannot resist such wrenching force. Hence, it is clear why the hearts and minds of Princes are more subject to the necessity of the heavens and divine will, whereas the hearts and minds of those engaged in private life are freer. This necessity within the hearts of Princes is fastened to divine will, hence a necessity of outcome and not of sin. For this reason, free will is not abolished.⁷⁵

⁷⁴ Proverbs 21:1, KJV.

⁷⁵ Cardano, *Libri quatuor de astrorum iudiciis*, in *Cardano Opera omnia*, vol. 5, 112a: “Unde manifestum est, quare in sacra scriptura scriptum sit, cor Regis in manu Dei est, quocumque voluerit vertet illud. Sit enim gratia exempli, vt Deus velit affligere bello aliquo ingenti & clade Germanos, cor Caesaris & Regis Gallorum coeli medio & magnarum coniunctionum ac generalium congressuum seu constellationum. [...] Atque ita Regum cordâ cum ad eorum voluntatem pertineat regiones bene vel malè tractare, regionum autem accidentia generalibus subiiciantur congressibus syderum, necesse est ut etiam corda Principum a generalibus coeli constellationibus gubernentur. At cor humanum tantae violentiae resistere non potest. Patet igitur cur corda Principum & mentes magis necessitati syderum & diuinae voluntati subiacent, priuatorum autem sint magis libera. Haec autem necessitas cordis Principis quae annexa est diuinae voluntati, est necessitas effectus & non peccati. Quamobrem non tollitur libertas arbitrii.” On the astrological rise and fall of religions and civilizations, Albumasar

The point here is one of scale. Fate, to the extent that it is fixed, happens at the level of nations and the great figures who serve as its principle instruments. The individual, however, has room to maneuver and can do so, Cardano continues, *without* contravening fate:

Thus, it is also clear why, in the above, Ptolemy has said that this science [astrology] teaches us to recognize the divine, what precisely is divine. Because, as we have just mentioned, certain events happen according to the necessity of fate, while certain events can be deflected. It is as if a person found himself in the sea during a tempest, and although he foresaw the danger he could not avoid it. The person skilled in swimming through heavy currents or practiced in handling the danger will be saved, while another hardly so.⁷⁶

To recognize fate is tantamount to recognizing the order and power of God. In this way, says Cardano, Ptolemaic astrology provides a kind of natural auxiliary to theology. It allows for

was the main source for medieval and early modern astrologers of Latin Europe. See John D. North, "Astrology and the Fortunes of Churches," *Centaurus* 24 (1980), 181–211. For Cardano and Arabic astrological sources, see Dag Nikolaus Hasse, *Success and Suppression: Arabic Sciences and Philosophy in the Renaissance* (Cambridge, Mass., 2016), esp. 248-292.

⁷⁶ Ibid., 112a-b: "Ex hoc quoque clarum est cur in superioribus verbis Ptolemaeus dixerit hanc scientiam diuina docere cognoscere, hoc enim diuinum est prorsus, quod nuper diximus, scilicet quod quaedam eueniunt fatali necessitate, quaedam vero ita ut declinari possint, veluti si quis sit in mari cum tempestate, quamuis periculum praeuideat non tamen euadere poterit: at vero in flumine natandi peritus, aut periculi gnarus servabitur, alius vero minime."

appreciation of the divine power and wisdom in nature. It allows, as we see in the above, a space for individual free will within the anxieties that accompany history's turbulence and trouble.

Conclusion

Cardano is a highly syncretic thinker, hardly systematic in a way favored by scholars of early modern philosophy. Yet he is a conduit for some of the most important questions and debates of sixteenth-century philosophy, and he is among the most original contributors to those debates. In the above, I have tried to give some sense of the complex that characterizes his thinking, of that particular connection between anxiety, human reason, nature, fate, and God. I have suggested that the anxiety which marks his writings is a consequence (or perhaps precondition) of tensions at the center of his philosophy: if humans can enjoy knowledge of events to come, they must also grapple with the enigmatic nature of signs and the unreliability of the human mind; if there is room for prudential action, there is also humanity's physical and passional weakness; if there is the promise of security in the divine, there is also the essential insecurity of everything else. The individual must constantly move through a landscape of risk. Cardano, meanwhile, presents himself as just the right sort of guide to lead his readers through that landscape, a master of medicine, philosophy, astrology, and a master in reading the language of the divine; there is little doubt that his success as an author had something to do with this strategy.⁷⁷

⁷⁷ In a recent study of Renaissance mercantile culture, Nicholas Scott Baker aptly writes that Cardano presented himself as an "expert in futurity"; idem., *In Fortune's Theater: Financial Risk and the Future in Renaissance Italy* (Cambridge, 2021), 18. For Cardano's authorial

As discussed, a key observation made throughout this essay is that Cardano understands the divine, and humanity's rapport with the divine, through the lens of security. Humans are threatened by the future; the divine is not. Moreover, the divine extends itself toward the human in an effort to instruct about the future. For Cardano, moments of transcendence, of connection with the divine, are never more manifest than in our relationship with the future, a relationship fraught with anxiety wherein divine help appears as so many instructive shadows and flashes of insight. In monumental studies of fear and security in Christian life, Jean Delumeau concluded that, as people in Western Europe became more committed to controlling the forces of nature and society, they separated the earthly from the spiritual.⁷⁸ Delumeau echoes Lucien Febvre, who posited that early modernity witnessed a "transfer from heaven to earth" of security, profit and loss, and that capitalism became possible as a consequence.⁷⁹ The question of economics is far from this article's scope, yet Cardano might be said to represent an important chapter in the story of how the dangers and uncertainties of life, along with our perceived capacities for self-preservation, were naturalized. What Cardano shows is that the heavenly and earthly were not necessarily separated but rather fused. In Cardano, we find divine intervention—the possibilities and effective limits of divine help for human beings in their state of vulnerability and uncertainty—fully expressed by a natural- and moral-philosophical system.

career and his publishers, see Ian Maclean, *Learning and the Market Place: Essays in the History of the Early Modern Book* (Leiden, 2009), 131-159.

⁷⁸ Jean Delumeau, *La peur en Occident*; idem, *Rassurer et protéger. Le sentiment de sécurité dans l'Occident d'autrefois* (Paris, 1989).

⁷⁹ Lucien Febvre, "Pour l'histoire d'un sentiment : le besoin de sécurité," *Annales*, 11 (1956), 244-247.