

## Chapter 3

# Abraham Caslari: A Jewish Physician on the Plague

THIS CHAPTER TREATS the *Tractate on Pestilential and Other Types of Fevers*, by Abraham Caslari, a Jewish physician in Besalú, not far from Girona and at the eastern tip of Catalonia. Composed sometime in 1349, Abraham's work is one of a number of extant tractates written during or immediately after the period of the Black Death, which reached Besalú in May 1348.<sup>1</sup> As an early record of a physician's perspective on the pandemic, Abraham's tractate is important as a medical witness. The first half of this chapter, accordingly, considers the tractate as a medical composition, comparing it with the slightly earlier plague tract of Jacme d'Agramont. The second half of this chapter examines aspects of Abraham's tractate that are not directly related to his medical argument, in order to see what light they shed on the social, religious, and human crisis precipitated by the Black Death.

For several reasons, Jacme d'Agramont's *Regiment de Preservacio* is a useful foil to Abraham's tractate. Jacme held the chair in medicine at the university in Lleida, a city located 200 kilometers west of Besalú. It was where Abraham and his family had spent several years following their expulsion from Languedoc in 1306.<sup>2</sup> The *Regiment de Preservacio* was written in April 1348, making it the first known medical treatise to respond to the Black Death and the first original medical treatise produced at the University of Lleida.<sup>3</sup> Jacme's work was unique among the early tractates as the only example of a plague regimen written in the vernacular (in this case, Catalan) and intended for ordinary people; his preface addresses the good councillors of Lleida, who wished to know how to defend their city against pestilence and to advise their citizens how to protect themselves. (If Jacme's readers sought theory or pharmaceutical recipes, he recommended that they consult a learned physician, for that was not the goal of his work.) In contrast, Abraham Caslari's tractate was intended for a reader learned

in medicine and in Hebrew—not just the limpid biblical Hebrew of the Iberian Hebrew poets but the stilted, highly technical Hebrew that characterized medieval Hebrew philosophical and scientific prose. Despite this rarefied circulation, Hebrew, too, shared some of the attributes of a vernacular for a textual community of rationalist, scientifically inclined Jews, crossing dialects and national boundaries and contributing to the common intellectual formation of Abraham and his peers, Christian as well as Jewish.

Whether the men were personally acquainted, or whether Abraham actually encountered Jacme's text, we do not know. By the summer of 1348, like many of his fellow Lleidans and despite whatever preventive measures they implemented, Jacme would be dead of plague, and the Lleida *aljama* would be the target of a pogrom fueled by rumors blaming Jews for the pestilence. In contrast, and at the other end of the peninsula, Abraham treated many patients who, like him, survived the pandemic; his tractate was written after the fevers had ebbed and the violence to his west and south had quieted. These similarities and differences make it useful to compare what these two men had to say about the greatest professional crisis of their careers. As the first half of this chapter demonstrates, both men drew on similar textual traditions, particularly the work on epidemic fevers by the revered tenth- and eleventh-century Persian physician known to the west as Avicenna (Ibn Sinā). Nonetheless, they plied this common learning to reach very different conclusions about the causes and nature of the plague. Abraham insisted that the devastating fevers that he had survived and treated were not true pestilential fevers and that if properly and quickly diagnosed, many victims of such fevers could be saved. In contrast, Jacme thought that the plague represented a universal pestilence, a type of pestilence originating in an astronomical (celestial) event such as an eclipse or planetary conjunction; for Jacme, this kind of pestilence was ordained by God in punishment for human sin.<sup>4</sup> Interestingly, from a medical perspective, their divergent views are reflected in plague demographics: in Besalú, mortality was not as high as in cities farther south or west, giving Abraham reason to think that it was treatable. In Lleida, mortality from the plague was much higher, as it was in cities like Barcelona, whose fate was known to Jacme. It may not be so surprising that Abraham's sense of confidence was not echoed by his peers, or that his tractate preserves a perspective on the pandemic that was distinctly in the minority. The second half of this chapter asks if plague demographics entirely explain the expressions of isolation and frustration that occasionally surface in Abraham's work.

Today, Jacme's treatise is often invoked by historians for its claim that plague could be "manufactured" by evil men, a notion that has been linked to

violence against local Jews. Indeed, Abraham's treatise was written not just in the wake of a devastating outbreak of plague but in the wake of a series of violent attacks on local Jewish communities to the east, south, and west of Besalú. The nearest of those attacks, in April 1348, was in Perpignan, approximately 40 kilometers away.<sup>5</sup> On May 17, when the plague had reached Besalú and Girona, the Jewish *call* (quarter) in Barcelona—approximately 130 kilometers to the south—was decimated and some twenty Jews killed; a domino series of attacks accompanied the plague west and south of Barcelona, causing varying degrees of destruction. (A second plague route through Iberia began in Majorca and touched the mainland in Almería, and then proceeded north and west.) Informed of the Barcelona attacks, King Pere IV of Aragon (also known as Pere III of Barcelona) sent letters to the cities of Cervera, Lleida, and Huesca ordering local authorities to protect their Jews.<sup>6</sup> While the efficacy of these letters has been debated by scholars, there is evidence that municipal officials in these towns attempted to comply with their demands. In Tàrraga, in contrast, the mayor and possibly the city councillors participated actively in the looting and murder of several hundred Jews; I treat their story in Chapter 5. There are no known records of anti-Jewish violence in Besalú or in Girona, the nearest city for which the impact of the plague has been studied.<sup>7</sup> Still, it was likely that, by the summer of 1349, Abraham knew of the assaults on Jewish life and property elsewhere. In April 1348, a traveler from Provence to Girona had brought news of the arrest and torture of Jews accused of poisoning the water to cause plague in Narbonne, Carcassonne, and LaGrasse.<sup>8</sup> By the following summer, when Abraham composed his tractate, refugees from Monzón, Tàrraga, and Solsona had sought shelter in Barcelona and surrounding towns, seeking refuge and redress; many refused to return to their ravaged homes despite enticements to do so. Some news of these men and women must have reached the ears of Jews farther east, and Abraham's connections to the royal court and royal patients surely brought links to other informants as well.

Abraham's tractate makes one reference to these events, alluding in his introduction to a contemporary Jewish chronicler's description of the attacks on the *aljamas*. The second half of this chapter moves away from scientific questions to examine aspects of Abraham's composition and prose style that shed light on concerns that the author consciously or unconsciously chose not to address outright. I focus on three specific features of the text: (1) the use of authorial interjections and assertions of personal experience or authority; (2) the use (or avoidance) of biblical illustration or citation; and (3) the elision of psychological or emotional factors in Abraham's discussion of diagnosis and treatment.

These “accidents of the soul” fall under the rubric of the sixth “nonnatural”—factors that influence health or illness and that are subject to manipulation. On the one hand, Abraham’s tractate reflects the lack of anti-Jewish violence experienced in his immediate environment. His apparent reticence may signal the temporary collapse of the institutions and networks that voiced and sustained traditional responses to violence. In contrast, as the plague tracts demonstrate, the lines of communication among physicians, despite their relatively high mortality levels, remained intact. On the other hand, Abraham’s decision to invoke, by means of intertextual citation, a contemporary account of plague-related violence points to the need to look beyond traditional commemorative genres to understand how different sorts of Jews responded to religious and political catastrophe of 1348.

But I want to begin Abraham’s story earlier, in the late summer of 1306. When Abraham Caslari, his wife, and his father, David, left their home in Narbonne and crossed the Pyrenees in the late summer or fall of 1306, they were one family amid the great Jewish exodus from France.<sup>9</sup> The Jews of Languedoc, which included Narbonne, were subject to the decree of expulsion that King Philip IV had issued in August; many proceeded south and west toward Catalonia or eastward into the Savoie and Dauphiné. For the former, Perpignan was their first destination. Today part of France, in the early fourteenth century it was territory belonging to the kingdom of Aragon; as such, it constituted an important haven for French and Languedocian Jews. The Jewish refugees quickly overwhelmed the local community and its resources, and many, like the Caslaris, pushed on farther, over the mountains toward Girona, Barcelona, and Lleida. After some years in Lleida, the Caslari family relocated back toward the border, receiving royal permission to open a medical practice in Besalú. In 1320, Abraham requested royal permission again—this time, to take a second wife in addition to the wife who had accompanied him from Languedoc. His new wife, Bonadona sa Sala, also came from a medical family that had originated in Perpignan and reestablished itself in Besalú; perhaps Abraham was trying to boost his local connections.<sup>10</sup> Bigamy was not a common practice among Iberian Jews, but it was not outlawed, and Abraham must have been willing to risk some domestic strain for the sake of his career.

One of his marriages ended in divorce, but the professional gamble paid off, as Abraham dots the royal archives with increasing visibility over the coming years.<sup>11</sup> Throughout the 1320s and 1330s, he amassed franchises and lawsuits, contracts, loans, and debts. In the late 1320s, he was granted a thirty-year exemption from new tax assessments by the king; by then, a son, Yahacel, had died,

and the king guaranteed that Abraham's privileges would be extended to his daughter Bonadona. By 1339, Abraham was under contract to provide medical care to the Infante Joan.<sup>12</sup> During these years, he authored several Hebrew tracts on medical topics, including an early essay on vital spirits, followed by the "Aleira'anán" (Fragrant leaves), a work on fevers composed in 1326.<sup>13</sup> When the plague reached Catalonia and Aragon in the summer of 1348, Abraham was still actively practicing medicine.<sup>14</sup> He treated victims of the plague and, shortly afterward, wrote the treatise that is our concern here.<sup>15</sup>

While some of the prominent Jewish physicians of his time were known also as men of letters, dedicating themselves to traditional religious texts and contemporary belles lettres as well as to science, Abraham's name is not linked to any belletristic achievement. In this respect, he differed from his father, David, who, in addition to his medical interests and writings, was a lover of poetry. A renowned physician in Narbonne, David translated a work by Galen from Latin into Hebrew. David also boasted a personal friendship with the local rhetorician and poet Abraham Bedersi, who dedicated a poem to him and nominated him to judge a poetry competition.<sup>16</sup> David died in Catalonia in 1315 or 1316; we know of nothing that he wrote from the day he left France.<sup>17</sup> In contrast, Abraham did invest time in writing, but as two of his three extant treatises attest, his abiding interest was not in poetry but fevers. In penning one of these medical works, moreover, Abraham Caslari bequeathed us a record of his views on a crucial topic of his day: the unprecedented fevers that swept through Provence and across the Iberian Peninsula in 1348 and 1349.

Abraham was one of a handful of physicians whose firsthand experience in 1348 led him to compose a formal tractate that discussed the diagnosis, prevention, and treatment of the plague. A new literary genre that emerged in 1348, the plague tractate remained popular for several centuries. Hundreds of tractates appeared over this period, most of them responding to later plague outbreaks and authored by Christian physicians, clerics, and astrologers. Many of these texts have now been gathered and studied by modern scholars. Much work remains, however, for the study of Jewish and Muslim tractates, only a few of which have appeared in critical editions.<sup>18</sup> A dated but important essay by Ron Barkai sought to survey the extant Jewish plague tractates, both those that were original compositions and those that were translations of Christian or Muslim works.<sup>19</sup> As Barkai noted, and as other studies confirm, Abraham's treatise is one of the earliest plague tractates in any language; other works composed by university-based physicians during or immediately after the appearance of the plague in 1348 were by Jacme d'Agramont in Lleida; the commissioned and jointly authored tractate by the

medical faculty at the University of Paris; the anonymous Montpellier author responding to the Paris tractate; Alfonso de Córdoba, also in Montpellier; and Gentile da Foligno in Perugia. Both Jacme and Gentile were dead from the plague by June 1348, Gentile while revising two earlier tractates that he had written before the devastating force of the pandemic was evident.<sup>20</sup>

A central argument of the *Ma'amar beqaddahot divriyyot uminei qaddahot* (Tractate on pestilential and other types of fevers) was that plague patients often suffered because physicians misdiagnosed the kind of fever that they were treating, confusing pestilential and non-pestilential fevers. As Melissa Chase has observed, this concern was shared by other plague authors, for whom fever was not (as now) a symptom but “a category of disease characterized by excess heat within the body.”<sup>21</sup> Fevers, as a rule, might be divided into three categories based on the parts of the body that they primarily affected: hectic fevers originating in the solid members, ephemeral fevers in the spirits, and putrid (corrupting) fevers in the humors. Pestilential fevers differed because they began *outside* the body, with a corruption of the air; when inhaled, the bad air went to the heart, where it generated excess heat and moved to other organs.<sup>22</sup> The buboes that appeared on plague victims represented the body’s attempt to expel excess heat to the “emunctory” closest to the affected organ (the groin, armpit, or neck)—what we now identify with the lymphatic network.

Like a few of his contemporaries, Abraham was not convinced that the fevers of the past year were truly pestilential, despite their heavy mortality.<sup>23</sup> While this view is not extraordinary, it holds interest because of Abraham’s description of a patient’s reasonable chances for survival if properly diagnosed. Some sick men and women recovered, he noted. But when physicians misdiagnosed the fevers that they were treating, patients often died unnecessarily. Significantly, studies of the impact of the Black Death in Girona, the nearest city for which I have found data, do conclude that the mortality rate there was markedly lower than in Barcelona or towns farther west. Guilleré estimated an overall mortality rate of 14.5 percent for Girona, which may be contrasted with the estimates of 40 percent to 60 percent or higher for Barcelona.<sup>24</sup> Ironically, Abraham may be accurately describing the plague demographics suggested by modern historians, although he attributes the better survival rate among “his” patients to his greater medical expertise. The same pattern of thinking led later physicians to assume that they were more successful in treating subsequent plague outbreaks, which in general were not as deadly as the Black Death.<sup>25</sup>

Even so, and no matter how they tried to prepare for it, the plague dealt the inhabitants of western Catalonia a harsher blow than anything that Abraham

could have previously seen. The sense of extraordinary catastrophe is correspondingly heightened in Jacme's hometown of Lleida, where mortality was high. On the one hand, the *Regiment de Preservacio* testifies to the rising prestige of university medicine in general society. As the modern editors of Jacme's text observe, the fact that *el catedrático* Jacme d'Agramante wrote at the behest of *los paers* is evidence of the burghers' confidence in the new university medicine.<sup>26</sup> Jacme's turn to a lay audience also underlines his conviction that "average" people stood to benefit from medical knowledge and that this was knowledge that they supposedly desired to have. On the other hand, despite its concessions to a lay audience, Jacme's text remained an official and authoritative pronouncement on the advancing pandemic.

Because Jacme was primarily interested in what laypeople might do to protect themselves from the plague, he avoided theoretical discussions. He felt that it was important, nonetheless, to provide his readers with a basic explanation for the causes of the plague and hence why certain kinds of prophylactic actions were preferable to others.<sup>27</sup> The tractate begins with an explanation of the crucial role played by air in times of epidemic. Air may become corrupted after undergoing two types of change—in its quality or in its substance—and these may have local or widespread ("universal") effects. A qualitative change can be natural (as in seasonal change) or contra-natural (as in abnormally warm winters or frigid summers). A substantive change is manifested as putrefaction and can also take two forms: one that generates living things (reptiles and insects) or one that does not. Six chapters follow. Chapter 1 defines pestilence as a contra-natural change in the air that may be qualitative or substantive but that leads to corruptions and sudden death among living creatures. Chapter 2 discusses the possible causes of pestilence. A "universal pestilence" of the sort unfolding to the east had three possible causes, all stemming from corruption of the air. The first, as his biblical examples illustrate, was sin, which God might punish by means of plagues. The second possibility was that wicked men might actually concoct a toxin to corrupt food and water sources. The third possibility was corruption of air due to celestial factors, such as an eclipse or planetary conjunction.

Not all pestilence was universal, of course, either in the sense of originating in celestial activity or in the sense of ranging far and wide. Local conditions might generate local pestilence. Jacme considers these conditions in his second chapter, discussing factors of diet and excessively indulgent bathing or sex, poor ventilation, or people with infectious ailments like leprosy or other types of fevers or skin diseases. Other possibilities included freakish weather or bad winds, poor sanitation, or smelly locations where "bad air" (bogs, butchers' or tanners'

streets, sewers, unburied corpses) might contaminate the local environment. As for celestial changes that translated into pestilence on earth, these had warning signs in the natural world—for instance, the strange behavior of animals and birds, or blighted crops.

Chapter 3 enumerates these signs of pestilence in the heavens and in the natural world; here Jacme draws directly from Avicenna's discussion of pestilential fevers while adding the possibility that God might be chastising "faithful Christians" with pestilence. Chapter 4 explains how corrupt air affects the human body, generating excess heat and corrupting humors that seek to evacuate the surplus by removing it to the "sewers" of the body (the emunctories). Chapter 5 offers a preventive regimen for hot and cold seasons, emphasizing the need to correct the imbalance in the air with fumigations and fragrant bonfires. Medications may be useful but should be obtained from a physician. In constructing this regimen, Jacme relied on the familiar categories of the "six non-naturals" inherited from Galen: climate (air); diet; evacuation (purging, bleeding, and bodily evacuations); sleep; exercise; and moods. He urges his readers to avoid strenuous exercise and certain foods, to sleep lightly and to undergo purging and bleeding at a physician's hands, and he offers practical tips for verifying that someone is dead. Chapter 6 is dedicated to "moral pestilence." It, too, is caused by a contra-natural change but in people's minds, leading to war and civil disorder, social chaos, and suffering.<sup>28</sup> As Arrizabalaga observes, for Jacme the term "moral pestilence" was not a metaphor; it expressed a link between natural and "moral" life, between individual disease and collective disorder.<sup>29</sup>

The serious attention that Jacme dedicated to moral pestilence is one aspect of his tractate that scholars often note. The other is his conviction that it was possible for malicious people to manufacture plague. The physician does not explicitly refer to Jews, yet some historians have grimly noted that attacks on Jews took place in the very localities where this tractate might have circulated. Certainly, elsewhere, burghers and city officials—Jacme's target audience—have been linked specifically to attacks on local Jews.<sup>30</sup> Attacks on Jews also occurred in Provence, where Alfonso de Córdoba made a more pointed assertion that the plague had been maliciously seeded by human beings, and a similar hypothesis in the plague tractate of the anonymous Montpellier author appeared in a context of accusations and anti-Jewish violence. But were these physicians legitimizing what was already a widespread belief, or were they suggesting something new? Arrizabalaga tends to the former reading, contending that d'Agramont was "just echoing the information that he had received from . . . trans-Pyreanean regions." Even so, he argues, the inclusion of this possibility in a learned document



could have encouraged its malicious dissemination and violence.<sup>31</sup> I am less convinced by this possibility. Plague-related attacks on Jews took place far beyond Aragon and Provence, reaching deep into central and eastern Europe, where medical literature has never been blamed for inciting them. In fact, Jacme clearly indicates that he is writing a preventive regimen for a *universal* pestilence (celestial in origin). *Manufactured* pestilence, in his own words, is not universal, but rather is engineered via the poisoning of foods, not air. Jacme dismissed the possibility that this was the cause of the current epidemic:

Per altra rahó pot venir mortaldat e pestilència en les gents, ço és a saber, per malvats hòmens fiylls del diable qui ab metzines e verins diverses corrompen les viandes ab molt fals engiynn e malvada maestria, *ja sie ço que pròpriament parlan, aytal mortalitat de gents no és pestilència de la qual ací parlam*, mas he.n volguda fer menció per ço car ara tenim temps en lo qual s'a[n] seguides moltes morts en alcunes regions prop d'ací axí com en Cobliure, en Carcassès, en Narbonès e en la baronia de Montpesler e a Avinyó e en tota Proença.

Another cause of mortality and pestilence is men, as is known, by wicked men, sons of the devil, who with venoms and diverse poisons corrupt foods with great cunning and evil skill. *But properly speaking, this mortality is not the pestilence of which we speak here*, although it must be mentioned because in this time in neighboring lands there have been many deaths, as in Cobliure, Carcassonne, Narbonne, and in the barony of Montpellier, in Avignon and all Provence.<sup>32</sup>

Jacme's *Regimen* survives today in only one copy, which was found in the ecclesiastical archives of Santa Maria de Verdú, in the diocese of Solsona, about halfway between Lleida and Besalú.<sup>33</sup> Although written specifically for the town of Lleida, it may have had a briefly wider life. Nonetheless, it is not cited by other writers and seems not to have been widely known.<sup>34</sup> If it did circulate beyond Lleida, Abraham could easily have been among an audience of medical practitioners or local officials who were read or given a copy. When he composed his own tractate the next year, however, Jacme's "popular" model was not what interested him, but rather the academic and analytical style of tractates more conventionally associated with the genre. Duran-Reynals and Winslow, who published a translation of Jacme's tractate in the late 1940s, stated emphatically that Jacme's and Abraham's tractates could not be more dissimilar, for the right

and wrong reasons. As they correctly noted, Abraham Caslari had actually treated victims of plague, and he includes treatment considerations in his regimen; Jacme's regimen was purely preventive and written before the plague had reached him. Unfortunately, neither Duran-Reynals nor Winslow had actually read Abraham's work, which they encountered in Pinkhof's (faulty) 1891 edition and Dutch translation. As a result, they concluded that Abraham's work was "not a scholarly one and must stem from a medical tradition" unlike that tapped by Christian physicians in his milieu, especially as it bore "no trace of the influence of Galen and Avicenna upon the author's philosophy of disease."<sup>35</sup> It is true that Abraham's tractate makes no explicit reference to the categories of naturals, nonnaturals, and counter-naturals associated with the Galenic texts admired by his Christian peers. However, it is unlikely that he was not exposed to Galen's writings, either in Arabic or in Hebrew translation, because they were both popular and circulating in his time and milieu, as well as foundational for Avicenna. Abraham was definitely at home with Avicenna's writings, and his tractate reflects the shared learning and intellectual attitudes of Jewish and Christian physicians in this region and time. How much that was so is evident from a comparison of Jacme's and Abraham's works, which, despite their distinctive agendas and positions, share a dependence on Avicenna's Canon.

As Abraham explains in his introduction, he organized his treatise to discuss definitions, and then causes, signs, and treatment, concluding with his thoughts on the fevers of the past year and how they should be treated.<sup>36</sup> The tractate consists of eight chapters, beginning with a definition of pestilential fever. "True pestilential fever" requires a "poison-like corruption of the air" that enters the spirit of the heart. He lists its possible terrestrial or celestial causes, adding that celestial causes are beyond the competence of most physicians because they have not studied astronomy. Chapter 2 discusses the signs of pestilential fevers, and Chapter 3 the "early signs" that also interested Jacme: these are early indications of celestial change that are visible on earth. Although humoral-pestilential fevers will closely resemble pestilential fevers, they are not the same; neither is the spread of disease an indication that it has necessarily become pestilential. In Chapter 4, Abraham presents a regimen for true pestilential fevers that stresses correction of the corrupted air, light sleep, and recommendations for diet and bleeding. Chapter 5 elaborates a treatment regimen for people with pestilential fever, recommending that people leave an infected area, if possible. If this is not possible, the fevers should be treated like humoral-pestilential fevers or fainting fevers, the regimen for which follows in chapter 6 and is tailored to the humoral complexion of the patient. Above all, it is important to strengthen the heart. Chapter 7 considers the

fevers of the past year, which behaved more like humoral fevers than pestilential ones—and mixed-humoral fevers, at that. Many of the afflicted were cured with or without medical intervention. Abraham speculates that the fevers had a material cause, possibly bad regimen due to famine and scarcity; a particularly malevolent astrological conjunction (i.e., celestial cause) is another possibility. Chapter 8 concludes the tractate with a regimen for “this year’s fevers,” if similar fevers recur. The regimen is not strictly intended for Jewish patients, as it refers to pork.<sup>37</sup> Although it does not use the terminology of nonnaturals, the tractate covers the topics of air, sleep, exercise, diet, sexual activity, bathing, bleeding, and purging that are standard touchstones for five of the six nonnaturals invoked in the writings of contemporary physicians. The only nonnatural that Abraham ignores is the sixth, which deals with mood or emotional well-being, an elision that I return to below.

Throughout the *Tractate on Pestilential and Other Types of Fevers*, Caslari refers to the opinions of both learned and not-so-learned physicians (respectively, those with whom he agrees and those with whom he does not), indirectly letting us know that he has been closely following the debates over the season’s fevers. It would have helped modern scholars had he named his sources and rivals; not atypically, he chose not to do so.<sup>38</sup> His familiarity with the core medical reading of his time, especially Avicenna’s *Canon*, is nonetheless evident; some of the passages that Abraham cites from Avicenna’s work are also cited by Jacme. Despite Duran-Reynals and Winslow’s claim that Abraham displayed ignorance of this learning, this is not surprising. Abraham, we recall, came from Narbonne, where Jewish medical learning and practice benefited from the prestige of medicine throughout Provence and Languedoc. The contemporary center for medical learning that would have influenced him was Montpellier, where the university faculty in medicine was renowned throughout Europe. Not far away, in Avignon, the papal court also attracted important physicians, some with faculty positions in Montpellier. Aragon imported physicians from Montpellier, while encouraging locally an “open” system of medical education that permitted non-Christian access to the profession in this region. Jews were not permitted to enroll at the universities but maintained a parallel system of instruction, largely through apprenticeships of young students to established physicians, and a licensing exam.<sup>39</sup> Abraham Caslari was presumably trained by his father in this way. The so-called open system of licensing and practice in Aragon made it possible for Jewish physicians to follow the university curricula by means of a parallel corpus of translations that permitted them to master essential texts.<sup>40</sup> When they were ready, the students were examined, often by a pair of examiners—one Christian, one Jewish—in the texts that constituted the formal university curriculum.

Among those works, Avicenna reigned supreme. For Jacme, that meant the Canon in Latin. Gerard of Cremona's translation had been circulating since the twelfth century and was incorporated into the university medical curriculum in the thirteenth.<sup>41</sup> Gerard was responding to a growing hunger for Arabic medical works in Latin at a time when most Jewish physicians were still able to read the Canon in the original Arabic. A century later, this was less and less the case, and the need for a Hebrew translation became pressing, especially in those regions of Christian Europe where Avicenna was now central to medical instruction and where Jews no longer knew Arabic, or enough Arabic, to read the original.<sup>42</sup> For Jews, the Canon in Latin was also largely inaccessible. Toward the end of the thirteenth century, two Hebrew translations appeared almost simultaneously in Rome: one by Nathan haMe'ati (1279) and one by Zerachiah ben Shealtiel Hen (Gracian) (1280). Sometime before 1402, Joshua haLorqi—soon to become a famed apostate—retranslated parts of Me'ati's books 1 and 2.<sup>43</sup> According to Benjamin Richler, a number of anonymous translators also took up the challenge of rendering the Canon in Hebrew, and their efforts survive in fragmentary form.<sup>44</sup> In Richler's words, the eleventh-century Avicenna's writings constituted "the most important component of Jewish intellectual activity in the fourteenth century."<sup>45</sup> And, as he has noted, if the number of manuscript copies is any indication of its popularity, the hundred-plus copies of Hebrew versions of the Canon testify that it "was by far the most popular medical book among the Jews in the Middle Ages."<sup>46</sup> Near the close of the fifteenth century, the Hebrew Canon would be the first Hebrew book ever printed, rolling off the press in Naples in 1491; this edition bears the additional distinction of being the first printing of the Canon in any language. Gerard of Cremona's twelfth-century Latin translation would not appear in print until 1522, and the original Arabic text was not printed until 1593.

The Canon was a huge work, and completing an entire translation would have been a remarkable achievement. Divided into five books, the Canon's introductory theoretical expositions attracted the most attention from translators.<sup>47</sup> At the other extreme, the pharmacological compendium of book 5 held practical appeal. Book 4, on illnesses that involve more than one body part, contains Avicenna's discussion on general and epidemic fevers.<sup>48</sup> In addition, the Canon generated its own commentary tradition among Christians and Jews. The Hebrew commentaries flourished, especially in Provence and Languedoc, which Hagar Kahana-Smilansky has argued reflects the Canon's practical value. Two late thirteenth-century commentaries come from Abraham's native region: one was authored by Yedaiah Bedersi, yet another Narbonnais intellectual

resettled in Perpignan, whose father, we may recall, counted Abraham's father as a friend. The other was by Moses b. Joshua Narboni (i.e., "of Narbonne"), also in Perpignan, the stopping point for all Languedocian Jews fleeing toward Aragon in 1306.<sup>49</sup> It is thus highly likely that Abraham Caslari had seen and thoroughly digested the contents of this important work.

The terminology that Abraham uses to distinguish among various kinds of fevers supports the claim that he was familiar with the Canon. Avicenna begins book 4 of the Canon by defining fever as an "alien" heat that ignites and expands via the spirit and blood through the vessels of the body: **חום נכרי** ומתלקח בלב ויצמח ממנו באמצעות הרוח והדם אשר בשריינים והעורקים בכל הגוף.<sup>50</sup> Abraham defines a pestilential fever as an "alien" corruption of heat and humidity in the air: **עפוש האויר בחום ולחות נכרי**;<sup>51</sup> he repeats the term when describing fevers that cause putrefaction of the spirit, **מקרה לחום נכרי משנה הרוח**.<sup>52</sup> The same echoes of Avicenna that sound in Jacme's work also sound in Abraham's, underlining the systematic approach to their medical problem that sent both physicians back to this primary text. Jacme notes that in times of pestilence, "we see how serpents and other reptiles flee from their holes and issue hurriedly from them, the birds leave their nests and flee. . . . [W]heat and other fruits growing from the earth are affected . . . and carry such great infection that they are like poisons to all who eat them."<sup>53</sup> Abraham writes that a pestilence caused by celestial change will be signaled on earth by changes in nature:

שהבורא ית' הטביע בבעלי חיים הרגשת האוירים הטובים וברח מהאוירים הרעים הנפסדים  
וביחוד קצת מיני העופות כעורב ומינו ותור וסיס ועגור . . .

For the Creator, blessed be He, gave animals [the ability to] sense when the air is good and to flee when it is bad and putrid, especially certain types of birds like crows, doves, and swallows.<sup>54</sup>

In fact, one reason he cites in defense of his argument that the mortality of the past months was not due to a universal pestilence (cosmological in origin) was that these signs were not in evidence:

והנה לא נראו האותות באויר באביב ולא בסתו ולא מערפלויות ושאר ובריחת העופות מקניהן  
והרמשים מחוריהן ולא נראה בפירות עפוש יותר מן העפוש הרגיל הטבע להם . . .

But these signs were not evident in the air, neither in the spring nor the fall, not in fogs or such, or in the fleeing of birds from their nests or reptiles from their holes. The fruit showed no more rot than usual for their nature.<sup>55</sup>

Both men's claims rely on Avicenna's Canon, book 4, which contains the author's treatment of fevers. Avicenna also divides his discussion of pestilential fevers into causes, signs, and treatment. He notes that pestilential fevers have celestial and terrestrial causes and that celestial changes may be observed in the peculiar behavior of birds and reptiles on earth. In Me'ati's medieval translation:

ואמנם האותות על דרך הדמיון לטבה כמו שתראה הצפרדעים הנה הרבו במים ותראה הר' משים הנולדים מן העפוש וממה שיוורה על זה שתראה העכבר וב"ח השוכבים בתוך הארץ יברחו על פני הארץ ותראה בעלי החיים נקי הטבע כמו אל לקלאק הם אגסים וכיוצא בהם יברחו מקניהם וירחקו ממנו ואולי יעזבו ביציהם.

Moreover, the signs as they appear for this cause may be that you see frogs multiplying in the water, and that you'll see reptiles [or insects] generated by the corruption and what indicates [corruption]; you will see mice and animals that live in the earth flee, and you will see "bad-natured" animals like the stork, i.e., the *agasim*, and the like fleeing from their nests and departing, perhaps even abandoning their eggs.<sup>56</sup>

Jacme observes that pestilence can be local or general; it can begin in a single house or street or city and spread, or it can originate in a greater region.<sup>57</sup> His analysis emphasizes the impact that local climate and, for that matter, lifestyle, could have on public health. The types of winds and air circulation that characterize a given locale, the ways people store food, the types of trees, "especially high ones such as poplars, which hinder the ventilation of the air, or walnut trees, which have a special tendency to corrupt the air, and also fig trees" will influence regional susceptibility to epidemics.<sup>58</sup> So, too, local sanitation, or an area where animals are slaughtered or tanners work, can produce infection—particularly for someone predisposed by temperament to disease, which is also a "lifestyle" hazard encouraged by those who bathe or have sex too frequently, or who overeat and drink.<sup>59</sup>

Abraham similarly believes that corruption of the air can have an initial toxic effect on one or many people. Like Jacme, he notes that pestilence can begin in a house—even a part of a house—a city, or region and spread, and that bad diet or an unbalanced regimen can aggravate its effects.<sup>60</sup> Again, both men echo the Canon, book 4, article 4, where Avicenna states that once corrupted air has entered the heart and spread to other organs, the result is pestilential fever—for those bodies who are susceptible to it. This includes people whose complexion is characterized by heat and humidity, but also people who have

“bad humors” as a consequence of excessive behaviors, like people who indulge too much in sex.<sup>61</sup> Jacme and Abraham also concur that local climate or individual susceptibility play a role in epidemic fevers.<sup>62</sup> For Jacme, however, the diagnosis of “universal” pestilence made individual susceptibility less relevant, as the primary cause was divine. For Abraham, the fevers of 1348 were not a universal pestilence, and individual temperament mattered.

Complexion (temperament) was relevant for Abraham even in terms of planetary influences, which primarily affect those persons and places predisposed to their influence:

ולא יעשה רושם בבלתי מוכנים לקבל זה, והם שמזגם חולק והפכי לזה השפע. ולולא זה כבר כל האנשים אשר עומדים באויר הדבריי יחלו חליים דבריים בעת הדבר ימותו מהם או יבראו ואיננו כן שיש שיחלו ויש שלא יחלו וסבת זה ההכנה לקבול השפע והבלתי הכנה.

They will have no effect on those who are not predisposed to receive it, or on those whose complexion is contrary or divergent from this influence. Were this not the case, all the people found in pestilential air would get pestilential illnesses; [all] would die from them or [all] get well. But this is not the case, since some get sick and some do not, and the reason is the predisposition or lack of predisposition to this influence.<sup>63</sup>

Even his own treatise, he cautions his readers, should be read with the understanding that it describes the action of an individual disease in specific individuals. Every experience of illness is unique: שאין אחד וחליו שוה לאחד וחליו. Although he seeks to offer guidance in case this kind of fever should recur, the savvy reader will “add or subtract as his intellect recommends.”

This is not a point unique to Abraham but is one that he repeatedly emphasizes. He saw many people die, but not all of them, and for him, this variability demonstrates that the plague was not a universal pestilence. Likewise, he insists on modifications in his treatment plan based on the humoral complexion of the patient—which would be irrelevant in the case of universal pestilence. He begins his treatise with a sharp critique of the fatalities that he attributes to physicians’ misdiagnosis of the season’s fevers, whose “mixed” signs made them difficult to classify. Again, his observations may simply reflect his personal reality in the context of relatively low plague mortality rates in the Girona region. From Abraham’s perspective, however, the problem was not regional epidemiology but the physician’s failure to apprehend the true significance of his patients’ symptoms.

Both Abraham and Jacme also followed Avicenna in describing the kinds of corruption that could propagate disease locally. Among the terrestrial factors, all

three men emphasized local climate and environment. Abraham's examples include mildewed crops; putrid waters; or plants and trees of a corrupting nature, "as empirics and researchers have agreed."<sup>64</sup> The unhealthy qualities of fig and nut trees were likewise noted by Jacme.<sup>65</sup> Jacme, we recall, also singled out people associated with odiferous settings and poor ventilation, as well as those who indulged in bad regimens: these were men and women whose potential to transmit infection was based on their occupational or habitual conditions. Finally, human beings afflicted with certain disease conditions were capable of transmitting infection that could corrupt their surroundings (or other people). Jacme listed these conditions as *lebrositat ho meseleria e roynna e tiseguea e lagaynna, febre pestilencial, pigota e sarampió e tiynna*.<sup>66</sup> In a parallel passage, Abraham ignored occupational hazards but listed disease conditions that generate corruption, including leprosy or fevered people who might transfer their own corrupted humors to the air and hence to other people.

For pestilential fevers, and for the "humoral-pestilential" fevers he diagnosed in his patients, Abraham offers a standard repertoire of remedies. To treat humoral-pestilential fevers, it is critical to strengthen the heart, and therefore foods that might be shunned in the case of pure pestilential fevers are cautiously allowed. Abraham admits that the fevers of the past year did not fit cleanly into any of these categories. Relying again on Avicenna, he notes that the pulse and urine of the patient might be deceptively normal, and then suddenly he would die:

ולכן היה דפקי אלה ושתניהם קרובים לטבעיים עם היותם קרובים למות הגיעם ללב וקרבתם להמוח עד שלא יוכל הרופא להקדים הידיעה במותם.

Thus their pulses and urine will be close to normal even as they are close to death. They [the corrupted humors] have reached the heart and brain so that the physician is unable to anticipate death.<sup>67</sup>

Thus, while they behaved in many respects like humoral-pestilential fevers, in other respects the recent fevers behaved as if the source of corruption were external and "poison-like." For pestilential fevers, fumigations, and wood fires might counteract the corrupted substance of the air; Abraham adds familiar warnings to avoid exposure to "bad" air currents or breezes, to cover windows that let in air. Beneficial foods are those that emphasize astringent (cold, dry) qualities; they include citrus and poultry, land birds, and fish roasted in vinegar or pomegranate juice. Sweet fruits and dairy products, which increase humidity (phlegm) should be avoided, as should emetics and bleeding, which deplete the patient's strength.



But since fevers such as those experienced recently are not pure pestilential fevers, Abraham concludes his tractate with specific recommendations for fevers like those of the past year. Patients should be given silk compresses on their hands, face, and heart; arms and legs should be washed twice daily with herbal blends.<sup>68</sup> Purging and bleeding are prescribed according to the number of days from the fever's onset and the time of day. A mild emetic should target all the humors, "which are mixed in these sicknesses"; this is preferable to purgative drugs of bad or toxic qualities.<sup>69</sup> Abraham prescribes ointments to combat headaches and recommends scenting the air lightly with myrtle, cinnamon, and citrus. Soups made with melon seeds, lentils, or chickpeas are good; almond milk, however, aggravates head pain. Meat and wine should be avoided, but since it is so important to bolster the patient's strength, the rules may be bent: it is better for the patient to eat familiar foods than medically prescribed ones that are alien to his or her regimen.<sup>70</sup> Unlike Jacme, Abraham offers no cost-cutting options for his recipes, which may say something about the social circles of his clientele; he does, however, indicate several times that dosages or remedies should be modified for children.<sup>71</sup>

To conclude the first segment of this chapter, therefore, Abraham and Jacme not only drew upon some of the same written authorities and texts for their work, particularly Avicenna, but they shared a way of thinking about health and sickness. Abraham's failure to enlist the categories of the six non-naturals seems noteworthy. Yet even without explicitly invoking this terminology, Abraham covers five of its six categories; the missing rubric, to which I turn below, is that of moods or emotional well-being. Overall, Abraham's approach to the medical challenge posed by the recent pandemic is logical, systematic, and clearly in dialogue with opinions and texts circulating around him. All the plague writers considered definitions, causes, and signs, followed by options for treatment and/or prevention. Their conclusions may have differed, but the process for reaching them was the same, whether the writer was Christian or Jewish, university-trained in Latin or privately tutored in Hebrew. Abraham understood the rules of the genre. Abraham's tract is also distinctive because it is based on his personal experience during the plague epidemic and in a region that experienced that epidemic in milder form than did other regions, some fairly nearby. His analysis and treatment recommendations reflect his conviction that he had not witnessed a universal epidemic of pestilential fever.

The relative optimism of Abraham's insistence on the ability of many patients to recover correctly reflects his experience treating them, but is unusual for the first-generation tractates. As Ann Carmichael has noted, physicians rapidly rebounded

from their initial sense of helplessness in encounters with the plague. Whether because subsequent outbreaks were less virulent, so that medical practitioners were convinced that their treatment regimens were successful, or whether repeated outbreaks dulled the shock of 1348, later tractates convey a tone of optimism and confidence notably lacking in the tractates of the first generation.<sup>72</sup> Again, Abraham's view of the fevers that he treated suggests a milder epidemiological context from that encountered elsewhere. That his experience was anomalous is also reflected in his exasperated disparagement of other physicians, some of whom presumably were located in cities and towns where the plague wrought greater devastation. Abraham's sense of estrangement from the elite circles of medical opinion, which he voices periodically in his tractate, may thus be explained as an epidemiological fluke. At the same time, less explicitly "medical" aspects of the *Tractate on Pestilential and Other Types of Fevers* suggest that other factors may also have contributed to this feeling.

\* \* \*

Is there any evidence that Abraham's distress, like his fevers, was motivated by nonacademic factors? Here a closer look at some of the stylistic features of his tractate is instructive, as they suggest something of the social and psychological context in which he wrote. The second segment of this chapter examines three literary aspects of Abraham's plague tractate: (1) its use of personal interjections; (2) its near paucity of biblical allusions; and (3) its elision of the sixth nonnatural, those psychological or emotional factors that influence the forms and experience of illness.

On the surface, Abraham's passion seems reserved for what look like questions of medical theory and policy. The season's fevers had "mixed" signs, and physicians had never seen anything like them before; moreover, people fell ill so suddenly that they often did not seek out physicians until it was too late.<sup>73</sup> Abraham repeatedly condemns the physicians whose *mis*diagnosis of the fevers has contributed to fatalities: physicians who erroneously believed that they were treating pestilential fevers would prescribe meat, chicken, and wine at the onset and augmenting phase of the fevers, and defer purging. "And I saw them [the patients] follow this regimen and die."<sup>74</sup>

Medicine is a social art, not just for the relationships that it fosters between doctor and patient but among physicians themselves. Abraham does not refer directly to social, religious, or political events, and he does not differentiate among his patients in terms of religion or nation. Likewise, as a learned physician, he was

part of a medical community that included practitioners of different sorts: men and women; Christians, Jews, and Muslims; empirics and university men.<sup>75</sup> Despite the diversity of medical practitioners around him, the world of learned medical men is what he notices; this is the group with which he identifies and is, significantly, medicine's most prominent social class. At one point, his tractate refers to a *כת מהרופאים*—a sect, or group, of physicians, perhaps alluding to an organized professional guild or group with political or university connections.<sup>76</sup> In this context, Abraham's repeated invocation of personal experience, like his use of personal asides and interjections, unintentionally testifies to the medical networks and relationships that connected university physicians and their more prominent Jewish peers. He begins his treatise announcing that he has been inspired to write by the unprecedented fevers of the summer and late spring. He describes the geographical range of the epidemic and then its symptoms: continuous fever with much fainting, pain, and weakness. The onset of the fever is accompanied by great sweating, mental confusion, weakness, hemorrhage, vomiting, diarrhea, and worms. The afflicted often "experienced diarrhea or vomiting or strong hemorrhaging from the nostrils, but many were healed and their strength held; some would die from a loss of strength and sudden and excessive evacuation." Despite their bewildering symptoms, however, "no *learned man* would doubt that these are not true pestilential fevers . . . and when I examined many people for them, [I found them to be] mixed, not simple" [emphasis mine].<sup>77</sup> Abraham's introduction informs us that he has written at the request of "wise and learned men":

ושאלו ממני אנשים חכמים ונבונים שאודיעם סברתי בהנהגות הקדחות האלה ושאתוב  
בזה מאמר והשלמתי רצונם ויקבל תועלת כל חכם לכיוצא בחלאים האלה אם יקרו ויהיה  
התועלת לההווים ויהיה המשל ודוגמא לבאים . . .

Wise and learned men asked of me that I inform them of my opinion for treating these fevers, and that I write a tractate about this. I have fulfilled their request. Let any learned man benefit from it concerning these illnesses, whether the benefit is for the present [fevers] or as a model for those to come.<sup>78</sup>

At the same time, Abraham suggests that he has another goal as well—namely, to record for posterity a view that has been marginalized by some of these learned experts:

וראיתי כי אם לא אודיע בברור הקדחות האלה מאי זה מין הם לא יפרסם אמתת סברתי  
בדרכי הנהגתם.

And I saw that if I did not make explicit what kind of fevers these were, the truth of my opinion about treating them would not be disseminated.<sup>79</sup>

In Abraham's judgment, the fevers that he treated were humoral-pestilential, not a universal pestilence. This implied, among other things, that the immediate causes were local (terrestrial) and not cosmological. One possible culprit was bad diet; it was a year of famine and poor-quality foodstuffs and people were eating grains and seeds that they did not customarily consume, "pips and chestnuts and acorns."<sup>80</sup> True, the primary causes of climate change were celestial, but celestial changes did not of themselves necessitate pestilence; this was ultimately up to God.<sup>81</sup> Abraham notes again, with some asperity, that by relying on astrological signs, "a number of would-be sages" had boastfully proclaimed the year's sicknesses pestilential. But the behavior of the planets is not sufficient for such a diagnosis: astronomical conditions might dictate an epidemic on earth, but only God determines whether it will be pestilential.<sup>82</sup>

Like Jacme, Abraham declares that he is writing for "the common good" (תועלת כללית). He insists that his readers are free to disagree with him. Should these fever types recur in the future, he adds, his readers are free to modify his recommendations as seems sensible to them. The tone of this passage oscillates between two not quite concordant claims. On the one hand, Abraham tells us that he is not writing for any personal stake or renown, that other men have implored him to write, and that he does so to serve a greater good. On the other hand, he lets slip several times that he has a perspective on the pandemic that other authorities have dismissed and that he writes to ensure that he gets a hearing. He has been among other physicians or with the patients they have treated, and he has decided that the physicians were wrong: it is hard to imagine that this would have been a harmonious scene. Now, Abraham feels that he must disseminate his view or have its traces lost forever. In other words, Abraham's asides and interjections preserve the traces of an impassioned debate over the causes, nature, and treatments of the plague.

Abraham's opinion was one of a variety of written judgments on the year's fevers, undoubtedly supplemented by oral discussions that are lost to posterity. If he had encountered Jacme's regimen, he knew Jacme's relatively heterodox consideration of possible causes, as well as his conviction that universal pestilence came to chastise Christendom for its sin. If he was unaware of Jacme's text, by the summer of 1349 he may have had some idea of the analyses circulating in the tractate of the anonymous writer from Montpellier or that of Alfonso de Córdoba. Alphonse, even more than Jacme, emphasized the possibility of human

causes for the plague, whose final phase he attributed to concocted poisons that corrupted the air.<sup>83</sup> For both Alfonso and the Montpellier author, this kind of pestilence was untreatable by human means. This, too, was a view that Abraham would have adamantly opposed. Among the early tractates described by Arrizabalaga, only Giovanni della Penna diagnoses a form of humoral pestilence similar to Abraham's reading, but Abraham was unlikely to have seen this work. Thus, among his peers, men educated in the orbit of Montpellier to the east and Lleida to the west, Abraham's opinion would have been in the minority.<sup>84</sup> And, apparently, it was rejected.

Abraham's discord with his colleagues surfaces throughout his tractate. In cases of true pestilential fever, he comments, their celestial cause can translate into sudden mortality without any of the early warning signs typically observed on earth. Physicians are not trained to read astronomical signs, and they are therefore confused about how to treat their patients.<sup>85</sup> Discussing pestilential fever, he refers to a position taken by the *כת מהרופאים*, a guild or group of physicians that he identifies with certain medical opinions.<sup>86</sup> As he goes on to argue for his own diagnosis of humoral-pestilential fever, where corruption of a humor in the body—not the air outside, or a celestial event—causes fever, Abraham interjects four times the phrase “as I have said” and once the phrase “as I mentioned earlier.” The force of the repetition intensifies his argument and underlines his interest in this fever category. At one point, Abraham brusquely cuts short his treatment regimen to send his readers to other books, as “I have left off mentioning this regimen in this tractate.” Indeed, he concludes:

המאמר הזה חברתינו ביחוד לבאר בהנהגת הקדחות שקרו בשנה הזאת ומקריהן ואותותיהן  
המשיגים והמפורסמים גם להמון וכ"ש לחכם רופא ולפי האותות לא יספק אחד מן החכמים  
כשאינן דבריות אמתיות. . . .

I have written this tractate especially to clarify the regimen for the fevers that occurred this year, their symptoms and their accidental signs, which are obvious even to common people and all the more to a learned physician. And according to the signs, no learned man would doubt that they were not true pestilential [fevers].<sup>87</sup>

Doubt only arises, he continues, when trying to distinguish between humoral-pestilential fevers and humoral-fainting fevers, which present very similarly; in this case, the early signs are critical, such as the quality of the air. In any event, the fevers that he saw were “mixed,” not simple, perhaps due to material causes such as poor diet in time of famine, or perhaps due to celestial causes like a

planetary conjunction. It is up to God whether celestial events translate into pestilence, but he mentions celestial causes because “would-be sages” have declared that a planetary conjunction was definitely responsible.

Taken together, these personal interjections buoy a drily clinical argument with passion and permit us to detect a medical community struggling to react to a new kind of crisis. From our perspective, an argument over a diagnosis of “true pestilential” or “humoral-pestilential” fever may seem like useless hairsplitting. We know that, either way, the prognosis of a plague patient was unlikely to be affected. But we would be wrong to shrug off the intensity and urgency of the debate from the perspective of men who were putting their own lives at risk to treat the sick.<sup>88</sup> Was Abraham ostracized or sidelined among the prestigious physicians he encountered at the court and bedsides of his well-to-do patients? He expresses just such a fear. Perhaps his views were marginalized because they did not reflect the epidemiological reality of the plague’s devastation to the east, south, and west of him. Or perhaps being sidelined in a medical debate had other kinds of associations as well as consequences in the summer and fall of 1348. If so, Abraham’s occasional testiness may have other causes, a conjecture strengthened by other features of his prose.

Abraham’s *Tractate on Pestilential and Other Types of Fevers* is characterized by a near-total avoidance of biblical allusion. This is especially observable when contrasting his language to Jacme’s, but also in contrast to the mosaic of biblical phrases and puns that were second nature to Hebrew belletristic writers of his day.<sup>89</sup> With rare exceptions, of course, Hebrew writers distinguished sharply between belletristic and scientific language: the former modeled on Arabic genres and emphasizing a biblical purity of language; and the latter modeled on secular, scientific, or philosophical Arabic and Latin works characterized by cumbersome syntax, foreign terminology, and neologisms. Biblical illustration has no place in this literature, either as exemplar or stylistic guide.<sup>90</sup> In contrast, Jacme’s second article defines universal pestilence, first citing the example of Exodus 10, where God punished Pharaoh with, “among other plagues and curses, scorching wind and locusts.”<sup>91</sup> Contra-natural change in the air causing pestilence may, he continues, be “sent by God because of our sins,” for which claim he cites Deuteronomy 28.<sup>92</sup> Immediately following, he invokes 2 Kings 24, Exodus 7–11, and Numbers 14 as other illustrations of divinely wrought plague. In the same article, part 2, chapter 2, Jacme states that pestilential diseases will spread unless God mercifully restrains them, and article 3 invokes Sodom and Gomorrah (Genesis 19), advising the “faithful Christians” who are his readers that they must accept divine chastisement for their sins.<sup>93</sup> Article 5 introduces Jacob’s spotted sheep (Genesis 30). Finally,

Jacme's final chapter, on moral pestilence, draws on New Testament passages, beginning with a cascade of references to Matthew and Luke and concluding with the solemn assertion that a truly "universal" pestilence would be a sign of the anti-Christ, as proved by Mark 13.<sup>94</sup> For Jacme, as for his colleagues at the University of Paris, the medical crisis posed by the pandemic was never entirely separable from the theological apparatus and language that shaped their view of history and human suffering. Medical science affirmed theology and remained securely subservient to it.<sup>95</sup>

Not all Christian physicians held this view. Arrizabalaga's survey of six tractates written by university physicians in 1348–49 describes two that barely mention God, two that consider divine factors of secondary importance, and two that consider "divine intervention" a plausible cause of universal pestilence.<sup>96</sup> Abraham's tractate concords with the views of the second group, reminding his readers that God ultimately controlled the celestial factors that cause plague on earth and that God decided whether astronomical events would translate into epidemics on earth.<sup>97</sup> Otherwise, heavenly motives play a minor role in Abraham's analysis and recommendations, although he is careful to refer to "God's will" in reviewing the case for astrological causes for pestilence.<sup>98</sup> His tractate emphasizes the importance of correct diagnosis and that the summer's epidemic was not a universal pestilence. He even ponders an explanation that some historians would reconsider more than six centuries later: years of erratic climate and bad harvests had led to widespread famine, and people were not eating well. Deviation in diet and regimen had led to humoral imbalances and corruption, with disastrous results.<sup>99</sup>

Abraham's disinterest in theology is reflected in his scientific commitments, which were rooted in his belief in scientific knowledge as rational and nonpartisan. That attitude was shared by many of his Jewish peers. In this context, Abraham's prose avoids biblical echoes so efficiently that it must be by design.<sup>100</sup> The two exceptions that I could identify in Abraham's *Tractate on Pestilential and Other Types of Fevers* are revealing. The first comes in the opening description of the devastation wrought by the plague as it moved from east to west through "Provence, Catalonia, Valencia, the district of Aragon, Navarre, and Castile." Abraham writes: **לא היתה** [ה] **מקדחות קריה ועיר ששגבה**— "there was no town or city mightier than the fevers."<sup>101</sup> The line, with its sweeping geographical arc, draws on a verse from Deuteronomy that, ironically, describes the biblical Israelites' conquest of the lands and peoples of Canaan. In Deut. 2:36, we read **לא היתה קריה ששגבה ממנו**, "there was no town mightier than they" (lit., "he," referring eponymously to the people). Abraham added "city" to the biblical "town" and inverted a scene of Israelite conquest to one

of epidemiological defeat. In the biblical context, the anticipated conquest is the realization of divine promise. It is brutally imagined: no *Gentile* woman or child shall survive the onslaught, and entire populations will be slaughtered, their property plundered and only their cattle spared. Abraham “borrows” this language to depict the raging devastation of a pandemic frequently accompanied by violence against Jews. Now a reversal of biblical promise, the phrase describes a moment when outside forces emerged to slaughter and plunder local populations. This time, however, the victims were not Canaanites, Moabites, or Amalekites. They were Jews.<sup>102</sup>

No similar allusion appears anywhere else in the treatise, which implies that it was not a theme that Abraham sought consciously to reinforce. Nonetheless, it also holds pride of place at the head of his tractate and exploits a biblical reference that his medieval audience would have recognized without difficulty. The description deftly links the geography of destruction wrought by the plague to that subtended by attacks against Jews. It is artful enough that it could easily have prefaced a very different kind of account. In fact, it does: in his account of plague-related attacks on Jewish communities, Joseph haCohen, the sixteenth-century Hebrew chronicler, cites a (now-lost) chronicle by Hayim Galipapa, an eyewitness to anti-Jewish violence following the plague’s appearance in Monzón.<sup>103</sup> As Hillel Barzilay has recently shown, haCohen embeds excerpts from Galipapa’s contemporary account in two of his own histories, which include the following citation in almost identical form:

והיה בשנת חמשת אלפים ומאה ושמונה . . . דבר כבד מאד ממזרח שמש ועד מבואו ולא  
היתה קרייה אשר שגבה ממנו ככתוב ב[ספר] עמק רפאים לר' חיים גאלייפפה.

In the year 5108 [=1348] . . . a weighty thing occurred, from east to west, and there was no town that was mightier than it, as written in the [book] *The Valley of Ghosts* by R. Hayim Galipapa.<sup>104</sup>

Was Abraham deliberately quoting Galipapa’s chronicle, amplifying the chronicler’s “east to west” with names of specific regions and their cities and towns? If so, he was very much aware of the link between the plague and anti-Jewish violence. Conceivably, Abraham’s insistence on the fatal consequences of misdiagnosis was also an acknowledgment that not all plague fatalities were a consequence of disease; some were the result of violence. Alternatively, perhaps Abraham unconsciously recalled Galipapa’s description and its biblical overtones in composing his own work. This reading, too, has its strengths. Nowhere else do we see Abraham repeat this kind of allusion, or express explicitly or implicitly any concern with



religious violence. Yet even as an unconscious echo, Abraham's language marks a convergence of professional and political powerlessness. The passage's significance is not so different, either way.

Abraham strikes a biblical chord with one other phrase in his tractate. It appears in a passage that I have mentioned before, where he discusses local sources of pestilential fevers:

והארציות יהיה משכונת העפושים מפסידים האויר כשכונת בעלי הגדמות והצרעות והנשד-  
פים והחרחורים. המתעבר הפסדם לאויר והפעולות

The terrestrial [causes] are proximities of corruption that cause a change of substance in the air as from the proximity of *gedemot* and lepers, *nishdafim* and *kharkhurim* whose substance is transmitted to the air.<sup>105</sup>

Abraham's list of corrupting conditions draws on Deuteronomy 28, the chapter detailing the curses that will befall the Israelites if they fail to heed God's word. Deut. 28:22 includes a list of diseases that will strike land and people: בשחפת ובק, דחת ובדלקת ובחרחור ובחרב ובשדפון ובירקון, translated in the Revised Standard Version as "with consumption and with fever, inflammation and fiery heat, and with drought and with blasting and with mildew."<sup>106</sup> Medieval commentators recognized that the list mixed human and environmental categories, and they tried to distinguish between them.<sup>107</sup> Today, we cannot know exactly what conditions the Hebrew words describe, and the RSV translators have opted wisely for capacious terms. Some of these words also went on to develop modern meanings that do not accurately convey their biblical and medieval referents. *Giddem*, in modern Hebrew, refers to an amputee, but this is only part of the picture summoned by the medieval condition, which is treated by Avicenna in the same book 4 on fevers that served Abraham as a reference. In Me'ati's translation of book 4, fen 3, article 3, Avicenna discusses הצרעת ונקרא בלשוננו גד'מות ובלשון ערבי גדאם ובלטין—ליפרה—"a type of leprosy that is called in our [Hebrew] language *gidhmut*, in Arabic *gudham* and in Latin *lepra*." As the Arabic and Latin terms clarify, *giddem* in Me'ati's translation describes a leprosy condition in which facial features and limbs disintegrate and eventually fall off. *Kharkhur* ("gangrene," in modern Hebrew) is read by the biblical glossators as a kind of fever—according to Rashi, an internal fever that causes great thirst. Abraham has thus taken two words directly from the Deuteronomic verse (*kharkhur* and *shidafun*) and changed a third (*shidafun*, "blight") to *nif'al* form, where it seems to describe a human, not an agricultural, condition: *nishdafim*. The biblical passage makes no reference to lepers: Abraham has added them to his list.

As we have seen, Jacme's plague tractate included a similar claim. His list of disease conditions that might be a catalyst to pestilence mentioned leprosy and a variety of conditions characterized by fever and skin irruptions.<sup>108</sup> Jacme also referred to tanning, meat markets, and bridgeheads, as well as winds and corpses, as sources of local corruption.<sup>109</sup> In both cases, people afflicted by illnesses caused by putrefaction might be expected to transfer that putrefaction to the air that surrounded them.<sup>110</sup> Among these conditions, leprosy held a special taint because of its association—going back to the Bible—with sin and moral delinquency. The leper's physical deformity was an outward manifestation of spiritual disease—a familiar concern of Jacme's but nowhere evidenced in Abraham's writings. Indeed, when Abraham discusses the treatment of pestilential fevers, he includes "toxic" patients among those being treated, implying that he does not see their condition as morally predicated at all.<sup>111</sup> Considering Abraham's overall disinterest in questions of moral corruption, his list carries with it a subtext of moral taint or sin that is an unexpected sting. Again, whether the sting was intentional or unconscious, the consequences do not much differ. In this case, Abraham's choice of language betrays a cultural prejudice shared across confessional lines, reminding us of how easy it was to move associations from a moral field to a medical one. To be a Jew did not bestow greater sensitivity toward the plight of other marginal groups.<sup>112</sup>

As a social datum, Abraham's catalog also reflects the trend toward segregation of lepers, prostitutes, and Jews in Aragonese towns—ironically, often near one another.<sup>113</sup> It may also reflect his distance from sites of relatively recent violence. In 1321, Abraham was already in Besalú when rumors linking lepers and Jews to a conspiracy to poison Christian wells fueled pogroms across Languedoc, the papal Comtat-Venaissin, and Aragon. Lepers were arrested, tortured, and burned, and then it was the turn of the Jews, who suffered particularly vicious attacks in Toulouse and Barcelona, Cervera, Huesca, Barbastro, Tarazona, and elsewhere. Significantly, the "Lepers' Plot" led to anti-Jewish violence along much the same trajectory that it would follow in 1348. In contrast, Girona and surrounding towns, like Besalú, are not mentioned in the accounts of attacks against lepers or Jews in 1321. More than two decades later, Abraham surely knew about these episodes. But when he wrote his tractate, lepers, like those who suffered from the other afflictions on his list, were not political victims. On the contrary, they posed a potential threat to public health—the "common good" that he and Jacme both invoke, and whose emergence as a discursive category owes much to the Black Death.<sup>114</sup> As a matter of public health, their moral status was irrelevant, but it roused no particular compassion or regard in the Jewish physician.

Another feature of Abraham's plague tractate bears consideration. This feature is one of omission—specifically, his disinterest in emotional or psychological factors that are otherwise standard considerations of a medieval treatment regimen. As Naama Cohen-Hanegbi has recently demonstrated, the source and management of emotions was a topic vigorously debated by medieval physicians, who struggled to reconcile Galen and Avicenna on this and other questions.<sup>115</sup> Cohen-Hanegbi notes that the popular genre of the preventive regimen did not invariably include the sixth nonnatural, otherwise known as “accidents of the soul”; physicians were not unanimously convinced that it belonged in their domain.<sup>116</sup> Elsewhere, she asserts that omission of this topic became increasingly rare; however succinctly, plague regimens routinely referred to the familiar set of emotional states treated in the standard regimen.<sup>117</sup>

The omission of emotional factors in Abraham's work distinguishes him from his Christian peers: all six of the Christian tractates written in the wake of the 1348 plague defer to the Galenic categories of the six nonnaturals, emotions (or “mood”) constituting the sixth of these factors that were subject to the physician's manipulation. Three of those tractates, by Jacme, the Paris faculty, and Gentile da Foligno, thoughtfully consider the sixth nonnatural's “accidents of the soul,” especially the importance of neutralizing fear.<sup>118</sup> Jacme invokes this last of the nonnaturals by citing Genesis 30, the story of Jacob's notched rod, which miraculously increased the birth of spotted lambs among his uncle's flocks. For Jacme, this story is proof of the suggestive power of the “spotted” bough to the ewes, who saw its stippled pattern and gave birth to spotted offspring. This testimony to the power of suggestion tells us how great the power of fear is in times of pestilence and how important it is not to lose hope. Jacme recommends suspending the practice of chiming bells for deaths in times of pestilence, as it encourages morbid imaginings.<sup>119</sup>

The three Hebrew tractates besides Abraham Caslari's that have been published to date are later fourteenth-century works responding to later plague outbreaks, but they are all from the same region and explicitly enlist the six nonnaturals, including consideration of “accidents of the soul.” The first, by Abraham ben Solomon Hen, recommends that the sick try to maintain good spirits to boost vital spirit.<sup>120</sup> The second, an anonymous Sephardic tractate recently published by Bos and Mensching, elaborates on psychological factors to a surprising degree. In times of pestilence, the author states, it is important to make an effort to avoid sadness, worry, and melancholy, and likewise anger, “bad thoughts,” and isolation. All these things arouse bad humors and burn up the good ones. Thus it is critical to tilt to the other extreme and distance oneself from anger and bad things,

“while rejoicing in one’s lot and giving praise to God for one’s life, enjoying companionship, good music, and tranquillity.”<sup>121</sup> In the third example, written in the aftermath of the 1362 plague in Avignon, Isaac b. Todros also warns his readers to avoid anger and melancholy or thinking about things that arouse fear and worry. He advises the sick (or potentially sick) to avoid studying difficult subjects but to study what is easy to grasp and gives one pleasure.<sup>122</sup>

In contrast, the question of psychological or emotional affect seems almost irrelevant to Abraham. In his defense, Avicenna’s Canon, book 4, does not emphasize these factors in its discussion of epidemic or pestilential fevers, either. The Canon, however, includes an impressive list of quotidian (ephemeral) fevers linked to affective causes that ranged from excessive joy to excessive fear, melancholy, fainting, or pain, and whose treatment calls upon remedies similar to those just mentioned.<sup>123</sup> So, too, the treatise on fevers by Ibn al-Jazzar, which preceded Avicenna’s but, like his work, found a secure niche in the thirteenth- and fourteenth-century curricula of European Christian universities, understands one cause of short-cycle fevers to be excessive emotion. The author’s list includes “anger, grief, and fury,” for which he recommends treatment with “words and deeds that appease and please the soul,” as well as comforting diversions, friends, and aromatic plants.<sup>124</sup> Abraham Caslari notes these categories when he considers the potential origins for putrefaction of spirit, some of which are humoral, and some in the heart or blood or spirit itself: “actions of the soul like anger and melancholy and others change the spirit’s [humoral] complexion.”<sup>125</sup>

Abraham may have assumed that physicians seeking a detailed treatment of this condition could consult other tractates; in several places, he mentions that he is eliding a topic because it is amply treated elsewhere. But even given this possibility, the total absence of psychological factors in Abraham’s tractate leaves a strange gap in the expected coverage of his subject matter. Only in the beginning of his tractate do we find a reference to “accidents of the soul”: when listing the signs of a true pestilential fever, Abraham refers to the power of fear, which, however, he medicalizes as a consequence of illness. Due to a suppression of vital spirit in the brain, the patient can experience lethargy, weakness, loss of appetite, and confusion. This physiological condition, in turn, creates “fear and a dread of death.”<sup>126</sup> He offers no specific treatment to soothe or comfort the frightened patient.

For Abraham, the physician’s primary goal when treating fevers like those that have ravaged Aragon is to maintain the strength of the patient’s heart. This may require cautious deviation from the regimens, especially if a patient yearns for a food that is not recommended.<sup>127</sup> Here Abraham acknowledges a sort of psychological factor, by granting weight to a patient’s particular tastes or cravings.

But the dietary cravings of a sick man are a meager concession to his mental anguish and fears. At the least, Abraham's failure to address this category suggests that in a time of medical emergency, he did not think a patient's emotional state was the physician's priority. And perhaps, by extension, the low premium that Abraham set on "accidents of the soul" tells us something about his own temperament. A man who survives expulsion from his home, community, landscape, and language, and then rebuilds his life in a new setting, adding a new wife and language and powerful patronage in the construction of a flourishing career, is not a man who gives in to fearful imaginings.

Alternatively, the lacunae tell us nothing of the sort, and Abraham simply chose to emphasize points of diagnosis and treatment that he felt were critical and on which he differed from prevailing medical opinion. A comparison with Abraham's 1326 fever treatise, the "Aleī ra'anān," might bolster one view or the other. Alas, it is still unpublished, and for now, we can only say that for Abraham, his patients' state of mind was not his most pressing medical concern, even that of patients he had lived among and perhaps treated for almost three decades. Neither, as noted above, does he distinguish among the sick in terms of class, profession, or gender, only deferring occasionally to modify recommendations for the very young. He does refer to patients of different humoral temperament (particularly sanguine and phlegmatic) and to men who overindulge in food or sex or bathing. But these are categories taken from Avicenna and do not necessarily describe Abraham's particular milieu.

What can be learned from these three literary aspects of Abraham's tractate? First, Abraham's interjections and asides betray a glimpse of himself and his colleagues as they treated the sick. They furthermore testify to the heated debates taking place among medical professionals during the course of the plague and in its immediate aftermath. That debate began with questions of diagnosis that taxed received categories of disease (specifically, fevers) in new ways, pushing to the fore questions of transmission and contagion, as well as causality, and pressuring physicians to reconcile the gap between their experience and their books. Abraham's insistence that the fevers should not be classified as universal pestilence is accompanied by his observation that many patients recovered. This anomalous assessment seems to reflect lower plague mortality in the vicinity of Girona and may partially explain the rejection of his view by other physicians (as well as his rejection of their plague realities).

Second, albeit indirectly, the tractate also reflects the author's distance from episodes of plague-inspired violence against Jewish communities—and equally from the sites of violence against lepers twenty-seven years earlier. There

is only one place in Abraham's text where he may allude to anti-Jewish violence, and that is in his opening description of the trajectory of the pandemic. This description not only cites a biblical passage evocative of violent slaughter and dispossession but is also the identical passage invoked by a contemporary eyewitness of the violence in Monzón who survived to write about the attacks on the *aljamas*. The fact that it remains an isolated example makes it impossible to ascertain how consciously Abraham recycled Hayim Galipapa's account. In either case, I have argued, the remarkable intertext reinforces a subtext of frustration in Abraham's tractate that may speak to more than a professional dispute. Moreover, if his source was Galipapa's chronicle, then this, too, indirectly suggests that more conventional genres of commemoration controlled by rabbinic authorities (fast days, penitential liturgies, and laments) were not the dominant genre shaping his views—because they were not relevant to him or because they were in trouble. Although these conventional genres did offer consolation to plague survivors, as I argue in Chapters 2 and 5, they may have competed with other forms of expression. For a man of science like Abraham, they may have lacked the kind of truth that he found in scholastic medicine.

\* \* \*

Abraham Caslari was a man who had survived his own dose of trauma and loss. His medical writings testify less to great gifts of intellect or synthesis than to his astounding resilience in a life that he had rebuilt from scratch and as a refugee in a foreign land with a father, wife, and children to support. His steady trajectory toward professional recognition, financial comfort, and political privilege documents his canny mastery of the social and professional challenges that he faced along the way. In this sense, his personal quirks may be on display precisely where he believes he has escaped them: in ordered, technical prose. Conversely, Abraham's prose betrays signs of stress. He worries that his views go unheard, he refers both to clinical and bookish disputes with other physicians, and he is tellingly contradictory in explaining his motives for writing. The fact, nonetheless, that he seeks to overcome these challenges in the form of a medical tractate reminds us that he saw his rivals as well as his followers as members of an intellectual and professional community whose language and commitments he continued to share in a time of crisis. This is a gesture of faith comparable to that of the liturgical poet who continued to ply the conventions of that genre when its assumptions were equally under stress. But the genre difference counts. The two types of writers envision different audiences: a community of learned physicians

versus a community of pious Jews. A poet like Emanuel, whose lament was treated in Chapter 2, speaks on behalf of a collective by tapping the shared tropes and language of sacred texts. Abraham Caslari also taps a shared canon of authoritative writing, but it is not sacred, and the voice that he proclaims emerges from his individual experience.

Strikingly, Abraham Caslari was also a survivor of earlier catastrophes, dating back to the great expulsion of French Jews in 1306. Over the four decades since his forced departure from Languedoc, he had built himself an enviable fortune and reputation, a prestigious career as a physician with access to the royal court and patients, not to mention a long list of royal privileges that he could transfer to his daughter and her family. Trauma may be a part of Abraham Caslari's story. But if so, it is trauma that has become inextricably interwoven with his sense of overcoming the blows of the past, confident that his success is a vindication of personal merit. Whether or how much he identifies with the reports of devastation in other regions—devastation wrought by high plague mortality as well as specifically Jewish losses to disease and violence—is a difficult question to answer. I have focused on elements of Abraham's tractate that, in some sense, destabilize the orderly logic of his prose, some of which may be rooted in his awareness of anti-Jewish violence. Even so, I am hesitant to claim that these factors are evidence of a deeply unsettled soul. With the exception of his opening line, his tractate never reverberates with any sense of a communal blow, a sense poignantly voiced in contemporary Christian plague tractates. Was Abraham content to leave this work to rabbis and poets, or did he repel grief and fear in the language of medical reason? I do not know.

What became of Abraham Caslari after the grim season that initiated the second great pandemic? He disappears from the records after 1349. That was just about when the plague made its first real appearance at the other end of the peninsula, in Castile. And that is where we turn our attention next.