Ignis sacer. Una storia culturale del 'fuoco sacro' dall'antichità al Settecento by Alessandra Foscati

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Medieval ideas of disease were rational and complex but they do not yield a clear picture of the past. Historians who interpret those ideas in order to recover both the cultural and physical aspects of diseases centuries ago can only bridge the distance if they first penetrate the semantic and lexical obscurities of another thought world. Alessandra Foscati's new study of an old disease terminology reveals just how carefully that task must be approached, since medieval writers described disease in ways that were more literary and historical than what we would characterize as empirical or scientific. These writers belonged, furthermore, to a restricted literate culture trained in particular ways. Treating the ill was by no means the exclusive domain of the literate but writing histories of diseases and epidemics was. So medieval writers drew vocabulary from an already remote classical past when they described the course of diseases and their impact on their societies. Accounts of those now distant pathological realities employed Greek and Latin medical nomenclatures that are not strictly equivalent to those of modern medicine. The precise subject of Foscati's book is the evolving meaning of the Latin expression 'ignis sacer' ('Holy Fire'), which for centuries described pathologies that ulcerated the skin and resulted in gangrene, and which has been thought in the modern period to have designated epidemics of ergotism. By examining a wide set of sources that include medical treatises, chronicles, hagiographies, sermons, public edicts, and notary texts, and by comparing these with each other over time, Foscati dispels some persistent confusion regarding the nature of these accounts.

Described in a 12th-century hagiography of Saint Ilarius of Poitier, *ignis* sacer burned in the flesh with no visible flame and 'smoldered within quietly, invisibly and with a fetid stench, so that it is easy to tell that this is not our

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mundane fire, but rather infernal' [43: my translation]. In an earlier description cited by Foscati, the Frankish chronicler Rudolf of Glaber described an epidemic that raged throughout Italy and Gaul in the last decade of the 10th century. Glaber tied the terrible epidemic to an eruption of Mount Vesuvius in the months prior. The volcano ignited a fire that spread to the bodies of the sick across the peninsula and beyond. The continuity imagined between the eruption and the epidemic illustrates the deep understory of the noun 'ignis', which carried philosophical, medical, and religious meaning that can be lost easily or distorted by hasty reading. The Frankish chronicler explained that Vesuvius had previously vomited 'sulfurous fire mixed with a great multitude of stones' [35]. In the 17th century, 'sulfurous fire' identified the theory of chemical volcanic ignition used by natural philosophers such as Giovanni Alfonso Borelli and Robert Hooke to explain volcanism. Obviously, chemical ignition so envisioned could not have been the meaning of Glaber's expression, though elements of a naturalistic explanation cannot be discounted. The medieval classification of diseases (nosology) and the description of those diseases (nosography) have to be understood on their own terms as much as possible. That effort is the central thrust of the book. If the classical and medieval sources that Foscati analyzes surely record instances of infectious disease, those pathological realities are, as she suggests, historically remote, difficult to retrieve, and obscured by changes in language and meaning.

Foscati develops a crucial revision of a historical interpretation that is by now itself quite old. Ever since medical observers began to identify ergotism at the end of the early modern period, historians have equated *ignis sacer* with epidemics of that disease among European populations. We now know that people who ate rye flour contaminated with the fungal toxin *claviceps purpurea* suffered from intense burning pain, gangrene, and convulsive seizures. Doctors became aware of the link between ergot poisoning and contaminated rye as early as the 17th century but it was only in the 18th century that medical texts began to identify ergotism (*ergotisme* in the French sources) with *ignis sacer*, really because the expression was widely useful in describing gangrene. Foscati, however, disputes whether a single pathology can account for the huge body of medieval sources citing *ignis sacer* and kindred phenomena. Ergot poisoning causes gangrene but medieval people developed gangrene for many reasons, including infection. Foscati's most immediate contribution to the historiography is readily located, as are the theoretical foundations of her analysis. She argues that disease names in historical accounts should be thought of as 'semantic vectors' that might designate very different pathologies in modern diagnosis [x]. She attributes this concept to Mirko Grmek's argument [1989, 1] that disease is a human idea, an explanatory model emanating from the thought constructs of a period. Foscati adapts Grmek's ecological concept of *pathocoenosis* to her analysis as well, specifically, to illustrate that the cultural and semantic transformations tracked in the book may also have been responses to changing ecology of disease in medieval Europe. 'Pathocoenosis' refers to the combination of pathogens present in any given population at a particular historical moment. Starting in the late 1960s, Grmek introduced the neologism in order to generate a more expansive model for explaining the frequency of diseases in given periods. He postulated that pathogens exist in communities acting in symbiosis, antagonism, or even indifference. The occurrence of diseases modulates through interaction with others and is influenced by the ecological and endogenous conditions that those pathogens inhabit in the environment and the human body [Grmek 1989, 3]. As Foscati implies in the opening lines of the book, any historical interpretation of disease must bear in mind that pathogens and their frequencies evolve, along with diagnoses of doctors [ix]. Combined, these formulations show that Foscati does not divorce her philological analysis from the natural history of medieval disease. Ultimately, as the title makes very clear, the cultural and semantic dimensions of 'ignis sacer' are the principal subject. The biological and ecological dimensions of historical pathologies would require a very different kind of investigation and should not rely on written historical sources alone.

This densely footnoted and compact book contains an introduction, four body chapters, and a brief appendix of primary source selections. As a good humanist, Foscati works back as far she can to find the fount of the expression 'ignis sacer'. She locates a point of origin in Lucretius' *De rerum natura* (first century BC) [3]. Foscati discovers considerable original variance in the Latin expression eventually adopted in the medieval medical lexicon. For the Roman authors Virgil and Columella, for instance, the expression may have denoted outbreaks of epizootic disease. For Pliny, on the other hand, 'ignes sacri'—in the plural—denoted human maladies afflicting the skin. In the first century AD, Celsus narrowed the definition to a disease that developed serpentine ulcerations on the body [6]. The Latin expression was tightly nested in the Hippocratic corpus by medical writers such as the fifthcentury AD Roman African Cassius Felix. Formal inclusion in the vocabulary of Greek medicine established the semantic equivalence between 'ignis sacer' and the Latinized Greek word 'erysipelas'. Isidore of Seville observed the same correspondence two centuries later, confirming its place in the medical lexicon. That equivalence would resurface at various points, existing as part of the larger system of nested meanings that shifted over time [12].

Foscati's analysis stimulates broad considerations throughout the book, some of which perhaps deserved fuller treatment. Symptoms of disease were intensely subjective and even then rarely written down as the direct expression of a sick person. Descriptions were frequently second hand, so distortion operated on distortion well before the long chain of literary repetition occurred. Much gets refracted in the prism of a philological analysis. We can see that the medieval understanding of illness derived in part from Greek medicine and natural philosophy, as expected. The range of the ancient knowledge greatly expanded after the 12th century. Even then, medieval nosography (description of the symptoms and etiology, or cause, of disease) always observed the Christian rationale of divine castigation for the sins of man. The sacred *topos* had a rationalizing function across a breadth of texts. Natural and divine operations situated symptoms into recognizable typologies that could be structured upward to causal understanding. By virtue of the micro-macrocosmic analogy, medieval writers sought coherence in narrating portentous historical events and natural disasters. Epidemics were in that respect analogous to other kinds of cataclysms. They were preceded by signs, for instance, and manifested operations of the divine in the natural order. The misreading of such sources by 18th-century historians stemmed from ignorance. Medieval nosography was not empirical in a strictly modern sense. More accurately, descriptions of epidemics and diseased individuals were subordinated to the narration of history. They functioned in ways that we might much more aptly characterize as literary [32].

Foscati dedicates a second long chapter to the close examination of the sources that recounted outbreaks of *malattie urenti*, an Italian class of diseases associated with the sensation of burning. 'Ignis sacer' was initially only one in a constellation of expressions. Most significant, Foscati finds no explicit correlation with ergotism in the earlier material. Foscati explains the wide recurrence of the expression by suggesting that it was especially apt

for characterizing maladies that appeared to be divine or infernal—hence the related expression 'ignis infernalis'. Her conclusion is perhaps a little broad, though substantively correct: the terrible, mysterious, and internal nature of the fire qualified it as supernatural rather than natural [59]. Fire was one of the four elements along with earth, water, and air, so its mundane operation was well accounted for by Aristotelian natural philosophy. The speciation of terms really occurred at the level of the adjective qualifying the noun 'ignis'. Fire could be variously occult, divine, sulfurous, infernal, or invisible (for example, occultus, divinus, sulfureus, infernalis, invisibilis). In the early 11th century, 'ignis sacer' emerged as a dominant noun and adjective pairing describing the terrible symptoms of gangrene, often in conjunction with 'ignis Sancti Anthonii' ('Saint Anthony's Fire').

Deftly, Foscati discerns patterns in the morass. One pattern was that chronicles and hagiographies that developed the equivalence between *ignis sacer* and gangrene frequently reinforced an association with the similar expression 'ignis sancti Anthonii'. The overlap appears, for example, in the 13thcentury religious texts of the renowned preacher and chronicler of heresies Stephen of Bourbon, who blurred the distinctions between *ignis sacer*, *ignis infernalis*, and *ignis Sancti Anthonii*. Contemporary medical texts, complicating matters further, used the Greek and Roman vocabulary of disease, describing various cutaneous diseases as erysipelas [93]. The reader might easily become lost in a thicket of overlapping expressions but fortunately Foscati manages to extrapolate a useful general picture. If 'ignis sacer' seems to have described gangrene in individuals as well as epidemics that may have included ergotism, the related expression 'ignis Sancti Anthonii' was not used to describe epidemics of any sort but instead described individual cases of gangrene [119].

Foscati delves into the relationship between the conceptualization of disease and the medical charitable practices of religious orders in a well-developed third chapter. The historian considers the larger social and cultural context in which authors used the expression 'ignis Sancti Anthonii'. Her close reading medical texts as well as religious records confirms that the expression described gangrene in afflicted individuals and not epidemics of ergotism. Most significant, Foscati finds that the strict association between the Hospital Brothers of Saint Anthony and traditions of charity and treatment of those suffering from ergot poisoning was, just like the distortion of 'ignis sacer', a later error of historical interpretation generated when a new disease construct occluded the original meaning of medieval texts. Disease ecology adds to the complexity. Foscati's reintroduces *pathocoenosis* at this point, highlighting that the disease environment of the later Middle Ages was likely very different from that of previous centuries. As Grmek has argued, communities of pathogens changed but so did human social and demographic behaviors with the recovery of urban life after the 15th century. Foscati makes this consideration: few sources after the Black Death of 1348 record epidemics of *ignis* diseases, though instances of gangrene abound in the record. Any conclusion is speculative, she concludes, but it is possible that epidemics of bubonic plague and then syphilis diminished the cultural importance of previous diseases [139–140]. The book's foray into this topic is limited and a less narrowly focused book might have done more with it but it is a useful expansion of the subject.

Foscati's book does shed much light on the semantic instability of 'ignis sacer' and 'ignis Sancti Anthonii', thus putting the traditional history of ergotism into question. As the fourth and final chapter argues, a new disease construct began to develop near the end of the early modern period. Scientific empiricism shifted the foundation beneath the two long-standing expressions. In 1676, Denis Dodart, a member of the Royal Academy of the Sciences in Paris, reported on an epidemic in north-central France and, significantly, observed a connection between that epidemic and the consumption of spoiled rye [181]. Medical writers began to build the case for ergotism in the ensuing decades empirically as well as by gathering evidence from earlier medieval texts. Reading these historical sources without the tools of modern philology, 18th-century writers produced an unnaturally simple account of the disease past.

Foscati's book expands our understanding of early modern empiricism too, especially in the final chapter. There is an intriguing similarity, and difference, between the 17th-century nosography of burning diseases and the natural history observation of volcanism that was in the same period (especially by the late 1600s), a bourgeoning science. Volcano watchers recorded the fiery history of eruptions empirically but in ways structured by medieval and Renaissance epistemologies (leaving aside the debates about the variances there). *Historiae* of volcanic eruption were similar to those of disease because they shared an analogy with the body and because they were sacred, historical, and natural philosophical in nature. Not yet geologists or volcanol-

ogists, early modern naturalists delved into texts. Observers of Vesuvius, for example, read back to the great eruption of the first century AD famously described by Pliny the Younger and then worked forward through the spotty record in late antique and medieval sources, up through the growing sequence of modern eruptions (in 1631, 1660, and so forth). The approach to classical and medieval sources would not have differed significantly whether they chronicled eruptions or epidemics. The similarity of these cases, on the other hand, ends when one considers the different effect created by the collation of textual evidence and empirical observation. For early volcanology in the 1600s, still unformed within a nascent modern geology, historical sources were a useful complement to empiricism because they helped to identify the date and frequency of previous eruptions, even when modern observers deemed the empirical value of earlier accounts to be scarce. In the case of epidemics, perhaps, historical accounts were more likely to mislead. Maybe that was because those events were not the operation of a highly visible and identifiable natural phenomenon with a discernible periodicity but were rather the operation of multiple pathogens that remained invisible to even the best observers.

A century after Dodart described an epidemic of ergotism, A. P. Read's *Traité du seigle ergote* [1771] became one of the texts that established the scientific case for a disease caused by eating *seigle ergoté* (ergotized rye). Foscati appends a selection of the treatise at the end of her book. Read explained that

there is every reason to believe that the different diseases that afflicted France in the tenth, eleventh, twelfth, thirteenth and sixteenth centuries, under the name of 'feu sacre', 'mal des ardents', 'feu infernal', 'mal de St Antoine', were caused by the use of ergotized rye. [207]

Read identified 12 epidemics of the disease between 944 and 1630. Citing the absence of scientific knowledge among the historians who chronicled these past scourges, Read explained that a terrible common set of symptoms helped to identify ergotism as the cause. Appearing on the skin, the disease spread inside the body, blackening and consuming limb and flesh. 'Not even the bones were spared this fire's furor', he wrote. It is revealing that Read described later 16th- and 17th-century epidemics as showing dry gangrene (gangrene seche), clearly evincing one of the expressions of early modern nosography that Foscati shows overwrote earlier sources [208–210].

The greatest use of this meticulously researched book will be by those historians of science and medicine, not few, who read Italian scholarship. Foscati's analysis manifests the best abilities of scholars with the training and proclivity to develop a philological approach that cuts across types of sources from different periods. Fellow historians so inclined will find the extensive footnotes especially helpful; these become a parallel text that locates the evidence, expands the analysis, and lays a well-marked trail to follow. Scholars of early modern epistemology will find this book useful, since Foscati's analysis delves into features of scientific empiricism already studied by Gianna Pomata and Nancy Siraisi, both of whom the author cites. Finally, this study merits reading for another reason. Foscati develops an interesting picture of how historians in the early modern period interpreted medieval sources as evidence. On that one wishes for more too but scholars interested in historiography and the construction of historical knowledge in general should mine this fine book for its insights.

## **BIBLIOGRAPHY**

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