

Book Reviews

Thomas Bartholin's *De morbis biblicis*, first published in 1672, proved an immediate success and went through four editions during the next twenty-five years. It contains no less than twenty-seven short chapters on diseases and "supernatural" events taken not only from the Old and New Testaments, but also from the Talmud. Bartholin's work is here made available for the first time in English in a thorough edition which includes a table of transliterations from Hebrew texts and, perhaps more significantly, a bio-bibliographical index, an important tool for unlocking the many references to contemporary scholars and texts.

Bartholin was far from being a newcomer to biblical medicine when he published *De morbis biblicis*. He had already indicated his interest in biblical topics in his correspondence with his uncle Ole Worm during his residence in Padua in 1642–43 and three years later he published his tract on the abdominal wound of Christ. Between 1645 and 1653 he further documented this interest by publishing a number of works on paralytics in the New Testament.

Systematic study of biblical medicine appears to have taken off at the beginning of the seventeenth century with the works of J Grossius, *Compendium medicinae ex scriptura sacra depromptum*, and G Arder, *Enarrationes de aegrotis, et morbis in euangelico*, both published in 1620. Unfortunately the introduction to this text offers no explanation as to why biblical medicine became a major concern in this period. Apart from stating that Bartholin was the "first physician of great distinction" to be interested in this topic, the editors make no attempt to explain how and where his work fits into this type of scholarship. We are told that Bartholin's approach to the diseases mentioned in the Bible was simple, namely that the Bible represents the truth and that therefore, from the symptoms described, physicians should be able to determine what type of disease was indicated, but not why Bartholin should have undertaken this enterprise. For a Lutheran natural philosopher and physician like Bartholin this interest appears to me to have

been a way of fusing his search for God through his natural philosophy, and enquiries into the natural world, with his faith and the supernatural as presented in Scripture—an area where natural philosophy and theology could possibly unite in their common purpose to reach a better understanding of God and his creation.

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Edward A Eckert, *The structure of plagues and pestilences in early modern Europe. Central Europe 1560–1640*, Basel and London, Karger, 1996, pp. x, 180, SFR 180.00 (3–8055–6267–5).

In the words of the author, this study, if viewed in the light of a general history of epidemics in early modern Europe, "is the most intensive analysis of plague in any area based on quantitative data" (p. 10). A data-base of some 800 parish registers, supplemented by quantitative and descriptive archival and printed sources, translates into a convincing case. The work is a detailed analysis of the spatial and temporal distribution of eight waves of plague which expanded and contracted during the eighty-year period from 1560 to 1640. The principal goal is to demonstrate that the recurrent waves of epidemic plague constitute a system.

The basic unit of this system is not the single community or a defined region but rather the *cluster* of outbreaks. The historical clusters are illustrated in a series of maps showing the location of affected towns and parishes. The development of a cluster is critically important to the proposed system because it becomes a stimulus to the dissemination of plague, which can be transferred from multiple infective foci within the cluster to multiple vulnerable locales in the general area by a variety of alternative routes. In brief, the system of plague unfolded in the following pattern: the development of one or more clusters of limited regional epidemics,

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which progressed into nearby areas resulting in epidemic waves, then a climatic stage in the form of an extensive core area, and finally spreading to previously spared areas of central Europe. Perhaps the most innovative component of the structural relationships is the proposition that “the usual outcome of the flow of plague during a cycle was that an area of terminal disease activity became a focal point serving as the origin of a new cycle of expansion” (p. 155). New periods of plague activity were more often traceable to self-generation within the central European area than to the alternative origins of maritime introduction or overland movement from the east or southeast.

Limitations of space preclude discussion of each of the eight periods of plague activity. But a summary of the demographic outcomes of the communal epidemics of 1622–31 will convey the quantitative parameters of all cycles except for the plague period of the 1630s, the intense phase of the Thirty Years War. Some 54 per cent of the communities suffered mortality greater than five times the normal burial rate, 31 per cent less than three times, and the remaining 15 per cent a loss ratio between those two outcomes. Based on an estimated population of 207,000 in 340 parishes, and assuming a normal death rate of 27 per 1,000, some 14.8 per cent of the inhabitants died during mortality crises. By contrast, during the subsequent plague period 1632–39, based on the full sample of 800 parishes, epidemic mortality was equivalent to burials in ten or more normal years in one-half of the parishes. Population losses of 40 per cent “were commonly approached or exceeded” (p. 149). The author found that the burials registered in his sample were of the same order of magnitude as the catastrophic German population loss proposed by Günther Franz in his controversial work, *Der dreissig-jährige Krieg und das deutsche Volk* (Stuttgart, 1961). Their parallel findings are presented in tabular form (p. 154).

As is well known, north-western and central Europe became essentially free of epidemic plague after the 1660s. This investigation

demonstrates, however, that the generalization does not apply to central Europe as a whole, and also that it requires some modification. In west-central as opposed to east-central Europe, plague epidemics in fact became infrequent and limited after 1640, with an enduring boundary remaining in place until 1713. The reader is of course interested in the specific developments that permitted western Europe to escape from plague during the second half of the seventeenth century. But the author is agnostic on this ultimate issue. For example, in referring to the experience both of Bavaria before 1630, during which time the region suffered only minimum plague mortality, and of the central European transformation after 1640, he writes, “In neither case do we know which factors were responsible for the resistance nor should it be assumed that the same factors were operative in both periods and areas” (p. 160).

It should be acknowledged that the study is not primarily concerned with the resolution of this issue. The promise of the most intensive analysis of plague based on quantitative data is fulfilled, and in the process the investigation has advanced our knowledge and understanding of epidemic plague to a quantum degree. Future investigators of the history of plague in the western world will overlook this impressive and invaluable work at their peril.

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Volker Zimmermann (ed.), *Paracelsus. Das Werk—die Rezeption. Beiträge des Symposiums zum 500. Geburtstag von Theophrastus Bombastus von Hohenheim, genannt Paracelsus (1493–1541) an der Universität Basel am 3. und 4. Dezember 1993*, Philosophie der Antike, Band 3, Stuttgart, Franz Steiner, 1995, pp. 227, DM/Sfr 76.00 (0–415–12410–7).

The number of contributions to this symposium is eleven, to which a preface by the editor and three introductory pieces have been added. One of these is by Gundolf Keil who also supplied two further articles presented at