

This is a difficult volume to review, for, despite the editor's valiant attempt in her introduction, neither the theme nor the individual contributions cohere easily. There is some high quality scholarship on display that was well worth publishing in some form, but there are gaps, not all the fault of the authors. But Classicists still fail to use the Arabic Galen, to their disadvantage. There is no reference to Galen's comments on the role of rhetorical performances in the Asclepius cult (*On examining the physician* 1,1-2) or his important exposition of the role of Hygieia in the fragments of his commentary on the Hippocratic *Oath* (edited by Franz Rosenthal). These include quotations from the famous paean of Ariphron, and from at least one other poem, and give a Pergamene perspective on the significance of Asclepius and his family.

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**Maaïke van der Lugt,** *Le ver, le démon et la vierge: les théories médiévales de la génération extraordinaire: une étude sur les rapports entre théologie, philosophie naturelle et médecine*, Collection L'Âne d'or, Paris, Les Belles Lettres, 2004, pp. xiv, 621, €37 (paperback 2-251-42018-5).

The worm, an animal formed by spontaneous generation, represents the Virgin Birth of Christ ("I am a worm and no man" of Psalm 22 could be read as a Christological text); the demon is a semi-spiritual creature capable of inseminating a woman; and the virgin, who gives birth parthenogenetically, is also, perhaps, the Virgin Mary. Maaïke van der Lugt explores these three themes in medieval embryology through theological, philosophical, and medical texts from the eleventh to the fourteenth centuries. The introductory remarks on the *Malleus maleficarum* are something of a false trail; van der Lugt's focus is on scholastic accounts of human and animal generation in the Middle

Ages, with a few excursions into more general texts.

Van der Lugt convincingly argues that theologians, philosophers and physicians shared a discourse on development in which the Virgin Birth was a common theme. "Divine embryology" was concerned with four aspects of the Virgin Birth: the roles of Mary and the Holy Spirit, the influence of the stars, the timing of the formation of the embryo and its ensoulment, and the source of material from which it was formed. Scholastics made no absolute distinction between nature and miracle, and described the conception and Virgin Birth of Christ in the same terms as ordinary generation. The popular devotion to Maria Gravidia also implied a real rather than a miraculous pregnancy: conception by the Holy Ghost was one more way, in addition to parthenogenesis, putrefaction and demonic insemination, by which a virgin could become pregnant.

Van der Lugt then considers the limits of natural generation. Animals could become pregnant without insemination through the action of the wind (by proxy for the *pneuma* of semen) or the stars, though wind eggs and molar pregnancies were the imperfect results. Spontaneous generation yielded ignoble animals such as insects and vermin, though a search for nobler examples is suggested by medieval legends of barnacle geese, and vegetable lambs, which grew on trees. Medieval scholars accepted the possibility of conception by demons but, unlike later theologians, did not associate it with sorcery, and denied demons generative power, insisting on their borrowing or altering human semen to achieve offspring. Van der Lugt painstakingly compares French and English manuscript and printed sources on demonic reproduction: Merlin, who lacked a human father, is our conductor through a series of accounts of generation by incubi, succubi, and humans; parallels that made it easier to accept the Virgin Birth as a natural rather than a supernatural event.

The chapters on the conception of Christ demonstrate that theologians drew on medical writings, some no longer extant, to describe the development of Christ *in utero*. Aristotelian

embryology, via Arab translations, maintained that the mother provided the substance, not the form, of the embryo. If Christ, as the Nicene Creed stated, “took flesh” of the Virgin but nothing more, then her contribution, as Thomas Aquinas wrote, was no different from that of any other mother. The Franciscan view, articulated by John Duns Scotus, that Mary played an *active* role in the incarnation, was never accepted as orthodox, though the phenomenon of maternal imprinting—the formation of a foetus in the image of the mother’s imagination—seemed to offer a means. One might speculate that the rejection of a formative maternal contribution to the foetus was due in part to theological arguments against a co-redemptrix.

Van der Lugt does not address the wider theological issues or the “social or psychological dimension” of embryological theories. The presentation of primary material, much of it translated for the first time, is the book’s strength, making it the most comprehensive account of medieval embryology available. Though the book’s narrow focus necessarily leaves some peripheral areas, such as monstrous births and animal/human hybrids, unexplored, the re-establishment of theological embryology as a central theme is illuminating.

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**Stuart J Borsch**, *The Black Death in Egypt and England: a comparative study*, Austin, University of Texas Press, 2005, pp. xii, 195, £32.95 (hardback 0-292-707617-0).

*The Black Death in Egypt and England* is an ambitious study that asks an important question: against the same backdrop of demographic crisis wrought by plague, why did England expand economically, with its peasantry benefiting over the long run, while post-plague Egypt slumped, with peasants’ wages falling, rents rising, and the land deteriorating? This is not the first time a historian has asked why the Black Death was the pivotal moment of Middle Eastern decline, but earlier attempts were mere asides within larger

books and pointed to culture and religion to explain broad differences between “Islam” and “the west”. At the outset Borsch rejects these explanations as an “Orientalist trap”. He also wishes to reject any explanation that smacks of “geographical determinism”, one that emphasizes Egypt’s dykes, canals, irrigation, and the control of the Nile’s annual flooding as the key. Borsch turns instead to differences in landholding systems between Egypt and England to explain their divergent post-plague trajectories.

The Egyptian landholding system under the Mamluks (1250–1517) was unique. A caste of “slave soldiers” ruled Egypt with a system that prevented hereditary rule and ownership of the great landed estates. As a consequence, the Mamluks were absentee landlords with little incentive to invest in their estates and instead sought to maximize short-term profits at the expense of the land and the peasantry. After the Black Death this system led to over-exploitation and the disintegration of the vital infrastructure of canals, dykes, and dams. Peasant autarky and Bedouin infiltration ensued. Before the Black Death, however, this same system of landholding and political control had had the opposite outcome. The peasantry flourished (especially in comparison with their demographically hard-pressed counterparts in thirteenth-century England); Bedouin tribesmen were pushed to the margins, the irrigation system greatly expanded, and land under the plough increased by 50 per cent. While increased population had worsened the economic and social plight of the peasant in pre-plague England, in Egypt (1250–1348) these same demographic trends had benefited the peasant, the land, and the overall economy.

Despite Borsch’s predilections against stressing geographic variables, Egypt’s peculiar geography emerges as the key in his analysis for understanding this change of fate before and after plague—the country’s reliance on the flooding of the Nile. Before 1348 (or according to the chronicler Al-Maqrizi, circa 1400), Egypt’s surplus agricultural population (unlike England’s) was easily absorbed by the labour-intensive work of dredging canals, building dykes, and expanding the irrigation