Book Reviews

Judith Miller, An Appraisal of the Skulls and Dentition of Ancient Egyptians, Highlighting the Pathology and Speculating on the Influence of Diet and Environment, BAR International Series 1794 (Oxford: Archaeopress, 2008), pp. 143, £29.00, paperback, ISBN: 978-1-4073-0282-9.

This study was initiated in order to examine whether a relationship could be demonstrated between the development of agriculture in Ancient Egypt, and the variation in dental health noted in skeletal remains from Neolithic pre-dynastic settlements (4000 BC) until the end of the Graeco-Roman period (AD 300). Skulls from Cambridge University's Duckworth Osteological Collection, and the British Museum (Natural History) - 524 in all - were examined over five age ranges: 0-9, 10-19, 20-9, 30-9 and >40 years. These skulls were amassed from archaeological sites throughout Egypt. The book includes over fifty tables and nearly one hundred photographs.

The author begins by examining dental references in the five medical papyri, which date from c.1950 BC (Kahun Papyrus) to the Greek period (Rylands Greek Papyrus). Most contain spells and recipes, but the Edwin Smith Surgical Papyrus also includes a technique (still practised) for reducing a dislocated mandible. An investigation into the aetiology of this apparently common occurrence in Ancient Egypt is promised (preface and page 31), but unfortunately not included. A chapter on the history of dentistry in Ancient Egypt addresses some of the myths about dental treatment and the existence of an organised dental profession. Did Egyptian 'dentists' drain abscesses, extract teeth, perform root canal treatment and practise restorative dentistry as attested by various researchers? Egyptians clearly suffered extensive and severe dental disease, although

since the study of forensic Egyptology, it has been a matter of dispute whether any interventional dentistry was carried out or if the practice of dentistry was limited to the use of the prescriptions in the medical papyri. The author concludes that dental treatment became a reality only during the Graeco-Roman period. There is no knowledge of any oral hygiene regimen in Egypt in ancient times apart from the use of masticatories, which may themselves have had a detrimental effect on the teeth.

There follows a study of geography, climate, diet, and some consequential medical conditions including scurvy, hypocalcaemia and malnutrition, which all leave their impressions on the skeleton. The fertility of the Nile Valley and the development of irrigation systems gave rise to the cultivation of an abundant variety of crops and breeding of animals. The food supply was excellent and varied but periods of famine had an adverse effect on health and dentition. In addition, dental pathology can be associated with the types of foods consumed. Previous dental examinations of skeletal and mummified material have identified severe wearing of the teeth (attrition, abrasion), erosion, caries, periapical lesions, periodontal changes, as well as bone loss, cysts, osteoarthritis of the temporomandibular joint, osteomyelitis, and dental anomalies such as hypodontia, supernumerary and rudimentary teeth.

Perhaps it should not surprise us that eightyfour per cent of the pre-dynastic skulls examined in this study showed no evidence of caries, which is associated with ingestion of sugars, but by the Graeco-Roman period, the caries-free percentage had reduced to 66.7 per cent – the result of an increased availability of honey and fruit juices. Nevertheless, these later Egyptians did not suffer the heavy tooth wear of their predecessors, whose staple diet was bread (largely from emmer wheat), which was heavily contaminated with sand and other inorganic abrasive particles, either introduced accidentally during the production of flour, or used as a grinding agent. In some populations, particularly during the New Kingdom (1567–1085 BC), relentless attrition / abrasion wore away even the secondary dentine and allowed an ingress of bacteria into the pulp chamber. The loss of supporting bone caused by periodontal disease, and periapical destruction resulting from pulp death due to attrition, made teeth so mobile that, in some specimens, they could have been removed with the fingers. In fact, they were not removed - the cause of dental pain was considered to be a 'tooth worm' rather than the tooth itself.

This book is an important contribution to the history of dental health of the Ancient Egyptians over 4,000 years, and shows that despite an apparently healthy diet, a significant proportion of the population would have been debilitated by dental disease.

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Joshua R. Eyler (ed.), *Disability in the Middle Ages: Reconsiderations and Reverberations* (Farnham: Ashgate, 2010), pp. xii + 235, £55.00, hardback, ISBN: 978-0-7546-6822-0.

This study of disability, concerning the mentalities surrounding disability from social, economic, religious and literary, but few medical aspects of mediaeval culture, will be welcomed for the scope and multidisciplinary breadth of its collection, although the bias does tend to weigh in favour of literary criticism. The premise of the collection, as the editor states in his cogent and reflective introduction, is 'that Medieval Studies and Disability Studies have much to say to each other.' Hence, all the contributions, in one way or another, commence with a critique, analysis or exposition of these two disciplines in relation to the specific topic of each essay.

In the first part, 'Reconsiderations', the authors engage with mediaeval sources, where a significant proportion of the essays concern blindness. The essay on rediscovering the working lives of blind inmates of a Parisian hospital demonstrates that there is a person with an individual identity, shaped amongst other by social and professional status, behind the simple label of 'blind'. There thus emerges the intriguing observation that persons working in textile production would potentially be prone to industrial accidents causing loss of vision. Blindness is also the theme of essays on St Francis, whose 'weakening of the eyes' appears to have been 'discreetly marginalized' by subsequent reception of his hagiography, and on blind poet-composers in the fourteenth century, who were believed to possess an enhanced sense of hearing in compensation for their loss of sight, leading not so much to disability but different ability, as one author argues. A similar tension exists in the miracles of Louis IX where disability, on the one hand, figures as testimony for Louis' saintliness, while on the other hand, valorises the suffering body.

Deafness is explored through a literary lens in the character of the Wife of Bath in Chaucer's Canterbury Tales, and the same writer's Merchant's Tale is enlisted for a portrayal of the pregnant body, reflecting stereotypes of considerable antiquity that treat the female body per se as disabled, in that female is deemed an inversion of the male norm. Social aspects of disability are addressed by both literary and historical approaches, namely through the connection between poverty and disability in their portrayal in Langland's Piers Plowman, and through the 'legal controversies' of madness in French jurisprudence. Two essays look at specific figures marked by disabilities, one treating royal impairments in Anglo-Saxon literature, while another investigates the disabled Fisher King of Arthurian legend. 'Markers of difference', that is, names suggesting disability in Icelandic sagas, are employed to explore the opposition between individual experience and social context.