

Book Reviews

G. R. DUNSTAN (ed.), *The human embryo: Aristotle and the Arabic and European traditions*, University of Exeter Press, 1990, 8vo, pp. xi, 235 £25.00.

This volume contains the proceedings of a conference organized by Professor G. R. Dunstan at the University of Exeter in March 1988 to commemorate the eight-hundredth anniversary of the death of Constantine the African, which is presumed to have taken place in 1087. Although labelled by Chaucer "the cursed monk", Constantine was a translator who gave impetus to the development of medical science by making accessible to Western Christendom major texts from the Greek and Arabic traditions on the problem of generation. The conference thus tended to focus on the history of embryology from Greek antiquity to the present day, with debate centring on the interplay of science, ethics, and religion.

As is to be expected in a collection of this sort, the articles vary greatly in scope. Some consist of a straightforward survey of the theories and attitudes current in certain circles at a given period, while others provide new material for the historian, or a new interpretation of familiar facts.

The largest section is devoted to the Middle Ages, with seven articles, of which the last, by Stephen Bemrose, puts forward the inevitable reinterpretation of Dante's passages on the animation of the embryo. Different religious traditions are represented with a genuine concern for balance. Basim Musallam demonstrates the role played by certain precepts from the Koran and the Ḥādīth in determining the preference shown by most Muslim writers for the Galenic position on the respective contributions of male and female in generation. L. E. Goodman uses the views of Maimonides as a framework for an exploration of the problems of abortion under Jewish law. Contraception and abortion provided the principal points of conflict between Christian doctrine and medical ideas emanating from the Greek and Arab world. The fact that the section on abortion was omitted from Constantine's translation of the *Zād al-Musāfir* (*Viaticum*) of Ibn al-Jazzār leads Monica Green to examine the effect of religious tabus on his activity as translator. In fact, this type of omission is quite untypical of his work as a whole, and there are frequent examples of naturalistic interpretations taking precedence over the constraints of Christianity. One cannot discuss medieval embryology without mentioning its astrological component: painstaking research has enabled Charles Burnett to trace the history of the tradition, probably of Hermetic origin, that each planet has a specific role in the development of the embryo during a certain month, a theory introduced into Western thought in the *De natura humana* ascribed to Constantine.

Before concluding with discussions of current trends in embryology, the book provides some interesting insights into periods which might be considered innovative for one reason or another. Vivian Nutton assesses the combined, but often contradictory, impact on embryological theory between 1530 and 1560 of the new translations of Galen and the upsurge in anatomical investigation. L. W. B. Brockliss invites us to consider the relationship between embryology and physic: a detailed study of the content of French medical education at the end of the seventeenth and the very beginning of the eighteenth centuries enables him to show the link between the adoption of preformationist embryology and adherence to mechanistic theories in medicine generally.

With Angus Maclaren's commentary on the Papal Bull *Apostolicae Sedis* of 1869, which excommunicated those responsible for abortion under any circumstances whatsoever, the reader arrives back at the difficult problem of reconciling the demands of medicine, morality, and demography.

Despite some disparity in the choice and treatment of subject matter, this work provides a useful supplement to and up-dating of the established histories of embryology. The specialist will find in it the occasional spur to reconsideration, while the general reader may contemplate the slow rate of change in an important and sensitive area of medicine and philosophy.

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