

Book Reviews

PAUL JULIAN WEINDLING, *Darwinism and social Darwinism in Imperial Germany: the contribution of the cell biologist Oscar Hertwig (1849–1922)*, *Forschungen zur Neueren Medizin- und Biologiegeschichte* 3, Stuttgart and New York, Gustav Fischer, 1991, pp. 355, illus., DM 148.00 (3–437–11305–4).

This is the first major study for thirty years of the cell biologist Oscar Hertwig, whose matriculation and retirement encompass the creation and collapse of Imperial Germany. Paul Weindling's book enriches our view of the period by drawing attention to the distinctive positions on biological and social issues of a neglected figure. Hertwig began as one of Ernst Haeckel's "golden sons", but later became a leading critic of his Darwinism, and also of Wilhelm Roux's "developmental mechanics", expounding instead a co-operative, organicist model of embryos and society.

An introductory chapter is followed by five on Hertwig's scientific research and controversies, including those with Roux and August Weismann, one on his educational and institutional career, and one on "biology as social ideology". There are descriptions of Hertwig's work on sharks' teeth, fertilization (his famous work showing the fusion of egg and sperm nuclei), the germ layers, and inheritance. There is much interesting material here, and Weindling shows nicely the varied and changing uses of theories of the cell. I did, though, find some of the writing cryptic, and felt there was a little too much reliance on straight paraphrasing of Hertwig's papers.

Hertwig began his career under Haeckel and Carl Gegenbaur at Jena, rising to head a new Anatomical-Biological Institute in Berlin. Weindling details the negotiations over the establishment of the Institute, investigates the relations between professors and the state, and assesses the extent to which specialization increased within the established discipline of anatomy.

Hertwig's later years were spent nervously watching the interest rates—the family were cigar manufacturers—and worrying about the harmful effects of mechanization, war, and the spectre of communism. This "lofty and lonely" man devoted himself to a comprehensive organicist synthesis, a legacy on which he hoped, in vain, that the German nation would reflect in times of crisis. He set out to show that Malthusian natural selection was an historical curiosity from the early days of industrialization, and that in the twentieth century big firms and government social welfare could provide the basis for purposeful adaptation. He hoped that the social organism of the state, united by religion and a socialized work ethic, and run by the professors, would triumph over capitalist individualism and the socialism of the workers.

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RANICE W. CROSBY and JOHN CODY, *Max Brödel: the man who put art into medicine*, New York, Berlin and London, Springer-Verlag, 1991, pp. xii, 352, illus., DM 98.00 (3–540–97563–2).

Medical illustration in the Renaissance and early modern period has, because of its various relations to fine art, been the subject of a significant amount of scholarship. Medical illustration in the recent past has attracted little in the way of serious interest. Yet modern medical representations have clearly been powerful enabling devices, assisting medicine in its entry into the body. Equally, such representations have been significant pedagogically, replicating a very particular account of the world. Yet however "realist" or "naturalistic" modern illustrations appear, no single style defines them. The conventions used to produce them have changed in response to new technologies, artistic styles and, above all, medical perceptions. Max Brödel was one of the most significant innovators and creators of the modern conventions of medical illustration. A German, who briefly worked as an illustrator for Carl Ludwig at Leipzig, he emigrated to the United States and spent the rest of his working life at Johns Hopkins. He arrived as Hopkins began to flower under Kelly, Halsted and Mall, and he

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was a significant force in the creation of the school's identity. Brödel created a style which is remarkably bold realistically, yet which, as he recognized, simplified the field to permit the viewer to see only what was intended. The authors of this handsomely produced volume describe Brödel's life in great detail on the basis of a large number of family letters. It is in fact more of a personal biography than a history of putting art in medicine. Nevertheless, there is a lot to be learned here, not least about Brödel's creation of a Department of Art Applied to Medicine and, effectively, the initiation of a school of medical illustration characterized by its distinctive style and techniques. There is no detailed analysis of Brödel's style here, no attempt to relate it to developments in art and illustration outside medicine. The small number of reproductions convey the flavour of Brödel's approach. This is a useful volume, a good read and not without surprises, not least the revelation of the friendship between Brödel and H. L. Mencken, one of whose characteristic observations accompanies the photograph on page 229.

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MURIEL LAHARIE, *La Folie au Moyen Age, XI^e–XIII^e siècles*, Paris, Le Léopard d'Or, 1991, pp. xii, 307, illus., 250 frs (2–86377–102–7).

SYLVIE LAURENT, *Naître au Moyen Age: de la conception à la naissance: la grossesse et l'accouchement (XI^e–XV^e siècles)*, Paris, Le Léopard d'Or, 1989, pp. v, 288, 250 frs (2–86377–086–1).

These two volumes show the continuing vitality of French studies of medieval medicine. Both range widely over a variety of texts, legal, historical, and theological, as well as medical. Medicine is not something for doctors alone, or a series of learned speculations, but deeply embedded in all aspects of medieval society. The belt of the Virgin Mary at Puy-Notre-Dame and the illustrations of the opening initial D to Psalm 52/53 ("Dixit insipiens"; "The fool has said in his heart") have as much to tell as the magisterial pronouncements of Peter of Spain or the canonist Gratian. Above all, there is a willingness to confront and interpret iconographical evidence, from psalters and ecclesiastical sculpture as well as from more familiar medical writings. Both books present in elegant French the results of some of the latest research to a general readership.

Laurent's study of pregnancy and birth is narrower in focus and shorter in length. It is also less satisfactory, in part because it covers ground already well trodden by others, e.g., by Jacquart and Thomasset in their *Sexuality and medicine* (1985: Eng. tr. 1988). It is weaker in its discussions of medical theories (with a curious over-emphasis on the Hippocratic Corpus, and some important omissions, notably Hewson's study on Giles of Rome [1975]), and its use of literary evidence is inferior to that in the more recent English books and papers by Mary Wack and Monica Green. The illustrations are largely taken from manuscripts in the Bibliothèque Nationale (no. 11, "Zodiac man" in Hebrew, is particularly striking), but the commentary and the references to other examples show little acquaintance with MacKinney's listings or, more pardonably, with Peter Jones' *Medieval medical miniatures* (1984). But there are many things to compensate—a good discussion of sexual desire in pregnancy, and of childbirth as a semi-public event. Infanticide is also treated with reference to a whole complex of medical, social, and religious ideas, and the problems of an unwanted pregnancy are expounded with due sensitivity, and with attention to legal records as well as denunciatory sermons.

Laharie's book is considerably longer (in terms both of the number of pages and of words on the page). It also considers a less familiar theme, going far beyond what Foucault had sketched in 1961. As befits a pupil of Le Goff and Jean-Claude Schmitt, Laharie is particularly good on the theological implications of medieval madness, not least the "holy fool", and on the symbolic nature of many accounts of madness. She catalogues at length the healing activities of saints, both before and after their deaths, from Acarius and Adelphus to Willibrod and Wulfram of Sens. Her discussion of the interrelationships between religious and medical cures (which she lists at length) could well be copied by others looking at medieval diseases. Her conclusion that the Middle Ages was no golden age of madness, as Foucault suggested, carries