

## Book Reviews

sensitive to the various drugs and cures that were purported to have an effect on syphilis, and he covers this aspect of the history with great care. Specialists concerned with the disease will, in particular, appreciate the way he explores the history of differing treatment regimens of both the seemingly scientific and quack cures. Parascandola's emphasis on the link between medical inspection and regulation of prostitution serves as a reminder of the extent to which the power seized by public health officials has always been underlined by the threat of infectious, and particularly sexually transmitted, disease. His analysis of how the concept of the "innocent victim" became part of public discourse is thoughtful and thorough, although those who know the extensive literature on the social hygiene movements and the efforts to police working-class women's sexuality will find this recognizable ground.

Parascandola draws upon his earlier work on the role of the government and media in the effort to control syphilis. Making use of the primary materials, he provides more detailed insight into the rise of the PHS's Venereal Disease Division and the continued struggles it and the American Social Hygiene Association had between the wars to gain support for their efforts. The reproduction of posters and propaganda about syphilis drive home his points visually. Parascandola has done an excellent job of relying upon the secondary literature in the areas of the history where he has not spent time in the archives. He concludes by bringing the story up to the AIDS era, focusing on what was never learned.

The result is a readable disease biography that will provide new insights for those who do know the literature on the history of syphilis. It will introduce those who are unfamiliar with the disease to its historical lineage and still unanswered questions.

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**John Kirkup**, *The evolution of surgical instruments: an illustrated history from ancient times to the twentieth century*, Novato, CA, Norman Publishing, 2006, pp. xviii, 510, 30 colour illus., 527 black and white illus., \$275.00 (hardback 0-930405-86-2).

**John Kirkup**, *A history of limb amputation*, Heidelberg, Springer, 2007, pp vii, 184, illus., £100.00, €149.95, \$169.00 (hardback 978-1-84628-443-4).

Surgery is pivotal to modern medicine and we have excellent histories of specific operations, surgical theories and concepts, the professionalization of surgeons, and studies of the relations between surgery, science and industry. Yet the surgical tools that facilitate operations by manipulating tissue and bone have received little attention. John Kirkup, a retired surgeon and Honorary Curator of the Historic Instruments Collection at the Royal College of Surgeons of England, has researched the history of surgical instruments for over twenty years with the objectives of analysing "the long evolution of operative instrumentation" and classifying "instruments in such a way that their structure, composition and function can be followed in a logical fashion". *The evolution of surgical instruments* is the impressive outcome of this project. In scope, style, and detail its pages are redolent of eighteenth-century taxonomies of natural history. Its content is underpinned by a wide variety of sources including archaeological findings, surgical writings, instrument catalogues, and museum collections across the world.

An introductory section on surgical and technological factors and historical sources contains a chapter in which Kirkup develops his thesis that instruments evolved naturally from their human precursors—fingers, thumbs, nails and so on. Hence in earliest times, fingers could act as retractors or as dilators, prefiguring the later instruments created out of antlers or bone, and eventually bronze and steel. The merits of such an argument are debatable but it does serve to remind us of the intimacy between the surgeon

and the instrument, and prompt reflection on the way in which new techniques such as endoscopy, lasers, and ultra-sound distance the surgeon from the body. The middle two sections on 'Materials' and 'Structure and Form' make up the heart of the book. Here, Kirkup painstakingly analyses the materials used to create instruments, including natural materials like stones and plants, nonferrous and ferrous metals, and gum, rubber, and plastics. He developed a point system to quantify the composition and distribution of materials over time in a range of instrument catalogues and collections held in Britain, Europe, and the United States of America. Instruments, he contends, can be organized into eight basic shapes although each shape has numerous modifications. The fine detail of his narrative, aided by the plentiful and varied illustrations will be invaluable aids for those attempting to identify and catalogue new instrument collections. The use of instruments in surgery is the subject of the final chapters.

Relations between instrument construction and the discovery of new materials are well-grounded. Cast steel in the eighteenth century created finer and sharper knives that improved surgical techniques; traction equipment, portable urinals and catheters were a few of the items developed using hard rubber in the nineteenth century; and the production of stainless steel alloys around 1916 permitted the creation of non-rusting scissors and forceps, even though use of the steel increased costs between 30 and 50 per cent. Kirkup's personal experience of surgery is of great advantage in mediating some of the intricacies of instruments to the reader. Writing of the French instrument maker J F Charrière's creation of extensions for the jaws of pivoting forceps in the nineteenth century, Kirkup notes that when he tried the extensions he found them to be "awkward, even dangerous, for his fingers, as well as time-consuming to attach".

*A history of limb amputation* is an organic offshoot of Kirkup's first book and maps chronologically the history of amputation from earliest times when epidemics of ergot poisoning could cause the loss of limbs, to the

beginnings of elective amputation in the sixteenth century triggered by gunshot wounds, and pioneered by military and naval surgeons, to twenty-first-century innovations like limb transplantation. As in the earlier volume, Kirkup takes account of the wider context of surgery and the huge benefits derived from techniques to control bleeding, pain, and infection. The social and cultural meanings of the process are deep: "Amputation is often regarded as an opprobrium of the healing art", wrote Joseph Lister in 1883. Elective amputation was contingent upon the social acceptance of non-surgical amputation, argues Kirkup, and he sketches out the different social and religious attitudes to amputation across the world. The primacy of a complete body at the time of death is a fundamental belief of Muslims. Some patients have found compromise between medical need and religious belief by preserving their amputated limbs or limb parts so they can be buried as a whole. These brief and tantalizing threads are ripe for fuller study and would complement nicely the emerging body of work on the history of disabilities.

In the first book, Kirkup has created an unparalleled reference tool that will be of use to the many communities—academic, medical and public—interested in surgery and its history. The second contributes to the historiography of specific operations and should stimulate further exploration of the cultural meanings of bodies and their parts. In an addendum to the final chapter of *A history of limb amputation*, Kirkup refers to new research which might solve the current surgical problems caused by infection occurring at the site of osseointegrated titanium implants. The idea originated, he says, from observations of the way in which the antlers of deer grow through overlying skin. Natural history it seems remains as central to the surgical present, as it was to the surgical past.

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