

body with diet, sleep and exercise in the regime of enhanced well-being. Such ideas and practices were inherited by the Romans and embraced by Galen as principles of western medicine in its attempts to understand and thereby control the inner workings of the body. However, the standards of hygiene achieved in the classical world did not last; with the fall of Rome went much of the technology necessary to maintain urban communal baths, Christian asceticism rejected the care of the body as detrimental to the soul, and medicine required several more centuries of scientific discoveries to make the microbiological link between dirt and disease.

Politics is the fourth factor in the history of cleanliness; as Smith explains, for centuries the means to be clean were available only to the wealthy. The concentration of dirt and frequency of epidemics in urban environments made the importance of public hygiene evident in antiquity, although, until the nineteenth century, this often involved nothing more technical than keeping the unwashed poor well out of sight and smell of the rich. Following John Snow's discovery of the cause of a cholera outbreak in London in the 1850s, the provision of clean water supplies and sewerage were established as modern public health essentials, reinforced by Louis Pasteur's concurrent discoveries in germ theory. Yet as Smith discusses, such "progress" has its detrimental side-effects, environmental and immunological.

Clean serves as an excellent introduction to the history of hygiene, body and soul, public and personal. Smith has expertly marshalled a vast amount of research on a wide variety of subjects from an equally impressive range of primary and secondary sources. Her findings are presented in a lucid and engaging style, with remarkable discipline given the breadth of the subject and the limits of the book's size. It is a shame that Oxford did not offer a more generous format; the topic really deserves the large, three-volume presentation of L'Univers Historique's new series, *Histoire du corps*. Nevertheless, *Clean* establishes a new domain in the study of human behaviour, providing an essential text for historians of medicine, architecture, and material

culture; scholars and students of social history, anthropology, ethnology and cultural studies.

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Simon Carter, *Rise and shine: sunlight, technology and health*, Oxford and New York, Berg, 2007, pp. ix, 134, £55.00, \$99.95 (hardback 978-1-84520-130-2), £19.99, \$34.95 (paperback 978-1-84520-131-9).

Richard Hobday, *The light revolution: health, architecture and the sun*, Forres, Findhorn Press, 2006, pp. 172, £7.99 (paperback 978-1-84409-087-7).

A summer holiday in California seemed the perfect place to review these two new books that deal in their different ways with our changing relationship with the sun. In *Rise and shine*, Simon Carter offers an analysis of sunlight in the mediation of health, pleasure, the body, race, and class, exploring our ambivalent relationship to the sun and sunlight. His aim is to "consider how the material impact of the sun upon bodies is mediated by a series of sociotechnical artefacts—such as past medical therapies, suntanning lotions and even architectural design" (p. 7). Taking as his starting point the complex relationship between bodies and sunlight, along the way he touches briefly on such themes as attitudes towards the sun, the history of camping, debates about rickets and tuberculosis, and the histories of the League of Sunshine and the World of Sunlight.

Thus Carter covers such themes as shifts between seeing the sun as a danger, to what he terms a sensuous physicality; travel as health, culture, and pilgrimage; aristocratic and middle-class ideals of beauty; debates about sunlight and rickets; heliotherapy as a means of tackling tuberculosis; movements such as the People's League of Health and the Sunlight League; and the garden city movement. Carter argues, for example, that "the sun unproblematically condenses and signifies the essence of modern travel and sensuous pleasure" (p. 3). Some of the sections are more interesting because their

subjects are less familiar; this is true, for example, of the brief mention of the invention of sun cream and Ambre Solaire (p. 101). The conclusion, drawing heavily on Science and Technology Studies and in particular on Actor Network Theory, is perhaps the most disappointing section, focusing on what it terms “helio-humans”. Thus Carter argues that “the body in sunlight is always mediated by the sociotechnical assemblages surrounding it . . . the continuing and changing relations of bodies to their environments continue to be influenced by . . . residual figurations” (p. 110). This is really a work of synthesis, and at times an uneasy mix of social history and sociology. But generally this is an attractive and well-written book, offering well-organized if brief summaries of interesting aspects of this history.

Richard Hobday’s *The light revolution*, on the other hand, is really about how to use sunlight to promote health in the built environment. His argument is that artificial light has an impact on physiological and psychological well-being, through depression, vulnerability to super bugs, and Vitamin D deficiency. Hobday deploys some historical evidence in support of this argument—Greeks and Romans; Florence Nightingale; public health; the debate over rickets; and the preoccupation with the sun seen in the work of modernist architects such as Alver Aalto. Nevertheless the tone is relentlessly strident, and, while the book offers a summary of the recent (mainly clinical and biomedical) literature, the failure to include either footnotes or endnotes means that the source for many of the statements made remains elusive. Hobday is desperate to prove his argument, and this leads to much repetition. The evidence for Seasonal Affective Disorder (SAD) remains unclear, with Hobday admitting the research is “in its early stages” (p. 30), while his call for the promotion of sunbathing seems to run counter to most of the medical evidence.

A wide range of health problems—heart disease, sleep disorders, and cancer among others—are linked to lack of sunlight. Moreover Hobday’s focus on Vitamin D deficiency leads him to downplay the role of diet in the interwar discussion of rickets, along with the issue of

malignant melanoma more recently. The section on architecture and street design is perhaps the most interesting, covering the work of Le Corbusier, Mies van der Rohe, and Maxwell Fry among others. Hobday has an important and interesting argument—that there should be a greater appreciation of natural light and direct sunlight on the part of designers and legislators—but his historical material is largely marshalled in support of this central thesis, and for that reason the book is of limited interest to the readers of this journal.

That said, postgraduate students searching for a suitable thesis topic could usefully be directed to these books, particularly *Rise and shine*. Together they suggest the untapped potential of historical research exploring the history of our attitudes towards the sun and sunlight.

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Jeremy A Greene, *Prescribing by numbers: drugs and the definition of disease*, Baltimore, Johns Hopkins University Press, 2007, pp. xv, 318, £33.50, \$49.95 (hardback 0-8018-8477-2).

In the second half of the twentieth century we have witnessed the emergence of a new model of disease based on numerical deviations rather than symptoms and treated on a preventive basis before any overt signs of illness develop. This concept of treating healthy patients is not a recent product of genetic medicine but arose gradually in concert with the development and use of a set of safe, effective and highly marketable prescription drugs. Jeremy Greene uses the careers of an antihypertensive, an antidiabetic and a cholesterol reducing agent to show how this rather “insidious” paradigm shift in American health care has come about.

Greene’s historical journey starts with the development and introduction of the first palatable pill for hypertension, chlorothiazide or Diuril® in 1958. Diuril, however, did not develop out of any targeted search for an antihypertensive therapy. The drug did not even have any connection with hypertension until it