

Book Reviews

about subjects with which they are already familiar". Holmes achieved both these goals by focusing attention on Antoine Lavoisier's French predecessors at the Academy of Sciences and arguing that their rigorous experimental attention to the identification and classification of salts provided material which Lavoisier took over virtually unchanged in the *Traité élémentaire de chimie* (1789), where a salt was defined as a duality of an acidic and basic oxide. Such chemistry—much of it done by French pharmacists searching for drugs in plant extracts—was, Holmes argues, logically self-contained and independent of any theory of phlogiston or oxygen.

Only the final lecture is devoted to exploring the nature of Lavoisier's revolution. Elsewhere, Holmes makes a critical review of the historiography of eighteenth-century chemistry and the chemical industry. A feature of the original lectures and their printing is the deliberate use of pre-Lavoisierian chemical terminology to demonstrate that "the unsystematic nature of the terms . . . did not prevent [eighteenth-century chemists] from thinking coherently about the compositions, relationships and interactions of the substances these terms designated for them". While probably clear enough at the original oral delivery, the unedited text produces some anachronisms or misidentifications concerning which student readers will need to be warned.

Medical historians concerned with Enlightenment science, and with what chemists and pharmaceutical chemists actually did in their laboratories, will find Holmes's monograph a short and provocative review of the latest views on the chief of medicine's collateral sciences.

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Journal of the Japan-Netherlands Institute, 1989, 1: *Papers of the Workshop on the History of the Medical Exchange between Japan and The Netherlands, Tokyo, 25–29 November 1985*, Tokyo, 1989, 8vo, pp. 161. illus.

This seems a favourable era for studies of the interaction between Western and non-Western medical systems. What this journal, a product of Dutch-Japanese collaboration, makes abundantly clear, however, is the extent of the difficulty involved in determining the scale and impact of intercultural relations in the past, and moreover, how hard it is for contemporary scholars to find a common language to describe the level of mutual understanding of past cultures.

Through their East-Indies Company trading centre at Deshima, off Nagasaki, the Dutch were from 1639 until the opening up of Japan by the middle of the nineteenth century, the only Westerners granted some contact with the Japanese. Restricted as this contact seemed—with only one annual visit paid by the Dutch to the capital—it did allow locally, at Deshima, for some medical teaching directly to the Japanese, carried out by the Dutch factory surgeon. A few translations from the Dutch of Western medical treatises were undertaken, even in the seventeenth century, but with greater intensity from the mid-eighteenth century onwards, when also a private academy of Dutch learning was established at Edo. After the mid-nineteenth century Dutch medical teaching increased, especially after the establishment of a Western-style clinic and medical school at Nagasaki by the Dutch in 1861.

Several of the Japanese contributions to the journal, such as Yoshida Tadashi's 'Anatomy in Rangoku', follow these developments, providing comments on the perceived character of the "Dutch learning" as they appear in the Japanese sources. The connection between the curriculum of the Military Medical School at Utrecht and that of the Dutch medical school in Japan is nicely demonstrated in the article by Ishida. The Dutch contributions to the journal focus more narrowly on such aspects of the historical Dutch medical system as the development of public health in the eighteenth and nineteenth centuries, and the organization of the nineteenth-century hospital system. The journal ends with a most interesting article by Sugimoto on Dutch linguistics from 1603 to 1868, which elaborates the crucial position of small groups of interpreters and linguists in the "translation" of Western knowledge.

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