considers popular Japanese and Sino-Japanese medicine from the seventeenth century to 1868. Traditional Japanese medicine as depicted in art is treated fully in Chapter 4, and in the last chapter modern medicine from 1867 to 1970 is described. There are copious scholarly notes to each chapter and appendices containing a list of Japanese medical schools, an index of foreigners who visited Japan (sixteenth to nineteenth centuries), a chronology of politics, a chronology of medicine (A.D. 414 to 1971), an excellent bibliography of Japanese medicine, and a list of lengthy illustration legends; there is a name index only.

The medicine of Japan, as well as its industry, is becoming an increasingly important factor in the West and it is therefore important that we should know more of its origins, and the forces and pressures that have moulded it. For instance it seems remarkable that so much progress could have been made since the Japanese emerged from their medieval state only one hundred years ago, and it is fascinating to learn how this has been brought about. The authors and the publishers are, therefore, to be congratulated on producing a book as full of learning as it is pleasing to the eye. It is to be hoped that an English version, comparable to Huard and Wong's work on Chinese medicine, will be available eventually.

NAKAYAMA SHIGERU, DAVID L. SWAIN and YAGI ERI (editors), *Science and society in modern Japan. Selected historical sources,* Tokyo, University of Tokyo Press, 1974, 8vo, pp. xxiii, 337, £10.00.

Since the opening of Japan to the West in 1858 a remarkable advance in science, and in other fields, has taken place there. As in the West, there has been recently a corresponding explosion in the history of science and this book collects together sixteen translated papers written by Japanese scientists and historians of science for a Japanese audience, and dating mainly from 1950 to 1972. They are arranged in three sections: emergent ideologies of science; exploratory research concerns; Japanese scientists and their social context. There are also, 'Biographical notes on contributors', 'An annotated bibliography of English language works on the social history of modern Japanese science', and an index in English and Japanese.

Owing to language problems we have been less aware of the developments in the field of the history of science in Japan than its progress there deserves. This book is, therefore, of considerable importance, and it reveals that the Japanese although naturally concentrating here on their domestic scene are also studying foreign aspects of the history of science. The papers deal mostly with the physical sciences, but there are several which discuss Western and broader scientific issues, as well as historical methodologies, and at least two are concerned with biological topics, Marxism and biology in Japan, and pollution. Throughout, there is an emphasis on the social aspects of scientific and technological achievement.

To understand the Japanese is for us as difficult as it is for them to comprehend us, for apart from the language gulf there is also a very wide difference in cultures. Thus Japanese attitudes to scientific problems often mirror their intellectual pressures and social background, and they are certainly influenced by the special relationship they have to their written language.

This anthology is most welcome and can be enthusiastically recommended to those who wish to know more of Japanese science in order to achieve a more complete, international coverage of the history of science. Moreover and more importantly, the opportunity of observing a different approach to science, whereby problems that also exercise the West are tackled from a different angle, is of great significance to the modern occidental scientist. Hopefully he may discover new and useful viewpoints. The book is also of value to all historians of science in view of the general papers included, which display fresh points of view. In the next series of essays perhaps it will be possible to include some on the history of medicine.

LISA JARDINE, *Francis Bacon. Discovery and the art of discourse,* London, Cambridge University Press, 1974, 8vo, pp. viii, 267, £4.90 ($15.50).

Most interpretations of Francis Bacon have judged him to be a man of the seventeenth century who revealed in his writings the approaching scientific revolution. However, Dr. Jardine believes him to be a Renaissance man, and in order to understand him properly his thought must be examined against a background of sixteenth-century ideas. Her arguments in favour of this are stimulating and convincing, and her scholarship and accumulated data, together with a pleasing style, have resulted in an important book.

In his youth Bacon was greatly influenced by the dialectical tradition and it is the author's task first to examine it closely and then to use this background to discover, if it exists, a central theme in his diverse works. He wrote on scientific method, practical science, law, pedagogic theory, English history, myth interpretation, and he occasionally published literary work. In the past these have usually been thought to be isolated from one another, but Dr. Jardine discovers a common thread: the central organizing role of *method* which included investigatory procedures to reveal new knowledge (*discovery*), and procedures for selecting and arranging information to be used for communication and instruction (*art of discourse*). This interpretation introduces a consistency into his writings, and, for example, one can equate his inductive method with the structure and strategies of his books dealing with ethics, politics, literature and history.

As an excellent presentation of Bacon's sixteenth-century roots this book is most valuable. However, it cannot be denied that he went beyond his dialectical forms of thought and his sources in presenting the new natural philosophy. Dr. Jardine is less successful in explaining why he was so influential in the advancement of science long after his death.

L. L. LANGLEY (editor), *Homeostasis. Origins of the concept,* Stroudsburg, Penn., Dowden, Hutchinson & Ross, 1973, 8vo, pp. xi, 362, illus., £11.40.

The publishers have initiated a praiseworthy series in which they will " . . . publish the original writings in a variety of fields which developed an important concept . . . ." The author of this contribution to the project and its editor, is a physiologist. He has selected twenty-two extracts, ranging from a paper published by Charles Blagden (1748–1820) in 1775 entitled, 'Experiments and observations in an heated room',