Recent Studies in the History of Biology by Japanese Historians

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This report reviews the activities of Japanese historians of biology during the later half of the 1960's and the early 1970's.

Section of History of Biology (Seibutsugakushi Bunkakai), History of Science Society of Japan, is the only organized group of Japanese scholars working in this field at the present time. Although the organization is seventeen years old, the number of historians have joined is very few. The Japanese Journal of the History of Biology (Seibutsugakushi Kenkyu), which is published bi-annually, has reached its 22nd issue. The sources of this report are mainly articles from the above mentioned journal, from the Journal of History of Science, Japan (Kagakushi Kenkyu), and from Japanese Studies in the History of Science.

History of Western Biology

Teiri Nakamura (1965a) noted that the interests of many researchers have been focussed on the biology of the "scientific revolution" in the 16th and 17th centuries. Nakamura, one of the most active researchers in this area, has studied the role of William Harvey's work in expanding biological knowledge. In 1965b and 1969, he reviewed his researches and those of other Harveyan scholars, and suggested that the process by which Harvey discovered blood circulation could be divided into the following phases: 1) observation that the blood always flows in the same direction, 2) measurement of blood stream volume, 3) conception of the idea of blood circulation by combining the knowledge gained in the first two steps, 4) verification of his idea through testing. Nakamura further concluded that the ideas held by Harvey in his later years concerning the movement of the heart were established upon the influence of Descartes' theory, and that Harvey was fundamentally not a mechanist but an Aristotelian.

After studying the biological thought of Francis Bacon, Nakamura (1968c) concluded that, although Bacon's mechanism did not reached Descartes' level, he was more mechanist than Aristotelian, and his ideas on biology were very progressive for his age.

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