

Survey of "Science in Colonialism"

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The following is a brief survey of chapters for science in relation to colonialism in *International Relations* volume, *Nippon Kagaku Gizyutusi Taikei* 7 (1968).

The Place of Colonial Science before World War I

Today most developing countries invite foreign aid, whether American or Soviet, military or economic. In the 19th century, however, there was no well-formulated colonial policy.

There were many scientist-explorers, who came to the East Asia to search for flora and fauna, or other findings of "local science". These people contributed to the academic world of their home countries, not to the advancement of scientific standards of the natives.

It is hard to generalize the situation of the whole Asian region, as the conditions vary according to each country. Therefore, in the following, I shall take one example from the Dutch East India.

Pastors and medical doctors were first invited there to serve the white colonists. Western medicine proved ineffective in treating "local diseases", by which the colonists were easily infected. Thus, the white doctors improved the sanitary conditions of the white residential areas, and established bacteriological institutes where the just-born vacteriological method was introduced.¹

Hygienic problems could not be solved by cleaning up only the white residences; the surrounding native areas had also to be taken care of. Furthermore, the colonists wanted to decrease labor losses due to sickness among the slave employees on their plantations. The Dutch doctors alone could not supply sufficient health care for all the natives, so the colonial government started to recruit and train natives as lower-class hygiene officers by establishing training centers. As higher standards of medical techniques became needed, these centers were turned into medical colleges, with courses in language and basic sciences on the secondary education level. This is how higher education in Indonesia was founded.

On the contrary, the activities of British and American missionaries were more aggressive and systematic. They had a long-established authority in the Western educational world in primary and secondary schooling, and they extended

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¹ Paul Christiaan Flu: *The History and Present State of Scientific, Medical Research in the Dutch East Indies* (published by Internationale Circumpacifische Onderzoek Commissie, ca. 1930)