Boerhaave and Von Siebold, Teachers of Medicine

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Introduction

The very interesting Exposition: “Four Centuries Holland-Japan” which is held in Leiden (October 1983—February 1984) is marking the important contact between Holland and Japan since the beginning of the 17th century.

On the exposition much attention is given to Von Siebold. In a building nearby the museum on the history of medicine the Boerhaave museum-one can find all about Boerhaave. So the two physicians about whom I am going to speak are now close together.

Herman Boerhaave

When Leiden University was founded in 1575 the teaching of medicine was limited to reading the books of Hippocrates, Galen, Paracelsus and others by the professor for the audience. For practical training the students joined a local physician. Only in 1636 the Collegium Medico-Practicum started practical teaching in a so-called Guesthouse where poor people were hospitalized.

The idea of bedside teaching originated from the University of Padua in Italy by Giovanni Battista del Monte, mostly called by his Latin name Montanus.

In 1714 when Boerhaave became professor of the Collegium Medico-Practicum he got for his clinical teaching six beds for males and also six beds for female patients in the St. Cecilia hospital in Leiden. His way of teaching made him famous all over the world.

Herman Boerhaave was born in 1668 at Voorhout near Leiden as the son of a clergyman. As a student of Philosophy and Theology he also attended lectures on medicine, botany, physics, chemistry and mathematics. An allround study indeed.

At the age of 22 he got his degree of doctor of philosophy. He did not follow his father in the Clergy but decided to go on with medicine. In 1693 he got his doctors degree. Preparing for this degree he also continued studying botany and chemistry. Soon after his promotion he started practising in Leiden. In 1703 he was allowed to begin lecturing anatomy and chemistry. In 1709 he was appointed professor of medicine and botany. His inauguration address in Latin was: “Veri ergo character ubique est simplicitas”. Since then his device was: “Simplex sigillum veri” i.e. Simplicity is the mark of truth.

Already before his appointment as professor of the Collegium Medico-Practicum many students came to Leiden to attend his lectures. After he started his clinical teaching the number of students increased very much. In the year before his death of the 97 auditors only 37 were Dutch, the others form all over Europe. After his death his students from all over the western world bemoaned him.

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Sigerist, the well known historian from the Johns Hopkins University at Baltimore U.S.A. in a lecture at the Boerhaave commemoration in 1938 at Leiden asked, I quote: “What was the cause of the master’s unparalled reputation? The cause of Boerhaave’s universal reputation is to be sought in his personality as a clinical teacher and physician. Whoever listened to him, whoever had the privilege to attend his courses, at the bedside of the patient, in the two small wards of the hospital, felt the magnetism of his personality and developed a fanatic devotion to him.

Boerhaave knew how to inspire young people. He gave them no dogmas but a scientific approach to medical problems. And when the students left Leiden they spread all over the Western World and passed the master’s teaching on to their own students.” (end quote)

His students Van Swieten and De Haen later introduced Boerhaave’s teaching at the University of Vienna in Austria. Van Swieten became court physician of the Empress Maria Theresia.

Together with Van Swieten Rutherford and Monroe from Edinburgh followed Boerhaave’s lectures. Rutherford started clinical instruction in a small hospital in Edinburgh after he was appointed professor of practical instruction. This hospital was the beginning of the Royal Infirmary, the Edinburgh University Hospital, now. Many other students of Boerhaave were appointed to the University f.i. Monroe, Plummer, Alston a.o.

Morgan got his degree at Edinburgh in 1763. He studied six years with Redman, who graduated at Leiden. Morgan started a medical school at the College of Philadelphia, at that time part of the English Colonies in America.

The famous German professor Haller attended as student the courses of Boerhaave. He applied the teaching principles of the master he adored to the Medical School of the University of Göttingen. Nobody passed the ideas of Boerhaave with more élan to his students than Haller did.

In Berlin Eller followed the Boerhaave school as a professor of the Collegium Medico-Chirurgicum. Eller became the personal physician of the Prussian Emperor Frederic William.

All together it is evident that the dissemination of the Boerhaave principles were sown out all over the Western world, even at the British colonies of America. The spreading of knowledge lead to an improvement of medical care.

Philipp Franz Von Siebold

In 1641 the Dutch Trading Company-V.O.C.- (United East Indian company) got the exceptional permission to settle on Deshima, an artificial island near Nagasaki. Exceptional, because no other countries could get a settlement in Japan at that time. A few years later a Dutch physician Caspar Schambergen joined the Dutch group. He started practising and also teaching young Japanese medicine. So did his successors.

One of these successors was Engelbert Kaempfer a famous German scholar and physician. He travelled for fourteen years all over the world. In Japan he stayed only for two years.

His famous book “History and Description of Japan” was published in English after his death.

The influence of teaching medicine to Japanese soon became evident. In 1706 an Abstract of the works of the French physician Ambroise
Paré in Japanese was published by one of the students who got his training at Deshima. In 1794 Sugita Gempaku translated a Dutch anatomy book - the *Kaitai Shinsho*. It was a result of the "rangaku" i.e. the Dutch learning. At that time the court physician and librarian were ordered by the Shogun to learn Dutch.

The most venerated physician whoever joined the Dutch V.O.C. was Philipp Franz Bathasar Von Siebold, born in 1796 at Würzburg, Germany. In 1820 he graduated as doctor of medicine and started practising. Soon he became court physician of King William I of the Netherlands. But he did not like the quiet court life and decided to travel and see the world. In 1822 he left for the Dutch East Indies (Indonesia now) and became a major-surgeon of the army in Batavia (Djakarta now). In 1823 he joined the V.O.C. at Deshima.

Von Siebold was quite familiar with the works and teaching of Boerhaave. Very soon after his arrival at Deshima he brought the principles of Boerhaave into practice at his school at Nartaki. As a practitioner he became famous. Many patients came to see him especially for operations on the eye for cataract. He never asked fees for treatment. Instead he got many objects of cultural and historical value as presents and tokens of gratitude. He married the Japanese Otaki Sonogi and in 1827 a daughter was born named O Ine. Grown up she decided to follow her father in medicine. She was educated by two of the best students of her father who left in 1830. She was especially interested in obstetrics and became court obstetrician soon after her father arrived in Japan for the second time in 1859.

In 1826 Von Siebold joined a Dutch mission to Edo (Tokyo). He took with him many medical instruments and a medical manual that was translated by one of his students.

In exchange he got many objects on history, art and ethnography. But he got into trouble when he received maps of the country. At that time it was strictly forbidden to give or even to show maps to foreigners. He had to leave the country at the end of December 1829.

Back in Holland he built a house in Leiden, called it "Nippon", where he went to live and where all the collected material was stored. Many of these objects are now the attraction of the exhibition, I already mentioned.

In the books he published descriptions are given of the history, ethnography, animals, plants etc. of Japan at his time. His successors, Buerger, Pierot, Textor, to mention only a few, continued his medical work as well as collecting material. In 1849 one of his successors Mohnike imported smallpox vaccine and vaccinated many Japanese children.

In 1859 when Von Siebold was already 63 years old, he got permission to go to Japan for the second time. He was warmly welcomed by his former students and friends. In 1861 on invitation by the Shogun he went to Edo to give lectures. Because of intrigues, mostly by the Dutch, he left for Batavia completely disappointed. He settled again at Leiden in 1862. He returned to Würzburg in 1863 and died in 1866 in München while he was ordering part of his collection, he had sold to the government of Bavaria.

Von Siebold contributed very much to the mutual influencing of Holland and Japan. He got many ideas of the Japanese scientists and on the other hand he brought European medicine and Boerhaave's teaching methods to
Japan. So Boerhaave’s ideas on medicine spread all over the world. Both Von Siebold and Boerhaave were erudite personalities.

In our twentieth century much has changed. No single person can grasp all what is known about medicine, biology, physics etc. etc. Even in medicine there is no physician who knows all about the different specialities. Students are following lectures on different parts of medicine. The coordination is lacking in many medical educational systems. Especially this coordination is badly needed at the education of the general practitioner.

Lack of time keeps me from elaborating on this theme. But I am going to make an exception.

On a visit to Tokyo a few years ago it was a great pleasure for me to meet again Dr. Shinyu Matsuda, because he was my honored guest at the Leiden University Hospital many years ago. Dr. Matsuda is the founder of the Kyorin University. He is the man of private enterprise, which often has so many advantages over governmental regulations.

He donated all the grounds and facilities of his Mitaka Shinkawa General Hospital to the Kyorin University. His school of medicine chiefly aims at educating primary care physicians.

Primary care medicine is still the backbone of medicine. As I said already the coordination in training is so very important and is still lacking at many schools. But the Kyorin University Medical School is just giving the coordination by integrating lectures by different teachers.

At this moment the Kyorin Complex has also a graduate School of Medicine; a School of Health Sciences, and a School of Social Sciences will start in 1984. In addition there is a School of Nursing, a Medical Library etc. It is a very important center for medical teaching and research in Japan. The whole is run by Dr. Matsuda and his son Dr. Hiroharu Matsuda.

Special attention will be given continuing medical education of the general practitioners. I cannot omit to make a comparison with the Boerhaave Courses for continuing Medical Education of the Leiden University.

Medicine needs lifelong study.