# The surgeon's acupuncturist : Philipp Franz von Siebold's encounter with Ishizaka Sōtetsu and nineteenth century Japanese acupuncture Mathias VIGOUROUX<sup>1</sup>

Résumé : Contrairement aux premières descriptions sur l'acuponcture de Willem Ten Rhjine et Engelbert Kaempfer rédigées dans les dernières décennies du xvile siècle, les observations de Philipp Franz von Siebold ont reçu peu d'attention à son retour en Hollande en 1828. La curiosité de Siebold pour l'acuponcture était pourtant différente de celle de ses prédécesseurs puisqu'il ne s'est pas intéressé à l'acuponcture en général, comme l'ont fait Rhijne et Kaempfer, mais aux théories d'Ishizaka Sōtetsu 石坂宗哲, un acuponcteur japonais du début du XIX<sup>e</sup> siècle qui tenta de constituer une passerelle entre la médecine occidentale et la médecine sino-japonaise. Dans cet article, je commence par reconstituer la rencontre entre Siebold et Ishizaka en me basant sur des documents rares de la bibliothèque de l'Université de Leiden, du Musée d'ethnologie de Leiden et de la famille Ishizaka. J'examine ensuite les nouveaux développements qu'a connus l'acuponcture japonaise au tournant du xix<sup>e</sup> siècle. Je montre comment Ishizaka appliqua ses connaissances sur l'anatomie occidentale à l'acuponcture, soutenant que cela lui donna de nouveaux outils méthodologiques et épistémologiques pour reconstruire les théories de l'acuponcture dans son propre cadre théorique, et que cela lui permit par conséquent de trouver une place dans les débats qui animaient la médecine japonaise depuis la fin du XVII<sup>e</sup> siècle. Enfin, j'examine les raisons de l'intérêt de Siebold pour les théories d'Ishizaka et sa contribution à leur diffusion en Europe.

**Mots-clés :** Acuponcture, Ishizaka Sōtetsu, Philipp Franz von Siebold, Anatomie, Médecine chinoise, théorie des vaisseaux d'acuponcture

**Summary :** In contrast to the first European descriptions of acupuncture by Willem Ten Rhjine and Engelbert Kaempfer in the last decades of the seventeenth century, Philipp Franz von Siebold's notes did not receive much attention upon his return to Holland in 1828. Siebold's

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interest in acupuncture was different from that of his predecessors, as he was not interested in acupuncture in general – as Rhiine and Kaempfer were – but in the theories of Ishizaka Sōtetsu 石坂宗哲, an early nineteenth century Japanese acupuncturist who attempted to bridge the gap between Western and Sino-Japanese medicine. In this essay, I first reconstruct Siebold's encounter with Ishizaka using rare materials held by Leiden University library, Leiden National Museum of Ethnology, and the Ishizaka family. Then, I review the new developments happening in Japanese acupuncture at the turn of the nineteenth century. I show how Ishizaka applied his knowledge on Western anatomy to acupuncture, contending that it gave him new methodological and epistemological tools to reconstruct acupuncture theories into his own theoretical framework. This allowed him to place himself in the debates that flourished in Japanese medicine since the late seventeenth century. Finally, I examine the reasons of Siebold's interest for Ishizaka's theories and his contribution to their diffusion in Europe.

**Keywords :** Acupuncture, Ishizaka Sōtetsu, Philipp Franz von Siebold, Anatomy, Chinese medicine, Acupuncture vessels theory

## I. – Introduction

In Bunsei 9 (1826), year of the Yang Fire Dog, on March 25, the imperial acupuncture physician Ishizaka Sotetsu 石坂宗哲 (1770-1841) met with the German surgeon Philipp Franz von Siebold (1796-1866) at a house located in the Kokucho district in Nagasaki, during the Dutch's journey to Edo (present day Tokyo) for their quadrennial visit to the court of the Tokugawa Shogun. Siebold was busy making a copy of a map representing the acupuncture vessels on the body that Ishizaka brought with him when he turned to Ishizaka and asked : « I heard that you are expert in acupuncture. In my country, Holland, there is no such technique. Try it on me and prick my arm !» Ishizaka complied and inserted an acupuncture needle in Siebold's arm, which impressed Siebold no end. Ishizaka then inquired to Siebold : « Why don't you also show me one of your techniques which does not exist in my country ? » Siebold answered : « Well then, I will cut your arm and show you how to stitch it up  $! *^{2}$ .

Siebold and Ishizaka initiated through the help of their disciples trained in Dutch language one of the most fruitful academic 2 - Quoted *in* Kure, 1931a, 2.

relationships of the early modern period between a doctor educated in Western medicine and an acupuncture doctor. However, in contrast to the first European descriptions of acupuncture and moxibustion<sup>3</sup>, by Hermann Buschoff (1620-1674), Willem Ten Rhjine (1647-1700), and Engelbert Kaempfer (1651-1716) published in the last decades of the seventeenth century, Siebold's notes on these two therapies did not receive the same attention upon his return to Holland in 1828. This was despite the fact that such knowledge would have likely contributed to a better understanding of these two therapies when they were in vogue in European hospitals in the early nineteenth century. Moreover, his encounter with Ishizaka and his contribution to the diffusion of acupuncture and moxibustion in Europe have been largely ignored by scholars in past studies on the transmission of Sino-Japanese medicine to the West<sup>4</sup>.

It has been a commonplace of historiography that acupuncture and moxibustion knowledge was transmitted to early modern Europe *via* Japan through the accounts of the physicians employed by the Dutch East Indian Company whereas recipes of pharmacopeia, pulse diagnosis and other key concepts of Chinese medicine were transmitted mostly *via* China through the writings of the Jesuits. Scholars have shed light on how the Europeans in post in Asia understood local medical practices<sup>5</sup>, the central role institutional and informal networks played in the process of dissemination of the new knowledge<sup>6</sup>, how European physicians assimilated Chinese and Japanese medical practices<sup>7</sup>, and why these therapies failed to integrate European medicine<sup>8</sup>.

- 3 A healing method consisting in burning dry mugwort on certain locations of the body.
- 4 The few articles that have been published in Western language focus on Ishizaka Sotetsu's theories. See for example Macé, 1994. See also Kobayashi, 2009. The Japanese scholar Kure Shūzō was the first to study the relation between Ishizaka and Siebold but he did not place their encounter and Siebold's observations on these two therapies in the broader context of the transmission of Sino-Japanese medicine to early modern Europe. See Kure, 1931a, 1-5; Kure, 1931b, 355-371. See also Kure, 1967, 143-148. More recently, Mathias Vigouroux and Machi Senjurō have conducted a comparative study of the documents related to Ishizaka in the Siebold collection of Leiden University. Vigouroux, Machi, 2011.
- 5 Michel, 1983, 1989, 1990, 1993, 1998 ; Cook, 2007 ; Carrubba, Bowers, 1974.
- 6 Cook, 2011 ; Lux, Cook, 1998.
- 7 Michel, 2004 ; Barnes, 2005 ; Bivins, 2000 ; Unschuld, 1995 ; Hsu, 1989.
- 8 Guilloux, 2013, 2012; Vigouroux, 2014. Except Michel and Vigouroux, the studies mentioned in footnotes 5 to 8 do not rely on Japanese sources and are mostly based on Western and Chinese sources.

This article contributes to these meticulous studies on the early transmission of acupuncture and moxibustion to Europe by examining the contribution of Siebold and Ishizaka. I first reconstruct Siebold's encounter with Ishizaka using rare materials held by Leiden University Library, Leiden National Museum of Ethnology, and the Ishizaka family. Then, I review the new developments happening in Japanese acupuncture at the turn of the nineteenth century focusing on Ishizaka. I contend that the introduction of Western anatomy in Japan gave Ishizaka the methodological and epistemological tools that helped him reconstruct Chinese acupuncture theories into his own theoretical framework, which eventually enabled him to place himself in the debates that flourished in Japanese medicine since the late seventeenth century. Finally, I examine the reasons of Siebold's interest for Ishizaka's theories and his contribution to the diffusion of acupuncture in Europe.

## II. - Siebold's encounter with Ishizaka Sotetsu

Siebold was born in 1796 in Würzburg in Bavaria into a family of doctors. He studied medicine at the University of Würzburg where his grandfather and father had been professors of medicine<sup>9</sup>. In June 1822, two years after earning his medical degree, he entered the service of the Dutch army as a surgeon and was sent to Batavia, where the headquarters of the Dutch East India Company (VOC) were located. His erudition soon caught the attention of the governor-general who, seeing in him a promising young scientist, decided to dispatch him to Dejima, a small artificial island in the Nagasaki harbor where the VOC had a trading post since the 1630s, as a doctor in service to the Dutch merchants with a special assignment : gathering information on Japan. By collecting various information on Japanese culture, customs, geography, history, fauna and flora, the Dutch had great hope to deepen their understanding of this country and thus better secure their exclusive commercial agreement with the Japanese authorities<sup>10</sup>. On 8 August 1823 Siebold reached Nagasaki, where he spent the next seven years collecting scien-

<sup>9 -</sup> On the contribution of Siebold's ancestors to the development of the medical faculty of the University of Würzburg, see Thiede, Keil, Hiki (eds.), 2000, particularly chapters 3 and 4.

<sup>10 -</sup> The best account of Siebold's assignment is Vos, 1989. See also Kouwenhoven, Forrer, 2000, and Bowers, 1970.

tific data on Japan with the help of his Japanese disciples, including information on the practice of acupuncture and moxibustion that he first read about in Kaempfer's *History of Japan* when he was a student in Würzburg.

The starting point of Siebold's encounter with Ishizaka was a short textbook titled Chiyō ichigen 知要一言 (Outline of the fundamentals), whose content summarized briefly the basic principles of acupuncture practice and was originally written for a Western audience<sup>11</sup>. In the first paragraphs, Ishizaka explains that when he met the Dutch physician Nicolas Tullingh, Siebold's predecessor, during the Dutch delegation's guadrennial trip to the Shogun court in 1822, he was asked to teach the main principles of acupuncture. Ishizaka was first reluctant, for he thought he first had to ask the permission to the authorities, as this was an unusual request from the Dutch. However, Tullingh's argument that it would be difficult to obtain an official permission and that there was not much time left before the Dutch embassy returned to Nagasaki convinced Ishizaka who prepared a general outline of the acupuncture method. It is unclear why Tullingh, who seemed to have had a genuine interest in Japanese acupuncture, did not bring Ishizaka's text back to Holland and left it in the Dutch trading post in Dejima<sup>12</sup>. However, this provided the initial reason for Siebold's interest in Ishizaka as the text was used by the Japanese interpreter Nakavama Sakusaburo 中山作三郎 (1785-1844) to satisfy his curiosity on Japanese acupuncture.

The content of Ishizaka's text indeed made a deep impression on Siebold who began to correspond with Ishizaka. He first tried to contact him in the second month of 1824 through Nakayama who sent a letter to Ishizaka explaining that Siebold was hoping to meet him in two years during the next trip to Edo of the Dutch delegation. Nakayama described him as a man of great ambition who was enthusiastically studying various subjects since he took his post, even venturing outside the compound of the Dutch trading post, a favor rarely granted by the Nagasaki authorities, to pick up some local medicinal plants and visit

<sup>11 -</sup> Ishizaka, 1992a, 37-78.

<sup>12 -</sup> The introductory paragraph of *Chiyō ichigen* provides the only information we know about Tullingh's interest in acupuncture and his meeting with Ishizaka.

local pharmacies in order to check their therapeutic properties<sup>13</sup>. Less than one year after his arrival in Japan, Siebold had clearly already started gathering information on Japanese natural products and medical practice.

Ishizaka did not reply to this first letter, so one year later, in February 1825, Siebold decided to send him another letter.

« To the Edo acupuncturist Ishizaka Sōtetsu.

From Doctor Von Siebold, professor of medicine in Japan and Holland, Dejima, February 1825.

Acupuncture does not exist in Europe, but I already heard about this technique. Fortunately, the other day I read your book and I would like to thank you very much for this opportunity. Even though I have been in your country until now, I did not send you a letter. However, I read your book and I will be very happy if we discuss further through letters. From now on, if we could always correspond, needless to say that I will benefit from it and I think that you will probably also profit from it. [Therefore,] I wish that from now on we could correspond with each other. My disciple Mima Junzo is benevolent and very kind. He read your book and translated the Japanese into Dutch for me so I could finally understand your explanations. Most of the time I agree with you but since I would like to ask you some questions, I wrote directly in Dutch inside your book. The Dutch sentences will be soon explained to you in Japanese. I hope you can read and answer [my remarks]. To thank you for letting me read your book, I have attached to this letter two lancets, one gold fixing needle [a clamp?] and thirty grams of opium of superior guality from my country. Next year, since I am going to your province [Edo], I request an audience with you. I pray that you may enjoy good health <sup>14</sup>. »

- 13 The letter is appended at the end of the published version of *Chiyō ichigen*. Ishizaka, 1992a, 67-71.
- 14 Siebold's letter was translated in Japanese by Udagawa Yōan 宇田川榕庵 (1798-1846). The translation is included in *Seisei shiroku*西聖氏録 (*Record of the Western Sages*) a manuscript held in the Kyōushooku 杏雨書屋 Library of the Takeda foundation (reference number : Kyō 266), which also includes the original letter written in Dutch by Siebold. Interestingly, Waseda University library holds two drafts of another Japanese translation apparently made by Mima Junzō 美馬順三 (1795-1825), a disciple of Siebold (reference number : bunko 08\_a0223). Both Udagawa Yōan and Mima Junzō versions contain many smears and corrections so they should be regarded as the first drafts. However, it remains puzzling why two translations of the same letters were made. The Japanese translation was also later reproduced in the published version of *Chiyō ichigen* and the manuscript *Shutaku no uchi* 手沢之内 (*Inside the favorite books*).

Two months later, Ishizaka received the Japanese translation of Siebold's letter along with the medical instruments and the opium. There is no record mentioning how Ishizaka appreciated Siebold's gift or what he did with it, but he must have felt obliged to reciprocate the gift for, in his answer to Siebold, he attached seven acupuncture needles manufactured by the craftsman Kobe Genzō 神戸源蔵. These seven needles were probably part of the needles set brought back to Holland by Siebold and now held in the Leiden Museum of Ethnology<sup>15</sup>.

The two physicians eventually met in Edo during the Dutch Delegation's quadrennial trip to the Shogun court in 1826. Ishizaka managed to pay Siebold two visits at his residence, the Nagasaki house located at Nihonbashi. At that time Siebold was already thinking about publishing Ishizaka's book in Europe in order to introduce his theories to a Western audience, as testified in the different accounts of their meeting. For example, in *Shutaku no uchi* 手沢之内 (*Inside the favorite books*), a manuscript held by the Ishizaka family, Ishizaka writes<sup>16</sup>:

« In Bunsei 9 (1826), year of the Yang Fire Dog, third month, the Dutch [delegation] arrived at Edo. Their physician Siebold said to me : "Acupuncture and moxibustion have never existed in Europe since antiquity. After receiving your *Chiyō ichigen*, I had it translate in Dutch, and will publish and circulate it in the different Western countries. In the coming years, when [the Dutch translation of your work] will be transmitted [to Japan] I will offer it to you '17." »

Siebold was probably trying to please Ishizaka by letting him know his work would be known in Europe. The Dutch translation was indeed published for the first time in the proceedings of the Batavian Society of Arts and Sciences in 1833, a full seven years after their meeting in Edo<sup>18</sup>. Ishizaka concurred with Siebold regarding the potential of the acupuncture method to be widely adopted by European physicians and further impro-

<sup>15 -</sup> In the Siebold collection of the Leiden Museum of Ethnology there is a lacquer box (13,5  $\times$  9 cm) containing 5 needles of 3 kinds and 2 guide-tubes (reference number : 1-631). On the acupuncture items brought back by Siebold to Holland, see Machi, 2014.

<sup>16 -</sup> I am grateful to Machi Senjurō (Nishogakusha University) for letting me borrow his copy of *Shutaku no uchi*.

<sup>17 -</sup> Shutaku no uchi in the collection of the Ishizaka family, no pagination.

<sup>18 -</sup> Siebold, 1833.

ved by their research. In another account of their meeting appended at the end of the manuscript version of *Chiyō ichigen* held by Leiden University Library, he wrote :

« If the art [of acupuncture] is practiced in the West, we will have to wait only the time to count the fingers of one hand before this technique develops at a more subtle and extraordinary level. I am happy to know that my humble name will be transmitted [to Europe] before long<sup>19</sup>. »

Five days after the first meeting, on 30 April 1826, Ishizaka paid a second visit to Siebold to give him another manuscript titled Kvuho 灸法 (On the moxibustion method), with a box containing the traditional nine Chinese needles made by the craftsman Kobe Kohei 神戸古平<sup>20</sup>. These nine needles were originally a request from Siebold who brought them back with him to Holland<sup>21</sup>. On 5 May 1826, while Siebold was still in Edo, Ishizaka sent him a brief description of the clinical use of these needles letter titled Kyūshin no zusetsu 九針の図説 (Illustration of the nine needles). He also thanked Siebold for letting him borrow his chart representing the blood system, adding that next he would like to borrow Siebold's chart on the nervous system. Ishizaka was therefore also relying on Siebold to have access to the most recent medical knowledge coming from the West. These Western anatomical charts were not rare anymore in Japan and circulated in print since the publication in 1774 of Sugita Genpaku's 杉田玄白 (1733-1817) Kaitai shinsho 解体新書 (New book on anatomy), the first published translation of a Western anatomical book in Japan, that included one volume of illustrations. A revised version of the Kaitai shinsho was published by Ōtsuki Gentaku 大槻玄沢 (1757-1827) in 1822, just one year before Siebold's arrival in Japan. These anatomical illustrations of the body, as it will be argued later, helped Ishi-

- 19 Ishizaka Sōtetsu, Chiyō ichigen (Leiden University Library, reference number : UB1092), no pagination.
- 20 « On 24 March I brought [On the moxibustion method] and personally delivered it to Siebold. Recently Köbe Köhei made a set of nine silver needles. I gave the box [to Siebold] upon his request. » Shutaku no uchi, see n. 17.
- 21 The inside face of the box lid contains a handwritten inscription in Latin : « *Apparatus chirurgicus in China ac Iaponia in antiquissimis temporibus usitatus* » (Surgical apparatus common in China and Japan in very ancient times) that was probably added by Siebold. Siebold collection of the Leiden Museum of Ethnology (reference number : 1-618).

zaka to rethink completely the acupuncture vessels theory, particularly its visual representation.

Ishizaka's letter was the last in the correspondence between the two physicians. After the Dutch delegation returned to Dejima in July 1826, they stopped writing to each other, either directly or indirectly through their Japanese disciples. Siebold most probably had collected enough texts and items related to the practice of acupuncture and moxibustion to introduce these two therapies in Europe<sup>22</sup>. Moreover, Japanese acupuncture was only a minor aspect of his project of data collecting, both textual and material, on various aspects of Japan that would later be used as primary sources to compile his *Nippon*. Therefore, after his Japanese disciples completed the translation into Dutch of the different texts Ishizaka gave him in Edo, he might have prioritized other aspects of Japan.

Harmen Beukers has astutely noted that Siebold's interest in Japanese medicine seems to have been limited to acupuncture and moxibustion and their clinical applications, for his collections and his writings contain no document on traditional medical theories<sup>23</sup>. I concur with Beukers ; however, I contend that Siebold was not interested in acupuncture in general, but in Ishizaka's acupuncture in particular<sup>24</sup>. To understand the reason of this interest, it is necessary to examine Ishizaka's theories in connection with the new developments that happened in the field of Japanese medicine in the late eighteenth and early nine-teenth centuries.

22 - This is also attested by the different items related to these two therapies that he managed to bring back to Holland, and that are currently in the Siebold collection of the Leiden National Museum of Ethnology. Apart from the two needles sets already mentioned, it includes also two charts representing the acupuncture vessels on the body (reference number : 1-4648a), a box delicately decorated with gold lacquer containing a hammer used for the hammer technique (reference number : 1-617), two empty needle boxes (reference number : 1-610 and 1-614), and two acupuncture mannequins approximately 80 centimeters high depicting the acupuncture points and acupuncture vessels (reference number : 1-3497).

24 - Siebold brought back from his first trip in Japan six books related to the practice of acupuncture and moxibustion that are currently held in the Siebold collection of the Leiden University Library. Only one of them is not from Ishizaka Ishizaka and was not written in the nineteenth century.

<sup>23 -</sup> Beukers, 1998, 101.

# III. – New knowledge as a means to recover ancient knowledge

The notable publication in 1774 of Sugita Genpaku's *Kaitai* shinsho 解体新書 provided a critical challenge to the traditional understanding of the human body in Japan based on Chinese medicine by emphasizing the role of anatomy in medical practice. It gave impetus to the development of Western medicine in Japan, as well as to the broader field of *rangaku* 蘭学 (Dutch studies) in general<sup>25</sup>. Moreover, it symbolically acknowledged the translation of Western medical books as a valid scholarly practice – one that formerly only fell into the purview of a handful of Nagasaki interpreters – and established Edo as the new center for Dutch studies<sup>26</sup>. The publication of the *Kaitai shinsho* was followed by an increasing number of Japanese translations of Western medical textbooks and reports of autopsies conducted in Japan<sup>27</sup>.

It was in this thriving intellectual environment centered on Dutch medicine at the turn of the nineteenth century that Ishizaka emerged as one of the leaders of a new generation of physicians trained both in Chinese and Dutch medicine. Kure Shūzō 呉秀三 has situated Ishizaka's first interest in Western medicine at the beginning of the Bunka period (1804-1817), but there is evidence suggesting that it must have began much earlier. His lecture notes on Hua Shou's 滑壽 Shi si jing fa hui 十四経発揮 (Elucidation of the fourteen vessels), a textbook on the vessel theory first published in China in 1341, written when he was dispatched to Kofu by the *bakufu* (shogun's administration) to help to establish an acupuncture school (circa 1797), already contain references to Western books<sup>28</sup>. Although the lack of sources on this early period of his life and the vague allusions to Western medicine in his early books make it difficult to reconstruct his educational background, it seems that Ishizaka was self-taught in Western medicine rather than study under the

<sup>25 -</sup> Kuriyama, 1992, 21.

<sup>26 -</sup> Sugita Genpaku attempted to invent a new origin for the development of Dutch studies centered only on Edo – and thereby minimizing the importance of the Nagasaki interpreters –, however, Annick Horiuchi has stated that his *Kaitai shinsho* can still be seen as a « legacy of the Nagasaki tradition of Dutch studies ». Horiuchi, 2003.

<sup>27 -</sup> For a list of these publications, see 0tori, 1964.

<sup>28 -</sup> Kure, 1931b, 360. Ishizaka's stay in Kōfu is described by his daughter's husband, Ishizaka Sōkei, in his preface of Ishizaka's book on Ginseng. Tō, Ishizaka, 1835, 1.

supervision of a teacher trained in Dutch medicine. He explains in his Kibvo genvu 奇病源由 (On the origins of rare diseases), for example, that since he did not know the Dutch language, his knowledge on Dutch medicine relied mainly on the Japanese translations by his peers<sup>29</sup>. After being granted the rank of  $h\bar{o}gen$ 法眼 (eye of the law) in 1812 – the highest for an acupuncturist - he probably benefited a great deal from his network inside the bakufu hierarchy, which included both Dutch and Chinese medicine, to get access to Western medical knowledge<sup>30</sup>. An analysis of the quotations in his Hochū jūyonkei 補註十四経 (The Fourteen [vessels] classic expanded and annotated) demonstrates the central role played by the Kaitai shinsho in his training in Western anatomy<sup>31</sup>. However, at this early stage Ishizaka had not yet assimilated Western anatomy into Chinese medicine as he did in his later textbooks. He quoted from this Western book as well as among dozens of Chinese medical textbooks only in order to provide a cumulative set of notes in his textual investigation of Hua Shou's text.

Ishizaka's interest in Western anatomy stemmed from the similarities he found between Dutch and Chinese medicine when comparing the two. He insisted particularly on the necessity for acupuncturists to learn Western anatomy<sup>32</sup>. As he explained it in his *Chiyō* ichigen, anatomy, a field comparatively neglected in Chinese medicine that tended to focus more on the function of the organs than on their location, enabled Ishizaka to rediscover the method of ancient Chinese acupuncture that had been lost over the centuries :

- 29 See also Ishizaka, 1992b, 25.
- 30 Ishizaka interceded with the *bakufu* in favor of the Dutch medicine trained physician Ōtsuki Gentaku to let him present a skeleton made of wood (木骨) to the *Igakkan* 医学館, the government medical school. See Kure, 1931b, 361. Ishizaka was also the first Japanese physician of the early modern period to mention the *Ishinpō* 医心方 (*Prescriptions at the heart of medicine*), the oldest Japanese medical textbook that was kept secret since the Kamakura period, in his *Hochū jāyonkei*. In the late eighteenth century, the Taki 多紀 family obtained permission from the *bakufu* to revise the manuscript for publication. Ishizaka must have had a very good connection with them to have access to the manuscript before its publication. On Ishizaka mentioning the *Ishinpō*, see Yamamoto, 1994, 117. See also Ishizaka, 1990a, 18, 189, 207, 238, 247, 306, 312, 313, 334, 335. On the Taki family network, see also Beerens, 2006, 88 and 149-150.
- 31 Compare for example Ishizaka, 1990a, 8 with Sugita, 1774, 5a-6a ; Ishizaka, 1990a, 38 with Sugita, 1774, 19b and 20a ; Ishizaka, 1990a, 144 with Sugita, 1774, 6b. See also Yamamoto, 2007.
- 32 Ishizaka, n. 19.

« The art of fine needles began in ancient China two thousand years ago. It was then transmitted to our country one thousand years ago. We hear that in China, the [acupuncture] method of antiquity disappeared some day and today only the [acupuncture] method of the intervening period remains. I discovered that the acupuncture method of the ancient times is preserved in the old books of China. I think that if today I am able to use the method of the fine needles that goes back to China two thousand years ago, it is because I could clear away doubts thanks to the Western books on anatomy<sup>33</sup>. »

Ishizaka was ultimately concerned with the loss of ancient medical traditions. In a lengthy passage of his Igen 医源 (On the origin of medicine), he not only held responsible the Chinese commentators of the medical canons, particularly Wang Shuhe 王叔和 (c. 180-270) who compiled the Maijing 脉經 (Pulse *classic*), for having transmitted a kind of spurious medicine (j. *nise igaku* 偽医学), but also criticized his Japanese peers for focusing too much on individual words (j. shigen 私言)<sup>34</sup>. Ishizaka dismissed the author of the *Maijing* as a reliable transmitter of the Huangdi neijing 黄帝内經 (The Yellow emperor's inner *classic*), an ancient medical text explaining the fundamentals of Chinese medicine completed during the Han dynasty (206 BCE - 220 CE) because in introducing speculative concepts such as the Five Phases theory (c. wu xing 五行), Wang ultimately subverted the original text. As a result, the true meaning of the ancient medical texts gradually became hidden under layers of misleading annotations that resulted in the decline of the way of medicine and the absence of great physicians during the two hundred and seventy years of the Qing dynasty (1644-1911)<sup>35</sup>. Ishizaka was perhaps the first acupuncture physician of the Tokugawa period (1603-1868) to explicitly notice the decline of acupuncture at the Qing imperial court. However, he was not the first to concentrate his attacks on Wang in particular. In the medical debates of the eighteenth century, many physicians of the Ancient Formulas School (j. Kōhō ha 古方派) already held Wang responsible for having corrupted the way of ancient medicine<sup>36</sup>. Nevertheless, Ishizaka was not a proponent of the

<sup>33 -</sup> Ishizaka, n. 19.

<sup>34 -</sup> Ishizaka, 1990b.

<sup>35 -</sup> In another passage, Ishizaka explicitly rejected the Five Phases theory of the *Nanjing* as « foolish explanations ». Ishizaka, 2002, 237 and 241. See also Ishizaka, 1990c, 10-11.

Ancient Formulas School if only because he also criticized those who focused too much on individual theory. He aimed clearly at two of the most prominent figures of the Ancient Formulas School, Gotō Konzan 後藤艮山 (1659-1733) and Yoshimasu Tōdō 吉益 東洞 (1702-1773) – both of whom advocated a clinical approach to medicine based on the *Shanghan lun* 寒傷論 (*Discussion on cold damage disorders*), a Chinese medical text written during the third century CE by Zhang Zhongjing 張仲景.

Goto and Yoshimasu rejected the Huangdi neijing for its speculative theories and criticized the Later Ages School (i. Gosei ha 後世派) proponents for giving too much importance to the Song and Ming dynasties medical writers. Goto elaborated on an original theory inspired by the seventeenth century Confucian scholar Ito Jinsai's 伊藤仁斎 (1627-1705) ichigenki 一元気 (unitary primordial qi) – that he called hyakubyo ikki no ryūtai ni shōzuru 百病生於一気留滞 (all diseases originate from the stagnation of the unitary qi). To release the blockages responsible for diseases, Goto favored treatments that enhanced the circulation of *qi* (j. *junki* 順気) in the body<sup>37</sup>. Yoshimasu later drew significantly on Goto's theory but he replaced the abstract concept qi with a more concrete one that he called poison (j. doku 毒), arguing that « all diseases [come from] a single poison. Medicines are all poisonous things. Poison is fought by poison. Once the poison is eliminated, the body recovers ( *萬病唯一毒*. 衆薬皆毒物. 以毒攻毒. 毒去體佳)<sup>38</sup> ».

In other writings, Ishizaka expanded his criticism to also include Dutch medicine-trained physicians and acupuncture specialists<sup>39</sup>. In sum, according to Ishizaka, all physicians deserved some blame. The Chinese physicians polluted the original medical classics with their commentaries, Dutch medicine-educated Japanese physicians gave too much importance to the medicine of the « Barbarians » (i.e., Dutch medicine) over Chinese medicine, Chinese medicine-educated Japanese physicians invented personal theories, and acupuncture specialists of his time were ignorant and incompetent when facing difficult medical cases.

- 36 On these debates, see Elman, 2008.
- 37 Gotō, 1979. See also Hattori, 1978, 8.
- 38 Yoshimasu, 1918, 12.

<sup>39 -</sup> Ishizaka, 1990b.

Western anatomy and its similarities to ancient Chinese medicine thus became central to Ishizaka's task of recovering the true meaning of the Chinese classics. In particular, it helped him to identify certain speculative theories and manifest invisible parts of the Chinese conceptualized human body into the visible spectrum. For example, he replaced the abstract six vin-vang division by an anatomical division of the body ; the purely theoretical concept of triple burner (c. sanjiao 三焦) described in the Huangdi neijing was also given an exact location<sup>40</sup>. He did not believe in the forbidden points theory (c. *jinxue* 禁穴), arguing that in case of disease all parts of the body should be needled even when the affection was located in some dangerous place, such as the eves<sup>41</sup>. His claims somewhat echoed those of the eighteenth century acupuncturist Suganuma Shūkei 菅沼周桂 (eighteenth century), who had already referred to the anatomical division of the body instead of the traditional six vin-vang division, as well as refuted the entirety of the vessel theory. Suganuma also denied the existence of the forbidden points, the *shu* points (c. *shuxue* 兪穴) and the meeting points (c. *huixue* 会穴) theories, and set the number of regular acupuncture points to only seventy because the other points were of no use in clinical practice<sup>42</sup>. Although the two acupuncturists both rejected the most speculative theories that had been allegedly added by Wang Shuhe and his proponents, their approach to the medical tradition was noticeably different. Suganuma was active in the middle of the eighteenth century – an era when knowledge on Western anatomy circulated mostly amongst a small number of Nagasaki interpreters dealing with the European physicians based in Dejima. This was long before the Kaitai shinsho had any influence on the development of « Dutch medicine »<sup>43</sup>.

43 - Suganuma does not mention any relation with Yamawaki Tōyō 山脇東洋 (1706-1762), who recorded in his Zōshi 蔵志 (Records of the organs), twenty years before Sugita Genpaku's Kaitai Shinsho, the result of his dissection of human corpses that ended up refuting the Yellow Emperor Inner Classic's explanation of the human body based on the five phases and yin-yang theories. It was the first time in the Tokugawa period that the Chinese conception of the human body was refuted on the ground of human dissection. Moreover, the publication of Kaitai shinsho was not followed immediately by other publications on Western medicine. It took several years before the Japanese physicians assimilated all the new knowledge exposed to them in the Kaitai shinsho.

<sup>40 -</sup> Ishizaka explained that the upper burner corresponded to the stomach, the middle burner to the small intestine and the lower burner to the part located under the kidneys. Ishizaka, 1990b, 429.

<sup>41 -</sup> Ishizaka, n. 19.

<sup>42 -</sup> Suganuma, 1978, 2.

Suganuma therefore remained fiercely critical within the theoretical framework of the Chinese tradition in an effort to overcome many centuries of misinterpretation of the ancient medical classics. He did this by focusing on an empirically grounded approach to clinical medicine. Such an extreme view resulted in proposing a theory (the seventy acupuncture points theory) that radically broke with the content of the Chinese medical classics. Understanding the limit of such a narrow-minded approach, Ishizaka adopted a more « eclectic » position (j. *secchū* 折衷). He turned to Western anatomy for the new methodological tools it offered to break the stranglehold of the Ancient Formulas School paradigm regarding the establishment and the standard sources that stood for tradition.

Ishizaka's medicine should not been seen, however, as radically breaking with previous Japanese medical ideas, but rather as the latest development of the academic disputes that highlighted the symbolic struggles of Japanese physicians to reinterpret the textual tradition of Chinese medicine during the Tokugawa period<sup>44</sup>. The introduction of Ming-Qing China's evidential scholarship (kaozhengxue 考証學) methodologv offered eighteenth century Japanese physicians new methodological and epistemological tools such as etymology, phonology, and paleography to reconsider Chinese medical knowledge directly from the original texts without depending on later commentaries. These tools helped them to produce critical editions of ancient medical texts and reconstitute the original formulas<sup>45</sup>. Similarly, Ishizaka aimed at recovering the original content of the Chinese classics but instead of using evidential scholarship, he relied on the new cutting edge knowledge of Western anatomy. Although Ishizaka's interest was genuine, he was not interested in Western anatomy per se. Indeed, there is no record that he attended even one dissection. Moreover, his interpretations of Western anatomy treatises were very loose in only adopting concepts that fit his theories. It explained why he never considered Western medicine to be superior to the

<sup>44 -</sup> On the reception of the acupuncture channels theory in Japan, see Vigouroux, 2015.

<sup>45 -</sup> For a more detailed discussion of the place of Chinese learning in the Tokugawa society and the Japanese Confucian scholars and physicians attitude toward Chinese Confucianism and medical knowledge, see Elman, 2008, 117. Daniel Trambaiolo also shows how philological study of ancient medical texts enabled eighteenth century Japanese physicians to create new medical practices. Trambaiolo, 2015.

Chinese medical tradition, and even condemned publicly his peers who paid too much attention to the medicine of the  $\,$  « Barbarians »  $^{46}$ .

# IV. – Blood circulation, the nervous system and vessels in Ishizaka Sōtetsu's acupuncture

Ishizaka's most innovative theory was perhaps his assimilation of the Chinese concept of nutritive (c. rong, j. ei 栄) gi and protective (c. wei, j. e 衛) gi to the Western blood system. He explains in Igen that the ei were named arteries (j. domyaku 動脉) by anatomists (j. kaibō ka 解剖家) and the e were called veins (j. seimvaku 静脉)<sup>47</sup>. Ishizaka's description of the blood system indeed reflects the influence of Sugita Genpaku's Kaitai shinsho, particularly chapter 16 on arteries and chapter 17 on veins 48. Concepts central to Western blood circulation, such as the central role of the heart in the circulatory system, the division of larger branches or vessels into smaller ones, the movement of blood to and from the extremities by means of vessels, were all assimilated by Ishizaka in his description of the *ei e* system. Moreover, as Mieko Macé already points out in her analysis of Ishizaka's Ei e chūkei zu 栄衛中経図 (Illustrations of the arteries, veins and the middle vessel), Ishizaka was also influenced by Udagawa Genshin's 宇田川玄真 Seisetsu ihan teikō shakugi 西説医範提綱釈義 (The Fundamentals of Western theories on medicine explained) published in 1805. The mobility of the arteries (i.e., their pulsation) repeated by Ishizaka but not mentioned by Sugita in his Kaitai shinsho, clearly derived from Seisetsu ihan teiko shakugi which speaks of the arteries as blood vessels that have movement<sup>49</sup>.

# His second innovative theory was his revision of the concept of *qi*. He argued that there was only one type of *qi* called ancestral

- 46 In *Igen*, Ishizaka argues : « Nowadays, Dutch medicine is practiced in the East. What entered there necessarily went out from here. What enters dominates, what goes out subdues itself to it. The theories and names of [Dutch medicine] are different [from our medicine]. Between the established principles [of Dutch medicine] and the established principles of our medicine in the Neijing, there are many similarities and few differences. However, people recommending the art of the Barbarians place it above the teaching of the Neijing. This is extreme ! » (Ishizaka, 1990b, 446.)
- 47 Ishizaka, 1990b, 427.
- 48 Compare for example Sugita, 1774, 9a and 11a with Macé, 1994, 80-81; compare also Sugita, 1774, 11b with Macé, 1994, 82-83.
- 49 Compare for example Ishizaka, 1997, 423 with Udagawa, 1805, 16b.

qi (j. sōki 宗気), which he assimilated to the Western nervous system. In one of his textbooks, quoting at length from the Lingshu 靈樞 (Divine pivot) and the Suwen 素問 (Plain ques*tions*), the two parts of the *Huangdi neijing*, he tried to explain the relation between the ancestral *qi* and the Chinese medicine concept of « essence » (c. jing, j. sei 精) and « spirit » (c. shen, j. *shin* 神) central to his theory. Ishizaka starts his explanation by an alleged quotation from chapter 18 of the Lingshu, however, a comparison of his text with the original reveals that he actually reconstructs the content of the chapter entirely by uprooting quotations from other chapters, changing the wording and adding his own comments so it fits its theory. For example, the term « five organs, six bowels » (j. gozō roppu 五臟六腑) in the quotation of *Lingshu* chapter 18 was replaced by the term twelve organs (j. *jūni zō*  $+ \exists \vec{k}$ ); the term triple burner in chapter 36 was replaced by upper burner which corresponded for Ishizaka to the stomach; the term yin-yang in the quotation of Suwen chapter 19 by « spirit » (j. shin 神) and « essence » (i. sei 精), and in the quotation from *Lingshu* chapter 47 that originally states « the blood, the *qi*, the essence and the spirit of the man », he dropped « blood » and « *qi* » to keep only « the essence and the spirit ».

In *Igen* he bridged the gap between ancient Chinese and European medical thought in linking his theory to the nervous system.

« Ancestral *ki* corresponds to the *sei* and *shin* that depart from the brain [...]. Ancestral vessels are the pathways for *sei* and *shin* [...]. What anatomists call consciousness-nerve [sensory nerve] corresponds in the *Neijing* to *shin* and what they call movement-nerves [motor nerve] corresponds in the *Neijing* to *sei*<sup>50</sup>. Regarding the pathways taken by *sei* and *shin*, their passage has main branches and network branches and their circulation has paths and structures<sup>51</sup>. The tiny branches [of the

51 - There is a similar passage in the *Lingshu* chapter 81 : « If the blood is harmonious, it fills first the tertiary vessels, then it pours into the network vessel. [When] all [these

<sup>50 -</sup> Here Ishizaka most probably refers to Udagawa Genshin's explanation of the function of nerves. In one passage, Udagawa speaks of the nerves perceiving of what is cold, hot, painful or itchy, and their control of the movement activity of the body. In another passage, he specifically explains that : « The function of nerves is usually of two kinds : one is the function of consciousness [sensory nerve], one is the function of movement [motor nerve]. » See Udagawa, 1805, 7ab.

nerves conduits] that look like the finest body hair  $^{52}$  harmonize with the lower burner, evaporate and leave the physical appearance  $^{53}.\ >$ 

The aforementioned passages illustrate Ishizaka's attempt to revisit the Chinese concept of vessel (c. *jingluo*, j. *keiraku* 経絡) by uprooting Western concepts to contextualize them in another space – the space of acupuncture. Moreover, it reveals Ishizaka's construction of an acupuncture of his own making through a process of adoption rather than influence. Ishizaka selected only the words or parts of sentences that fit his explanations from Sugita's *Kaitai shinsho* and Udagawa's *Seisetsu ihan teikō*. In this process, classical Chinese appear to have been central to overcome the difficulty of adapting Western terminology.

In the preface of *Kaitai shinsho*, Sugita explained how his group approached the translation of the Dutch version of Johann Adam Kulmus's *Anatomische Tabellen*. They distinguished between three kinds of translation : *honyaku* 翻訳 or the substitution of a Sino-Japanese word equivalent for a Dutch word, *giyaku* 義訳, or neologism, and *chokuyaku* 直訳 or the translite-ration of the original word <sup>54</sup>. For example, the term « artery » was translated as *dōmyaku* 動脈 (literally movement-vessel), a term used in the *Neijing* to describe the movement in the vessel. The term *shinkei* 神経 was coined to translate the word « nerve » by mixing the characters « spirit » (*shin*) and « vessel » (*kei*). Although *shinkei* does not appear in the *Neijing* as a compound word, both *shin* and *kei* have a meaning on their own in Chinese medicine. Sugita's use of classical Chinese in *Kaitai shinsho* contributed much to Ishizaka's attempt to built a bridge

vessels] are filled, it pours into the main vessels. Yin and yang are already bloated and circulate [through the propulsive action] of respiration. Their passage has conduits and connections, their circulation has paths and structures. » See Ma, 1628, 399. The two expressions « their passage has conduits and connections » and « their circulation has paths and structures » also appear in the *Suwen* although the first two characters are *fen ji* (分紀) instead of *jing ji* (経紀). Paul Unschuld translates the passage as « [their] passage has separate arrangements. [Their] circulation has paths and structures. » See Unschuld, Tessenowm, 2011, 165.

52 - In Udagawa Genshin's *Seisetsu ihan teikō*, there is an analogous sentence comparing the extremities of the nerve branches to the « finest hair ». See Udagawa, 1805, 3a.

<sup>53 -</sup> Ishizaka, 1990b, 425-426.

<sup>54 -</sup> Macé, 1994, 85.

between the vessel theory and the blood and nervous systems because they were using the same terminology that made sense both in Western medicine and Chinese medicine. It illustrates once again the centrality of the classical Chinese language in Japanese medicine during the early modern period <sup>55</sup>.

Foreshadowing the modernization of acupuncture during the twentieth century, Ishizaka's theory on the reaction provoked by the insertion of the needle was unusual for an acupuncturist of the early nineteenth century. He explained that the basic principle of acupuncture lay in the inflammatory reaction (j. netsu 熱) following the insertion of a foreign body into the human body  $^{56}$ . The needle inserted into the affected part provoked a local inflammatory reaction, stimulating the living *qi* (j. *seiki* 生気) and the blood under the needle to form « original *qi* » (j. *genki* 元気) that expelled the pathogenic agent out of the body<sup>57</sup>. Neither the insertion of the acupuncture needle directly into the affected area nor the idea of expelling the evil agent outside the body was new. The seventh century Chinese physician Sun Simiao 孫思邈 already mentioned the ashi (j. aze 阿是) points in his Qianjin yaofang 千金要方 (Essential prescriptions worth a thousand pieces of gold as complementary to the acupuncture vessel theory, and the Neijing insisted on this idea of « attacking intruders » such as wind, cold or dampness that penetrate the body and cause diseases. What was new, however, was that Ishizaka made local application of acupuncture a general principle over the vessel theory, and that his explanation of the acupuncture needle's action on the body did not present any significant problems of understanding even for a novice in Sino-Japanese medicine. This early stage of « medical bilingualism », a term that Marta Hanson defines as « the ability not only to read in two different medical languages but to understand their different histories [and] conceptual differences<sup>58</sup> », explains perhaps why Siebold had so much interest in Ishizaka's acupuncture and used his writings to introduce Sino-Japanese acupuncture in Europe.

- 55 Macé, 1998.
- 56 The word *netsu* literally means heat, but the local reaction described by Ishizaka refers to an inflammation. See Ishizaka, n. 19. Mima Junzō, Siebold's disciple, also used the Dutch word for inflammation (*onsteking*) in his translation of Ishizaka's writing on acupuncture. See Shiiboruto Bunken Kenkyūshitsu, 1936, 155. On Mima Junzō, see also part V.
- 57 Ishizaka, n. 19.
- 58 Hanson, 2016.

# V. – Ishizaka Sōtetsu's theories in the writings of Siebold

In 1828, two years after his meeting with Ishizaka in Edo, Siebold was caught by the Japanese authorities in possession of several maps of Japan that he had obtained from the court astronomer Takahashi Kageyasu 高橋景保 (1785-1829) and put under house arrest – this is known as the Siebold incident. After months of investigation, Siebold was eventually banished from Japan<sup>59</sup>. He left Nagasaki on the 30 December 1829 and arrived in Holland in July 1830. After settling down in Leiden, he started referencing and cataloguing the large collection of some ten thousand items he had managed to ship from Japan, which included hundreds of books on various topics, minerals, plants, seeds, and other various objects used in Japan in daily life.

Siebold's first observations on Japanese acupuncture were published in 1833 in the Batavia journal *Verhandelingen van het Bataviaasch Genootschap van der Konsten en Wetenschappen*. His article titled « lets over de acupunctuur (naaldensteekkunde) : Getrokken uit eenen Brief van den Japansch-Keizerlijken Naaldensteker Isi Saka Sotels » (On acupuncture : Based on a letter from the Japanese imperial acupuncturist Ishizaka) is divided into three parts. The first part is an essay on acupuncture from Ishizaka, the second, some comments by Siebold, and the third, an illustration representing several acupuncture needles and needles boxes<sup>60</sup>.

According to Ōtori Ranzaburo 大鳥蘭三郎, the content of the first part matches the third part of *Kyūhō ryakusetsu* 灸法略説 (*Outline on moxibustion*), a dissertation written by Siebold's disciple Mima Junzō 美馬順三<sup>61</sup>. Since the Japanese were not permitted to give the Dutch material in Japanese containing historical, political or geographical information, Siebold requested his Japanese disciples to write dissertations on various subjects rela-

<sup>59 -</sup> On the Siebold incident, see Kouwenhoven, Forrer, 2000, 44-47.

<sup>60 -</sup> As for the first edition of *Nippon*, the illustration includes a presentation of the guidetube and the hammer techniques, the two most used acupuncture techniques in Japan during the Tokugawa period. Siebold, 1833, 381-389.

<sup>61 -</sup> Shiiboruto Bunken Kenkyūshitsu, 1936. For a comparative analysis of the content of the Japanese manuscripts in Leiden University Library and the dissertation in Dutch written by Siebold's disciples, see also Vigouroux, Machi, 2011, 325-342.

ted to Japanese history, geography, culture, etc., and in exchange he taught them Western medicine. Mima's  $Ky\bar{a}h\bar{o}$ *ryakusetsu* is one of these dissertations whose content is a Dutch translation of Ishizaka's *Chiyō* ichigen. Siebold most probably checked and polished Mima's Dutch before publishing the article in the Batavia journal, which could explain the differences of phrasing between the two versions. Despite all the acupuncture manuscripts he brought back to Holland, Siebold had a very limited command of Japanese<sup>62</sup>. Therefore, his knowledge of acupuncture relied mainly on Mima's dissertation, and perhaps also to some extent on Ishizaka's oral teaching when the two physicians met in Edo.

Based on his article « lets over de acupunctuur », Siebold's understanding of Ishizaka's acupuncture could be summarized as follows: first, in case of a disease, acupuncture could be applied anywhere in the body as long as the acupuncturist paid attention to not harm the lungs, the heart, the arteries and the nerves. Using acupuncture on a healthy body was strictly forbidden. Second, acupuncture was applied locally and directly on the affected part of the body. Third, the main principle of acupuncture relied on the inflammatory reaction caused by the introduction of the needle into the body of a foreign material. When a needle was inserted into the affected part, it produced a reactive force that increased the body temperature and caused an inflammation. When the suppuration that results from the inflammation is expelled out of the body it carries out the pathogenic element. Fourth, acupuncture needles were limited to 9 cm long (3 *sun* 寸). Fifth, after its insertion through a guidepipe, the needle was twisted. The acupuncturist first inserted the needle extremity into the skin through the guide-tube using either his index or a hammer, then withdrew the tube and inserted the needle deeper into the body by twisting it. Finally, two methods were used to stimulate the needle : tonification and dispersion. The former required the use of a fine needle, the latter the use of a thick one.

Siebold did not agree with Ishizaka on the reaction caused by the insertion of the needle into the body. He explained that he had tried acupuncture on himself, but it caused no inflammation 62 - Kuiper, 2015, 888. such as the one described by Ishizaka. He proposed instead another explanation based on his own observations made with Ignaz Döllinger (1770-1841), his professor of anatomy and physiology when he was a student at the university of Würzburg<sup>63</sup>. Siebold thought that the insertion of the needle provoked a local stimulation that changed the flow of blood circulation. He therefore linked this reaction with the nervous system<sup>64</sup>.

Interestingly, the first edition of Siebold's *magnus opus : Nippon, Archiv zur Beschreibung von Japan und dessen Neben : Und Schutzländern Jezo mit sen südlichen Kurilen, Sachalin, Korea und den Liukiu-Inseln (Nippon : Archives for the description of Japan and its dependent and tributary countries : Ezo with the Southern Kuril Islands, Sakhalin, Korea and the Ryukyu Islands)*, published in 1833, contains no chapter on acupuncture and moxibustion. Only volume 4 includes an illustration of some tools used in acupuncture practice very similar to those depicted in his article « lets over de Acupunctuur ». Siebold most probably drew these two illustrations from the different needle sets he brought back from Japan.

Siebold's most complete notes on the acupuncture and the moxibustion methods were included in two chapters of the second edition of his Nippon published in German by his offspring in 1897, thirty one years after his death 65. The first chapter entitled : « Beiträge zur Kenntnis der japanischen Akupunktur » (Contribution to the knowledge of Japanese acupuncture) is composed mainly from part one and two of the article in the Batavia journal. The second chapter entitled : « Über die Anwendung der Moxa » (On the application of moxa) is the only text Siebold wrote about moxibustion. A comparative analysis of its content shows, however, that Siebold relied mainly on three sources : Kaempfer's dissertation, the first part of  $Ky\bar{u}h\bar{o}$ ryakusetsu translated into Dutch, and finally his own observations made during his stay in Japan<sup>66</sup>. However, since the citations from Kaempfer's text are much more numerous than those from the two other sources, it is also possible that this chapter

<sup>63 -</sup> On Siebold and Döllinger, see Thiede, Keil, Hiki (eds.), 2000, 63-70.

<sup>64 -</sup> Siebold, 1897, 81-82.

<sup>65 -</sup> Siebold, 1897, 78-86.

<sup>66 -</sup> See his remarks in Siebold, 1897, 84-85.

was not actually compiled by Siebold himself, but by his offspring who relied on the notes he left after his death.

Until the publication of Siebold's *Nippon*, Kaempfer's *History of* Japan, published in 1727, eleven years after the latter's death, was the main source to learn about Japan in eighteenth and early nineteenth century Europe. A bestseller soon after publication, it included two appendices on acupuncture and moxibustion that were originally part of Kaempfer's doctoral thesis on tropical diseases, oriental medicine, and exotic natural phenomena defended in 1694, two years after his return from Japan, and published for the first time in Latin in 1712<sup>67</sup>. Kaempfer's account of these two therapies became one of the most cited sources in medical articles and books on acupuncture and moxibustion published in the early nineteenth century, the other source being Willem Ten Rhyne's Dissertatio de arthritide published in 1683, which included the earliest and most detailed description of the acupuncture technique. Rhjine tried unsuccessfully to assimilate the vessel theory into the Western blood circulation system, whereas Kaempfer focused more on moxibustion than on acupuncture<sup>68</sup>. Moreover, at the time of Rhjine's and Kaempfer's stay in Japan, the Japanese interpreters did not yet have a good command of Dutch<sup>69</sup>. Their descriptions therefore contain many mistakes <sup>70</sup>.

In contrast, a comparative analysis of the Japanese acupuncture texts brought back to Holland by Siebold with his own writings on these subjects shows clearly that first, Siebold was more fascinated by acupuncture than by moxibustion; second, he was not interested in acupuncture in general – as Rhjine and Kaempfer were – but particularly in Ishizaka's acupuncture because

- 67 Bowers, Carruba, 1970, 270-310.
- 68 On Rhijne and Kaempfer, see Michel, 1983, 1989 and 1990.
- 69 Rhijne and Kaempfer both complain in their writings about the poor language skills of the Japanese interpreters. See for example Kaempfer, 1727, 273. See also Rhijne, 1683, preface 5.
- 70 A good example is the illustration titled *Kyūsho kagami* (The Mirror of the Moxibustion Point) and included by Kaempfer in his account on the moxibustion method. Kaempfer presents this illustration and its explanation as « A treatise (in the literal sense of a looking-glass) showing what parts of the human body are to be burnt with the Moxa ». However, the illustration depicts in fact the forbidden points, that is, the points of the body where moxibustion should not be applied. To my knowledge, Wolfgang Michel has been the first scholar to point out this mistake. See Kaempfer, 1727, appendix IV, 43. See also Michel, 1983.

of his attempt to blend knowledge of Western anatomy with acupuncture theory; third, the good command of Dutch of his Japanese disciples and the interest of Ishizaka for Western anatomy enabled Siebold to present faithfully the acupuncture theories of one of the most representative acupuncture physicians of the late Tokugawa period. However, whereas Rhjine's and Kaempfer's accounts aroused much curiosity after their publication despite their many flaws, Siebold's contribution remained largely unknown to his contemporaries.

## VI. – Epilogue : Why Siebold's writings on acupuncture made no impact in Europe

Rhjine and Kaempfer became mostly known in seventeenth century European medical circles for their account on moxibustion. It is only in the early nineteenth century that their account on acupuncture was reappraised by European physicians. Moxibustion attracted the attention of Europeans because of it resemblance with cautery, whereas there was a certain reluctance to experiment acupuncture, a method that had no equivalent in Western medicine. It was in fact the publication in 1675 of Buschoff's book on the treatment of the gout by moxa – the first to relate in details the use of moxibustion - that first sparked the curiosity of Europeans<sup>71</sup>. The descriptions of Rhjine and Kaempfer published a few years later further aroused their interest for this therapy. Moxibustion soon became popular because it was recommended for the treatment of the gout, the disease of the nobility in seventeenth century Europe against which Western treatments were mostly ineffective. Europeans were therefore disposed to try a new type of cure even if it was coming from a far Eastern country. This popularity was short lived as moxibustion was quickly abandoned in the early eighteenth century because of its inefficacy 72.

French physicians rediscovered this therapy in the late eighteenth century and, shortly after, also began to experiment acupuncture. However, even when research on acupuncture

<sup>71 -</sup> Unlike Rhijne and Kaempfer, Buschoff never visited Japan. His observations are based on his own experience while he was in Batavia. Buschoff, 1675 and 1676. On the contribution of Buschoff, see also Michel, 1998.

<sup>72 -</sup> On the reception of acupuncture and moxibustion in seventeenth and eighteenth century Europe, see Michel, 2004. See also Guilloux, 2012.

was at its zenith in France in the 1820s-1830s, French physicians often acknowledged the contributions Rhiine and Kaempfer made in introducing this method in Europe, whereas Siebold is never mentioned 73. The reason Siebold's work on acupuncture and moxibustion was ignored was indeed a set of unfortunate circumstances. The first edition of his *Nippon* that was published in 1833, just when acupuncture and moxa were in vogue in European hospitals, did not include anything on acupuncture and moxibustion, except an illustration representing some acupuncture needles. He also chose to publish his article introducing Ishizaka's acupuncture (*lets over de Acupunctuur*) in Dutch in a Batavia journal, which probably considerably limited his diffusion. Moreover, until the second half of the nineteenth century, no one in Europe, except perhaps a few scholars such as Johann Joseph Hoffmann (1805-1878), Jean-Pierre Abel-Rémusat (1788-1832) and August Pfizmaier (1808-1887), mastered the Japanese language enough to decipher the medical manuscripts on acupuncture that Siebold had brought back to Europe from Japan. When the second edition that included the two chapters on acupuncture and moxibustion was released in 1896, European interest in acupuncture had already faded away<sup>74</sup>. It did not appear significantly again until the 1920s, when George Soulie de Morant (1878-1955) published his translation of Chinese acupuncture textbooks which soon gave new impetus for the assimilation and diffusion of acupuncture in twentieth century Europe<sup>75</sup>.

<sup>73 -</sup> In the 77 articles and books published on acupuncture in France between 1784 and 1850, Rhjine is quoted 14 times, Kaempfer 13 times. None of Siebold's works are quoted. See Vigouroux, 2014, 421-422.

<sup>74 -</sup> Thirty years before the second edition of *Nippon*, the publication of Dabry de Thiersant's *La Médecine chez les Chinois* (1863), that presented for the first time in Europe in a coherent manner the acupuncture vessels theory, remained also largely unnoticed.

<sup>75 -</sup> Nguyen, 2012.

## **Bibliography**

#### BARNES Linda L.

2005. Needles, herbs, gods and ghosts : China healing and the West to 1848 (Cambridge, Massachusetts : Harvard University Press).

#### **BEERENS Anna**

2006. Friends, acquaintances, pupils and patrons : Japanese intellectual life in the late eighteenth century : A prosopographical approach (Leiden : Leiden University Press).

#### **BEUKERS Harmen**

1998. *The Mission of Hippocrates in Japan : The contribution of Philipp Franz von Siebold* (Amsterdam : Foundation for four centuries of Netherlands-Japan relations).

#### **BIVINS Roberta**

2000. *Acupuncture, expertise and cross-cultural medicine* (New York : Palgrave Macmillan).

#### BOWERS John Z.

1970. Western medical pioneers in feudal Japan (Baltimore : The Johns Hopkins Press), 92-173.

#### BOWERS John Z., CARRUBA Robert W.

1970. The doctoral thesis of Englebert Kaempfer on tropical diseases, Oriental medicine, and exotic natural phenomena, *Journal of the history of medicine and allied sciences*, 25, 270-310.

#### **BUSCHOFF Hermanus**

- 1675. *Het Podagra, nader als oyt nagevirst en uytgevonden, midsgaders des selfs sekere Genesingh of ontlastend Hulp-Mittel* (Amsterdam : Jacobus de Jonge).
- 1676. *The Gout, more narrowly searcht, and found out : Together with the certain cure thereof* (London : Printed by H.C.).

#### CARRUBBA Robert W., BOWERS John Z.

1974. The Western world's first detailed treatise on acupuncture : Willem Ten Rhijne's De acupunctura, *Journal of the history of medicine*, 29, 371-394.

#### Соок Harold J.

- 2007. *Matters of exchange : Commerce, medicine, and science in the Dutch golden age* (New Haven : Yale University Press).
- 2011. Conveying Chinese medicine to seventeenth-century Europe, *Science between Europe and Asia*, 275/4, 209-232.

#### DABRY DE THIERSANT Claude-Philibert

1863. La Médecine chez les Chinois (Paris : Henri Plon).

#### **ELMAN Benjamin**

2008. Sinophiles and sinophobes in Tokugawa Japan : Politics, classicism, and medicine during the eighteenth century, *East Asian science, technology and society*, 2, 93-121.

#### GOTō Konzan 後藤艮山

1979. Ikyō 遺教, in *Kinsei kanpō igakusho shūsei* 近世漢方医学集成 (Tokyo: Meicho shuppan), vol. 13, 154-156.

#### **GUILLOUX Ronald**

- 2012. Transmissions de la moxibustion et de l'acupuncture en Europe : Entre pratiques et discours (1670-1830), *Revue d'anthropologie des connaissances*, 6/3, 85-112.
- 2013. L'acupuncture et le magnétisme animal face à l'orthodoxie animale française (1780-1830), *Gesnerus*, 70/2, 211-243.

#### HANSON Marta

2016. Is the 2015 Nobel Prize a turning point for traditional Chinese medicine ?, http://theconversation.com/is-the-2015-nobel-prize-a-turning-point-for-traditional-chinese-medicine-48643 (Accessed July 15 2016).

#### HATTORI Toshiro 服部敏良

1978. *Edo jidai igakushi no kenkyā* 江戸時代医学史の研究 (Tokyo : Yoshikawa Kōbunkan).

#### HORIUCHI Annick

2003. When science develops outside state patronage : Dutch studies in Japan at the turn of the nineteenth century, *Early science and medicine*, 8/2, 169-170.

#### Hs∪ Elisabeth

1989. Outline of the history of acupuncture in Europe, *Journal of Chinese medicine*, 29, 28-32.

#### ISHIZAKA Sotetsu 石坂宗哲

- ca 1820-1825. Shutaku no uchi 手沢之内 (Manuscript in the collection of the Ishizaka family)
- 1826. Chiyō ichigen 知要一言 (Leiden University Library, reference number: UB1092).
- 1990a. Hochū jūyonkei 補註十四経, *Rinshō shinkyū koten zensho* 臨床鍼灸古 典全書 (Osaka : Oriento Shuppansha), vol. 16, 1-410.
- 1990b. Igen 医源, *Rinshō shinkyū koten zensho* 臨床鍼灸古典全書 (Osaka : Oriental Shuppansha), vol. 16, 411-448.
- 1990c. Sō ei e sanki ben 宗栄衛三気弁*, Rinshō shinkyū koten zensho* 臨床鍼灸 古典全書 (Osaka : Oriental shuppansha, 1990), vol. 36, 1-12.
- 1992a. Chiyō ichigen 知要一言, *Rinshō shinkyā koten zensho* 臨床鍼灸古典全書 (Osaka: Oriento Shuppansha [1826]), vol. 36, 37-78.
- 1992b. Kibyō genyu 奇病源由, *Rinshō shinkyū koten zensho* 臨床鍼灸古典全書 (Osaka: Oriento Shuppansha), vol. 36, 19-30.
- 1997. Henjakuden kai 扁鵲伝解, *Rinshō jissen shinkyā ryāgisho shāsei* 臨床実 践鍼灸流儀書集成 (Osaka: Oriento Shuppansha), vol. 12, 417-430.
- 2002. Shingyō genshi 鍼経原始 (Osaka: Mori no miya iryō gakuen shuppanbu).

#### **KAEMPFER Engelbert**

1727. The History of Japan (London : Printed for the translator), t. 2.

#### Ковауазні Кепјі

2009. Sōtetsu İshizaka's Shinkyū chiyō ichigen, *Kampo : Acupuncture and integrative medicine*, 4/1 (spring 2009), 19-21 ; 4/3 (fall 2009), 21-24 ; 4/4 (winter 2009), 21-23.

#### KOUWENHOVEN Arlette, FORRER Matti

2000. Siebold and Japan : His life and work (Leiden : Hotei Publishing).

#### **KUIPER Pieter Nicolass**

2015. « The Early Dutch sinologist : A study of their training in Holland and China and their functions in the Netherlands Indies (1854-1900) », PhD dissertation (Leiden University).

#### KURE Shūzō 呉秀三

- 1931. Tokugawa jidai no yūmei na shin'i hōgen Ishizaka Sōtetsu 徳川時代の有 名な鍼医法眼石坂宗哲, Jissen irigaku 実践医理学, 2 (1931a) 1-5 and 3 (1931b), 355-371.
- 1967. *Shiiboruto sensei : Sono shōgai oyobi kōgyō シーボルト*先生-其生涯 及功業 (Tokyo : Heibonsha).

#### KURIYAMA Shigehisa

1992. Between mind and eye : Japanese anatomy in the eighteenth century, *in* Charles Leslie (ed.), *Asian medical systems : A comparative study* (Berkeley/Los Angeles/London : University of California Press), 21-43.

#### LUX David S., COOK Harold J.

1998. Closed circles or open networks ? Communicating at a distance during the scientific revolution, *History of science*, 36, 179-211.

#### Ma Shi 馬蒔

1628. Huangdi neijing ling shu zhu zheng fa wei 黃帝内經霊枢注證發微 (Kyoto University Library reference number : ko/185/ki).

#### MACÉ Mieko

- 1994. The Medicine of Ishizaka Sõtetsu (1770-1841) as cultural pattern of the Edo period : Based on the example of Ei e chūkei zu (1825), *Studia humana et naturalia*, 28, 73-90.
- 1998. Le chinois classique comme moyen d'accès à la modernité, *Daruma*, 4, 79-103.

#### MACHI Senjurō 町泉寿郎

2014. Shūshūbunken kibutsu kara miru shiiboruto to kinsei nihon no igaku: Raiden shozō no shinkyū shiryō wo chūshin ni 収集文献・器物から見る シーボルトと近世日本の医学 — ライデン所蔵の鍼灸資料を中心に, *in* Ningen Bunka Kenkyū Kikō 人間文化研究機構, Kokubungaku Kenkyū Shiryōkan 国文学研究資料館 (eds.), *Shiiboruto nihon shoseki korekushion genzon mokuroku to kenkyū* シーボルト日本書籍コレク ション現存書目録と研究 (Tokyo: Bensei shuppan), 602-650.

#### MICHEL Wolfgang

- 1983. Engelbert Kaempfers merkwürdiger Moxa-Spiegel: Wiederholte Lektüre eines deutschen Reisewerks der Barockzeit, *Dokufutsu bungaku kenky* 独仏文学研究, 33, 185-238.
- 1989. Willem Ten Rhijne und die japanische Medizin (I), Dokufutsu bungaku kenkyā 独仏文学研究, 39, 75-125.
- 1990. Willem Ten Rhijne und die japanische Medizin (II): Die « Mantissa Schematica », Dokufutsu bungaku kenkyā 独仏文学研究, 40, 57-103.
- 1993. Frühe westliche Beobachtungen zur Akupunktur und Moxibustion, Sudhoffs Archiv, 77/2, 194-222.
- 1998. On the introduction of Moxa in Europe : The life and writings of Hermann Buschoff, *Bulletin of the Japan-Netherlands institute*, 23/1, 47-63.
- 2004. Far Eastern medicine in seventeenth and early eighteenth century Germany, *Gengo bunka ronkyā* 言語文化論究, 20, 67-82.

#### NGUYEN Johan

2012. La Réception de l'acupuncture en France : Une biographie revisitée de George Soulié de Morant (Paris : L'Harmattan).

#### **O**TORI Ranzaburo

1964. The acceptance of Western medicine in Japan, *Monumenta Nipponica* 19/3-4, 266-268.

#### **RHIJNE Willem Ten**

1683. Dissertatio de arthritide : mantissa schematica de acupunctura et orationes tres de chymiae et botaniae antiquitate et dignitate, de physionomia et de monstris (Londini : impensis R. Chiswell societatis Regalis typographi ad insigne Rosæ Coronatæ in Cometerio D. Pauli).

#### SHIIBORUTO BUNKEN Kenkyushitsu シーボルト文獻研究室

1936. Shiiboruto sensei bunken shūei 施福多先生文献聚影 (Tokyo: Shiiboruto bunken kenkyūshitsu).

#### SIEBOLD (VON) Philipp Franz

- 1833. lets over de Acupunctuur (naaldensteekkunde), *Verhandelingen van het Bataviaasch Genootschap van der Kunsten en Wetenschappen* (Batavia : Der Lands Drukkerij), 381-389.
- 1897. Nippon Archiv zur Beschreibung von Japan und dessen Neben : Und Schutzländern jezo mit den südlichen Kurilen, Sachalin, Korea und den Liukiu-Inseln (Leipzig : Woerl's Reisebücher-Verlag).

#### SUGITA Genpaku 杉田玄白

1774. Kaitai shinsho 解体新書 (Edo: Suharaya Ichibee 須原屋市兵衛).

#### SUGANUMA Shūkei 菅沼周圭

1978. Shinkyū soku 鍼灸則, Shinkyū igaku tenseki taikei 鍼灸医学典籍大系, 17 (Tokyo : Shuppan kagaku sōgō kenkyūjo, 1767), 2.

#### Tō Heikin 唐秉鈞, ISHIZAKA Sōtetsu 石坂宗哲

1835. Ninjinko 人参攷 (Rekijuen 櫟寿園).

#### THIEDE Arnulf, KEIL Gundolf, HIKI Yoshiki (eds.)

2000. Philipp Franz von Siebold and his era: Prerequisites, developments, consequences and perspectives (Berlin: Springer-Verlag).

#### TRAMBAIOLO Daniel

2015. Ancient texts and new medical ideas in eighteenth-century Japan, *in* Benjamin Elman (ed.), *Antiquarianism, language and medical philology : From early modern to modern sino-Japanese medical discourses* (Leiden : Brill), 81-104.

#### UDAGAWA Genshin 宇田川玄真

1805. Seisetsu ihan teikō shakugi 西説医範提綱釈義 (Edo: Seireikaku 青藜閣).

#### UNSCHULD Paul U.

1995. The reception of Oriental medicine in the West : Changing worldview and epistemological adaptation, *Japanese journal of Oriental medicine*, 45/4, 745-754.

#### UNSCHULD Paul U., TESSENOWM Hermann

2011. Huang Di Nei Jing Su Wen : An annotated translation of Huang Di's inner classic : Basic questions (Berkeley : University of California Press), vol. 1.

#### VIGOUROUX Mathias

- 2014. « La Transmission et l'assimilation des savoirs médicaux liés à la pratique de l'acuponcture et de la moxibustion au Japon (*via* la Chine et la Corée) et en Europe à l'époque pré-moderne (XVI<sup>e</sup> siècle-XIX<sup>e</sup> siècle) », PhD dissertation (university Jean-Moulin-Lyon-3).
- 2015. The reception of the circulation channels theory in Japan (1500-1800), in Benjamin Elman (ed.) Antiquarianism, language and medical philology : From early modern to modern sino-Japanese medical discourses (Leiden : Brill), 105-132.

#### VIGOUROUX Mathias, MACHI Senjurō

2011. Jūkyū seiki yoroppa no shinkyū no juyō ni okeru shiiboruto to Ishizaka Sōtetsu no kōken ni tsuite: Shiiboruto kyūzō no shinkyā kankei shiryō no hikaku chōsa wo chūshin ni 19世紀ヨーロッパの鍼灸の受容におけるシーボルト と石坂宗哲の貢献について―シーボルト旧蔵の鍼灸関係資料の比較調査 を中心に一, Nihon ishigaku zasshi 日本医史学雑誌, 57/3, 325-342.

#### Vos Ken

1989. Assignment Japan : Von Siebold, pioneer and collector (The Hague : SDU).

#### YAMAMOTO Nobuyoshi 山本信吉

1994. Ishinpō no kenkyū 医心方の研究 (Osaka: Oriental Shuppansha).

#### YAMAMOTO Noriko 山本徳子

2007. Shiryō de tadoru nihon shinkyūshi 54 : Ishizaka Sōtetsu no shinkyū 資料で たどる日本鍼灸史 [54] – 石坂宗哲の鍼灸, *Idō no nihon* 医道の日本, 763 (2007), 178-181.

#### YOSHIMASU Todo 吉益東洞

1918. Tōdō zenshū 東洞全集 (Tokyo: Tohōdō shoten).