Aoki Konyō (1698-1769) and the Beginnings of *Rangaku*

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Introduction

Studies of Japanese interaction with the West from the mid-19th century have emphasized the importance of preceding contacts through Westerners resident in Japan. Such contacts arose as early as the 16th century, when Portugal dominated a period of vigorous European missionary and trading activity and, though severely restricted less than a century later, they continued throughout the Edo period, through the Dutch trading factory in Nagasaki. During these years a key intermediary role was played by the official interpreters, whose oral and, in some cases, written language ability gave them direct access to the representatives of Western civilization. Even more significant, however, were the efforts of another group, the Edo-based *Rangakusha* [scholars who study the Dutch learning], who emerged towards the end of the 18th century. Though in most cases their oral ability in Dutch was insufficient to permit direct conversation with the foreigners, they attempted to investigate the outside world by a study of Dutch-language books.

Regular contacts between Dutch and Japanese in Edo date from the first part of the 17th century. In 1609, the Bakufu granted permission to the Dutch factory director to pay a visit of greeting to the shogun, and from 1733 this practice was introduced as an annual obligation.[1] The system which developed over the succeeding decades was that the director, his scribe and surgeon, two Japanese interpreters, together with other Japanese officials and attendants, would set out from Nagasaki early in the new year on the five or six week trip to Edo. Shortly after arrival, usually on March 1 of the lunar calendar, they were received in audience by the shogun, to whom they offered gifts in thanks for their privileged trading relation with Japan. In the succeeding days there were less formal interviews with other officials who visited the foreigner's lodging quarters and, after a stay of approximately two weeks, the entourage set off again on the return trip to Nagasaki.

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[1] Detailed description of Dutch language source materials, together with a useful introduction to Dutch activities in Japan is given in Roessingh, M. P. H., *Het Archief van de Nederlandse Factorij in Japan/The Archive of the Dutch Factory in Japan 1609–1860* (The Hague: 's-Aravenhague, 1964). For the annual visit to Edo, see especially Section VIII.

Though such contacts existed from early in the Tokugawa period, it was not until the 18th century that real interest in what could be learnt from the foreigners developed strength in Edo. The pioneering figure was the shogunal scholarly adviser, Arai Hakuseki (1657–1725), and his most important contact was with Giovanni Batista Sidotti, an Italian missionary who, in 1608, landed on an island off southern Kyūshū.[2] Under orders of the sixth shogun Ienobu (office: 1709–1712), Sidotti was escorted in the following year to Edo, where Arai was given the task of interrogating him through the medium of the official interpreters. Arai's interest and perspicacity was such that, in a few meetings with Sidotti, supplemented by some interviews with the Dutch traders in Edo, he was able to obtain an extraordinary understanding of western conditions. The results, as evident in his writings, were a wealth of rare information on western geography, society and culture.

Arai's interest in western subjects was exceptional in his age but, progressively in the ensuing decades, efforts were made to seek useful western knowledge for application in particular areas of Japanese society. Especially active in this enterprise was the eighth shogun Yoshimune (office: 1716–1751), who, as an aid to government and through natural curiosity, maintained a keen interest in foreign matters. He gave sign of this outlook on his first formal encounter with the Dutch factory director Johan Aower in the spring of 1717, when he removed the screens which customarily shielded the shogun from the visitors' gaze.[3] During the remainder of his office he gave substance to the gesture, seeking personally, or appointing his scholarly officials to obtain, information, books and implements in such fields as calendar reform and astronomy, medicine, botany, geography and military science-including the raising of horses.[4] It was Yoshimune's concern with the first of these matters which prompted his relaxation of the Bakufu law, issued first in 1630, which forbade the importation of particular Chinese-language works, because of their alleged connection with Christianity.[5] Among these were many astronomical and mathematical texts written by or outlining the ideas of the Jesuit missionaries who had lived in Ming period China; in 1720, Yoshimune, at the encouragement of his astronomers, ordered

[2] Based mainly on Numata Jirō, *Yōgaku Denrai no Rekishi* [History of the Dutch Learning Tradition] (Shibundo, 1960) pp. 24–31.

[3] Ōtsuki Nyoden (ed.), Satō Eishichi (rev. ed.), *Nihon Yōgaku Hensen Shi* [Chronological History of Western Learning in Japan] (Kinshōsha, 1965), p. 165.

[4] Detailed outline in Saitō Agu, "Tokugawa Yoshimune to Seiyō Bunka" [Tokugawa Yoshimune and Western Culture] (*Shigaku Zasshi* [Journal of Studies in History], XLVII, II, 1936, pp. 80–101).

[5] Ōtsuki, pp. 74, 129, 148 (for original ban); p. 148 ff. (for its relaxation).

Satō Shōsuke, *Yōgaku Shi Kenkyū Josetsu* [Introduction to Studies on the History of Western Learning] (Iwanami Shoten, 1964), p. 15 ff., 72 ff.

Boxer, C. R., *Jan Compagnie in Japan* (Oxford University Press, 1968; from 2nd. rev. ed., 1950), pp. 53–55, 61–62.

that some eleven named treatises on western scientific subjects be permitted free importation, thus widening the channels by which valued western knowledge could enter Japan.

Equally significant was another event which occurred later in Yoshimune's rule. Amongst these who sought information from the Dutch traders on the occasion of their annual visit to Edo, a Bakufu scholar, Aoki Konyō (1698–1769), began in about 1740 a study of the written language. Though Aoki himself was not to attain the level of comprehending Dutch books, his work opened the way for the succeeding generations of *Rangakusha*: scholars who were able to use Dutch written works in their investigations of foreign subjects.

Traditional accounts of these beginnings of *Rangaku* usually focus on an injunction, supposedly issued by Yoshimune in about 1740, ordering Aoki and a medical official, Noro Genjō (1693–1761) to undertake a study of foreign subjects through interviews with the visiting Dutchmen. Sugita Gempaku (1733–1817) outlined the story in *Rangaku Kotohajime* [The Beginnings of Dutch Learning] (completed in 1815) as follows:

> Until this time, the shogun had never seen a Dutch book and he directed that he be given one. Wereupon what should be offered but a book containing illustrations! On seeing it, he reflected that since the illustrations alone were so precise, the text, if one could read it, must surely be detailed and useful; there ought to be someone in Edo, who could understand Dutch. So, for the first time, an order was issued, to the Bakufu medical official Noro Genjō and the Confucian scholar Aoki Bunzō [Konyō]. Accordingly, these two gentlemen worked zealously at their study. However, since they could ask questions of the interpreters who accompanied the Dutchmen on their formal visit of greeting each spring only during the brief period of their stay, and since this was a particularly busy and task-filled period, they could not penetrate deeply into their study. Though many years passed, they only managed to write in alphabet form by learning such simple words as "sun", "moon", "star", "heaven", "earth", "man", "dragon", "tiger", "plum" and "bamboo". Nevertheless, this was the beginning of Dutch learning in Edo.[6]

Some of the inaccuracies in Sugita's account have been corrected by later scholars, and more of the details supplied.[7] It is generally accepted, for instance, that Aoki's concern with Dutch was not simply the result of a shogunal decree, but that he had previously developed an interest in the subject; and that, while

[6] Sugita Gempaku, *Rangaku Kotohajime* [The Beginnings of Dutch Learning] (Iwanami Shinsho, 1959), pp. 13–14.

[7] Among standard accounts see Iwasaki Katsumi, *Maeno Ranka* (Self pub., Tokyo, 1938), pp. 110–111; Numata, l.c. p. 33ff; Satō, pp. 74–75; Ōtsuki, p. 175. Donald Keene's account, given in *The Japanese Discovery of Europe, 1720–1830* (Rev. ed., Stanford University Press, 1969), pp. 14–15, and G. K. Goodman, *The Dutch Impact on Japan* (Leiden Brill, 1967), p. 80 are misleading here.

he worked at the language itself, Noro studying herbal science, relying on the interpreters to obtain oral explanations of the foreign books. Further, it is recognized that Aoki's progress, though fraught with considerable difficulties, did extend beyond the limits of the simple exercises described above by Sugita.

Yet our understanding of the beginning of *Rangaku* in Edo remains vexingly inadequate. There is, for instance, the question of Yoshimune's motivation, so simply disposed of by Sugita. Iwasaki Katsumi, noting that more than twenty years elapsed between the shogun's first inspection of a Dutch book and his supposed inauguration of language learning, questions whether the delay can simply be explained by the fact that no suitable students presented themselves immediately.[8] Other scholars point to a growing shogunal interest in western science, bringing the realization that this required a basic study of Dutch-language works.[9] Regarding the Shogunal decree itself, Numata Jirō concludes that, although undocumented, some type of private order was probably issued; and, since the Dutch records of the Edo trips mention visits by Noro and Aoki in 1741 and 1742 respectively, he dates it as 1740, or 1741 at the latest.[10] Yet Satō Shōsuke, while not disputing the timing, emphasizes the uncertainty regarding the content of the supposed shogunal directive since Noro Genjō did not study language, it can hardly have been a direct injunction to learn to read Dutch books.[11] Finally, there is the matter of Aoki's and Noro's individual contributions: what motives underlay their endeavour and what was their achievement?

The object of this paper is to investigate the beginnings of Dutch studies in Edo by focusing on Aoki Konyō, giving consideration to the circumstances under which he began his study and the nature of his contribution. First, however, his biography. It is interesting and relevant and I give it in detail.

Biography

Aoki Konyō was born on May 12, 1698, in the Nihombashi district of Edo, the only son of a fish merchant, Aoki Hanüemon, usually referred to as Tsukudaya, the name of his shop.[12] Few details are known of the Aoki family, but it is believed that Hanüemon's ancestors were natives of Settsu province (in

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[8] pp. 108–109.

[9] Ōtsuki Fumihiko, "Rangaku Bokkō no Gen'in" [The Cause of the Sudden Rise of Dutchs Learning] (*Nihon oyobi Nihonjin* [Japan and the Japanese], No. 646, 1914, 225–233), pp. 228–229.

[10] Numata, p. 33 ff.

[11] pp. 74–75.

[12] Among the several rather dated biographies of Aoki, I found Inamata Entarō, "Aoki Konyo Den" [Biography of Aoki Konyō] in *Ryūsui Ikō* [Posthumous Manuscripts of Ryūsui] (pub. in Tokyo by Inamata Aya, 1967) most useful. Even more valuable, however, for its factual accuracy and guide to sources is a more modern work, Hirano Genzaburō's *Aoki Konyō Den* [Biography of Aoki Konyō] (Rinjinsha, 1968), upon which I have principally relied.

a section which now forms part of Osaka city) and that, following the local *nanushi* [village head], they moved to Edo in about 1590, the year Tokugawa Ieyasu entered the Edo area. Konyō's mother was the daughter of an Edo doctor. He had one sister, who died at an early age. Little is recorded of Konyō's youth, but it is related that he loved his studies; and, indeed, instead of succeeding to the family business, he set out from Edo in August, 1719, at the age of 22, to continue his education in Kyoto.

The institution which Aoki Konyō entered was a famous one: the Kogidō, founded in 1662 by Itō Jinsai (1627–1705) and now flourishing under the guidance of his son Tōgai (1670–1736). As a Confucianist, Jinsai had rejected the prevailing reliance on neo-Confucian [*Shushigaku*] texts, stressing the importance of returning to the original writings of *Confucius* and *Mencius*. Rejecting public office, he preferred to teach and, with the aim of fostering virtuous national leaders, opened the Kogidō, which was to become a large school, attracting students from all parts of Japan.[13]

Kogaku training was necessarily founded on textual study, but the curriculum of the Kogidō was apparently not rigid. There are no records of Aoki's studies but the biographers claim that he concentrated on the more practical spheres of economy and institutions.[14] The seeming incongruity between *kogaku* and Aoki's own scholarship perhaps explains the general lack of interest by scholars in the former. Shimmura Izuru points out, however, that Aoki owed much to Itō Tōgai, an exceptionally widely learned scholar.[15] He mentions several areas—economy, language, Korean studies—in which Tōgai's interests seem to have been communicated to his pupil. Regarding Aoki's interest in foreign subjects, also, Shimmura sees a possible connection with Tōgai. He cites in particular a passage from the latter's *Heishokudan* [Talks by the Candlelight] (1729), which Aoki in 1738 submitted to and later copied for the shogun, and which perhaps served as a model for his own *Sōrozatsudan* [Miscellaneous Talks from a Grass Hut], written in the same year.[16] Under the heading *Oranda no koto* [About Holland], Tōgai draws on Chinese sources to recount the beginning of Dutch-Chinese trade and of the role of the Pescadores Islands. This is a mere fragment; yet, within the context of Tōgai's widely ranging concerns, it helps to illustrate the very general point that interest in foreign, non-Chinese subjects was not necessarily simply the product of direct contact with

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[13] See Spac, Joseph, Ito Jinsai, *A Philosopher, Educater, and Sinologist* (Peiping, 1948).

[14] Inamata, p. 1; Nakamura Naokatsu, "Aoki Konyō" (*Rekishi to Chiri* [History and Geography] III: 1, Jan., 1919), p. 60.

[15] Shimmura Izuru, "Aoki Konyō Den Hotei" [Revisional Notes on Biographies of Aoki Konyō] in *Zoku Namban Kōki* [Chronicle of the Southern Barbarians, Continued] (Iwanami Shoten, 1925, pp. 10–26), p. 10 ff.

[16] p. 17.

the Dutch, but that a surprising breadth and vitality could be fostered by a good classical education. Moreover, with regard to Aoki's special emphasis on the Dutch language, Shimmura makes two points; firstly that Aoki, like Tōgai, had a general interest in language and writing systems, Chinese, Korean and others; secondly, that for an individual trained in textual study, particularly that of the *kogaku* school, an eagerness to read original Dutch-language works is not to be wondered at. The relevance of these comments can be judged best later, in the light of Aoki's Dutch studies.

In two other quite different respects, Aoki's stay at the Kogidō was to affect his life significantly. It was here that he must first have become acquainted with the sweet potato [*Satsuma imo*, *kanshō*, *banshō*], a hardy but nutritious vegetable whose high yield, even under adverse conditions, made it an ideal foodstuff in infertile areas or in times of famine. Introduced into Satsuma han from the Ryūkyū Islands early in the Edo period (1612/1613), its cultivation had spread as far as the Kansai boundary by the early 18th Century; and in 1717, a former Kogidō pupil, Matsuoka Gentatsu (1669–1747), had in fact written *Banshōroku* [Chronicle of the Sweet Potato], giving details of its cultivation.[17] From Aoki's later comments, it would seem that he did not see Matsuoka's composition during his stay in Kyoto but he was able to visualize the benefits of wide scale sweet potato cultivation—a suggestion which later brought him his entry into Bakufu service.[18]

A final important legacy of the Kogidō lay in the strict discipline and rigorous ethical training which formed the basis of its educational outlook. When Aoki returned to Edo in 1722, his main concern was to care for his ailing parents. Illness, together with a fire which in 1721 ravaged the Nihombashi district, had brought severe hardship to the family; whereupon Aoki opened a small school as a source of livelihood and in all respects took exemplary care of his parents. After Hanüemon's death in 1726, and again following that of his mother in 1730, he made the rare sacrifice of performing the full ritual three year mourning—later quoting Itō Jinsai's recommendation of such action.[19] By 1733, Aoki, at the age of 34, had neither family nor official position. But his outstanding

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[17] From charts in Hirano, preceding main text. Accounts of Aoki's activities relating to the sweet potato are confusingly varied. I have used mainly the explanation and source material provided by Hirano, together with.

i) Inamata, p. 7 ff and p. 27 ff.

ii) Nakamura Naokatsu, "Aoki Konyō" (*Rekishi to Chiri* [History and Geography], III: 1, Jan., 1919, pp. 59–67 and III: 3, Mar., 1919), pp. 341–350.

iii) Shibuya Shuzo: *Konyō Sensei Kansho no Yurai* [Origins of Konyō Sensei's Sweet Potato] (Kansho Shōdōgyō Kumiai, 1914).

[18] For Aoki's statement of his relation with. Matsuoka Gentatsu, see preface to *Banshokō* [On the Sweet Potato] (1735), quoted in Hirano, p. 15.

[19] Shimmura, p. 16.

character had won the attention of one Bakufu official at a time when personal merit seems to have been particularly valued in the bureaucaracy.

Aoki's sponsor was Katō Enao (1692–1785), a native of Ise whose hopes for an improved station had brought him in 1718, just years after Yoshimune came up from the neighboring Kii povince to assume office as shogun. Among Yoshimune's most able administrators was the Edo *machibugyō* [city magistrate], Ōoka Echizen-no-kami Tadasuke (1677–1751), a *hatamoto* retainer who also rose through ability, in 1736 attaining the position of *jishabugyō* [magistrate of shrines and temples] and the status of daimyo.[20] In 1720, Katō was appointed *yoriki* [subordinate] of Ōoka with the status of *jikisan* [direct shogunal retainer]. Katō is said to have preferred the company of scholars, and his connection with Aoki, stemming perhaps from the fact that Aoki's home was at one time on land included in his estate, was a lifetime one. Immediately after Aoki had completed his mourning in 1733, Katō wrote to Ōoka, stressing his friend's exceptional filial piety and indirectly recommending him for public office.[21]

According to Katō's late account, Ōoka conceded Aoki's personal merit but, pointing out that virtue alone did not guarantee bureaucratic ability, asked for indication of more practical talent.[22] Aoki's response was a short paper entitled *Banshokō* [On the Sweet Potato] which he submitted in 1733 or 1734 through Katō to Ōoka.[23] Drawing on Chinese herbal and agricultural texts, he outlined the value of the sweet potato and its method of cultivation, urging that it be widely grown, especially in the infertile and often famine-stricken islands off the Izu Peninsula.

The idea was received favourably by both Ōoka and Yoshimune. According to "*Tokugawa Jikki*" [Tokugawa Chronicle], the shogun had already heard from a subordinate of the potato's efficacy in Nagasaki during the big famine of 1732, and in 1734, he ordered an experimental cultivation in the Bakufu-owned Fukiage garden within the Edo castle.[24] From this some 1500 tubers were

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[20] General biographies of Ōoka Tadasuke include Numada Riho, *Ōoka Echizen-no-kami* (Meiji Shoin, 1929) and Uno Shūhei, *Ōoka Echizen-no-kami* (Nippon Hōsō Shuppan Kyōkai, 1967).

[21] Quoted in Hirano, p. 10 and Inamata, p. 5 ff.

[22] Quoted in Hirano, p. 14. The date 1730 given by Katō is clearly an error of memory.

[23] Aoki wrote several versions of his ideas on the sweet potato during the early 1730's. The original *Banshokō*, submitted in 1733/1734, was written in *kambun*, but was accompanied or soon followed by an ordinary Japanese version. Then, in Dec., 1734, Aoki completed a further simplified version on shogunal orders. Entitled *Satsuma Imo Kōnōsho* (Book on the Efficacy of the Satsuma Potato), this was sent along with the potato tubers to the country areas early in the following year.

In Feb., 1735, Aoki rewrote, but did not publish, the original *kambun Banshokō*. In 1745, a revised edition, based on *Banshōko* or the accompanying Japanese version, was published, with Bakufu permission, by Suzuki Shumin in Osaka, under the title *Kanshoki* (Chronicle of the Sweet Potato).

[24] Quoted in Hirano, pp. 18–19, 24. See also the annotation 25.

obtained, and after some rotted or were injured, a harvest of about 700 was ready for use by the end of 1734.[25]

Whether Aoki was connected with this project is not certain. "Tokugawa Jikki", a record of events and anectotes compiled 1809–1849, relates that, having submitted *Banshokō* soon after Kato's recommendation, Aoki was, in 1733 or early 1734, comissioned to attempt the Fukiage cultivation, together with a Nagasaki metal smiths having periodical experience of potato cultivation.[25] Contemporary documents suggest, however, that Aoki himself had no connection with the Fukiage project, but he submitted *Banshokō* on its completion, at the end of 1734, whereupon Ōoka immediately took steps to implement the project.[26] He arranged that of the Fukiage harvest, some tubers were sent, accompanied by a simplified version of Aoki's *Banshokō*, to the Izu islands and other districts early in 1735. For the greater part remaining, three sites were chosen: two in the present Chiba prefecture, the third and best-known in Edo: in the grounds of the *Yōjōsho* [Charity medical clinic] which had been established in the shogun's herbal garden. Here, Aoki worked during 1735, in the autumn obtaining a successful harvest.[26]

Success with the sweet potato brought Aoki a small gift of money from the Bakufu and, more significantly, an opportunity for further employment. Though he did not yet receive a formal appointment, from 1736 he worked as *shomotsu-goyō* [business of documents] and *shamotsugoyō* [business of copying] under the direction of Ōoka, who was now *jishabugyō*.[27]

An interesting insight into Aoki's activities during these years is provided by a diary which Ōoka kept during the period 1737–1751, his term as *jishabugyō*.[28] Two of the projected three volumes of this work have recently (1972) been published, and amongst the wealth of information they contain, are frequent references to Aoki. It can be seen that he acted as a kind of researcher for the shogun; whose wide scholarly interests, delight in matters of detail and sheer curiosity were expressed in requests for information, comments and copies of documents; these were conveyed by a close and influential personal attendant [*osoba*], Kanō Tōtōmi-no-kami Hisamichi (1673–1748), through Ōoka to

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[25] "Tokugawa Jikki: Yūtokuin Jikki Furoku X" [Tokugawa Chronicle; Supplementary Chronicle X of Yūtokuin [Yoshimune] Vols. 45, 46 in *Kokushi Taikei* [General Survey of National History] (Rev. and enlarged, Yoshikawa Kōbunkan 1964–7), vol. 45, p. 316–17.

[26] Aoki, recalling his activities in connection with the sweet potato in *Konyō Manroku* (1766; see note 48 below), p. 550 dated the *Yōjōsho* cultivation as occurring in 1734.

[27] Hirano, p. 30, Inamata (p. 8) and Shibuya (p. 19) give 1735.

[28] Ōokakebunshokankōkai (ed.), *Ōoka Echizen-no-kami Tadasuke Nikki* [Diary of Ōoka Echizen-no-kami Tadasuke] (2 vols., San'ichi Shobō, 1972) is part of a projected 3-volume publication of Ōoka's diary, kept during his term as *jisha-bugyo*. Volumes I and II, hereafter referred to as "Ōoka I" and "Ōoka II", cover the period 1737–1745, except for the years 1739 and 1741.

Aoki.[29] The demands of the authorities were well met by Aoki, who not only followed specific instructions but on his own initiative sought out and presented interesting books and curios. Among the latter was Itō Tōgai's *Heishokudan*, mentioned above, which he also copied on request.[30] In addition, he offered works of his own compilation: *Keizai Sanyō* [Outline Economic Compilation], *Keihōkokujiyaku* [Japanese Translation of Chinese Criminal Law] and an unidentifiable *Sakkōbunkenroku* [Record of Things Seen and Heard at Nagasaki Harbour] were the first of several compositions submitted in draft form from 1737.[31]

In recognition of his services, Aoki received in December, 1737, at Ooka's petition, a gift of money to cover the cost of his writing materials.[32] Moreover, in the preceding month his request to borrow books from the shogunal library had been favourably received.[33] The latter especially was a rare honour for one of such low status, and Aoki expressed due gratitude in *Sōrozatsudan*, written in September, 1738.[34] Finally, in 1739, Aoki, at the age of 41, was given a formal appointment; in March he was named a subordinate of the *orusui* [guard office] and in the next month received the specific position of *goshomotsugoyō*. His connection with Ōoka was unaffected, however, and in July, 1740, he was officially transfered to the department of the *jishabugyō*. His first big task here was one for which he had proved his aptitude; the investigation, collection and copying of documents and other rare objects housed in temples, shrines and private collections in the country.[35] During the period September, 1740 to July, 1742 he made four trips to seven provinces in the Kantō region, reaping a total of 23 volumes of copied materials.

The other memorable achievement of these years was Aoki's Dutch study. As hinted by the above-mentioned *Sakkōbunkenroku*, his assorted "investigations" had early brought him into peripheral contact with foreign matters. In March, 1737, he presented "objects", apparently foreign coins, which had been brought into Nagasaki.[36] In February, 1738, his opinion was sought regarding calculations previously made in Nagasaki by the doctor-astronomer Mukai Gensei (16?–1728).[37]

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[29] Introduction to Ōoka, II, pp. 10–11, describes Kanō's position, emphasising the extent of his influence with Yoshimune.

[30] Ōoka, I, pp. 213, 219, 241 and passim.

[31] Ōoka, I, p. 111 and passim. I cannot identify *Sakkōbunkenroku*, but I presume it to be the *Nagasaki Bunsho* [Book of Things Heard at Nagasaki] listed by Hirano (p. 88), Inamata (p. 35) and others.

[32] Ōoka, I, pp. 185–186.

[33] Ōoka, I, pp. 165–167.

[34] Quoted in Hirano, p. 31.

[35] Details in Aida Jirō, "Aoki Konyō no Kobun Saihō" [The Collection of Old Documents by Aoki Konyō] (*Rekishi Chiri* [History and Geography], L, 2, 19, pp. 155–165). See also Hirano, p. 32 ff and Ōoka, I, passim.

[36] Ōoka, I, p. 36. Uno, p. 229 and passim.

[37] Ōoka, I, p. 214 and passim.

A further, slightly closer link is seen in an entry in Ōoka's diary for April of the same year. Shogun Yoshimune, whose early concern with astronomy and the calendar has been mentioned, had continued, both personally and through subordinates, to seek information and objects from the Dutch trading personnel, especially on the occasion of their annual visits to Edo. From Ooka's record, it appears that the factory director (in 1738 the incumbent was Gerardus Bernardus Visscher) presented some astronomical maps and charts to the shogun, whereupon Aoki, who in fact had no connection with the matter, procured the astronomical text *Kongai Tsūken Zusetsu* [Illustrated Explanation of Celestial Principles], one of the originally proscribed Chinese works released by Yoshimune in 1720. Aoki was unaware of the latter fact, or, perhaps, was simply cautious; he explained to Ōoka that, although forbidden, the work was not impregnated with Christianity, but contained useful detail relating to the recent acquisitions. Several days later he submitted a report on the work.[38]

One final fragment for the year 1738 might be mentioned. On April 23, Aoki presented another, unfortunately unidentifiable book, entitled *Bangoshōroku* [Small Chronicle of the Barbarian Language], which, he said, provided information about Dutch navigation.[39] Because of the number of "*kakushiji*" [words of "hidden" meaning; illegible words? foreign words?], however, there were parts he could not understand; these he promised to mark and submit to the shogun for scrutiny.

There is no diary for the year 1739, so that hints of ensuing foreign contact are not traceable. The next relevant entries, those of March and April, 1740, refer to the crucial event itself: Aoki, on his own request, was able to meet the Dutch factory director Thomas van Rhee and the others of the mission, addressing questions through the accompanying Japanese interpreters. Details of Aoki's Dutch studies will be discussed in the following section. Enough to say now that they centred the written language and continued for at least 18 years, till Aoki was in his 61st year; he recorded what he learnt in a number of booklets for presentation to the shogun.

The study of Dutch did not mean an end for Aoki's other scholarly interests. He continued to write, mainly ecomomic and institutional compilations drawn from Chinese texts[40] At the same time his official status gradually rose. In 1744, he was appointed *Momijiyamahinoban* [Fire Guard of Momijiyama], and in 1747 became *hyōjōshokinyaku jusha* [Confucian Scholar employed at the Consultations Office], with the accompanying privilege of an audience with the shogun. Finally, in 1767, Aoki, at the age of 70, attained the position of *shomotsubugyō* [magistrate of documents], an office under the administration of

[38] Ōtsuki Nyoden, p. 74, for the original ban; p. 153 for the relaxation. Ōoka, I, p. 239.
[39] Ōoka, I, pp. 243–244.
[40] See Inamata, p. 36ff.

the *wakadoshiyori* [junior elders], requiring the care of the books in the Momijiyama Bunko. In Aoki's case, this was probably largely honorary and brought little real change to his customary scholarly activities. Two years later, in October, 1769, he died at the age of 72.

Dutch Studies

I. First Interview with the Dutch in Edo (1740)

It has become apparent in the foregoing that Aoki Konyō was diligent, alert and possessed of an inquiring mind; that the spirit of his Bakufu working environment could be expected to encourage him to extend his efforts to include Dutch; and, finally, that his direct interviews with the Dutch had been preceded by a tangential concern with foreign matters. What remains to be discussed, however, is at what point and under what stimulus those Dutch efforts began.

It was noted in the introduction that scholarly attempts to clarify Sugita Gempaku's account of the beginnings of *Rangaku* usually hold that Aoki Konyō had himself developed an interest in Dutch before he received Yoshimune's order to undertake Dutch studies. Most widely quoted as the possible origin of Aoki's eagerness is an experience similar to that which Sugita ascribed to Yoshimune: the sight of a Dutch book. Ōtsuki Fumihiko related that, having received permission to read shogunal books in the winter of 1737, Aoki entered the Bakufu library, beheld the foreign books therein and, reflecting on the benefit that reading them could bring to society, requested permission to study Dutch language.[41] Yoshimune, having previously seen a Dutch astronomy book with its impressively precise illustrations, had already planned to have suitable scholars in Edo study Dutch so that the text, too, might be intelligible. Accordingly, on hearing of Aoki's wish, Yoshimune readily consented, ordering Aoki and Noro Genjō to undertake Dutch studies. Ōtsuki thus explained the origins of *Rangaku* as a "combination of Yoshimune's astronomical knowledge and Konyō's economic eye".[42] Slightly different was an explanation given by Ōtsuki Nyoden, who related that, on seeing the Bakufu collection of Dutch works, Aoki reflected that since they were composed of letters there must be a way of reading them—a story similar to that told of his successor Maeno Ryōtaku.[43]

Both stories doubtless contain elements of truth in that Aoki was surely aware of the practical value and intellectual interest of the enterprise. However, the suggestion, still widely repeated, that inspiration came from seeing the books in the library deserves reconsideration. Ōoka Tadasuke's diary reveals that in

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[41] Ōtsuki Fumihiko, "Aoki Konyō ni tsuite" [On Aoki Konyō], in Teikoku Kyoikukai (ed.), *Roku Daisentetsu* [Six Great Learned Men of the Past] (Kodokan, 1911, pp. 112-157), pp. 131-2.

[42] Ōtsuki Fumihiko, "Rangaku Bokkō no Gen'in," pp. 228-229.

[43] Ōtsuki Nyoden, *Shinsen Yogaku Nempyo* [Newly Selected Chronological Tables of Western Learning] (Hakurinsha, 1946), p. 49.

the exchange of books, as in all communications between Aoki and his superiors, elaborate procedures were required, Aoki's requests were submitted through Ōoka to the shogunal attendant Kanō Hisamichi (and presumably to Yoshimune) and the response came back accordingly. It is improbable that Aoki at this stage could ever gain free access to the shogunal library.[44] Further, though he obviously knew of the books which were given by the Dutchmen to the Bakufu, there is no record of his having asked to borrow a Dutch work, nor even that he had seen one.

It there any more satisfactory explanation of how Aoki's interest in Dutch evolved? The answer seems to lie in Shimmura Izuru's reference to his long-standing personal interest in language.[45] *Sōrozatsudan* (1738) contains numerous items which reflect a general concern with words and characters, and among them is one offering information on the Dutch system of writing. Entitled *Oranda Moji* [Dutch Writing], it is the earliest record of Aoki's interest in the Dutch language:

> "In Holland there are three kinds [*san shoku*] of writing: Dutch writing, Djakarta writing and *Harushiyamu* [Persian] writing. '*Harushiyamu*' refers to Western India."[46]

Several years later, after Aoki had begun his direct interviews with the Dutch trading staff, he was to write in *Oranda Moji Ryakkō* [Brief Notes on Dutch Writing] that he had obtained this information from a "Nagasaki person" and that, on asking the foreigners, had received the quite different (if no more accurate) explanation that there were in fact two types, Italian [Roman] and Greek.[47] This episode is interesting, not simply as a measure of Aoki's progressive understanding of the language, but because, as revealed in Ōoka's diary, it was to clarify this very point that he first requested permission to speak to the Dutch.

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[44] Iwasaki, p. 110, is I think, incorrect here.

[45] Shimmura, esp. p. 19 ff.

[46] '*Harushiyamu*' follows manuscript in Seikadō Bunko. Hirano, p. 41, gives "*Harushiyaru*" his reference to the 3rd volume should be corrected to the 2nd.

The belief that Dutch people used Persian and Djakartan letters in addition to ordinary Dutch ones was apparently common.

Ōtsuki Nyoden (*Nihon Yōgaku Hennen Shi*, pp. 171–172) quotes a document entitled *Oranda Tsūji Bunsho* [Document by the Dutch Interpreters], in which the idea is dismissed as incorrect. Signed by five interpreters, it is a formal statement—in Ōtsuki's view, probably a reply to an enquiry from the Bakufu. It is undated, but from the order of the signatures, Ōtsuki dates it as 1736. Who solicited the information, or how it was used is unclear. Aoki obviously had not seen that document when he wrote *Sōrozatsudan* in 1738, nor was he advised correctly when expressed his doubts on the matter in 1740.

[47] Unpublished. There are at least two copies:

(i) housed in the Seikadō-Bunko, described as a copy made by Aoki himself.

(ii) a photocopy by Ōtsuki Fumihiko, containing also an introduction to Aoki's works; this is in the library of Tokyo University.

The problem arose again in connection with Aoki's second miscellany, *Konyō Manroku* [Random Notes by Konyō].[48] Though this, his most famous work, was not completed and revised until 1763, volume I was, according to the preface, written "during the Gembun period (1736–1739)"—probably towards its close.[49] The first volume contains one item pertaining to Dutch, again entitled "Oranda Moji", the revised version of which is translated in the appendix. Quoting from Chinese texts it mentions the founders of and briefly characterizes a number of Asian writing systems, before giving a similarly brief description of the Dutch script. This is followed by an alphabet, each letter being written in three styles and having the pronunciation indicated in *katakana*; finally the Arabic numerals are listed. The succeeding item illustrates the Korean syllabary. No drafts of *Konyō Manroku* remain, but it appears that, in describing Dutch, Aoki had at first repeated the *Sōrozatsudan* explanation of the three types of writing. By this time, however, he had conceived doubts on this point and decided to seek further elucidation. On February 26, 1740 he spoke to Ōoka of his desire to speak directly to the Dutch factory director on his forthcoming visit to Edo. Ōoka recorded the incident as follows:

> Despatched a communication to Tōtōmi-no-kami [Kanō Hisamichi] regarding *Konyō Manroku*, which Bunzo is presenting. Bunzō says that in it he has written that there are three types [*san shoku*] of Dutch writing but that he does not know what these are. He says that if he speaks directly to the *Kapitan* [Dutch factory director] next time about the three types and writes it in the above work it will be of use to the shogun and therefore, he wishes to speak directly with the *Kapitan* next time. This request, together with the above work, I despatched with Sen'eki.[50]

Kanō and presumably Yoshimune, saw no objection to the request. Indeed each year, a number of scholars customarily visited the Dutch quarters on shogunal orders to address questions on astronomical, botanical, medical and other subjects. There was no reason why Aoki, a diligent scholar-official, should not also go. On the following day, Kanō notified Ōoka that he had spoken to the Nagasaki *bugyō*, Kubota Hizen-no-kami, who handled the practical details of the trip, and that Aoki was to be instructed to go freely to the foreigners' lodging-house.[51] Of the actual visit there is probably no record. I have not been able to examine the Dutch records, but, judging from secondary accounts, there is no direct

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[48] *Konyō Manroku* [Random Notes by Konyō], 6 vols., together with *Zoku Konyō Manroku* [Random Notes by Konyō Continued], I vol. and *Zoku Konyō Manroku Ho* [Supplementary Continued Notes by Konyō], I vol., are published in *Nihon Zuihitsu Taisei* [Outline of Japanese Essays] (Yoshikawa Kōbunkan, 1956, X, pp. 433–660). Quotations cited hereafter give page references to this edition.

[49] *Konyō Manroku*, preface, p. 434.

[50] Ōoka, I, p. 382.

[51] Ōoka, I, p. 382.

reference to Aoki in the register for 1740.[52] It is certain, however, that he did go to ask the foreigners and that he was able to obtain some information. On March 12 he reported what he had learnt to Kanō Hisamichi, together with four sheets of Dutch letters written by the interpreters.[53]

What this Aoki's first encounter with the foreign traders? Nowhere is this explicit, and since there is no diary for the preceding year 1739, evidence is not conclusive. Yet it would seem so. Hirano Genzaburō quotes a section from *Sōrozatsudan* in which Aoki discusses a place name which he cannot identify from the characters and which "the Dutch and others, though asked, also do not know.[54] Hiranō interprets this as proof that Aoki had communicated directly with the Dutch prior to writing this passage in the autumn of 1738; but in view of all other evidence available it seems unlikely that it was Aoki himself who asked the opinion of the foreigners.

The other relevant question concerns the link between Aoki's interview with the Dutch mission as recorded in Ooka's diary and the famed order issued to Aoki and Noro Genjō by Yoshimune. Noro's part in this enterprise requires fuller consideration, but, with regard to Aoki, the following points may be noted: a) that the interview arose from his own request and not from a shogunal command; b) that it was prompted by his individual academic interests and was only indirectly connected with his official scholarly work; c) that whatever Aoki's private hopes might be, his request was for a single interview to obtain fairly specific information about the language, and not to undertake a long-term project of studying the language itself; and d) that there is no apparent connection between this episode and Noro Genjō.

II. Continued Interest in Dutch Subjects (1741–1742).

Despite these rather unspectacular beginnings, Aoki's contact with the visiting Dutchmen was to develop into a more extensive learning programme. His initial interview of 1740 was followed by an immediate request to be permitted to conduct further discussions with the interpreters in Nagasaki.[55] The outcome of this is not clear, but it seems to have been decided that the Nagasaki *bugyō* would send the required information. There is no diary for 1741, but that of 1742 reveals that Aoki had retained his anxiety to learn what he could from the Dutch.

The actual circumstances of the 1742 interview are somewhat puzzling.

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[52] Numata, p. 36.

Iwasaki, pp. 110–111.

Itazawa Takao, *Nihon Bunka Kōshōshi no Kenkyū* [Studies in the History of Inter-cultural Exchange in Japan] (Yoshikawa Kōbunkan, rev. ed., 1961), p. 206, quotes references to Aoki from the Dutch records for 1742 and 1745, but not from those for 1740.

[53] Ōoka, I, p. 392. There is unfortunately, no description of the content of the report.

[54] Hirano, p. 39.

[55] Ōoka, I, pp. 392, 393, 395. There appears to be no further direct reference to the subject.

Though language was to remain Aoki's central concern, his request to speak to the foreigners this time was made in the name of a quite different problem. On February, 20, 1742, Ōoka passed two statements from Aoki to Kanō Hisamichi. He described them simply as "one referring to the matter of instruction by the Dutch in eye medicine" and "one concerning his desire to have an interview with same".[56] As before, Kanō, having spoken to the Nagasaki *bugyō*, gave ready permission. There was, however, an added caution. As recorded by Ōoka on February 23:

> Tōtōmi-no-kami said: 'Regarding the matter of Bunzō's interview with the Dutchmen which he spoke of earlier, I have spoken to Kubota Hizen-on-kami, and give my approval. However, since this matter of instruction by the Dutch in eye medicine is a shogunal order we must think carefully. It's not appropriate that the Dutchmen should think that there are no eye doctors in Japan. Bunzō must try to be discreet in receiving instruction. . . .' Regarding the above I spoke with Hizen-no-kami. He said that the Dutch *Kapitan* arrived yesterday and that regarding Bunzō's interview, which Tōtōmi-no-kami had mentioned, Bunzō ought to go tonight.[57]

The significance of this matter of "instruction in eye medicine" is unclear. Was it hoped that foreign medicine might restore Yoshimune's extremely weak vision? If so, why was Aoki chosen to receive instruction in preference to one of the medical officials who usually visited the Dutch mission? Was Aoki more highly trusted, or had he perhaps heard or read something relevant which he expected the Dutch doctors to clarify? In any case the plan was apparently abortive. Whether or not the subject was even raised might be seen from the Dutch register, but curiously (in view of Aoki's fidelity to instruction) he seemingly made no report on the matter to Ōoka.

(a) The books "on Dutch writing" (1742) and *Oranda Moji Ryakkō* (1746)

Aoki, however, reported on other results of his studies. On March 12, 1742, the following interesting entry appears in Ōoka's diary:

> Despatched to Tōtōmi-no-kami three books on Dutch writing [*Oranda moji*] which Bunzō has compiled and is presenting. Bunzō also submitted a statement to the effect that, as a result of his interview with the Dutchmen last year, he was able to complete the above work this spring, referring to the information sent from Nagasaki. He says, however, that Dutch books are very difficult to read and, unless he can meet the Dutchmen many times, he will not be able to read them. Not even the interpreters are skilled in the written language. Despatched Bunzō's statement to this effect.[58]

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[56] Ōoka, I, p. 532. Also quoted by Hirano, p. 38.

[57] Ōoka, I, p. 533, Hirano, p. 38.

[58] Ōoka, I, p. 543.

The above statement is noteworthy on several accounts. It indicates that in the preceding 1741, for which there is no diary, Aoki had, indeed, visited the Dutchmen for the second year in succession; and that, having ambitions to read Dutch books, he hoped to continue the interviews. His comments on the interpreters' poor reading ability are also interesting. Most significant, however, is the reference to the three books on Dutch writing [*Oranda moji*]—Aoki's first books on Dutch subjects-compiled from material sent from Nagasaki.

Manuscripts of these works do not survive, and nowhere else have I seen direct reference to them, but their identity becomes clearer when we consider them in conjunction with Aoki's later composition *Oranda Moji Ryakkō* [Brief Outline of Dutch Writing], the best-known of his Dutch writings and, next to *Konyō Manroku*, perhaps of his works as a whole. The preface to *Oranda Moji Ryakkō* is dated November 21, 1746, and reads as follows:

> Formerly I wrote a three volume work, *Oranda Moji Ryakkō*, and presented it to the government. Unfortunately, the copy I kept in my home was destroyed in a fire this spring, so I have called for some old paper and, writing down what I can remember, have compiled three volumes. They are probably not the same as the book in the possession of the government.[59]

Aoki does not give details of his original *Oranda Moji Ryakkō*, and the circumstances of its composition have been the subject of conjecture. Ōtsuki Fumihiko observed Aoki's note that there were Nagasaki dialect words in the text of *Oranda Moji Ryakkō* and, on the assumption that Aoki travelled to Nagasaki about 1744, concluded that it was written soon after his return.[60] Iwasaki Katsumi and other more recent scholars, while denying that Aoki went to Nagasaki, have not seen reason to change Otsuki's suggested date.[61] Ōoka Tadasuke's diary does not support this, however, since there is no mention of *Oranda Moji Ryakkō* among the books presented by Aoki in 1744. On the contrary, it seems almost certain that, although their titles are not certain, the three volumes "about Dutch writing" correspond to the original *Oranda Moji Ryakkō*.

What do we know of the content of these two works? The 1746 *Oranda Moji Ryakkō* comprises 43 foliations, divided into three volumes. The first of these deals with the Dutch writing system in general.[62] Aoki begins by introducing the alphabet, setting it out in *katakana* form and explaining it as the equivalent of the Japanese *iroha*. He then describes three different types of Dutch letters, those used in printing, block letters and those of ordinary

[59] See above, 47. Quoted by Iwasaki, p. 112.
[60] In "Aoki Konyō ni tsuite", p. 141.
[61] Iwasaki, p. 113.
[62] Hirano, pp. 56–58, gives lengthy quotation; Iwasaki, pp. 112–117, detailed commentary.

handwriting, this time pointing to a correspondence with the varying styles of calligraphy. Next is a section describing the way individual letters are combined to form syllables, with resulting changes in pronunciation. Finally, he adds some miscellaneous observations: the Dutch words (written in *katakana*) for "write", "read", "syllable" and "book"; the statement, quoted earlier, that Dutch writing consists not of Dutch, Persian and Djakarta varieties, as he had formerly believed, but of Italian and Greek; and the information that Dutch books are read from left to right, in reverse of the Japanese order. Following the main text are some samples of Dutch writing: the alphabet set out in ordinary, block and printing letters, followed by the Arabic and Roman (clock use) numerals.

Volumes II and III, which following Dutch order, read from left to right are devoted to vocabulary items, 721 by Iwasaki's count, each written in alphabetical form, with the Japanese meaning beside it; the pronunciation of individual letters and of the word as a whole is also shown in *katakana*.[63] Items are not divided formally but, as Iwasaki notes with examples, words of related meaning appear together, progressing from astronomical, temporal and geographical terms to the names of animals, fish and insects, and successively through terms referring to people, language, food, and metals and other aspects of everyday existence.

Looking at this text of 1746, one cannot separate out with any certainty which sections Aoki himself composed and which he simply copied; or know how far and in what areas it differs from the 1742 original. Two comments by Aoki are, however, relevant. In volume I of *Oranda Moji Ryakkō* he notes:

> Regarding volumes two and three: previously I gave this book to the government, I got the Dutchmen to write the Dutch words for the final copy. This time I have, as a temporary measure, copied the writing of the interpreters.

The other statement was made in 1742, at the time Aoki submitted his three books on Dutch writing. As recorded by Ōoka and quoted above, he had said that "as a result of his interview with the Dutchmen last year, he was able to complete the above works this spring, referring to the material sent from Nagasaki." These comments combined seem to suggest that in 1741 Aoki asked the Dutchmen to write the words for his books; these were done in Nagasaki during the succeeding twelve months and brought to Edo in 1742. What the foreigners used as a basis for their list is unstated but, as Iwasaki suggests, it was perhaps a pamphlett compiled by the interpreters for their own use in Nagasaki.[65]

Moreover, despite Aoki's note in the preface to *Oranda Moji Ryakkō* that he had rewritten it from memory, this is obviously not true of volumes II and III,

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[63] Iwasaki, p. 114.

[64] pp. 114-115.

[65] p. 116. See also Hirano, p. 57.

for which he retained or reborrowed an original in the handwriting of the interpreters. Volume I, on the other hand, with its discussion of writing, the subject of Aoki's special interest, was probably the most original section of *Oranda Moji Ryakkō*; it must have been this volume which differed most from the work of four years earlier.

What of the significance of this compilation? As Aoki's first book on Dutch subjects, it has a special place in an account of his development. The concern with styles of writing, combining of letters and vocabulary which it reveals was to remain the central, though not the only theme of his study. Even more interesting however, is its significance as the pioneering work on Dutch language study written in Edo. C. R. Boxer, listing the major language studies printed during the latter part of the Edo period, begins with *Rangaku Kaitei* [Ladder to Dutch Learning], a two-volume work, written in 1783 by Ōtsuki Gentaku (1757–1827) and printed in 1788 in Edo, noting that it was "the first work ever composed and printed by Japanese which deals exclusively with the study of a European language".[66] While this is true, and while *Rangaku Kaitei* was especially noteworthy for its apologia on behalf of Dutch studies, its significance as an explanation of the Dutch language is seen in better perspective if we consider that much of the same content had appeared in Aoki Konyō's unpublished works about 40 years earlier. True, Aoki's outline is simpler and less accurate, appearing more like a series of scattered notes whom composed with Ōtsuki's synthesis; nor does it include the examples of whole sentences prominent in the latter.[67] On the other hand, it far exceeds the 32-word vocabulary which Boxer has counted in *Rangaku Kaitei*.[68] The relation between the two works will be referred to again in the conclusion; but it should be noted here that, since Ōtsuki studied Dutch under Maeno Ryōtaku, a pupil of Aoki, his work owed something at least indirectly to the author of *Oranda Moji Ryakkō*.

(b) *Oranda Kahei Kō* (1742)

While language remained the centre of Aoki's Dutch studies, it did not restrict his inquiries in other areas. Indeed, Saitō Agu, having studied Dutch accounts of their encounters with the Japanese in Edo, includes Aoki among those whose not easily answerable questions particularly vexed the Dutchmen.[69] As noted before, the plan of 1742 to seek information on "eye medicine" produced no obvious results, but on March 24 of the same year, shortly after presenting his books on Dutch writing, Aoki submitted to Ōoka a small booklet on another subject close to his interests: that of coins and currency. The title was *Oranda*

[66] pp. 64–65. See note 72.

[67] Word-by-word explanations of sentences do appear in other works by Aoki, however, The first of these was *Oranda Wayaku* (1743), see below.

[68] p. 65.

[69] p. 82.

Kahei Kō [On Dutch Currency] and the preface, dated March 1, explained its origin:

> When asking the Dutchmen above their writing, I also happend to hear about the Dutch method of exchanging gold, silver and copper coins. Accordingly, I have written a small volume, including also some information on weights and measures. The title is *Oranda Kahei Kō*.[70]

That Aoki was trained economic matters can be seen from the orderly presentation and, where possible, precise detail of this work. He lists the Dutch coins in ascending order of value, giving weight and, where known, comparative worth. For example, the opening sentences:

> The *penning* is a cheap copper coin. Though it is still in circulation, the *penning* has not been minted in recent years.
>
> The *duit* is a more valuable copper coin, eight *bu* in weight. One *duit* is equivalent to two *penningen*.

Interspersed are one or two general comments, most noteworthy being the observation that, since each of the seven Dutch states minted their own coins, the units of exchange were not completely standardized, but that the *stuiver* formed the basis of the currency system. A small supplementary note explains some weights and measures. Following this, Aoki added an illustration of the *stuiver*, laboriously copying the inscribed date 1724 and the place name West Frisia (this also appears as Vrisia), and identifying the latter as a state of Holland. The Western style of year counting—a subject also mentioned in *Konyō Manroku*— is explained as referring to a "restoration in middle antiquity", the Christian association being discreetly omitted, it would seem, by Aoki and/or his informants.[71]

Though the object of *Oranda Kahei Kō* is thus principally the communication of information, Aoki's special interest in the written language is also apparent. In the main text Dutch words are written only in *katakana*; but at the very end they are listed both alphabetically and in *kana*, the Dutch version being the careful work of a foreigner.

As Aoki had stated in his preface, the book was not central to his main study. Though the specific information was probably new, it was not, in view of the quantity and level of knowledge currently available, a significant contribution to Japanese understanding of the West. Nevertheless as the earliest of Aoki's compositions based on information obtained in interviews with the Dutch, it provides an interesting illustration of the direction and level of his interests.

III. Writings on the Dutch Language 1743–1758

The events of 1740–1742 set a pattern for the next sixteen or so years. Ōoka Tadasuke's diary reveals that Aoki's interviews with the visiting Dutchmen

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[70] This and subsequent quotations are from the manuscript in Seikado Bunko.

[71] See appendix.

quickly became a yearly routine, requiring no more than the request to be permitted to discuss writing "as I did last year".

It was during this period, in about 1744, that Aoki was believed to have travelled to Nagasaki to further his studies. This theory, originating in Otsuki Gentaku's *Rangaku Kaitei* and repeated by Sugita Gempaku in *Rangaku Kotohajime*, was discredited by Shimmura Izuru, who, referring to Katō Enao's diary, revealed that Aoki was a frequent visitor to Katō's home during 1744 and therefore could not have gone to Nagasaki in that interval.[72] Shimmura's argument has now been accepted and requires no detailed explanation, but further evidence from Ōoka's diary might be mentioned. As previously mentioned, Aoki did, in 1740, express a wish to clarify his knowledge of Dutch by close discussions with be interpreters in Nagasaki. The hope was not realized, however, and at least in the years before 1746, he continued his studies through interviews in Edo only, making no further mention of travel to Nagasaki.

Regarding the content, procedure and number per year of interviews, Ooka wrote noting. The Dutch registers would be helpful here, but are currently inaccessible. A third important source of information remains: the booklets following *Oranda Kahei Kō*, in which Aoki recorded what he had learnt and which he presented to the Bakufu. None of these compositions was published, but copies of most of the manuscripts remain, giving a good indication of the progress and final fruits of Aoki's Dutch studies. Beginning with *Oranda Moji*, titles and preface dates are as follows; dates of presentation to the Bakufu, as recorded by Ōoka, are also given in brackets for those written before the end of 1746.

	Preface Date	
Three books "on Dutch Writing"	Spring, 1742	(March 12, 1742)
Oranda Kahei Kō [On Dutch Currency]	March 1, 1742	(March 18, 1742)
Oranda Wayaku [Japanese Translations of Dutch Sentences][73]	March 5, 1743	(March 14, 1743)
Oranda Wayaku Kōshu [Japanese translations of Dutch Sentences—later Compilation]	March 11, 1744	(March 17, 1744)
Oranda Kanshuka Yaku [Translations of Dutch Wine-drinking Songs]	March 11, 1745	(March 22, 1745)
Oranda Sakuragi Ikkaku Setsu [Dutch Theories of the Cherry-tree and the One-horn]	1746	

[72] Ōtsuki Gentaku,"Rangaku Kaitei" [Ladder to Dutch Stndies] pp. 215-243. In *Bummei Genryū Sōsho* [Series on Mainstream of Culture], I, Kokusho Kankōkai: 1912), p. 223.

See also Suita, p. 15.

For the refutal, see Shimmura, pp. 21-26, Hirano, pp. 41-55.

[73] *Oranda Wayaku* appears in Ōoka's diary as *Oranda Chūyaku* [Translation and Notes from Dutch]. See II, p. 39.

	Preface Date
Oranda Moji Ryakkō (3 vols.)	
[Brief Outline of Dutch Words]	November 21, 1746
Oranda Bunyaku (Compilations I–X)	
[Translations of Dutch Words]	
Compilation I	missing 1749?
,, II	missing 1750?
,, III	March 20, 1751
,, IV	missing 1752?
,, V	missing 1753?
,, VI	April 10, 1754
,, VII	missing 1755?
,, VIII	April 21, 1756
,, IX	April 3, 1757
,, X	March 18, 1758

(a) *Oranda Wayaku* (1743) and *Oranda Wayaku Kōshu* (1744)

Oranda Moji Ryakko and, though to a slight extent, *Oranda Kahei Kō*, show Aoki's concern with spelling and vocabulary, but his compositions of the two succeeding years reveal further advance—into sentence structure and the translation of simple groups of words. The preface to *Oranda Wayaku* [Japanese Translations of Dutch Sentences], dated March 5, 1743, reads as follows:

> The sounds of the Dutch language are very different from those of our language and so, even though I ask the Dutchmen for details about the combination of Dutch letters, their instruction is mainly oral and I cannot write down what is said. Compared with our language, theirs is completely up-side-down and, as there are many auxiliary words, it is very difficult to understand. Accordingly, I have translated four Dutch sentences and one letter, and have indicated their meaning. The title is *Oranda Wayaku.*[74]

Oranda Wayaku Kōshu [Japanese Translation of Dutch Sentence—later compilation], written and presented to the Bakufu in March of the next year, 1744, is introduced as follows:

> This spring the Dutchmen stayed along the way to Edo and arrived late, so I was not able to question them properly. I have simply recorded four lines as I heard them and, adding one more, have named this *Oranda Wayaku Kōshu.*

In these two small volumes, just seven and six foliations respectively, Aoki has, as indicated, selected a number of short sentences, for which he attempts to give not only a translation of the general meaning, but a word-by-word explanation of individual elements. Iwasaki Katsumi has quoted the first two

[74] Quotations are taken from the text, listed as a copy made by Aoki in 1743, housed in the Seikadō Bunko. The most useful commentary is again that of Iwasaki, pp. 117–120.

sentences of each volume, so, as a further example, I give the second sentence of *Oranda Wayaku*. Each sentence is written first in Dutch and then in *katakana* form. In the explanatory sections only *katakana* is used:

Gister was het mooy weer maar van daag regen achtig weer.
gisteru wasu hette moi ueeru niaru han daaku reegen akuteki ueeru

'*Gisteru*' is yesterday. '*Wasu hette*' is an auxiliary having the feeling of the Japanese '*ta*'. '*Mooi ueeru*' is good weather. '*Niaru*' is an auxiliary, here having the feeling of the Japanese '*shikaredomo*'. '*Han daaku*' is today. '*Reegen*' is rain. '*Reegen akuteki ueeru*' is 'the weather looks like rain'.

This sentence means; 'yesterday was fine weather, but today it looks like rain'.

It is obvious from the above example that Aoki's comprehension of Dutch grammar and sentence structure was minimal. Iwasaki comments that he seems quite unaware of such matters as declension, conjugation, case and tense, and is able to handle even difficult elements with the aid of terms such as "auxiliary" and the explanation "having the feeling of".[75] Nevertheless, these two small works are not without significance. Though the grasp of Dutch here demonstrated is clearly not sufficient to permit Aoki to comprehend Dutch works, the direction of his efforts is noteworthy. Unlike his colleagues who sought knowledge of western subjects mainly by having the interpreters convey the required information, Aoki, using admittedly simple material, was attempting to understand the process by which that meaning was communicated in the Dutch language. In this he was foreshadowing the spirit of the succeeding generations of *Rangakusha*, for it was the central characteristic of their efforts that they sought not simply to rely on interpreters, but to read and understand the Dutch texts directly.

(b) *Oranda Kanshuka Yaku* (1745)

Amongst Aoki's writings on Dutch subjects, *Oranda Kanshu Yaku* [Translations of Dutch Drinking Songs] is the only one I have not seen in full. As quoted by Shimmura Izuru[76] the preface is dated March 11, 1745, and states that Aoki heard the songs from the Dutchmen. The text consists of the four verses written in Dutch, with the pronunciation indicated in *katakana*, together with Aoki's Japanese rendering of each. Shimmura notes that they were the first Dutch poems to be translated into Japanese.

(c) *Oranda Sakuragi Ikkaku Setsu* (1746)

More interesting than the drinking songs at least in terms of language, is Aoki's succeeding work, *Oranda Sakuragi Ikkaku Setsu* [Dutch Theories of the Cherry-tree and the One-horn], which he introduces simply as "what I heard

[75] p. 119–120.
[76] Quoted by Hirano, pp. 59–60.

from the Dutchmen in Enkyo 3 [1746]."[77] In writing this booklet, Aoki copied two written Dutch statements, adding a version of the pronunciation in *katakana*; he then composed his explanation, translation and brief commentary. The subjects were simple, but of interest to him. The Dutch "explanation" of the cherry-tree was a one sentence statement to the effect that the Dutch tree bloomed in April, the second month of the Japanese calendar; and that its fruit was preserved and used in making wine. This inspired a short note by Aoki on the differences in the two countries' calendars.

The unicorn, long prized for its medicinal properties, appears again as a topic in *Konyō Manroku* and was clearly a matter of special interest for Aoki. Before giving the Dutch statement, he notes that for three years he has questioned the foreigners about the unicorn, to be told each time that there is no one theory on the subject. Indeed, the Dutch comment quoted simply states that although specimens of the one-horn are found throughout the world, it is not known whether they have come from a fish or an animal; one can ask wise men, but there is no illustration of the unicorn anywhere in the world. Aoki was evidently not content with this lack of information. Further investigation uncovered a lengthy description, compiled from Dutch books by the interpreter Imamura Genüemon [Eisei] (1671–1736), which he later included, complete with illustration, in *Konyō Manroku*.[78]

As an exercise in language, *Oranda Sakuragi Ikkaku Setsu* is in the pattern of the earlier *Oranda Wayaku* and the compilation succeeding it, giving a detailed almost word-by-word explanation of the Dutch. Iwasaki has quoted the section on the cherry; here I give as example a brief extract from the unicorn:

Het iste geloohen dat allede een hoorns de en
hetto iste giroohen datto arurete een hoorunsu en
inde gantsge werld gehonden horden ...
inde gantsuke urerudo jihonden horuden ...

'*Hetto isute*' can be used in various ways, but here it has the feeling of 'this'. '*Geroohen*' is 'to think'. '*Datto*' can be used in many ways, but here it has the feeling of 'this'. *Arurede* is 'all'; it expresses the idea of 'completely'. *Een hoorunsu*' is unicorn. '*Dei en*' is a phrase which points out something. '*Inde*' has the feeling of 'that'; it also expresses the idea of Nagasaki [?], etc. '*Gantsuke uererudo*' is 'throughout the world'. '*Jehonden*' is 'to pick up'. '*Horuden*' is a word expressing a completed past....

This is; 'Unicorns have been picked up now and then in Holland'...

In the three years which have elapsed since *Oranda Wayaku*, Aoki's language has, not surprisingly, made little obvious progress. As before, he has diligently

[77] This and ensuing references are taken from the manuscript in the Seikado Bunko, listed as a self-copy made in 1746.

[78] See appendix.

obtained a meaning for each word, but he still appears to have no awareness of the rules governing the relations between words and parts of words and, therefore, no basis for attempting independent translation. This is of course not to be wondered at when we consider that his language studies, pursued without the aid of dictionaries and grammar texts, were effectively limited to what he could glean during the brief period of the annual Dutch visit to Edo. Perhaps it was because he saw clearly that he would never reach the stage of translation, or perhaps it was that his interests lay basically in the words and letters themselves, that Aoki did not continue his textual analyses. Though he still visited the Dutchmen, there is no record of any writings during the next two years, and when writing his succeeding and final series of works based on the yearly interviews, Aoki returned to his original concern with words.

(d) *Oranda Bunyaku* (1749–1758)

Oranda Bunyaku [Translations of Dutch Words] consists of ten small booklets, of which numbers, I, II, IV and VII are missing. Earliest of those surviving, number III is dated March 20, 1751; its preface reads as follows:

> Here I record what I heard from the Dutchmen this spring, taken from the *superukonsuto* [spelkonst ?]. The title is *Oranda Bunyaku Sanshu* [Translations of Dutch Words—Compilation Three].[79]

Similar introductions head the succeeding volumes, concluding with number X, dated March 18, 1758.

As a compilation of Dutch words, *Oranda Bunyaku* is closest in content to *Oranda Moji Ryakkō*, offering lists of words in the original Dutch, together with a *katakana* version of the pronunciation and a Japanese translation of the meaning. In number of entries, too, the works were probably roughly equal. Iwasaki counted 314 words in the extant volumes of *Oranda Bunyaku* and concluded that the total must have been almost double that number, just slightly smaller than the 700-word *Oranda Moji Ryakkō*.[80] There is, however, one obvious difference, arising from the differing origins of the two works. While the earlier one, based on word lists made by the Nagasaki interpreters, was organized into word groups of similar meaning, *Oranda Bunyaku* was compiled directly from a Dutch work-book and followed its alphabetical arrangement of entries. As indicated in the prefaces, Aoki each year copied and obtained a Japanese rendering for a section of words in the *superukonsuto*, an unidentified book, presumably of technical words, which the Dutchmen brought with them. With the completion of volume X in 1758, he had thus produced a simple Dutch-Japanese dictionary, compiled from a Dutch book and arranged alphabetically—the first such work to be produced in Edo.

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[79] From manuscript in Seikado Bunko, listed as a self-copy. Commentary in Iwasaki, p. 121.

[80] p. 121.

The completion of *Oranda Bunyaku* brought Aoki's language writings to an end. No special reason for this was recorded at the time. Otsuki Fumihiko suggested that, after his patrons Yoshimune and Ōoka died in 1751, Aoki became discouraged.[82] Leaving aside the error concerning Nagasaki, this is doubtful when viewed against the apparent lack of positive official encouragement of Aoki's language studies. The reason was probably very simple; that, having completed his ten-years enterprise in word compilation, Aoki, at the age of 61, felt he had done enough.

IV. Konyō Manroku (1763) and Supplementary Volumes (1766, 1768)

Though *Oranda Bunyaku* marked the end of Aoki's regular Dutch language studies, one final, additional record of his annual interviews must be mentioned. As indicated by *Oranda Kahei Kō*, he used his opportunities of speaking with the Dutch to obtain information on a variety of other topics; and while these were not sufficient to a separate book, some were included among the miscellany of fact and observation which go to make up *Konyō Manroku* [Random Notes by Konyō].

As noted earlier, the first volume of this work was begun in the Gembun period (1736–1740), and others were successively added. In 1763, Aoki wrote a preface to a 6-volume edition:

> During the Gembun period (1736–1740), I compiled volume I of *Konyō Manroku*. After that I wrote many small volumes. Now I have revised them, sometimes adding, sometimes deleting, making a total of 6 volumes. The title is *Konyō Manroku*.[81]

Three years later he wrote the supplementary volume; and two years after that, in 1768, he finished the second and final addition.

A true miscellany, *Konyō Manroku* contains information on a range of topics, matters arising from Aoki's economic and literary studies, and things he had heard and seen. Amongst them, some record information and observations relating to Dutch subjects. As indicated in the list of titles appended, many of the items refer to subjects which arose in his earlier Dutch writings: writing, currency, measures and the unicorn, for instance. The others concern equally simple, practical matters: foreign products (especially food and medicine) and techniques are the most frequent subjects for comment, with occasional fragments of geography and history.

Regarding the level of Aoki's general knowledge of the West and its place in his scholarship in general, the extracts quoted from *Konyō Manroku* are instructive. They reveal, for instance, that while direct contact with the Dutch through the interpreters had certainly opened the way to new and rare knowledge it was for Aoki by no means the only way to knowledge of the West, since many of his explanations of western subjects were actually drawn from Chinese and

[81] p. 434.

Japanese works. By comparing what he had learnt from the foreigners to things he had read in Japanese and Chinese books and things he had seen and heard elsewhere, he was using the new knowledge to clarify and enrich his thought in the interests of a broader general knowledge.

Not surprisingly, however, Aoki's knowledge of foreign affairs was severely limited. Even in the context of currently available knowledge and that being sought, by scholars such as Noro Genjō knowledge of western science and society did not, as Itazawa says, extend beyond kindergarten level.[82] Still, it must not be assumed (as Itazawa does ?) that this miscellany represents the final product or the measure of Aoki's Dutch studies. Rather, as a series of random observations arising out of his major language study, they form a interesting supplement to the latter; on as an indication of his grasp of foreign subjects they offer an interesting guide to perception of western subject among scholars of his age.

Conclusion

In this paper I have indicated a number of ambiguities in accounts of the beginnings of *Rangaku* and have attempted to clarify some of them by considering the role of Aoki Konyō. In examining the circumstances under which Aoki undertook his language studies, I have relied particularly on the diary kept by his superior, Ooka Tadasuke, during most of the crucial years 1737–1745. From it has emerged evidence which at some points supports, at others challenges accounts by modern scholars.

On the positive side, Ōoka's diary supports, for example, the customary focus on 1740 as the probable starting point of Aoki's Dutch studies. It also provides evidence to confirm Shimmura Izuru's argument that, contrary to the accounts of Otsuki Gentaku and Sugita Gempaku, Aoki did not travel to Nagasaki to study, but perservered in Edo. In one key area, however, the diary diverges sharply from modern studies: the interpretation it suggests of the relative roles of Shogun Yoshimune and Aoki in the inauguration of Dutch language study.

With regard to Yoshimune, it is clear that, both personally and as administrator, he valued knowledge in general highly, and made a special effort to seek out and make use of western scientific knowledge. To this end he had officials obtain information on particular subjects by addressing questions through the Japanese interpreters to the Dutchmen on their annual visit to Edo; though I have not investigated the case of Noro Genjō, it does seem probable that, as Sugita Gempaku wrote in *Rangaku Kotohajime*, Noro began his botanical research under Yoshimune's orders. Less likely, however, is Sugita's further assumption that the shogun reached the conclusion that to gain access to western knowledge it was necessary to initiate Dutch language study in Edo. As Ōoka records, it

[82] Itazawa, p. 34.

was not owing to the shogun's command that Aoki started his language efforts, but on his own request. Yoshimune, it is true, agreed readily—he seemingly never hindered Aoki's access to information—but he did not place obvious importance on the project nor offer particular encouragement.

This is not to say, however, that Aoki had been inspired with the need to begin Dutch language study as a means of obtaining useful foreign knowledge. Rather, his first request to interview the Dutchmen, as recorded by Ōoka, seems to have arisen primarily from a personal, more narrowly academic interest in the foreigners' writing systems. As an official, of course, he was committed to consider the social value of his scholarly investigations as a whole, but he did not spell out the particular merits of foreign language study, far less engage in the apologia of his successors Ōtsuki and Sugita. Further, although the nature of his subsequent efforts, especially the ten-year compilation of *Oranda Bunyaku*, suggests a concern to assist later scholars, Aoki made no obvious effort to solicit pupils, nor to promote the future development of his new field of study.

The results of Aoki's Dutch enterprise can best be judged from his several small compositions which, except for *Oranda Kahei Kō* and *Konyō Manroku*, deal with Dutch writing, vocabulary, sentence analysis and other aspects of the language. From these one can conclude that, while Aoki never reached the stage of actual comprehension, he knew the script, had encountered some one thousand words and had an elementary understanding of the way words were arranged to express an idea in a simple Dutch sentence. By modern standards such results were poor, and, even among comtemporary colleagues, the interpreter Nishi Genzaburō held Aoki's ability in such low esteem that, as recorded in *Rangaku Kotohajime*, he tried to dissuade Sugita and Maeno Ryōtaku from attempting Dutch by citing Aoki's example.[82] Nevertheless, in a situation of almost complete ignorance of Dutch, Aoki, working without proper texts and in the brief period of the foreigners visits to Edo, had made a noteworthy contribution. He had taken the first important step towards extending a knowledge of Dutch beyond the small group of professional interpreters Nagasaki to ordinary scholars resident in more central areas of the country.

More significantly, Aoki's efforts were not simply a poor duplication of those of the interpreters. While the latter were necessarily most concerned with practical oral communication, he emphasised the written language, and in doing so prepared to meet the special, more academic needs of subsequent *Rangakusha*. For example, in the description of letters and their combination in syllables which comprises volume I of *Oranda Moji Ryakkō*, he provided a simple introduction to the written language, the earliest of its kind in Edo. Then, too, with volumes II and III of *Oranda Moji Ryakkō* and the ten-part *Oranda Bunyaku*, he had prepared two simple dictionaries, of about 700 and 600 words respectively, the latter listing items alphabetically, the former arranging them in groups of

similar meaning. This is not to suggest that the above works were Aoki's independent composition; indeed, Aoki himself noted that he copied the vocabulary of *Oranda Moji Ryakkō* from material written by the interpreters. What is important is that Aoki had sought out and assembled such information, making available simple study tools for use in learning the language. One other significant aspect of Aoki's studies, already mentioned, was exemplified in the sentence analyses of works such as *Oranda Wayaku*. While these were a long way from independent translation, they foreshadowed the direct investigation of Dutch written works which formed the basis of the Rangaku tradition.

There remains the final, more practical question of the relevance of Aoki's Dutch language efforts in the succeeding *Rangaku* tradition. One should not overstate his role. The content of his work remained unpublished and, though there were copies of the manuscripts, these were not widely circulated. Moreover, Aoki was not a teacher, nor was his reputation in Dutch, as revealed in *Rangaku Kotohajime*, such as to inspire emulation. He did have one important student, however, the doctor Maeno Ryōtaku, through whom the results of his enterprise were transmitted into the developing school of Dutch investigation.

Sugita Gempaku recounted in *Rangaku Kotohajime* that Maeno, having conceived a desire to study Dutch, heard of Aoki's experience in the subject and eventually became his pupil. Sugita did not date the incident exactly, but Iwasaki ascribes it to 1769, the year of Aoki's death:

> By chance, he [Maeno] heard that Aoki *Sensei* was learned in the subject, and eventually was able to become his pupil and study Dutch. Receiving instruction from works such as *Oranda Moji Ryakkō*, he completely memorised all that his teacher knew.[83]

Maeno was fortunate in that he could indeed obtain with comparative ease the benefits of Aoki's 18 year effort. Moreover, he followed this instruction with a period of study under the interpreters in Nagasaki, where he also collected Dutch-language materials for further work in Edo. Yet, while Aoki's achievements were thus quickly surpassed by his only pupil, they were not thereby rendered obsolete.

Firstly, in the area of vocabulary, the word-books *Oranda Moji Ryakkō* (volumes II and III) and *Oranda Bunyaku* remained till the end of the century the most complete dictionary type work available for use in Edo, being succeeded by *Bango Sen* [Treasury of Barbarian Words], published in 1798 by Morishima Chūryō, who learned his Dutch from Katsuragawa Hoshū, Maeno's junior colleague. Moreover, while it is not certain wether Morishima used Aoki's work directly, he organized his dictionary in units of meaning as had Aoki in *Oranda Moji Ryakkō*.

[83] p. 15. The association between Aoki and Maeno is best dealt with in Iwasaki, p. 153 ff.

A second, special emphasis of Aoki, transmitted by Maeno, made a mark on Edo Dutch language study. In about 1770, soon after his return from Nagasaki, Maeno wrote two small introductions to the Dutch language: *Jigaku Shosei* [Small Outline of the Study of Lettering], which, as the title indicates, described various styles of writing; and *Oranda Yaku Sen* [An introduction to Dutch Translation], which outlined the characteristic features of the language.[84] The details Maeno gives in pronunciation and grammar and his general understanding of the language reveal the influence of his study in Nagasaki, but his emphasis on the script reflects Aoki's special interest. As the main theme of *Jigaku Shosei* and an important one in *Oranda Yaku Sen*, he describes and illustrates various styles of writing letters and numerals, giving in greater detail and accuracy Aoki's explanation given in volume I of *Oranda Moji Ryakkō*. Maeno did not publish his booklets on the Dutch language, but their contents, rearranged, with variation and amendments, appeared in *Rangaku Kaitei* written in 1783 by his pupil Ōtsuki Gentaku, and published five years later. A type of beginners' text. *Rangaku Kaitei* was in two parts, the first of which explained the history and value of learning Dutch and the second set out the main features of the language. Here, too, heading the discussion of pronunciation, sentence forms, etc., is a careful outline of forms of writing; thus giving Aoki's special concern with writing thus a central place in the earliest generally available study of the language.

The final noteworthy aspect of Aoki's study was the sentence analysis and translation attempted in works such as *Oranda Wayaku*. It was in this area that Maeno Ryōtaku and his colleagues concentrated their energies, obtaining successes doubtless unimaginable for Aoki. The first of these came in 1774, just five years after Aoki's death. Sugita Gempaku and Maeno had independently obtained copies of a Dutch translation of a German anatomical text, in which the illustrations diverged considerably from the Chinese models which formed the basis of their medical training.[85] In 1771, a rare opportunity to witness a human dissection pointed to the accuracy of the foreign version, and the two doctors, together with Katsuragawa Hoshū, began a translation of the latter. Given the enthusiasts' limited knowledge of Dutch and the lack of study aids in Edo, their enterprise was fraught with difficulty, but by 1774 they were able to publish the results under the title *Kaitai Shinsho* [New Book on Anatomy], the first full translation by Japanese of a western scientific text.

The publication of *Kaitai Shinsho* marked the real emergence of *Rangaku*, as a school of learning in which scholars sought to obtain knowledge of western subjects by investigating Dutch written materials. Their investigations, focusing first on medicine and the natural sciences, gradually expanded to include matters

[84] Quoted as appendix by Iwasaki, pp. 601-639; commentary, pp. 190-195.

[85] The story is related in some detail by Donald Keene, pp. 20-24, and by Goodman, pp. 93-96.

relating to economy, society and polity, providing small but vital glimpses of the western world in the decades before the opening of the country in the mid-19th century. Such a role, though unforseen by Aoki, was nevertheless the final outcome of his enterprise, and it is in this that his studies of the Dutch language obtain their greatest significance.

APPENDIX

Appended below are (i) titles and (ii) selected translations of items pertaining to Dutch subjects which appear in *Konyō Manroku* (6 vols. +2 supplementary vols). The text principally followed is that published in *Nihon Zuihitsu Taikei* [Outline of Japanese Essays], X (Yoshikawa Kōbunkan, 1956), pp. 433–660; any variations are noted.

(i) *Titles.* These are listed as they appear in the text, giving a rough guide to sequence of composition. A general indication of the content of each item is given by classifying each into one of 7 groups: writing; products; institutions; medicine; history/geography (general knowledge); measures and money. Asterisks refer to items which have been translated. The numbers in brackets refer to the volume of *Konyo Manroku* and the page of *Nihon Zuihitsu Taikei.*

(ii) *Translations.* At least one item from each of the above groups has been selected.

(*i*) *LIST OF TITLES*

Oranda Moji [Dutch Writing]	Writing	(I: 460–462)
Shichi On [Seven Sounds]	Writing	(II: 468)
Rasha [Woollen Cloth]	Products	(II: 468)
Oranda Mu Nengo [The Absence of Year Periods in Holland]	Institutions	(II: 473)
Sekido [Flintheads]	Products	(II: 484)
Oranda Yaku [Dutch Medicine]	Medicine	(II: 484)
Oranda Ryōjō Zu [Illustrations of Two Dutch Castles]	Hist/Geog	(II: 484)
Dai San [A Big Mountain]	Hist/Geog	(II: 487)
Ruri [Lapis Lazuli]	Products	(II: 488)
"*Hoorakka*" [Mango ?]	Products	(III: 494)
Oranda no Sumi [Dutch Writing Ink]	Products	(III: 494)
"*n*" [The Letter "n"]	Writing	(III: 495)
Kurobune [Black Ships]	Hist/Geog	(III: 497)
Oranda no Shaku [Dutch Measures]	Measures	(III: 500)
Oranda no Gin [Dutch Silver]	Money	(III: 500)
Seiyō Insho [Western Printing]	Institutions	(III: 512)
San Yaku [Powdered Medicine]	Medicine	(III: 516)

Kinsen [Gold Coins]	Money	(V: 554)
Ryukotsu [Dragon-bone]	Medicine	(V: 559)
Wasen [Japanese Fans]	Products	(V: 562)
Ganseisō [Herb for Assisting Childbirth]	Medicine	(V: 562)
Ikkaku [The Unicorn]	Medicine	(V: 564–565)
Banshu [Barbarian Wine]	Products	(VI: 577)
Oranda Shaku Zu [Illustration of a Dutch Measure]	Measures	(VI: 581)
Ensō [Tobacco]	Products	(VI: 606)
Sonneueisuru [Sun dial]	Institutions	(VI: 608–611)
Oranda Ginsen [Dutch Silver Coins]	Money	(Supp.: 652)
Hindosutanto Koku [The Country of Hindustan]	Hist/Geog	(Supp.: 655)

(*ii*) *TRANSLATIONS*

I. DUTCH LANGUAGE

Oranda Moji [Dutch Writing] (I: 460–462)

It is written in the *Hōonshurin*:[2] "In ancient times there were perhaps three people who invented systems of writing. First was Brahamana; his writing went from left to right. Then came Kharosthi;[3] his writing went from right to left. Lastly there was Ts'ang-chieh;[4] his writing went from top to bottom."

The Dutch script goes from left to right and consists of 25 letters. It has several forms, just like the *ten*, *shin*, *sō* and *gyō* styles of Japanese writing, and is written by joining each letter to those on either side of it. (Regarding the way in which letters are combined I have written in *Oranda Moji Ryakkō*.) Here I illustrate the 25 letters and the numerals.

According to the *Shoshikaiyō*,[5] "The Imperial councillor Pa Ssu-pa invented the Mongolian script.[6] Each character has three tones: ordinary, upper and

[1] In 1795 Ōtsuki Bansui [Gentaku] wrote "Ransetsu Bensei" [Corrections of Ideas about Dutch Matters] (in Ōtsuki Nyoden ed., *Bansui Zonkyō* [Echoes of my Forefather Bansui] Part I, 1914) in which he listed the first 25 of these items, those appearing in the main text. His intention was to explain and correct Aoki's views on western subjects, but in fact he only completed the first four.

[2] *Hōonshurin* (also *Hōenshurin*) was a Chinese T'ang period work in which ancient facts concerning Buddhism were compiled and classified.

[3] Brahmī, written left to right, and Kharosthī, written right to left, were both alphabets of Semitic origin. The former was introduced into India in about 800 B.C., the latter was brought into north-western India in the 5th century B.C., during the time of the Persian domination.

[4] Ts'ang-chieh was a demi-god of the Huang-ti era, credited with the invention of Chinese characters.

[5] *Shoshikaiyō* [Compiled History of Calligraphy] was a Chinese Ming period work which listed skilful calligraphers from ancient times and included an outline of styles of writing.

[6] Pa Ssu-pa was a Yüan period priest of the Lama religion. In about 1300 A.D., the script of the Uighurs, a Turcic-speaking people living in Mongolia and East Turkestan, was combined with that of a Tibetan group to form the Kalica [Galica] script, officially adopted as the written language of the Mongolian Empire.

lower; a word uttered lightly is the same as the ordinary tone". Since Pa Ssu-pa was a priest, he probably constructed it by copying Sanscrit writing.

In the *Daiseikiji*[7] it is written: "In the year Temmei 5 (1620) of the reign of the Emperor T'ai Tsu the Manchurian script was invented. In the year Tenchō 6 (1632) of the reign of the Emperor T'ai Tsung, Tai Kai first used Manchurian writing.[8] He translated the dynastic histories and distributed them throughout the country." Since everyone thoroughly understood and used the Manchurian script by this time, it must have been invented in the Manreki period (1573–1615) of the Ming dynasty.

There are 25 letters in the Dutch language, as listed below. These are known as the "ABCD" in Holland. In our country they are called the "Dutch *iroha*".

Shichi On [Seven Sounds] (II: 468)

When I asked the Dutchmen about Dutch writing it became clear to me that, since the combinations of Dutch letters are all based on five sounds vowels, then the five vowels of Chinese must be derived from those of the West. I have dealt with this in detail in *Oranda Moji Ryakkō*; it is something we ought to think and know about.

"*n*" [The letter *n*] (III: 495)

Although the Dutch letter "n" (*enna* is not the pronunciation but the name of the letter) is read in combinations as "*na*", "*ni*", etc., when we read it in isolation it becomes indisputable that the letter "n" corresponds to the iroha "n" [ん]. Now, when Kōbō Taishi went to China he learnt the European alphabet and, returning, constructed the *iroha*. The way of combining *iroha* symbols is also based on the European method but with the symbols arranged lengthwise. Thus *iroha* "*n*" is the same as the Dutch letter "n".

II. COINS AND MONEY

Oranda Ginsen [Dutch Silver Coins] (Add. Supp.: 652)

The Dutch silver coin "*harofurobei*" [half-rupee] is as illustrated [omitted]. There are two types of "rupee" [*robei*]. The larger, weighing 3 *momme*, is called simply "rupee" [*robei*]; the smaller, weighing 5 *bu*,[9] is called "half-rupee" [*harofurobei*].[9] "*Harofu*" means "half", hence the latter name means "one half of the rupee".

Previously, when I wrote *Oranda Kahei Kō*, the Dutchmen told me that these coins existed. This year for the first time I saw them.

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[7] I have not been able to identify either this work or the person Tai Kai.

[8] I have not discovered the significance of the title, unless it refers to the seven tones [*shichi on, shichi sei*] of the Chinese musical scale. Ōtsuki Bansui's commentary makes no mention of the title.

[9] The *momme* was roughly 3.75 grams; the *fun* was one-tenth of the *momme*.

III. MEASURES

Oranda no Shaku [Dutch Measures] (III: 500)

In Holland a finger's width is called a *duimstock*, and the method of measuring comes from this. Thus, it has been said that they also refer to a *shaku* in terms of "feet".[10]

In *Kago*[11] Confucius said: "Stretch out your hand and know a *shaku*; stretch out your finger and know a *sun*." It seems, then, that the same thing applies in China.

IV. INSTITUTIONS

Oranda Mu-Nengo [The Absence of *Nengo* in Holland] (2: 473)

In Holland there are no year period names. This year, Kampo 2, is thus called 1742. Now, since it would seem from this that only a few years have elapsed since the foundation of the country, I asked the Dutchmen about this. They said that the actual birth of the country was 5746 years ago; the date 1742 probably refers to a restoration in the country's development.[12]

Seiyō Insho [Western Printing] (3: 512)

Looking at Dutch herbal, etc., we can see that it is exceedingly precise, superior to that of the rest of the world. That Western printing makes use of an implement called a "*rajiten*" [螺絲転] is recorded in the book *Ensai Kiki* [Illustrations of Strange Implements of the Far West].[13] The passage is as follows: "In Western printing a *rajiten* is used, thus giving the printed matter gradations of thickness and depth. Their craftsmanship is extremely precise and detailed."

Now, *Ensai Kiki Zusetsu* is a work communicated orally by the Westerner Johannes Terrenz during the Tenkei period of the Ming dynasty, and translated and illustrated by Ōchō, a man from the Western provinces. It contains illustrations of various Western lmplements together with explanations. (There is also an illustration of the *rajiten*.) Indeed, written with the aim of assisting the government of the country, it is a book well worth investigating.

"*Sonneueisuru*" [The Sundial] (VI: 608–611)

In Holland a sundial is called "*sonneueisuru*" [*zonnewijzer*]. There is no single method of construction. Here I give an example. In Holland there are twelve hours of daytime and twelve hours of night, night and day together coming to

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[10] The *shaku*, a measure of length, was of several types; the *magarijaku* (*kanejaku*) was roughly 0.303 mm. The *sun* was one-tenth of the *shaku*.

[11] *Koshi Kago* [Domestic Sayings of Confucius] was a collection of sayings, deeds and dialogues attributed to Confucius.

[12] The computation used by the Dutchmen was that based on a literal reading of *Genesis*.

[13] Also known as *Kiki Zusetsu* [Illustrated Explanations of Strange Items], this was a Ming period work, illustrating some 39 objects. The main text was compiled by the Jesuit missionary, Joannes Terrenz, the supplement by the scholar Ōchō. Aoki's explanation is incorrect on this point. I cannot identify the *rajiten* [螺絲転].

24 hours. In one hour there are 60 minutes, the total for a day and a night being 1200 minutes. By knowing the Dutch directions of North, South, East and West and the numbers from 1 to 12, we can calculate the hour.

If we point the metal needle to the number representing the angle of that country's inclination against the North Pole and place upright the needle indicating the numbers, the number to which the needle points indicates the hour. Fer example, if it is a country having an angle of inclination of 30° against the North Pole, we point to the number 30. I have learnt as follows: If we add a circle to the number 1 it becomes 10; if we add a circle to the number 2 it becomes 20.

Note: Below the needle which records the angle with the North Pole is a line like this.... We point this line to the angle of that country.

V. PRODUCTS

Rasha [Woollen Cloth] (2: 468)[14]

In *Tōzaiyōkō* Ku'ei wrote: "The woollen fabric *toromen* cannot be pierced by sword or by arrow."; thus, if it could not be pierced by sword or arrow, it must have been thicker than the *toramen* we have today.[15]

In the same book it is written: "*Tora*" is woven with hair and down. Long pieces extend to 6 or 7 *jō* per roll.[16] Nowadays people call it *tararen*.

Thus, although *toramen* and *rasha* are difficult to differentiate, it seems that *toramen* was a type of *rasha*. Originally, in China, they translated Western *rasha* as *toramen*, and later erringly considered it to be the same as our present Japanese *toramen*. In Holland they call *rasha* "*laken*".

VI. MEDICINE

Oranda Yaku [Dutch Medicine] (2: 484)

When Dutch people take the laxative *hiyoruhanhaarumuchi* [*purgeermiddel?*],

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[14] Vocabulary items:

i) *Rasha*. From Portuguese *raxa*, a type of thick woollen cloth, imported into Japan in the late Muromachi period and used especially for coats of arms, fire blankets, etc.

Also a general word for woollen cloth.

ii) *Toromen/tōramen*, probably from Sanskrit *tûla*.

a) pron. *tōramen*. A white cotton fabric.

b) pron. *toromen*. A foreign-made woollen cloth. In ancient times rabbit hair was combined with the cotton thread during weaving. Now no hair is added. There is also a Japanese variety.

iii) *Tararen*. Same as *tōramen*.

iv) *Laken*. General Dutch word for cloth.

[15] *Tōzaiyōkō* [Notes on East and West] was a Ming period work, treating mainly countries with whom China had trading relations. "Eastern" countries centred on the Philippine archipelago, the Malaccan peninsula and Borneo Straits area. "Western" countries included Indo-China, the Malay peninsula, Java, etc. Countries with whom China had no relation were included in a special "foreign" section.

[16] *Jō*, a measure of length, was about 3.030 m.

an electuary in common use, they make it a little sour, so that the motion is extremely soft. They do this by boiling the fruit of the Dutch tamarind tree and straining off the juice.

If we soak this fruit in honey and eat it, it makes the inside of the mouth cool and fresh.

Ikkaku [The Unicorn] (V: 564–565)

The *daitsūji* [great interpreter] Imamura Genüemon, having studied several Dutch books, wrote his own theory of the unicorn, adding an illustration of one.[17] In his outline he says:

> In the book written by *Haurusuheneetosu* we find: "The *gamu* of the country of Turkestan (in Turkestan '*gamu*' is used to refer to the king) keeps unicorns. Moreover, in the capital *Ranfurii* there is a small statue of one. With regard to its shape, the head is flat like that of a wild boar; its tongue is pointed, like a fish-hook; its eyes resemble those of a rhinoceros."

Haurusukotohyusu said:

> The unicorn is like a young grey colt; its head is covered thickly with hair; it has a beard like that of a goat; on its forehead it has one horn of about 2 *kobito* [cubits] in length (about 3 *shaku* 2 *sun* according to our present *magarijaku*).

Moreover, the author *Rorateueikitebaru* of *Hononii* [place name] wrote:

> I saw two unicorns which flourished in the stables of the *keruku* [in Holland a big family is called a "*keruuku*"] of Mecca (the capital of Arabia). One was fully grown and like a 30-month colt; on their foreheads was one horn, about 3 *aira* [just over 6 *shaku* 8 *sun* calculated in *magarijaku*]. The smaller one was like a one-year old colt, with a horn measuring about 4 hands.
>
> Note: the Dutch standard measure is equal to 2 *shaku*; the Dutch use the words hand and finger to designate *shaku* and *sun*.
>
> These unicorns were black in colour; their heads were like those of deer; their necks were short and were thinly covered with hair; their manes were short, with the hair falling over to one side; the feet were narrow like those of a doe; their footprints were slightly split at the tip, like those of a sheep; on the right foot there was much hair.

Unicorns are the favourites of young girls, who enjoy their fragrance. It has been said that at one time the word unicorn referred not to an animal, but to a one-horned fish of the northern sea. This theory likewise has not been proved, so one should not place too much confidence in it. As I wrote in *Oranda Sakuragi Ikkakuju Setsu* [sic], we cannot know about such animals of the mountain and the sea. That is as it has to be.

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[17] I cannot identify this work by *Imamura*, nor the books to which he refers.

It seems to me that, although this sketch which I have included of a unicorn also appears in the books of Holland (in Holland *honzō* is called), if we do not know about the animals of the mountain and sea, we still cannot place confidence in the theory.

VII. Geography/History

Daisan [Big Mountain]

The Dutchmen say that there is no mountain which can equal Mt. Peak of the Canary Islands in height.[18] They say that in shape the mountain is like an upright spear, and that it is taller than Mt. Fuji.

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[18] Peak of Tenerife is a volcanic mountain the highest in the Canary Islands. It is by no means as tall as Mt. Fuji, though to the Dutchmen passing in their boats on their way to the East, it may indeed have seemed so.