

Demonic Affliction or Contagious Disease?

Changing Perceptions of Smallpox in the Late Edo Period

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This article examines the ways in which smallpox epidemics were perceived in premodern Japan. It is a study of the ways of thinking that crystallized around the struggle to eradicate smallpox, and aims to clarify the formative elements of the now extinct cult of the smallpox deity. In this struggle against smallpox, practices based in magical thinking and measures that were strikingly modern in nature existed side by side until the middle of the nineteenth century, when the practice of vaccination finally prevailed.

Keywords: smallpox — *hōsōgami* — red — magico-therapeutic techniques — *hayarigami* — Edo era popular beliefs

MAJOR EPIDEMICS STRUCK Japan at irregular intervals during its history, and they did so with increasing frequency during the Tokugawa period, spreading easily in the great and densely populated cities of Edo, Osaka, and Kyoto. The two main diseases involved were smallpox (FROIS 1585, pp. 100–101) and measles.¹ This article will examine the different ways in which smallpox was perceived by society toward the end of the Edo period, in the light both of magical concepts surrounding epidemics and of a counter view that regarded it merely as a contagious disease. The major anti-smallpox measures attributable to magical thought remained highly influential at the time,² employing the symbolism of the color red, pilgrimage, ritual use of daily objects,

* This article was translated from French by Royall Tyler of the Australian National University.

¹ The high mortality rate especially affected children. Temple registers (*kakochō* 過去帳), for example, attest that more than half the victims were children (TATSUKAWA 1979, p. 144). In Shimane Prefecture smallpox was even called *korori* ころり (a word evoking sudden collapse) because death was so often the outcome (SAKATA 1977, p. 58).

² See for example *Hosō majinai hiden shū* (HASHIMOTO 1756).

and magic potions and spells to ward off smallpox demons. In contrast, Hashimoto Hakuju 橋本伯寿, a physician from Yamanashi Prefecture, in his *Dandoku-ron* 断毒論 (Treatise on cutting off poisons, 1810; NSSS, vol. 7), recommended avoidance and confinement. It was only with the introduction of vaccination in the mid-nineteenth century that smallpox was eradicated in Japan.

Red as the Mark of Smallpox

Scattered throughout the Japanese provinces one still finds small shrines dedicated to the kami of smallpox. An Edo-period description of one of these (in Fujimi-chō, Suwa-gun, Nagano-ken) mentions that the shrine building is red (TATSUKAWA 1976, p. 124). This color played a fundamental role in all representations of the disease and all practices connected with it. It had complex and revealing implications both for the treatment of smallpox and for accepted conceptions of it.

Late in the Bunka period (1812–1818) Noda Senkō-in 野田泉光院, the priest of a temple in Kyushu, was ordered by his hierarchical superior at Daigo-ji 醍醐寺 to undertake an inspection tour of Tōzan-ha 当山派 Shugendō temples throughout Japan.³ His travel notes (*Nihon kubu shugyō nikki* 日本九峰修行日記)⁴ contain not only valuable information on the multiple social and religious roles of an itinerant monk near the end of the Tokugawa period but also many references to smallpox epidemics. For example, he observes under the date 27/11/1816:

There is an outbreak of smallpox right now in this village, and everyone is highly agitated. Families have stretched straw ropes (*shimenawa* 注連縄) hung with red paper streamers (*gohei* 御幣) around their houses, and in their courtyards they have made piles of brush decorated in the same way. Everywhere inside the houses are long strips of red paper. Everyone is dancing to the rhythm of drum and *shamisen*.

Shimenawa, which delimit a sacred or (in this case) protected space, and paper streamers in the apotropaic color red are traditional folk weapons in the struggle against epidemics, imagined as evil spirits arriving from outside. The dances (*hōsō odori* 疱瘡踊り) were meant to induce the demons to leave the village, taken away by the dancers.⁵

³ On Shugendō, see RENONDEAU 1965; ROTERMUND 1968; EARLIART 1970.

⁴ See ROTERMUND 1983. This document survives in two manuscripts, one owned by a sixth-generation descendant of its author and one preserved at Daigo-ji in Kyoto. There is also a printed edition in NSSS, vol. 2.

⁵ On dances to ward off smallpox, see ONO 1966 and YANAGITA 1962, vol. 7, p. 425. On the survival of such dances after the introduction of vaccination, see UENO 1976, pp. 91–92.

According to the *Shōni hitsuyō sodategusa* 小児必用養育草 (chapter IV/4),⁶ the color red also appeared in the furnishing of the patient's room. A section entitled “Concerning dispositions to be taken in the room where the sick person lies” states:

When the first smallpox pustules begin to appear, one should carefully clean a space one *ma* 間 wide,⁷ place a screen there, and burn some of the incense known as *nyūkō* 乳香⁸ in order to ward off pollution and impurity. In winter put in place a simple curtain or something in the way of a paper curtain, and light a charcoal fire for protection against the cold. In summer, hang mosquito netting to prevent mosquitoes from settling on the lesions. On the clothing rack belonging to the screen hang red garments, and also clothe the patient in red. In fact everyone should wear red. That is because red is the color preferred by smallpox.

Many references in the literature of the period testify to the popularity of red-dyed clothing.⁹ A *senryū* on the subject goes (OKADA 1976, vol. 9, p. 22):

Bright red clothing
for our sick child
stricken with smallpox.¹⁰

Believed at least to assure a benign form of smallpox, red was also preferred for children's toys (for instance Daruma dolls), for illustrated “anti-smallpox” books, and of course for the type of print known as *aka-e* 赤絵 or *hōsō-e* 疱瘡絵 (ROTERMUND 1991, pp. 135ff):

A deep red,
these amusing things
distract the sick person. (OKADA 1976, vol. 4, p. 94)

Certain *senryū* suggest that the place where the sick person slept was fairly dark and lit only by twists of red oiled paper.¹¹

⁶ By Kazuki Gozan. Manuscript belonging to Tsukuba University. A printed text is available in *Nihon kyōiku bunko, eisei oyobi yūgi hen*, 1977.

⁷ A space defined as the distance between two pillars in a standard Japanese room.

⁸ Frankincense, made from the resin of *Canarium album* *Raeschel*.

⁹ An example is *Mukashigatari inazuma-byōshi*. This text is discussed later in the article.

¹⁰ In Europe, too, it was the custom in case of measles to hang the bed and windows of the patient with red and to put a red band around the patient's neck (BOUTEILLER 1966, p. 295).

¹¹ “The purple twist / dispels the darkness / the child's cares” (ŌKUMA 1967, vol. 2, p. 551). Moreover, the physician's examination was to start with the soles of the feet, inspected by this red light. This light also accompanied the physician when he left after examining the patient: “The pediatrician / by the glow of the lampwick / takes his leave” (OKADA 1976,

This insistence of having red present all around the patient applied also to practices designed to repel the kami of smallpox. Use of red *gohei* was normal in rites to “flush smallpox away” (*hōsō nagashi* 疱瘡流し), that is, to dismiss smallpox with a round straw plaque (*sandawara* 棧俵) decorated with *mochi*, rice, and so on. This item constituted the material support, or vehicle, of the smallpox demon (ROTERMUND 1991, p. 260). Moreover, a good many *hōsō-e* show this demon dressed in red.¹² For example, *Bujishūi* 無事志有意¹³ (see ODAKA 1966, pp. 449–503) gives this amusing description (summarized here):

[Ebisu, Daikoku, Jurōjin, Fukurokuju, Benten, and Inari,¹⁴ have gathered to discuss the tobacco they are all smoking. In the next room is a character whose peculiar costume attracts their attention.] “Red even to his hair,” he wears a red jacket and a red coat. His undergarments and his belt are red, as are his socks and his pipe. When questioned he reveals his identity: the kami of smallpox! Intrigued by the refined design of the pipe he is smoking, the others ask to try it out. The quality of his tobacco proves to be revolting. “It’s pine bark!” [*matsukawa*].¹⁵

The use of red, ubiquitous in the magico-therapeutic treatment of smallpox, may suggest a connection with the modern recourse to the properties of red light and so provide a “rational” foundation for some of these old traditions.¹⁶ However, it is not possible here to go

6/7). According to *Shōni hūtsuyō sodategusa*, the physician examined the patient by this light alone, for thanks to it he was able to discern, as soon as the first fever appeared, the symptoms announcing future smallpox pustules. Old Chinese paper was recommended for this purpose.

¹² *Konjaku monogatari shū* 今昔物語集 22/10, too, describes a demon of disease as human in form and dressed in red.

¹³ A *hanashibon* 噺本 the title of which parodies that of the famous *Uji shūi monogatari* 宇治拾遺物語. It contains over fifty comic stories collected by Utei Enba 烏亭焉馬, who is known also for his *kyōka* 狂歌 and for his contribution to the development of *rakugo* 落語.

¹⁴ The Seven Gods of Good Fortune (Shichi Fukujin 七福神) minus Bishamon 毘沙門 and Hotei 布袋, and with the addition of Inari 稲荷.

¹⁵ *Matsukawa* 松川 also designates a region where tobacco had been cultivated since the mid-eighteenth century. *Matsukawa* refers to *matsukawa-bōsō*, a particularly serious form of smallpox in which the lesions are superimposed on one another, so that the skin resembles pine bark. As another satirical verse says crudely:

Matsukawa girl
with the pine-bark face
she brings as her dowry. (OKADA 1976, 17/35)

¹⁶ In actinotherapy (treatment by means of light rays), modern medicine has recourse to light, which at certain wavelengths has the ability to penetrate skin and tissue. Thus infrared has sedative and decongestive effects (vasodilation, warming of tissue) employed for example

into this subject further. The traditional predilection for red might also be linked to a homeopathic conception based on similarity with the red flush of fever. Finally, red may also have served to advertise the presence of the disease and so encourage greater care and cleanliness (FUJIKAWA 1981, p. 145).

Pilgrimage and the Ritual Use of Objects

Another expression of magico-religious thinking was pilgrimage to shrines renowned for their miraculous powers. Thus, before catching the disease villagers living near the shrine of Sagi daimyōjin 鷲大明神 near Izumo (“number one among all the deities in Japan who offer protection against smallpox,” NODA SENKŌ-IN 1814-4-16) went to pick up pebbles in the shrine precincts and took them home with firm faith in their magical efficacy. They returned them once the threat of the disease had passed.¹⁷

The following magic poems from the Shugendō repertoire (ROTERMUND 1998, pp. 232–33) suggest that shrine precincts, due to their ritual purity, were not penetrated by smallpox and therefore safe ground.

<i>mukashi yori</i>	Such is the promise
<i>yakusoku nareba</i>	made from of old:
<i>mo hashika mo</i>	within the kami fence
<i>yamu to wa shirazu</i>	I will therefore never catch
<i>kamigaki no uchi</i>	smallpox or measles.
<i>hōsō no</i>	Where is it, you ask,
<i>yado wa to toeba</i>	smallpox’s abode?
<i>ato mo nashi</i>	Nowhere to be seen.
<i>kono tokoro ni wa</i>	Here in this place
<i>imo sezarikeri</i>	it is just not to be found.

Rivers could also wash away the threat of smallpox:

<i>mogami-gawa</i>	Mogami River
<i>nagarete kiyoki</i>	flows on, its waters
<i>mizu nareba</i>	so limpid and pure
<i>akuta wa shizumu</i>	that all filth sinks straight down
<i>nushi wa sakaeru</i>	and the patron prospers.

Sagi daimyōjin hōsō shugo no kiryakuji 鷲大明神疱瘡守護之記略辞 (an

in the treatment of arthritis. Ultraviolet light, employed to treat certain disorders of the skin, can kill bacteria.

¹⁷ “Be it smallpox or measles, grave or light, they will protect us, these pebbles from the shrine of Sagi daimyōjin.” A copy of *Sagi daimyōjin hōsō shugo no kiryakuji* can be found in Yamazaki Bunko, Juntendō University.

account of the cult and its practices at this Izumo-region shrine) confirms relevant passages in *Nihon kubu shugyō nikki* and also mentions borrowings and offerings of straw hats (*kasa* 笠), symbols of divine protection. The word for “straw hat” (*kasa*) is a homophone of *kasa* 瘡, which means “boil” or other skin eruption. Children were to begin wearing these hats before catching smallpox. Motoori Norinaga 本居宣長 (1730–1801), too, refers to this protective hat in his *Kojiki den* 古事記伝. He notes that someone who prays for a benign case of smallpox should go to the shrine of Sagi daimyōjin and borrow a bamboo hat, which is to be placed and honored in the house. Once recovered, the person is to make a second hat and return it to the shrine with the first. Others will then borrow it in turn. That is why such hats accumulate at the shrine.¹⁸

The practices recommended in *Hōsō majinai hiden shū* 疱瘡禁厭秘傳集 (1756) convey the full range of magico-therapeutic techniques current at the time; and, like far older magical treatises, it draws on Shugendō texts.

On the thirteenth day of each month, purchase eels from a fishmonger and release them in a pond of a Hachiman shrine¹⁹ or a temple for the rite of “freeing living beings.”²⁰ Doing this each month will ensure absolute efficacy of protection against smallpox.²¹

* * *

Write the full name of the child on an egg, then bury the egg below the middle of the doorsill of the house. This will ensure a light case of smallpox.²²

¹⁸ *Kojiki den* X, p. 472–73. By an apparently analogous symbolic process, a basin (*tarai*, *kaiba oke*) offers protection against measles. No doubt such a basin can be used physically to protect the head, but the real reason is probably that it can also serve as a livestock feed trough. With their feed the animals swallow the awns (*hashika* 芒) on the grain heads, that is to say, the measles (*hashika* 麻疹).

¹⁹ Apart from the connection between Hachiman shrines and the practice of *hōjō* (NAKANO 1967, vol. 1, pp. 404ff.), the appeal to this deity in the struggle against smallpox is connected also with Emperor Ōjin 応神. Ōjin was the son of Jingū Kōgō 神功皇后, who subdued the kingdom of Silla (Korea); and it was believed that a smallpox epidemic had come from Silla. Such reasoning explains a similar appeal to the shrine of Sumiyoshi, where Jingū Kōgō is also worshiped, among other deities.

²⁰ *Hōjō-e* 放生会, the rite for releasing captured living beings, was introduced to Japan in the seventh century. It was initiated particularly at Usa Hachiman shrine, which came under Buddhist influence very early. Behind what claims to be a Buddhist rite, it is possible to discern the ancient custom of making offerings to the deities of fish or fowl, who were present within the precincts of shrines.

²¹ According to *Hōsō majinai hiden shū* (Ijin no den 異人の伝), a monk encountered on Ikoma-yama 生駒山 taught this method to a certain Adachi Magoshichi of Kawachi.

²² A method transmitted in the family of Takano Jōnen, of Ōmiya in the Chichibu region.

The following method, transmitted in the Oda family, attempts to shelter someone from the disease by “burying” it.

Have the sick child put on new straw boots for a horse, left foot first for a boy, right foot first for a girl. Then place the boots in a place sheltered from rain and dew, until the smallpox is gone. Once the child is well again, dig a hole five feet (*shaku*) deep and bury the boots in it.

These practices, which consist in causing the disease symbolically to vanish, are all aimed at ensuring that the patient should suffer only from a light case of smallpox, rather than at a total avoidance of the disease. This is indeed the goal of almost all such magico-therapeutic practices against smallpox (ROTERMUND 1991, pp. 162ff). *Shinsen maji-nai chōhōki taizen* 新選呪詛調法記大全 (1842) gives the following advice:

Take a *kama-bōki* 釜箒 (oven broom) belonging to a childless couple, without the couple’s knowledge; go home and put the broom in a purified place. Then, as soon as the disease declares itself, tie a red scarf around the broom so as to transform it into an object of worship. This rite is miraculously effective. Once the worst of the smallpox is past, return the broom to its owner.

The author of *Nihon kubu shugyō nikki* distributed amulets and performed, though unwillingly, the exorcisms requested of him, but for himself and his servant he never had recourse to magico-therapeutic practices (ROTERMUND 1983, pp. 83ff). Similarly, he practically never alludes to the richness of a popular pharmacopoeia that appears in many other documents of the same period.²³ His silence is especially regrettable, since the *yamabushi*, heirs to the long Shinto-Buddhist syncretic tradition and in profound touch with esoteric and popular Taoist teachings, were the supreme masters of amulets, spells (including magic poems), and a pharmacopoeia as abundant as it was repellent.

Pharmacopoeia and the Marking of the Body

The concern with ritual purity predominated even in the employment of medicines that involved the marking of the patient’s body:

Take a whole leaf from a loquat (*biwa*) branch facing east and cut notches in it corresponding in number to the patient’s age. Put an equal number of small and large red beans

²³ For example, *Tankai* 譚海 (1795), by Tsumura Sōan 津村宗庵 (NSSS, vol. 8); and *Mimi-bukuro* 耳囊 (1814), by Negishi Yasumori 根岸鎮衛 (NSSS, vol. 16).

(*dainagon azuki*) and of black soybeans (*kuromame*) in a teacup (*tenmoku*) full of water; boil seven minutes; and apply the resulting substance, together with the pieces cut from the loquat leaf.

The patient should wash. Then purify the fire and boil the beans in preparation for using the substance obtained. Apply it in the morning for men and in the evening for women: thrice on the eyebrows, both cheeks, the tip of the nose, the palms, and the navel.²⁴ Do this with great care. Next, thrice on the soles of the feet. However, once the smallpox pustules have appeared, boil the mixture a second time before applying it.

If the patient is as though dead, place three whiskers from the tea whisk (*chasen*) in the container with the loquat leaf fragments, the soybeans, and the red beans, boil, and apply. After three applications the patient will revive. Furthermore, when the case is serious, cut a pear (*ari no mi*) into fine slices, soak them in water, and with this water moisten the navel repeatedly.²⁵

Hōsō majinai hiden shū is a representative text on this sort of subject, containing as it does pharmacological recipes as well as advice of a magico-therapeutic nature. Its author, Hashimoto Seiwa 橋本静話, stresses that the medicines he recommends are easy to obtain, even in the country, and that the magical practices he describes are the work of deities and therefore not to be despised. “However,” he adds, “the words of charlatan monks (*maisū* 売僧, 売子) and of quacks (*hato no kai* 鳩のかい) are not included.” He goes on to say that he does not mean to prohibit recourse to physicians or to medicines, or to claim that only magic works. “Whether one uses magic or medicine and drugs, the fact remains that the pollution and impurity present in the house are what turn a light case of smallpox into a serious one.”

The method employing a loquat leaf, already described, no doubt constitutes a “magical marking” of the body. Some further aspects of this technique follow. *Hōsō majinai hiden shū* recommends a preparation of musk, cinnabar, and castor bean, mixed together in a new bowl with a new brush and applied, in conjunction with a spell, to the patient’s body: between the eyebrows, on the bridge of the nose, on the hollow of the belly, on the palm of the hands, and on the soles of the feet. What matters most in this method is the date when it is to be

²⁴ Possibly because of the similarity in sound between *hōsō* (smallpox) and *heso* (navel).

²⁵ *Hōsō no kami matsuru hiji*, from *Zoku majinai chōhō ki* (also, *Onmyōji chōhō ki*), a manuscript in the Tōyō Daigaku library.

used: early in the morning of the fifth day of the fifth month. Once the procedure is over, the brush and bowl are to be thrown into the river. “Never use them again,” the text enjoins. “The same person must never prepare this remedy for a second child.” It is tempting, despite the absence of proof, to link the marking of the body with the many black lines seen in certain *hōsō-e*. These follow, precisely, the lines of the nose, the eyebrows, the mouth, and so on (ROTERMUND 1991, pp. 83). This appears to suggest a sort of “magical marking,” especially of the parts of the face that most need to be protected against smallpox.

These preparations obviously involve all sorts of substances and plants, but what the documents describing them stress above all is their careful application in certain crucial places.²⁶ A passage of *Hiden sehō bukuro* 秘傳世宝袋 (1763, by Kusakabe Furen 日下部不鍊) lists thirteen of these, promising that whoever follows this method for a year is unlikely to contract smallpox, and more unlikely still after two years. After three years the method will confer lifetime protection. It is moreover no surprise to note that in most cases (the text just cited is quite clear on this) the purpose of these washings or markings is less to escape smallpox completely than to incur only a light case.

As in the case of other anti-smallpox measures, it is indeed the date that matters particularly for the preparation of a mixture. Apart from the fifth day of the fifth month, mentioned above, the last night of the year is also commonly recommended:

On the last night of the twelfth month, take a large conger eel (*hamo* 鱧) and boil it. Wash the child in the broth and then rinse with hot water. At the time of the first ablution, ignore the powerful smell and wet the entire body. Anyone who doubts this method should leave out a few patches on the feet or the hands. Smallpox will erupt there without fail.²⁷

Thus, given the only very relative efficacy of the pharmacopoeia of the time, the wish to ward off infection often entails attempts to limit the effects of the disease by seeking only a benign case.

In this context the following example is of great interest because it associates this marking with the verbal magic already mentioned. It recommends writing a well-known poem-spell on the patient’s belly:

²⁶ *Kinketsu* 禁穴, possibly the “vital points” on the human body that are so essential to acupuncture (PORKERT 1973, pp. 150ff).

²⁷ *Hosō majinai hiden shū* (Shinsen hiketsu); method transmitted in the Mukai family. Regarding the other major aspect of the pharmacopoeia, the taking of medications, the reader should consult ROTERMUND 1991.

Deep in the mountains,
cut off at the root
the vines of the demons
and the whole plant will die,
leaving no trace behind.²⁸

Writing this poem three times (in black ink for men, in red *beni* for women) while silently reciting the mantra of Dainichi nyorai 大日如来 (*Abira unken sowaka*) will make it possible to escape smallpox completely, or at least to contract only a light infection.

Protective Spells and Encounters with Smallpox Demons

Knowledge of a protective spell can ward off smallpox. This knowledge is obtained as a result of an encounter with the demonic smallpox kami itself, as a reward for services (or for acts of worship) rendered. Such legendary events or encounters (ŌSHIMA 1985, pp. 95, 125ff.) form the etiological basis for certain magic concepts and traditions.

As a reward for services rendered, for hospitality granted, for a commitment to acts of worship, and so on, the demon teaches a tale's hero a protective spell, gives him an amulet to put up on the door, or imparts to him the knowledge of some other magical practice. While the tale associated with the amulet of Yu-no-o Pass 湯の尾峠 in Echizen refers to legendary events,²⁹ that concerning Rokurōzaemon 六朗左衛門 has a certain "historicity." The existence of such a merchant family at Obama 小浜 is attested in various Edo-period documents, and it appears that as late as the prewar period people came to request amulets from them (ŌSHIMA 1981-1982). Inventing a connection with a powerful personage (for example, claiming to be a descendant of Rokurōzaemon) was also a common way to protect oneself against an epidemic or at least to mitigate its effects.

Tales of encounters with the smallpox demon share a characteristic trait with popular conceptions of "deities in vogue" (*hayarigami*), a term that refers to the demons of disease, among others. The people of the Edo period feared them for causing devastating epidemics but also saw them as offering protection against these same diseases. Santō Kyōden's 山東京伝 *Mukashigatari inazuma-byōshi* 昔話稲妻表紙 contains a long passage about a case of smallpox, one that highlights

²⁸ *Hiden dokuza gushō* (1743). This poem is also employed in ORL (otorhinolaryngology) therapy.

²⁹ Imajō in Nanjō-gun, Fukui-ken (福井県南条郡今庄町). In 1984 I met one of the families that once kept a tea shop at the pass and that had therefore passed on the tradition.

many elements necessary for a better understanding of the smallpox demon.³⁰

Sasara Sanpachirō, resident somewhere in Tanba under the name of Namuemon, found himself taking a ferry in company with a destitute-looking old woman. Once the ferry had crossed the Kizu River and all the passengers had disembarked, the old woman was attacked by dogs. She had trouble defending herself with her cane, and Sasara Sanpachirō went to her rescue. In the meantime, Sasara Sanpachirō's eight year old son had caught smallpox. The boy's mother put up an altar for the deity (*mogasa no kami* 痘瘡の神), decked it with red *gohei*, a *sandarawara*, a Daruma doll, and an owl, and watched over the patient, who wore a red hood.

She had seen to everything: the taboo against speaking, the need for pure fire, the ingredients for the food, as well as the *magojakushi* amulet from Yu-no-o Pass and the *heisara basara*³¹ remedy. Nothing desirable had been left out. Alas, the smallpox in this case was serious, the fever was high, the disease affected the eyes, and it was feared more than once that the boy would die.

[Soon smallpox broke out on the face and the entire body, and the boy's life was in grave danger. Day after day the mother waited anxiously for her husband to return. Meanwhile her son writhed under the influence of the fever.]

Was the smallpox deity out of humor? Kuritarō stamped his feet, snivelled, threw around his pillow stuffed with little red beans, tore the arms off his dolls, and never stopped crying, no matter what was done to calm him down.

[When the husband returns, his wife tells him what has happened. But when the boy sees his father he sits up in correct posture, bows to him with his hands on the floor, and says]: "What a surprise! This house is yours? This is your son? I am the old woman whom you saved from that terrible plight the other day at the Kizu River ferry. In fact, I am a kami of smallpox! We all fear dogs more than we do humans. I had spent some time in Kyoto, spreading smallpox, but four or five days ago I moved to this province. I moved into this house and gave your son smallpox without knowing that he was yours. To tell the truth, he has a very serious case, and he would have died

³⁰ Chapter 2, partial copy in Tōkyō-toritsu Chūō Toshokan. See also the printed text in *Yamihon* 読本, Nihon Meicho Zenshū 日本名著全集, 1929, p. 192.

³¹ *Pedra bezoar* (Portuguese), a reddish-black mineral concretion from the stomach of cattle or horses. It was employed against poisons (ARAKAWA 1967, p. 1187).

within two days. Your coming back at the last moment shows that he has a very strong life force. Now is the time for me to return your favor of the other day by leaving. The smallpox will disappear immediately, and all the scabs will fall off. I will never approach your family again. However, in the absence of some sort of sign, your family might be infected again, as now. What is your name?

[Namuemmon tells her his name, and she says]: “In that case, write ‘Sasara Sanpachi’s house’ inside an abalone shell and hang the shell under the eaves. I will not go where that sign hangs, nor will I allow any of my colleagues to do so. Now I must hurry away.” Kuritarō then seemed to faint, and at that very moment what appeared to be an old woman turned into a wisp of smoke that vanished into the air outside.

The mother then takes her son in her arms. The smallpox has miraculously vanished without a trace, and the boy is as strong as ever. His astonished parents sprinkle him with *sasayu* water (see ROTERMUND 1991, p. 264), prepare *sekihan*, and joyfully celebrate the deity’s departure.

What merits our greatest attention here is not the altar to the smallpox kami, the observing of taboos, the amulets from Yu-no-o Pass, or the presumed efficacy of the *pedra bezoar*, but rather the the sick boy’s behavior and the form in which the smallpox demon manifests itself: that of a miserable-looking old woman.³²

A passage of *Kasshi yawa* 甲子夜話 emphasizes that the smallpox kami can manifest itself in widely differing forms: a child, a young woman, or a miserable old woman.³³ The smallpox kami’s appearance is thus usually human, but some texts speak of “beings strange in form,” and in a good many illustrations it has the features of a demon.

Many accounts convey the cause and effect connection between kindness toward the deity and the acquisition of a protective formula or an amulet. *Edo chiri hiroi* 江戸塵拾 insists on the happy consequences of such an encounter: a life transformed, an improved situation, wealth and prosperity.³⁴ Thus the smallpox kami, in principle evil and

³² The smallpox god takes the same form in *Ōmisoka akebono sōshi* (1839–1854; copy in Tōkyō-toritsu Chūō Toshokan) by Santō Kyōzan 山東京山. This text, too, situates the apparition at the very end of the year or the very beginning of the New Year.

³³ *Kasshi yawa zokuhen* (1821; Kokusho Kankōkai, 1911), vol. 3, ch. 80, p. 108. *Kokon zōdan omoide sōshi* (In NZTS 3/2, pp. 463–64) relates that the deity approached a samurai’s house in the area of Sumiyoshi (Settsu) in the form of a young nobleman.

³⁴ The text speaks of the encounter between a young warrior and a “strange being” beside the sea—a scene that somewhat recalls the legendary exploits of Minamoto no Tame-tomo 源為朝. Threatened with imminent death, the smallpox demon reveals the efficacy of an amulet against the disease. At this, the warrior lowers his weapon and thanks the demon.

the carrier of a terrible disease, becomes a god of good fortune. This transformation is confirmed by the time of the kami's manifestation (the very end of the year or the very beginning of the next one), which was always a lucky period. Other elements of the popular tradition confirm this shift in the deity's nature from that of a feared demon to that of a god of good fortune.

In the following entry from *Hōsō majinai hiden shū*, the author deplores that some people should make light of the idea that the smallpox kami really exists.

From ancient times it has been the custom in our country to decorate an altar to the smallpox deity. There are sanctuaries dedicated to that deity among the *massha* 末社 of Shinto shrines throughout the land, and parents who care about their children believe that the prayers of the priests there are effective.... Whatever the custom may be in China or India, it is best in Japan to follow Japanese ways.

Medical treatises like *Tōsō tebikigusa* 痘瘡手引草 (1781, by Tachibana Nankei 橘 南谿), approach this subject with a degree of caution.³⁵ Without really pronouncing itself on whether or not the smallpox kami exists, the text urges above all better understanding on the part of the sick person's family. In that respect it coincides to a certain extent with certain criticisms expressed in *Shōni hitsuyō sodategusa* (IV/2), which moreover does not condemn the cult of the smallpox kami:

There are many who administer no medicine but simply wait for death to occur. How stupid they are! Do not people in other countries as well speak of the smallpox demon? Japanese customs particularly enjoin veneration of the kami. Therefore, when a family cares for someone stricken with smallpox, it puts up a separate altar, offers sake and other things, and so renders a cult to the smallpox kami. Since quite apart from

Years pass, and by following the demon's advice the samurai's hitherto poverty-stricken life is transformed. He becomes rich, and (the text says) his family remains so at present, in the second generation.

³⁵ "As far as worship of the kami of smallpox is concerned, customs differ from province to province. In fact, there are also provinces where this sort of worship is unknown. Where a family observes it, in conformity with local custom, everything is done with great care. Lighting a candle and keeping all impurity away is extremely good for the sick person. However, when the matter is taken too far, all sorts of strange things may happen. At times the sick person may mutter this or that, take pleasure in mock funeral rites, talk constantly of heaven and hell, show a fascination with white, or bow before the buddhas—all things connected with taboos that a sick person's family is obliged to observe. There are even cases in which these symptoms lead the family to conclude immediately that the sick person is certain to die. This is a serious misunderstanding, since the sick person's behavior, however strange, is quite harmless."

medical treatment this procedure does the sick person no harm at all, one should strive to respect the customs of one's own country.

However, the text that follows suggests that in this case the kami of smallpox—the object of a cult less recommended than tolerated—is not the demon responsible for the disease but a kami of another kind: one that offers protection against smallpox. *Shōni hitsuyō sodategusa* continues:

These days the Shinto faithful recommend worshiping Sumiyoshi daimyōjin 住吉大明神 as the kami of smallpox. Precisely this kami is to thank for the submission of the three Korean kingdoms, and since smallpox came from Silla, it is possible by venerating this kami to overcome the evil spirits that spread this epidemic.

Many Edo-period documents mention this second type of smallpox kami, who has already appeared above in connection with Sagi daimyōjin near Izumo. Sagi daimyōjin and Sumiyoshi daimyōjin also appear as protectors against smallpox in *Hōsō mamori bukuro* 疱瘡錦囊, which moreover stresses how differently the smallpox kami is conceived in China and Japan.

It is now time to return to the notebook of Noda Senkō-in, the pilgrim introduced above. A passage from it combines elements of the classic arsenal of weapons used against the demons of disease with measures no doubt prompted by a sort of empirical rationalism. Noda Senkō-in wrote on 2/4/1813:

On this island of Kabashima 樺島 [in present Nagasaki-ken] ... the people expel smallpox with bow and cannon, just as in exorcisms (*harai*) practiced against the demons of disease.... If despite the strictest measures someone, even an only child, is stricken—though this rarely happens—a third party is asked to take that person three or four leagues into the depths of the mountains and there to abandon the sufferer to fate. Moreover, the family leaves home and flees to another region.

Abandoning the sick person in the mountains, at best under a guardian's care (normally someone immunized by having already survived smallpox), and also routing travelers around a contaminated area, are empirical measures, prophylactic rather than therapeutic. They may have been inspired unconsciously by a vague intuition that the disease was contagious, although this intuition provoked no explicit statement to that effect and never touched the vitality and popularity of the magic methods already described.

Hashimoto Hakuju's Criticism of Traditional Treatments

Nonetheless, early in the nineteenth century a solitary voice spoke against these attitudes in the *Dandoku-ron*. In this work the author, the physician Hashimoto Hakuju,³⁶ clearly warned for the first time against the contagious character of smallpox and recommended measures to avoid infection through avoidance and confinement. He noted that originally smallpox was unknown in Japan, naming as proof—a very relative sort of proof—many localities still believed to be free of it.³⁷ He also observed that the disease is reputed to be “mysterious” and may be called “sacred skin eruption” (*seisō* 聖瘡) or “celestial flower skin eruption” (*tenkasō* 天花瘡): terms that to him indicate physicians’ obvious confusion and even ignorance concerning smallpox epidemics. Traditional wisdom had it that these epidemics were brought on by climactic factors or by the fatal character (*kiun* 氣運) of a given year;³⁸ and the people made sense of these epidemics by blaming them on a kami of smallpox. Hashimoto roundly criticized the ridiculous attitude of his colleagues:

Quack doctors, illiterate and ignorant as they are, have no idea what really is the poison that causes smallpox. Equipped with their mere one or two medical books they fold their hands and bow their heads while waiting impatiently for an epidemic too long in coming. Then, when the epidemic is near and about to spread, they triumphantly announce, “There now! The time has come!”

Heedless of the fact that people are dying in agony, they think of nothing but their own profit. To succumb to this disease, they say, is the will of Heaven, or the way of the world; and so they turn this horrible illness into a method for assuring their own livelihood.

A smallpox epidemic usually spreads to most provinces, but certain

³⁶ Hashimoto Hakuju was originally from the province of Kai (Yamanashi-ken) and in his youth had studied in Nagasaki, where he had come into contact with Dutch medicine.

³⁷ He cited Ontake and Akiyama (Shinano), Shirakawa (Hida), Iwamura (Mino), Hachijōjima (Izu), Tsumari (Echigo), Kumano (Kii), Iwakuni (Suō), Tsuyu no mine (Iyo), Betsue (Tosa), Ōmura and Gotō (Hizen), Amakusa (Higo).

³⁸ Naturally, Hashimoto roundly condemned this popular opinion, claiming instead that the four epidemic diseases (smallpox, measles, syphilis, and scabies) are quite distinct in nature from others that are indeed carried by miasmatic vapors (*akki* 悪気) and that are due to climate. Modern medicine no longer accepts the concept of miasmatic vapors, but it is true that certain epidemic diseases are at least distantly linked to season and climate. Examples are Japanese encephalitis, which is more common in summer, and colds, which are more frequent in winter. Hashimoto held that although it is possible to avoid the four epidemic diseases that he cites, it is almost impossible to escape those that are due to climatic influences.

regions or localities are said to be free of smallpox: this is the critical point from which Hashimoto's reasoning begins. How to explain it? The learned and enlightened Hashimoto cannot accept the idea of protection vaguely vouchsafed by the kami and buddhas; nor does he blindly believe in the efficacy of the contemporary pharmacopoeia. He also rejects as simplistic and ill-conceived any appeal to these regions' isolated geographic position, since as a matter of plain fact some are not actually isolated at all. For example, Ōmura 大村 (Hizen) and Iwakuni 岩国 (Suō), both castle towns, are open to the spread of an epidemic on all sides. Nonetheless, they are said to be free of smallpox. Why?

The simple answer, according to Hashimoto, is that the way to escape infection is carefully to avoid contact with any infected household. This is all the easier to do because smallpox comes from alien lands, having reached Japan on "foreign air currents" (*iki* 異気) from regions where the cosmic order of yin and yang is in a disturbed state. (Here, Hashimoto clearly betrays the limits of a perspicacity otherwise far in advance of the accepted medical knowledge of his time.) Smallpox, he holds, is easily avoided by not approaching those affected or breathing the odors that emanate from them.³⁹ One also must not touch their clothing, toys, food, and so on.⁴⁰ This list, at first glance surprising, is by no means haphazard. It is directly connected with certain customs then current, as well as with the very "sociology" of the disease.

On the question of who the victims of smallpox actually are, Hashimoto introduces highly revealing distinctions made according to social class, mode of life, etc. It is true that in theory anyone is vulnerable, the poor and those of "doubtful morals" (*mimochi yokaranu* 身持ちよからぬ) are nonetheless at greater risk. This last remark seems to allude above all to venereal disease, but otherwise Hashimoto's epidemiology can be summed up as follows.

- a) Some, because they live alone, can escape the threat of an epidemic by moving; but others, who serve a master, care for their parents, or have a family, unfortunately have no choice in the matter.

³⁹ In a number of places *Dandoku-ron* clearly betrays anguished preoccupation with the idea the contagion spreads through the miasmatic vapors of smallpox. He advises to rinse one's mouth with clean water or, failing that, with saliva after contact with these vapors. However, he writes, this method is not completely effective, and it is far better to detour around an infected household completely; for the mere sight of such a household is not yet sufficient to transmit the contagion.

⁴⁰ Hashimoto mentioned the case of the village of Kashidate on Hachijōjima. Dolls, pictures, and so on that had belonged to a sick child were washed up on the beach and started an outbreak of smallpox.

- b) Economic factors are even more important. The poor have a hard life, and their distress with respect to clothing, food, and shelter becomes still more acute when exposed to sickness. Moreover, the large number of child victims results in the shops being filled with used clothing that the poor have little choice but to buy and wear; and this for them means certain infection.

Nonetheless, Hashimoto holds that even the poor may escape the disease by, for example, forbidding their children to visit other families and avoiding contact with anything belonging to an infected family.

In the case of those who serve a master, Hashimoto reveals an interesting sort of social discrimination.

Those who have a master must first consult him in order to determine whether they may or may not take measures to escape smallpox. They may do so if the master agrees, but such action would be wrong if it goes against their master's will. Their duty is to sacrifice their life for their master, and for them to value their own life over their master's wishes would violate the proper order of things.

There in a nutshell is the whole spirit of a feudal society, illustrated by the case of smallpox.

Being convinced that it is easy to escape smallpox, Hashimoto deplores the attitude taken toward the disease by his contemporaries. He criticizes above all those who, in order to avoid a misfortune that comes only once in a lifetime, hasten to catch it as soon as possible by approaching someone only lightly affected.⁴¹ Parents would take their children to such a house for that purpose. Hashimoto writes, "This is more dangerous than bringing them into contact with live coals." Not to do everything in one's power to escape infection but instead to seek it voluntarily, all the while praying to the kami and taking medicines is an idea for Hashimoto as foolish as drinking sake and then praying to the kami not to get drunk.

With the zeal of the crusading physician seeking to spread his ideas on the prevention of disease, Hashimoto thus attacks a naively contradictory attitude toward the danger that smallpox represents. His argument, presented with verve and sometimes with irony, recalls Voltaire who, some seventy-five years earlier, had expressed himself as follows.

⁴¹ It is possible for both light and serious cases of smallpox to occur within the same family: a fact sufficient to discredit the idea that one will have only a light case of smallpox if they get it from someone who is only lightly affected.

In Christian Europe people say quietly that the British are madmen and lunatics: madmen because they give their children smallpox in order to keep them from getting it, and lunatics because they cheerfully give their children a certain and hideous disease for the purpose of preventing an uncertain misfortune. The British, for their part, say: "The other Europeans are depraved and cowards: cowards because they are afraid of causing their children a little discomfort, and depraved because they leave them vulnerable to dying one day of smallpox."
(VOLTAIRE 1964, p. 48)

Popular imagination attributed smallpox to an ambiguous kami of the disease, but Hashimoto sees in this idea nothing but nonsense and error. If it were really true, he writes, that smallpox is due to the baneful designs of a smallpox kami, that kami would obviously be an evil demon to be expelled immediately, certainly not one worthy of any cult. And if worshiping this kami insured only a benign case, then should one not do the same in the case of other epidemic diseases, which are also life-threatening? Should one not pray to the kami of measles, since this disease claims as many victims as smallpox?⁴² There are certainly analogies between the therapeutic and prophylactic measures employed against both diseases, and many magico-therapeutic images address both. The Japanese language even treats them similarly, since an ancient term for measles is *aka-mogasa*, "red smallpox."⁴³

The resemblance between smallpox and measles seems not to be confined to their epidemic character or to their tragic human consequences. As a well-known proverb had it, "Smallpox decides looks, measles decides life or death" (*Hōsō mime sadame, hashika inochi sadame*). A girl "loved" by the smallpox kami has fewer chances of marriage, as this satirical *senryū* makes crudely plain:

In the embrace
of the smallpox kami
the girl is devalued. (YDZ 30/30, OKADA 1976)

⁴² A kami of measles appears in many pictures, but there is no trace of a cult rendered to this kami, as one was rendered to the kami of smallpox. This discrepancy may be connected to the frequency of epidemics of the two diseases. Between the eighth century (the first written reference to smallpox is dated 735) and the Meiji period there were about 100 epidemics. At first these occurred roughly every thirty years. Later on, however, they became more frequent, occurring every six or seven years and then, in the end, almost annually (NAKAJIMA 1982, pp. 76-77). In contrast, measles broke out roughly every twenty years—according to Hashimoto, a period long enough that fear of the disease could be largely forgotten.

⁴³ To be more precise, the first references to these epidemic diseases confuse the two, so that these epidemics are now difficult to attribute with certainty to one or the other. The frank assimilation of measles to "red smallpox" seems to date from the Edo period.

Another verse gives advice on how to avoid this danger:

When smallpox is rampant
the best thing to do:
find your girl a husband. (YDZ 3/34)

In other words, marry her off while the epidemic rages, because afterwards it may be too late; a pockmarked face might repel every suitor. And if such a girl does marry, she has no right to be jealous of her husband's infidelities:

A wife's jealousy
when her face is gravely pockmarked
can be simply ignored. (YAMAMOTO 1972, p. 66)

Senryū never tire of mocking these unfortunate victims. Some suggest that marrying off such a daughter requires a greater dowry.

Those potato fields:
his daughter with the pockmarked face
takes them for her dowry. (YAMAMOTO 1972, p. 138)

* * *

To get him to marry
a girl with a pockmarked face,
figure the right price. (URAKAMI 1980, p. 16)

* * *

Two hundred *ryō* in dowry:
buy yourself a pockmarked wife,
live high all your life. (URAKAMI 1980, p. 15)

* * *

A hundred *ryō* in dowry
are soon gone, but you keep
the pockmarked face. (ŌKUMA 1967 vol. 2, p. 486)

This emphasis on looks lasted until the Meiji period, when smallpox vaccination began. Then *senryū* insisted on vaccination before marriage.⁴⁴

But to return to Hashimoto, who could not help criticizing the errors of popular custom. It might make sense, he writes, to treat the smallpox kami like those of other diseases, but some villages refuse to allow itinerant sellers of sweets to enter them, because such merchants arrive playing the flute, and the sound of a musical instrument might cause the smallpox kami to leave. If it did, Hashimoto objects,

⁴⁴ "Vaccination should be done while baby still drools"; or "The go-between insists on having proof of vaccination." (YAMAMOTO 1972, pp. 138, 139)

should they not attract as many of these merchants as possible?

Nevertheless, the misguided populace busies itself with an elaborate cult of which Hashimoto provides the following picturesque account.

In my native province of Kai, the kami of smallpox is venerated lately in a more and more sumptuous manner. On the evening of the sixth day [of the disease] the family invites not only close relatives but also a large number of other people, together with monks, Shinto priests, or [*yamabushi*] exorcists, as it prefers. The family also prepares an altar (*kamidana*) decorated with countless red or white paper streamers.... Gifts, brought by eagerly competing relatives and friends, are set out all around the bed of the sick person: many-colored *nishiki-e* pictures of the kind so popular these days, dry cakes, *mochi*, sake, or cloth and clothing, etc. The quantity of items displayed heightens the family's reputation.

On the twelfth day, called the "raising of the altar" (*tana-age*) the family entertains the visitors again. The altar to the smallpox kami is placed as an offering on the roof of the house, and cooked glutinous rice (*kowa-meshi*) is distributed to every family without exception.

This account elicits two remarks from Hashimoto. First, the preparation of the altar, the exchange of gifts, and the rivalry between families to decorate their houses as beautifully as possible all entail enormous expense. The costs often far exceeds the means of the family affected and may force it to seek a loan that then threatens its ability to pay its taxes. Second, this financial loss might in a sense be worthwhile if only such a degree of veneration of the smallpox kami insured a light case of the disease. However, what happens is the reverse. The increased contact between all these families' children results in wider transmission of the disease, which then strikes a larger number of people and spreads at an accelerating rate. The first step to take in order to stop it is to delay this circulation of gifts and foodstuffs until the sick person has completely recovered. Anyone who receives such gifts should throw them into the water. It is wrong for an infected family to send gifts, for "the recipient will be infected in turn, and if that person dies, the act of giving will have amounted to an act of murder."

However, Hashimoto recognizes that a long process of education would be needed to have this advice accepted. It would have to begin within families themselves and with their children. As soon as children reach their third year and begin to understand language, they should be told repeatedly that smallpox is a terrible disease that can cause

death or at least blindness and other deformities. Hashimoto continues, "They should also be told never to eat cakes and sweets during an epidemic, because the smallpox poison clings to such things. This prohibition would help not only to prevent smallpox but to keep them from eating too much, which could not possibly do them any harm."

Hashimoto also recommends that all of a child's lessons (reading, writing, and so on) should be suspended when an epidemic strikes, lest the child come into contact with infected children. After all, he writes, it is better to take such precautions during an epidemic than to have the child miss his lessons because he is ill.

He observes also that the regions said to be free of smallpox show how to escape infection without recourse to kami or buddhas, or to medicine of any kind. Two simple measures suffice: never pass through an infected region, and keep all infected people out. In a similar vein, he gives a last piece of advice that no one could dismiss even now: avoid crowds during the height of an epidemic. Places to be avoided include festival venues, the theater, or anywhere else frequented by a large number of people, especially public baths, where one might come into contact with "many scabby individuals." Despite Hashimoto's recommendation of avoidance and confinement, magical practices predominated in the late Tokugawa period.⁴⁵

Vaccination Against Smallpox

Vaccination against smallpox was introduced into Japan in 1849, following its discovery a half century earlier by the British physician Jenner, but its use no doubt spread only slowly to the most distant provinces and to the islands south of Japan. The year 1849 is that of the first successful vaccinations, but there had been earlier attempts that failed. Fujikawa Yū, a specialist in the history of medicine in Japan, reports that the first were made in Nagasaki by Dutch physicians, twenty years after Jenner's discovery, but that the Japanese authorities condemned and forbade a practice that they considered "magic"⁴⁶ (FUJIKAWA 1981, vol. 4, p. 147). Something similar happened in France, when vaccination was forbidden by the Parliament in 1763. Voltaire wrote sarcastically:

Gentlemen, since vaccination succeeds in all the neighboring nations that have tried it, and since it has saved the lives of

⁴⁵ Similar measures were taken against leprosy and plagues in medieval Europe (RUFFIÉ and SOURNIA 1984, p. 258).

⁴⁶ Elsewhere, in 1812 a member of an advance guard post on Etorofu, captured by the Russians, apparently published a book on vaccination. However, the influence of his work did not go beyond northern Japan (see SHIBUYA 1977, p. 83).

rational foreigners, you will justly proscribe it, considering that no such practice is registered here; and to that end you will follow the decision of the Sorbonne, which will tell you that Saint Augustine knew nothing of vaccination.

(VOLTAIRE 1964, p. 219)

At any rate the Japanese apparently felt a certain resistance to smallpox vaccination, one suggested by a belief, said to be current in northern Japan, that anyone vaccinated according to the Jenner method would turn into a cow (SHIBUYA 1977, p. 85).

A publicity campaign was therefore required to overcome the population's deep-rooted suspicion. Its point of departure had to be an attack on traditional concepts of the etiology of the disease, and especially on belief in the kami of smallpox. In the years following the first successful vaccination, which resulted in a harmless infection, many tracts appeared to praise the benefits of this new method. One, published in 1850, contains this poem:

Hōsōgami?
 Kami of smallpox?
 Who gives that name
 to an outlaw demon
 that brings misfortune to all?

The tract then reviews the forms of inoculation known in China, especially inoculation via the nose. It goes on to approve "the most recent method," inoculation with a vaccine taken from a cow. This method "was first tried during the Bunka period (1804-1818), in Holland, by a certain Eto Jenner" (text published by Kyūkyōdō, Kyoto).

Another such document has been preserved by the Kawada family of Hirakawa, whose ancestors were vaccinators employed by the Meiji government. The document says:

Smallpox afflicted Japan as early as Tenpyō 8 [736]. Thereafter, two or three children born at the time succumbed to this disease, and two or three more remained disfigured by it. Under these circumstances, all sorts of practices were tried in both China and Holland, but without success.

During the Kansei period [1789-1800], a method using vaccine was developed in Holland, and it was introduced to Japan four or five years ago. My master has employed it since 1850. None of the 15,000 people treated has suffered any ill effects.... Those who wish to know more should consult the book published by my master's family: *A Treatise on Vaccination*.

(KAWADA 1855)

A print dated Kaei 4 (1851) is entitled “Advice to undergo vaccination, addressed to those who believe in the kami and buddhas” (*Shinbutsu shinkō no hitobito e uebōsō susumegusa*). This document skillfully links the miraculous efficacy of vaccination to faith in the kami, thus rendering it more acceptable, and plays down the scientific side of the matter, which in any case was little known to the public at large. Is this a publicity ploy? Such an appeal to the kami reappears in another print dated Kaei 5 (1852): “A discourse in favor of vaccination, addressed to devotees of the Tenmangū shrine” (*Ushibōsō Segyō no Ben*, 1852).

Vaccination had therefore begun to conquer the disease by the mid-nineteenth century, but it was only under the Meiji government that a decree made it general and established a vaccination service. Vaccination then had to be recorded in the family register, and anyone who refused to be vaccinated was fined (YAMAMOTO 1972, p. 66). A newborn baby had to be vaccinated between 75 and 100 days after birth, with two booster vaccinations at seven-year intervals.

In order to achieve compliance with the law, the government relied on publicity that skillfully merged new medical treatments with traditional beliefs. A representative example of this sort of publicity tract shows a child holding a lance and seated on a cow (the source of the vaccine).⁴⁷ The child is chasing away a figure that has the appearance of a demon. The lance undoubtedly symbolizes the syringe that finished off the demonic kami of smallpox, thus eliminating a millennial plague that had once afflicted Japan among many other countries.

ABBREVIATIONS

- NMG *Nihon minzokugaku* 日本民俗学, Nihon Minzoku Gakkai.
 NSSS *Nihon shomin seikatsu shiryō shūsei* 日本庶民生活史料集成, eds. Harada Tomohiko, et al. Tokyo: San'ichi Shobō, 1968–1984.
 NZTS *Nihon zuihitsu taisei* 日本随筆大成, eds. Sekine Masanao, et al. Tokyo: Yoshikawa Kōbunkan, 1973–.

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⁴⁷ The text says, “A Dutch child, immunized by vaccination.” On other pictures of the same type the child displays the characteristic marks of a successful vaccination: red dots on the arms.

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