

## **Domesticated animals in Japan. Alan Macfarlane**

One fact that immediately strikes us is the curious absence of animals in Japan. It was Isabella Bird, coming from animal-rich Britain in the later nineteenth century who most graphically described the absence of domesticated animals. She was struck by the silence and emptiness of the countryside. 'As animals are not used for milk, draught, or food, and there are no pasture lands, both the country and the farm-yards have a singular silence and an inanimate look.'<sup>1</sup> She missed the sounds: '...a mean looking dog and a few fowls being the only representatives of domestic animal life. I long for the lowing of cattle and the bleating of sheep.'<sup>2</sup> There were also very few horses: 'there is little traffic, and very few horses are kept, one, two, or three constituting the live stock of a large village.'<sup>3</sup> Horses were not used for ploughing, nor, even, were they used for carrying. 'Very few horses are kept here. Cows and coolies carry much of the merchandise, and women as well as men carry heavy loads.'<sup>4</sup> So rare were domestic animals even in the later nineteenth century, that they were exhibited like exotic species: '...monkey theatres and dog theatres, two mangy sheep and a lean pig attracting wondering crowds, for neither of these animals is known in this region of Japan.'<sup>5</sup>

Griffis also noted that 'In Japan, sheep and tame geese are unknown, except from reading of them.'<sup>6</sup> The mention of geese illustrates the relative absence of even domestic fowl. 'In riding through the country one soon notices the absence of flocks of hens. A single hen and cock roam together, though they are usually confined under an inverted wicker basket.'<sup>7</sup> Given all this, it is not surprising that there were no butcher's shops. 'A meat shop was a great novelty a few years ago, and even now only a few are seen in the larger cities.'<sup>8</sup> 'Vegetable and fish shops are plentiful, but there is neither butcher nor

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<sup>1</sup> Bird, *Tracks*, p.49

<sup>2</sup> Bird, *Tracks*, p.49

<sup>3</sup> *ibid*, p.128

<sup>4</sup> Bird, *Tracks*, p.131

<sup>5</sup> Griffis, *Mikado*, p.449

<sup>6</sup> Griffis, *Mikado*, p.449

<sup>7</sup> Morse, *i*, p.53

<sup>8</sup> Morse, *i*, p.128

baker.<sup>9</sup> The general situation by the later part of the nineteenth century was summarized by Chamberlain. 'Till recently the Japanese had neither manufactures nor foreign commerce, neither have they yet any flocks of sheep and goats, and droves of geese, turkeys or pigs. Even cattle are comparatively scarce, and neither their flesh nor their milk is in general use, beef being still regarded as a luxury, and milk rather as a medicine than a food. The pasture meadow and the farmyard are alike lacking.'<sup>10</sup>

The situation two centuries may have been somewhat different for there are also suggestions of a more extensive use of animals. In XXX, XXX had noted that pigs, goats and even cows could be purchased cheaply.<sup>11</sup> Kaempfer's account shows that knowledge of the animals was not lacking. Of pigs, he wrote 'They have but few Swine, which were brought over from China, and are bred by the Country people in Fisen, not indeed for their own Use, which would be contrary to their superstitious Notions, but to sell them to the Chinese, who come over for trade every year and are great admirers of Pork, tho' otherwise the doctrine of Pythagoras, about the transmigration of Souls, hath found place likewise in China.'<sup>12</sup> Or again 'Sheep and Goats were kept formerly by the Dutch and Portuguese at Firando, where the kind still subsists. They might be bred in the Country to Great advantage, if the natives were permitted to eat the flesh, or knew how to manage and manufacture the Wool.'<sup>13</sup> There were some horses, but not a great number. 'There are Horses in the Country; They are indeed little in the main, but some of them not inferior in shape, swiftness and dexterity to the Persian Breed. They serve for state, for riding, for carriage and ploughing.'<sup>14</sup> 'Oxen and Cows serve only for ploughing and carriage. Of milk and butter they know nothing.'<sup>15</sup> Thus in the most pastoral area of the mountains 'we saw no cattle grazing any where all day long, excepting a few cows and horses for carriage and plowing.'<sup>16</sup> 'They have

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<sup>9</sup> Griffis, Mikado, p.357

<sup>10</sup> Chamberlain, Things, p.19

<sup>11</sup>Purchas, Pilgrims, 147

<sup>12</sup> Kaempfer, History, i, p.196

<sup>13</sup> Kaempfer, History, 1, p.195-6

<sup>14</sup> Kaempfer, History, 1, p.194

<sup>15</sup> Kaempfer, History, 1, p.194-5

<sup>16</sup> Kaempfer, History, 1, p.376

a sort of large Buffles, of a monstrous size, with hunches on the back, like Camels, which serve for carriage and transport for goods only, in large Cities.<sup>17</sup> Even chickens were of little use. 'Of tame Fowl they keep Chickens and sometimes Ducks, but being as I took notice above, imbued with the superstitious notions of Pythagoras, the generality will not eat them, and they are kill'd and sold to such as do venture to eat them, only by Persons of a mean extraction.'<sup>18</sup> Their main value was as a primitive clock. 'The Cocks oftner find pardon than Hens, and are kept alive with great care, because they are held in great esteem, chiefly among the religious Orders, by reason of their measuring the time, and foretelling future changes of the weather.'<sup>19</sup> A century later, Thunberg noted that **Sheep** and **Goats** are not to be found in the whole country; the latter do much mischief to a cultivated land; and wool may easily be dispensed with here, where cotton and silk abound.<sup>20</sup>

There are a number of possible explanations for the marked absence of large numbers of domestic animals. The ecological arguments would stem from the nature of the volcanic soil of Japan. Japan lacked the possibility of pastoralism except in certain areas in the west and north. This argument is then supported by a second, namely that given the small area of cultivable land people could not afford to keep animals which would compete with grain production. The opportunity cost of giving up precious land to livestock was too high. It was necessary to use every piece of fertile ground to produce the basic grains on a very densely settled strip.

Many people have observed that raising animals is an expensive option - for instance, to feed grains to chickens may produce meat and eggs but many people in the world cannot afford the grain. The fairly desperate struggle to grow enough rice and other foodstuffs may have made animals a luxury the Japanese could not afford. Indeed, as population built up in the seventeenth century, the cereal rather than animal husbandry option may have become increasingly attractive. Thunberg at the end of the eighteenth century had noted the absence of pasturage and animals. 'Meadows are not to be met with in the whole country; on the contrary, every spot of ground is made use of either for corn-fields, or else for plantations of esculent rooted vegetables.'<sup>21</sup> He implied that it was the low number of grazing animals that led to the absence of pastorage. 'They have few Quadrupeds; for which reason there is no occasion

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<sup>17</sup> Kaempfer, *History*, 1, p.195

<sup>18</sup> Kaempfer, *History*, 1, p.204

<sup>19</sup> Kaempfer, *History*, 1, p.204

<sup>20</sup>Thunberg, *Travels*, iv, 95

<sup>21</sup>Thunberg, *Travels*, iv, 81

to lay out the land in extensive meadows.<sup>22</sup> The pressures against keeping livestock were again noted in the later nineteenth century by Alcock. 'Meadows are not to be met with in the whole country; on the contrary, every spot of ground is made use of either for corn-fields or else for plantations of esculent-rooted vegetables: so that the land is neither wasted upon extensive meadows for the support of cattle and saddle horse, nor upon large and unprofitable plantations of tobacco (they grow tobacco, nevertheless).<sup>23</sup> As the agronomist King pointed out when he visited Japan in the early twentieth century, 'By devoting the soil to growing vegetation which man can directly digest they have saved 60 pounds per 100 of absolute waste by the animal...'<sup>24</sup> He calculated that '1,000 bushels of grain has at least five times as much food value and will support five times as many people as will the meat or milk that can be made from it.'<sup>25</sup> The agricultural area of Japan, on this reckoning, could only have supported six million, if it had been based on pastoral agriculture rather than the thirty million actual inhabitants in 1800.

A similar theory was put forward by several anthropologists in the 1950s who described how 'Land shortage accounts particularly for the rarity of grazing animals. On arable land, crops grown for direct human consumption are much more efficient than natural vegetation or fodder crops for grazing animals.' There is not enough waste or spare grazing for larger animals.<sup>26</sup> This view is supported by the agricultural economist Boserup, who points out that 'Draft animals fed on produced fodder are not an efficient source of energy supply. The mechanical energy supplied by them is probably only some 3-5 per cent of the energy contained in the fodder they consume.'<sup>27</sup>

While all this is undoubtedly a powerful factor, there is clearly also a cultural or religious dimension; the dislike of animal products, whether meat, eggs or milk as food-stuffs which Kaempfer had alluded to as 'the notions of Pythagoras.' There is a mixture of ritual prohibition and a feeling of disgust which alone can explain why, even when chickens or cows were kept, they were not eaten by ordinary Japanese. This was an aversion that lasted into the middle of the twentieth century. For instance, an anthropologist

<sup>22</sup>Thunberg, *Travels*, iv, 94

<sup>23</sup> Alcock, *Tycoon*, 1, p.69,201

<sup>24</sup> King, *Farmers*, p.135

<sup>25</sup> King, *Farmers*, p.135

<sup>26</sup> Beardsley, *Village*, p.177

<sup>27</sup>Boserup, *Technology*, 49

describes how 'Horses and cows are kept, but they are used only as beasts of burden. The animals are backed into their stables, where they spend all their time when not working. Milk is considered dirty and is only drunk on doctor's prescription.'<sup>28</sup>

There is evidence that some Japanese interpreted the Buddhist scriptures as putting a ban on consuming the products of four-footed creatures. Hence meat and milk would be banned. That Buddhism in Thailand, China or much of south-east Asia has not lessened the consumption of sheep, goats and other animals suggests that this can only be a partial explanation, but it does not make it an invalid one. There is obviously something more, however, which concerns the classification of what is 'good to eat'. Many were genuinely disgusted at the thought of eating meat or drinking milk, it was not merely a matter of religious prescription. This takes us into areas of animal classification and taboo which has been fruitfully explored by anthropologists (e.g. Douglas, Sahlins, Tambiah) but which cannot be elaborated here.

Of course, Japan is not quite the most extreme case of the avoidance of animals, and it may also have other roots, as Mokyr suggests. He notes that large domesticated animals 'were entirely lacking in pre-Columbian America and Africa, and scarce in most parts of Asia. This scarcity may have had deep historical roots: African and East Asian adults suffer from lactase deficiency and cannot digest large quantities of fresh milk (although they can digest milk in the form of cheese or butter).'<sup>29</sup> Crosby has likewise noted the contrast between the Old World of Eur-Asia, with numerous animals, and the New World with few. He commented that Old Europeans 'had as allies their livestock, which, somewhat like benign cousins in an extended family, provided the means for staying alive when the labour and luck of the nuclear family did not suffice...'<sup>30</sup> We shall consider this a little further under the question of nutrition. Whatever the reason, it is clear that, while knowing about most useful animals from at least the sixteenth century, the Japanese kept few domestic animals. This affected every branch of their life and is a central factor in trying to understand the patterns of disease on the island. If it is the case that the number of domestic animals declined quite significantly over time in Japan, particularly from the fifteenth century onwards, this may have had a significant effect. The association of such a likely decline were set out by Doubleday in 1847. He noted that 'as the food of a people degenerates from a preponderance of animal nutriment to a vegetable diet, in that ratio the population increases and thickens...'<sup>31</sup> Whether increasing population is the cause or effect is, of course, a moot point.

<sup>28</sup> Embree, *Suya Mura*, p.31

<sup>29</sup> Mokyr, *Lever*, p.161

<sup>30</sup> Crosby, *Ecological*, pp.19,24).

<sup>31</sup> Doubleday, *Law of Population*, 123.