

DIRT AND DEVELOPMENT.

A theme which has constantly emerged from consideration of the English and particularly the Japanese case is that of dirt and its converse cleanliness. Much of the progress in battling with disease before the later nineteenth century came as a result of customs and beliefs which were principally concerned with other things - status, decency, order, power, security and so on. These affected the clothing, housing, washing, toilet behaviour, eating, drinking habits which we have investigated. Yet again and again we come back to the question of dirt and cleanliness. In this respect there is clearly something unusual about England and Japan. I will try to grapple with this a little here.

Dirt and cleanliness are largely socially constructed. One person's dirt is another's cleanliness. This is nicely illustrated by the story of the Indians who presented to some early missionaries a ball of human excrement - snot. When the recipient expostulated, the Indians explained that while they themselves saw this as dirty, they had noticed that the westerners regarded it as very precious, taking out valuable cloths each time they needed to get rid of the stuff and carefully depositing the snot in it - presumably to use or worship at some later time (source xxx). This example also illustrates one of the major characteristic definitions of dirt, as analysed by Mary Douglas, that it is 'matter out of place.' It is material which is either on a conceptual boundary - as with matter such as excrement, half human or non-human - or matter which has crossed into the wrong category. Dirt is the product of a classification system which categorizes certain things as 'clean', others as 'dirty'.

Thus the first thing is to recognize dirt. Dirt is contextual and become invisible. Often 'dirt' that would not be tolerated in one setting, for instance in the home, or on land, is acceptable if thrown into the street or a convenient ocean. The second thing is the difficulty of doing something about dirt when one sees it, for eradicating dirt requires effort. There is no such thing as a cost-free clean environment. These two aspects are separate. An explanation of why certain things are considered dirty and more generally as to why there is an apparent obsession or lack of interest in boundaries, or the reverse, will take us into matters of religion, cosmology, taboo and classification. An answer to the question of how dirt can be eliminated, and how much remains, takes us into practical matters of wealth, water supplies, industriousness and so on.

Let us start by re-stating the problem. In the middle of the eighteenth century, the Scottish judge and philosopher Kames believed that the desire for personal cleanliness might well be an universal trait. What suggested this was that 'cleanness is remarkable in several nations which have made little progress in the arts of life. The savages of the Caribbee islands, once a numerous tribe, were remarked by writers as neat and cleanly.'¹ Or again, 'The Negroes, particularly those of Ardrah on the slave-coast, have a scrupulous regard to cleanness. They wash morning and evening, and perfume themselves with aromatic herbs. In the city of Benin, women are employed to keep the streets clean; and in that respect they are

¹ Kames, *Sketches*, i, p.242

not outdone by the Dutch.'² He concluded that 'cleanness is agreeable to all, and nastiness disagreeable: no person prefers dirt; and even those who are the most accustomed to it are pleased with a cleanly appearance in others.'³ On the other hand, both Kames and Westermarck noted that while all men may be born with a biological instinct towards cleanliness, not all societies are as 'clean', at least by western standards, as others. 'A taste for cleanness is not equally distributed among all men; nor, indeed is any branch of the moral sense equally distributed: and if, by nature, one person be more cleanly than another, a whole nation may be so.' Westermarck put it slightly differently. 'We commonly find that savages who are clean in certain respects are dirty in others.'⁴ He gave examples of people who fastidiously kept their bodies clean, but wore filthy clothes and so on. There were also 'very many uncivilized people who are described as generally filthy in their habits...'⁵ Thus dirt and cleanliness were very variable.

The curiosity which aroused Kames' attention was that in the eighteenth century, the three 'cleanest' societies, that is the ones which had the highest reputations for bodily and other cleanliness, were also the three most 'advanced' economies, namely Holland, England and Japan. The cleanest of all larger nations, he thought, were the Japanese, 'so finically clean as to find fault even with the Dutch for dirtiness.' This great cleanness 'I judged to be also the case of the English, who, high and low, rich and poor, are remarkable for cleanness all the world over...'(xxx) At first he toyed with the idea that the similarity between Japan and England might have something to do with being islands. 'I have often amused myself with so singular a resemblance between islanders, removed at the greatest distance from each other.' After further research he was forced to abandon the theory, upon a discovery that 'the English have not always been so clean as at present' which seemed to be shown by certain earlier disparaging comments by Erasmus and others. Of course, if he had proceeded even further, he would have found plenty of islanders who were less spic and span, and many continental dwellers who were scrupulously clean. Yet there still remains a puzzle, as he noted. What correlation, if any, if there between the elimination of dirt and economic and other material development? This takes us to the complex interplay between dirt and its causes and effects over time.

Having illuminated the **nature** of purity and dirt, and its intimate links to religious ideas, Mary Douglas' work unfortunately takes us little of the way into explaining **why** different societies are more or less obsessed with dirt, and why their treatment of what is considered dirty changes over time.(REF) She has one major theory, which links dirt to the nature of social integration, which we shall consider later.

² Kames, Sketches, i, p.243

³ Kames, Sketches, i, p.243

⁴ Westermarck, Moral, ii, p.348

⁵ Idem

Let us start with the list of possible factors put forward and discussed by Westermarck. 'The prevalence of cleanly or dirty habits among a certain people may depend on a variety of circumstances: the occupations of life, sufficiency or want of water, climatic conditions, industry or laziness, wealth or poverty, religious or superstitious beliefs.'⁶

In terms of 'the occupations of life', Westermarck merely suggests that 'Castren observes that filthiness is a characteristic of fishing peoples ' and gives one example.⁷ It would be difficult to take this observation much further in relation to England and Japan, except to say that Kames might have argued that town-dwelling, merchant and artisan types of people, which describes the English, Dutch and Japanese world of the eighteenth century, tend to be conspicuously clean. Amsterdam, London, Osaka, were prototypes of a very 'clean' sort of civilization and there may be some association between the rationality of business and the rationality of living which Weber might have discerned. Since the reasons for a high state of 'cleanliness' are likely to be multiple, and will re-enforce each other, we may merely note here that the occupational structure of Japan, England and Holland may be **one** of the factors we need to take into account.

The second factor mentioned by Westermarck is the availability of the main agent that humans use to rid themselves of 'matter out of place', in other words water. Westermarck was able to cite a number of instances where the presence or absence of water made all the difference to standards of cleanliness. Here again, all else being equal, Japan was one of the most water-filled environments in the world, much of it temptingly hot, and the famous or infamous English climate and ubiquity of rivers, put them not far behind, in the same league as the almost amphibious Dutch. Both at the general level, and at the particular, for instance as we have seen in the effect of pumping water through London, these three cultures with an ample water supply for most inhabitants had, at the least, less excuse than most for being dirty.

Westermarck's next factor was climate, although all he says on the subject is that 'a cold climate, moreover, leads to uncleanliness because it makes garments necessary.'⁸ There is little to be said about this beyond what we have noted in relation to Japan, namely the fact that few clothes could be worn for most of the year did probably improve bodily cleanliness. The well-dressed Dutch and English may have been impeded by their clothing, but managed to maintain a reasonable standard of cleanliness despite this.

The next factor is 'industry or laziness'. Here Westermarck explicitly referred to Kames' ideas and

⁶ Westermarck, *Morals*, ii, p.349

⁷ *ibid*

⁸ Westermarck, *ii*, p.350

gives examples of peoples who 'from their laziness' are 'as dirty as swine'. Since Kames' argument is somewhat deeper than sheer laziness, it is worth summarizing his views, which could be seen in some ways as a foreshadowing of parts of Weber's thesis on the Protestant ethic.

Having abandoned the theory of the link between islandhood **per se** and cleanliness, Kames still retained the looser link between growing prosperity and cleanliness. He could see how clean the English were, and believed this to be a recent development. 'A change so extraordinary in the taste and manners of the English, rouses our curiosity.'⁹ He thought it was caused by some link with industriousness. Indolence breeds dirt, while 'The industrious, on the contrary, are improved in neatness and propriety, by the art or manufacture that constantly employs them: they are never reduced to purge the stable of Augeas; for being prone to action, they suffer not dirt to rest unmolested. Industrious nations accordingly, all the world over are the most cleanly.'¹⁰ His main example was Holland. 'Arts and industry had long flourished in Holland, where Erasmus was born and educated: the people were clean above all their neighbours, because they were industrious above all their neighbours; and, upon that account, the dirtiness of England could not fail to strike a Hollander.'¹¹ Later the English became more industrious and cleaner.

The comparison between France and England created something of a problem, for 'the French are less cleanly than the English, though not less industrious.' He thought this could be explained by the distribution of wealth, for 'the lower classes of people being in England more at their ease than in France, have a greater taste for living well, and in particular for keeping themselves clean.' 'Thus cleanness improves gradually with manners, and makes a figure in every industrious nation.'¹²

The idea that if people were busily moving matter from place to place in one aspect of their lives, making and producing, exchanging and behaving in an active way, this would spread into all of their behaviour is an intriguing one. 'The more you do, the more you do', is a generally observed phenomenon. If dirt containment is largely concerned with keeping matter in its right place, it is very similar to commercial activities. It all comes down to the shifting of atoms to places where they can create useful things for humans, away from places where they can do harm. Both are about creating separations, divisions, new order out of disorder. Some sort of 'elective affinity' between industriousness and cleanliness was noted by William Hazlitt; 'a people that are remarkable for cleanliness, will be so for

⁹ *ibid*

¹⁰ *ibid*

¹¹ *idem*

¹² *ibid*, i, p.244

industry, for honesty, for avarice, and **vice versa**.¹³ The same association had a little earlier been noted by a visitor. Writing of London, he was impressed in London by '...the extraordinary neatness of the dwellings, both within and without, by the exertions in point of commerce, and the universal industry which gives animation and spirit to every quarter of the town...' (Meister)¹⁴ As we shall see, a religion which encourages orderliness of life will usually apply not merely to spiritual but also physical cleanliness.

In this respect, Holland, England and Japan were notably 'industrious'. Yet, as Kames noticed, sheer hard work is not a sufficient cause. In many societies ordinary people work incredibly hard, are very 'industrious', and yet live, or are forced to live, in a great deal of dirt. Kames added the dimension of wealth to his model; in England, but not France, the poor had some wealth and hence pride. This takes us on to Westermarck's next factor, namely that 'Poverty, also, is for obvious reasons a cause of uncleanness.'¹⁵ In this respect, as we have noted, it is significant that the English and the Dutch had the most widely spread 'wealth' in seventeenth century Europe and Japan, though the wealth was at a lower level, was their nearest equivalent in Asia. Put in another way, getting rid of dirt takes time, effort and often depends on a considerable infrastructure. In particular in crowded societies, it is difficult to keep up high standards if one is living on a knife edge of subsistence. The fact that these three nations had risen well above this level was both a cause, and a consequence, of their increasing wealth.

Westermarck also realized that the pressure to cleanliness was largely a social one and hence closely linked to social stratification. 'Very commonly cleanliness is a class distinction.'¹⁶ This is a complicated matter, but it does seem that in societies with a relatively 'open', but quite stratified social system, such as that which characterized England and Japan, degrees of cleanliness, like many other markers, became important in assessing relative position. To have a 'clean' home, became as important as having a 'clean' accent or 'clean' criminal record. This is illustrated by an early twentieth century textbook on hygiene. 'Unconsciously, from childhood upwards we have come to make a rapid general estimate of the social status and of the mental state of individuals by noting their appearance in the matter of personal cleanliness, under which heading that of order and disorder may well be included.'¹⁷ The socially aspiring kept themselves and their houses clean. The noted obsession with etiquette and

¹³quoted in Thomas, *Cleanliness*, 80

¹⁴Wilson (ed), *Strange Island*, 139

¹⁵ Westermarck, *Morals*, ii, p.352

¹⁶ *ibid*

¹⁷ Lane-Claypon, *Hygiene*, p.73

manners among the middling ranks of Japanese and English society for many centuries encompassed the 'proper' behaviour in terms of the body, gesture, posture and so on. The controls which Foucault, Elias and others have analysed were largely status-based. (REF) It is not inevitable that dirt and cleanliness will become a central marker of status. One could no doubt find cases where it was the opposite - the wealthier one was, the dirtier one was expected to be. There is thus still a puzzle. The point here is that if a scale of physical purity **is** established, it will lead to ceaseless striving after increased cleanliness.

The relation between social status divisions and cleanliness has been stressed by a number of those who have recently written on the reasons for growing interest in cleanliness in England. Keith Thomas points out that 'Cleanliness was an important social marker, distinguishing the elite from their inferiors.'¹⁸ He writes that 'cleanliness was a form of social distinction by which people staked out a claim to respect and preferential treatment. It was an attribute of higher social status.'¹⁹ This was a tendency which was marked in the eighteenth century. For example 'Lord Chesterfield's letters to his son in the mid-eighteenth century, which stressed that a particular attention to cleanliness was "but common decency, in order not to offend people's eyes and noses". "In your person you must be accurately clean; and your teeth, hands, and nails should be superlatively so".'²⁰ It is furthermore argued that the association of gentility and cleanliness grew even stronger in the nineteenth century. 'The cleanliness that was always part of gentility was thus receiving renewed emphasis around 1800, and the fashion did not recede; the commitment to cleanliness grew ever stronger throughout the nineteenth century.'²¹ Buchman writes that 'personal cleanliness was an absolutely essential requirement for acceptance into the middle and upper classes. Messages from a hundred sources left no doubt that a dirty face and a smelly body would never pass.'²² As Cooley was to write in his great nineteenth-century compendium on 'The Toilet', 'Dirty and coarse hands are no less marks of slothfulness and low breeding, than clean and delicate hands are of refinement and gentility.'²³

¹⁸Thomas, Cleanliness, 80

¹⁹Thomas, Cleanliness, 70

²⁰Thomas, Cleanliness, 69; see also Buchman, Cleanliness (xerox), 1220

²¹Buchman, Cleanliness (xerox), 1222

²²Buchman, Cleanliness (xerox), 1231

²³Cooley, Toilet, 359/60

The final factor put forward by Westermarck is the religious one. He notes that 'In many cases cleanliness, either temporary or habitual, is also practised from religious or superstitious motives.' He gives as one example, that 'the Shinto priests in Japan bathed and put on clean garments before making the sacred offerings or chanting the liturgies.'²⁴ He briefly shows that Greek and Roman religion, Zoroastrianism, Hinduism, Buddhism, Judaism and Islam, all link spiritual and physical purity in some way. 'These practices and rules spring from the idea that the contact of a polluting substance with anything holy is followed by injurious consequences...' Furthermore, 'a polluting substance is itself held to contain mysterious energy of a baneful kind' which is dangerous to others. This takes us into the whole area of pollution, taboo, classification which many anthropologists from Robertson-Smith and Steiner through to Douglas, Leach and their successors have seen as central to an understanding of dirt (xxx).(REF)

Yet Westermarck also noted that 'whilst religious or superstitious beliefs have thus led to ablutions and cleanliness, they have in other instances had the very opposite effect.'²⁵ He cites a number of cases where religious people have consciously used dirt as a mark of sanctity. This is particularly so in relation to asceticism. Buddhist monks have a rule which 'prescribes that their dress shall be made of rags taken from a dust or refuse heap.' Christians have often welcomed dirt as a sign of grace or 'as penance'. In medieval Christianity abstinence from every species of cleanliness was also enjoined as a penance...²⁶ Thomas notes that 'In the twelfth century one religious writer elaborated upon the "marvellous mystery" of smelly, greasy, matted and verminous beards, with saliva dripping down them, as a revelation of "interior cleanliness, that is divine virtue"'.(REF XXX) We need, therefore, to examine with some care the nature of the religion to be found in England, Holland and Japan. To what extent is there an emphasis in their religions in the necessity for not merely spiritual but also physical purity?

Japan's blend of Shinto, Buddhism and Confucianism seems to have produced a system of belief and classification which gave the Japanese an exceptional attitude towards purity. Buddhism is well known for its insistence on asceticism, simplicity, the orderly destruction of the material world. Although it is quite compatible with personal dirt, it is not difficult to see, as in the Buddhist temples and rituals in Japan, that it can also give support to an ascetic, anti-dirt, system based on the purging of all matter that is not essential. For instance, in the quintessentially Japanese institution derived from Buddhism, the tea ceremony, 'Spotless cleanliness' was required.²⁷ Confucianism, though not a religion, preached orderliness and self-discipline, which is again a useful ingredient for a society which takes purity to its

²⁴ Westermarck, *Morals*, ii, p.352

²⁵ Westermarck, *Morals*, ii, p.354

²⁶ Westermarck, *Morals*, ii, p.355-56

²⁷ Singer, *Sword and Jewel*, 114

limits. But it is when these two religions are blended with a third element, unique to Japan, namely Shintoism, that a strange chemical transformation seems to take place, emphasizing one strand in them. We need to look, albeit briefly, at theories which suggest that Shinto provides one key to the Japanese concern with purity.

Lafcadio Hearn described how Shinto beliefs emphasized the link between ritual and physical purity and the need for purity in all things. 'From the earliest period Shinto exacted scrupulous cleanliness - indeed, we might say that it regarded physical impurity as identical with moral impurity, and intolerable to the gods.'²⁸ He notes that 'the most important of all Shinto ceremonies, is the ceremony of purification - **o-harai** as it is called, which term signifies the casting-out or expulsion of evils...'²⁹ Before praying to the Shinto gods, worshippers need to purify themselves. 'They wash their faces and hands and rinse their mouths, - the customary ablution preliminary to Shinto prayer.'³⁰ Purification was at the centre of Shinto. 'Purification rituals occurred at all levels of society, from the two great national ceremonies performed on the last day of the sixth and twelfth months, down to household and individual rites.'³¹

What is particularly important is that moral purity and physical purity, and their reverse, were seen as symbolically and actually intertwined. It was early noticed by Thunberg; 'they never venture to approach the homes of their god if they are in any vice impure; for which reason they wash themselves first perfectly clean, dress themselves in their very best apparel, and wash their hands a second time at the entrance of the temple; then advancing with the greatest reverence, they place themselves before the mirror...'³² The absence of differentiation between moral and physical impurity is well summarized by Maraini, in describing Shinto. 'The most important principle of the cult is ritual purity. Given the divinity of the whole of nature, and hence of the human body, there was no necessity to differentiate between sin and dirt; the essential was to carry out certain rites, for which the requirements were scrupulous personal cleanliness (**misogi**, ablutions), concentration and abstinence (**imi**) and contact with certain purifying things (e.g. branches of **sakaki**, **Cleyera japonca**).'³³ Kato points out (1926 p.113) that in

²⁸ Hearn, *Interpretation*, p.161

²⁹ Hearn, *Interpretation*, p.160

³⁰ Hearn, *Glimpses*, p.141

³¹ Lock, *Medicine*, p.25-26

³² Thunberg, *Travels*, iv, 22

³³ Maraini, *Meeting*, 148

the ancient documents the ideas of purity and pollution have highly physical connotations and are in no way of an abstract or a moral nature.³⁴ This is shown, for example, in the symbolic association between material and spiritual purity in the rites associated with the chief 'priest' of Shinto, the Emperor. Siebold described this in the early nineteenth century. He wrote that 'everything about him must be at all times new. No article of dress is ever worn a second time; the places and dishes in which his repasts are served up, the cups or bowls out of which he drinks, and even the culinary utensils in which his meals are prepared, must never have been used before.'³⁵ Newness and cleanliness are clearly associated.

It is of course impossible to know whether the religion reflected a deep concern with purity, or vice versa - probably, as Hearn implies, they were always influencing each other. 'The Japanese love of cleanliness - indicated by the universal practice of daily bathing, and by the irreproachable condition of their homes - has been maintained. and was probably initiated, by their religion.'³⁶ Certainly it is not difficult to see how the view that ritual and moral purity in the 'Way of the gods' also means physical purity, was extended through all of life. 'Spotless cleanliness being required by the rites of ancestor-worship - in the temple, in the person of the officiant, and in the home - this rule of purity is naturally extended by degrees to all the conditions of existence.'³⁷ As Morse remarked 'If cleanliness is next to godliness, then verily the Japanese are a godly race.'³⁸ His remark has a deeper meaning than he perhaps intended. Cleanliness is 'next' to godliness in a literal sense, indeed it is a **part** of godliness - and cleanliness would indeed be both a sign and expression of godliness. As Grilli points out, religion and cleanliness are one. 'It is no exaggeration to say that they have made a religion of cleanliness, for the implications of ritual purification pervade the most ancient Shinto ethos and have remained constant throughout the development of Japanese cultural history.'³⁹ As he writes, 'filth' means both spiritual and material dirt - 'matter out of place' disturbs the Gods. Dirt is evil. 'In the Shinto tradition, evil and immorality have always been associated with filth and impurity, and virtue with cleanliness.'⁴⁰ This

³⁴ Lock, *Medicine*, p.25

³⁵ Siebold, *Manners*, p.106

³⁶ Hearn, *Interpretation*, p.162

³⁷ Hearn, *Interpretation*, p.162

³⁸ Morse, *Homes*, p.201

³⁹ Grilli, *Bath*, p.24

⁴⁰ Grilli, *Bath*, p.24

attitude pervades every aspect of living. What we have seen expressed in previous chapters is well summarized by Grilli. 'Described as the 'Shinto attitude' for lack of a better term, the notions of natural purity, simplicity, and aesthetic as well as physical cleanliness have influenced all Japanese designs for living: art and architecture, literature and self-expression, the preparation of food, patterns of familial and societal organization, craft and productivity - in short, all activities by which man defines his existence and orders his life.⁴¹

The fact that physical impurity was a central theme in Japanese culture was early noted by outsiders. Among the special features of the Japanese, noted by the Chinese historians from the third century onwards, were their 'habits of personal cleanliness.'⁴² Reciprocally the Japanese thought other nations very dirty, particularly the Chinese and the Ainu when they had systematically pushed out of the Japanese mainland to the Northwest island of Hokkaido. As for Europe, '...the travelled Japanese consider our three most prominent characteristics to be dirt, laziness and superstition.'⁴³ All Europeans were dirty, but some less so than others. The Dutch were the least unclean. 'They shave their beards, cut their nails, and are not dirty like the Chinese.'⁴⁴ Yet even they were dirty. Kaempfer noted of the Japanese attitude to the Ainu, 'They describe them further, as very dirty and nasty, but the truth of this accusation is not so strictly to be relied on, since they, the Japanese themselves, are so extremely nice and superstitious in frequently washing and cleaning their Bodies, as to have found the very same fault with the Dutch.'⁴⁵

Later visitors suggest the way in which cleanliness was somehow linked to simplicity and asceticism and these ran through all of the culture. At the end of the eighteenth century, Thunberg noted that '**Cleanliness** and **neatness** are attended to as well with regard to their bodies, as to their clothing, houses, food, vessels, etc. and they use the warm bath daily.'⁴⁶ A few years later, Rein wrote that 'The **cleanliness** of the Japanese is one of the most commendable qualities. It is apparent in his body, in his house, in his workshops, and no less in the great carefulness and exemplary exactness with which he

⁴¹ Grilli, Bath, p.24

⁴² Grilli, Bath, p.44

⁴³ Chamberlain, Things, p.263

⁴⁴ Keene, Discovery, p.170

⁴⁵ Kaempfer, History, 1, p.108

⁴⁶Thunberg, Travels, iii, 258

looks after his fields.⁴⁷ After long experience of the Japanese Alcock had 'no hesitation in saying that they are, upon the whole, a cleanly people, wash often - **sans peur et sans reproche**; wear little clothing, live in houses open to the air, and look on wide and well-ventilated streets, where nothing offensive is allowed to rest.'⁴⁸ It was a simplicity and asceticism which he found admirable. 'There is something to admire in this Spartan simplicity of habits, which seems to extend through all their life, and they pride themselves upon it.'⁴⁹ They were the Quakers of the East and this gave them freedom. 'Certainly so much austerity, and such universal absence of luxury, must go far to enable all to live upon little - preserve to each his independence of action.'⁵⁰ As Buddhists they had conquered material desire. As Morse put it, 'Their wants are few, and their tastes are simple and refined. They live without the slightest ostentation.'⁵¹

This desire for order, self-discipline, simplicity and cleanliness, were shown in many ways. Rudyard Kipling found it impossible to express how careful and 'clean' the agriculture was. 'But all I can write will give you no notion of the wantonness of neatness visible in the fields; of the elaborate system of irrigation, and the mathematical precision of the planting.'⁵² Fear of "dirt" is also the reason for strong sanctions against finger-sucking and nail-biting in children - it is not because the habit is thought childish.⁵³ It permeated from top to bottom of the society. The Emperor, we have seen, was surrounded by endless protections against the 'dirt' of life - constantly using new objects. He bathed ceremonially on behalf of his people several times a day. (xxx) At the other extreme, the tramp was meticulously clean. 'Your Japanese tramp takes his hot bath daily, if he has a fraction of a cent to pay for it, or his cold bath, if he has not. In his little bundle there are combs, toothpicks, razors, toothbrushes.'⁵⁴

⁴⁷Rein, *Travels*, 411

⁴⁸ Alcock, *Tycoon*, 1, p.189

⁴⁹ Alcock, *Tycoon*, 1, p.301

⁵⁰ Alcock, *Tycoon*, 1, p.302

⁵¹ Morse, *Homes*, p.114

⁵² Tames (ed.), *Encounters*, p.86

⁵³ Lock, *Medicine*, p.89

⁵⁴ Hearn, *Kokoro*, p.30

The way in which this great concern with boundaries, with order, with purity, affected health has been explored by Margaret Lock.⁵⁵ She shows, for example, how the famous opposition between 'outside' and 'inside' in Japanese culture worked out in relation to the house and the body. Danger and dirt lay in the 'outside' world and life was a constant battle to keep it at bay. Lock points out that 'In line with the thinking of Douglas (1966), Japanese people symbolically demarcate areas that are considered 'outside', dirty and potentially dangerous, from others that are denoted as 'inside', sacred and clean. This is true of social relationships, of the use of physical space, and of attitudes toward the body.'⁵⁶ In relation to social relationships, there were certain 'unclean' groups whom one should traditionally keep away from, in particular those in contact with 'unclean' things such as blood and death, namely the **eta** and **burakamun**. 'To write **eta** the Japanese use two ideograms meaning "much impurity", "much dirt".⁵⁷ Outsiders and strangers, whether Chinese or Europeans were also dirty, hence the very elaborate precautions to keep them out of Japan, as in the case of the artificial island at Desina. Yet it was not just foreigners and polluting quasi-castes. Anyone who was sick was also a threat. Lepers were sent to the most distant places for their bodily decomposition was disgusting. Those who were ill were ostracized. The draconian measures towards cholera victims which we saw earlier were part of an older pattern. Long before germs were discovered, there were other reasons for avoiding contact with the sick. 'Illness was also a state that was considered polluting, according to Shinto beliefs, and thus it called for temporary separation and even ostracism from the group.'⁵⁸ This could affect a whole family 'Because it was believed that people could transmit their diseases to their family members, sickness could potentially lead to public ostracism of the entire family.'⁵⁹

Thus one protection consisted of adjusting one's social relationships to keep pollution at bay. A second is to emphasize the threshold between the 'outside' world of public space, which is dirty and dangerous, and the pure safety of the living space. This is symbolized in many ways. 'The separation of inside from out is reinforced every time someone takes off his shoes...to enter a house or private building.'⁶⁰ The

⁵⁵A similar account is given in Ohnuky-Tierney, *Illness*, 21-37, 49, 57

⁵⁶ Lock, *Medicine*, p.88

⁵⁷Maraini, *Meeting*, 223

⁵⁸ Lock, *Medicine*. p.90

⁵⁹ Lock, *Medicine*, p.25

⁶⁰ Lock, *Medicine*, p.88

purging is normally more complete than this. In a similar vein, on returning from school or work one customarily washes one's hands and by so doing washes off the dirt of the outside world.⁶¹ The dirt of the outside, of course, follows one in on one's clothes, which also need to be carefully washed. Likewise, the dirt that comes in through the window, on food, or in other ways is also a threat. Inside the house, cloths used for cleaning are carefully separated so that each cloth has only one specific function. Exchanging a cloth used in cleaning the sink for one used for wiping off the stove or the kitchen table is a cause for great concern. Boundaries have become confused.⁶² The constant bathing was to wash off the physical and ritual dirt of the outside world. Even the mouth has to be protected. Nowadays 'Children are frequently made to gargle, both at home and in kindergarten, after play in the school yard. The purpose is to expel dirt before it enters the body proper.'⁶³ Everything that comes into contact with external matter becomes unclean, for instance the hands. 'Since hands were considered unclean...it was advisable neither to pick up nor carry with bare hands articles intended for the use of a superior. They were usually carried on the sleeves and presented in the same way.'⁶⁴

The danger, however, did not merely come from the outside, the body itself was a potential source of contamination to 'oneself' and to others. One obvious form of dirt was 'blood', particularly menstrual blood. 'Some women today still consider themselves to be 'dirty' when menstruating. Underwear worn at these times is usually washed separately from other clothing.'⁶⁵ A second is the idea that internal 'corruptions' worked themselves out onto the surface of the body. Some could be washed away, but more serious ones had to be burned away. Hence one of the major techniques in Japanese medicine, the burning of little mounds of mugwort or **moxa** under a cylinder (see description by Kaempfer xxx). This was both painful and left terrible scars all over the body. As Lock notes, '...until very recently, moxa was often burned to leave extremely obvious scars. The subconscious need to eliminate things that are offensive or "dirty" as radically and as fast as possible could explain this behavior.'⁶⁶ She elaborates this. 'Such scars are considered highly disfiguring, but they also symbolize that "once I was dirty but now I am clean". Better to be disfigured and remain part of one's group than to be thought of as polluted and

⁶¹ Lock, *Medicine*, p.88

⁶² Lock, *Medicine*, p.89

⁶³ Lock, *Medicine*, p.89

⁶⁴ Frederic, *Daily Life*, p.87

⁶⁵ Lock, *Medicine*, p.90

⁶⁶ Lock, *Medicine*, p.91

thus risk ostracism.⁶⁷

Thus, from very early on, an association was made between dirt and disease. The environment, the house and the body must all be kept 'clean', matter must be kept in its place and this would help to minimize the dangers of 'corruption', confusion of categories, breakdown of normal 'health'. Constant attention to all forms of cleansing were an obvious corollary of this. 'Avoidance of constipation and the practice of regular bathing and gargling are still central to concepts of health in Japan today - the body must undergo thorough and regular cleansing in order to avoid sickness.'⁶⁸ All this is systematically taught to infants and children. 'During early socialization in Japan today young children internalize many Shinto-derived values; they are taught to fear dirt and to make clear distinctions between what is clean and good and what is dirty and bad. I never once heard a mother teach her child about bacterial theories of infection.'⁶⁹ They are constantly monitored and instructed in these vital matters. 'It is in the activities of going to the toilet, bathing, washing, and going to sleep that the Japanese mother remains highly involved with her child.'⁷⁰ To fail in keeping oneself healthy was a threat to oneself and the whole group. An individual who was ill had failed. It was not merely an economic disaster, as it is in many societies, it was also a social disaster. 'From early historical times in Japan, therefore, impurity, uncleanness, and the occurrence of sickness were inextricably bound up. Shortcomings in the management of one's own body were seen as sources of illness both for the individual and possible for one's children.'⁷¹

All this was mixed up with theories of poisonous 'contagion' through dirt. In a curious way, it anticipated the world of bacteria, viruses and other micro-organisms that was only to be discovered at the end of the nineteenth century. Theories of pollution were strong and widespread - but the pollution was associated with symbolic as well as actual dirt, that is with all ambiguous categories. 'A second theory of disease causation was also used. By coming into contact with polluting agents such as blood, corpses, people with skin disease, and so on, one could get into a state of **ekiakudoku**, which literally means "having a spirit polluted by bad poison". Concepts of communicable and inherited diseases were established early in Japan, for it was believed that such a state not only could bring sickness on the

⁶⁷ Lock, *Medicine*, p.91

⁶⁸ Lock, *Medicine*, p.25

⁶⁹ Lock, *Medicine*, p.91

⁷⁰ Lock, *Medicine*, p.73

⁷¹ Lock, *Medicine*, p.26

individual concerned but could be passed on to the children.⁷² The indirect consequences as we have seen, were immense.

The Japanese case illustrates very well the importance of the cultural and religious dimension, concepts of boundaries, dirt, pollution, taboo. With this in mind, we turn to Europe. The Dutch were renowned for their cleanliness from the sixteenth century onwards. This has been well documented by Schama. For instance, he notes that 'De Blainville thought the North Holland custom of washing cow stalls "several times a day" and tying their tails to a post "that they may not dirty them by their urine and dung" just one of the "extravagancies" of "excessive neatness" that he found bizarre and disturbing".⁷³ Yet theories to explain this state of affairs are rather thin.

One theory was that it was a public health measure, caused by a recognition of the dangers of a moist climate combined with dense population. One writer suggested that 'because of the extreme moisture of the air without the help of those Customs, their country would not be habitable by such crowds of people but the air would corrupt upon every hot season and expose the inhabitants to...infectious diseases.'⁷⁴ Schama rightly notes that the real reason is more likely to be moral, or cultural, rather than practical. He believes it is something to do with nationalism and ethnic identity. 'For the laws that commanded the Dutch to conspicuous observation of their washing rituals were moral rather than material. And they were deeply associated in the collective mentality with the polarities of pride and shame, solidarity and alienness.'⁷⁵ What he means is elaborated a little later. 'To be clean, militantly, was an affirmation of separateness. What was cleansed was the dirt of the world that had obscured the special meaning of Dutch history and the providential selection of its people. Dirt made things general and undifferentiated; cleansing exposed distinctness.'⁷⁶ This seems to touch on the edge of the problem, but only takes us a little way, even when combined with the other factors such as the new surfaces of glass and stone, the wealth, the surfeit of water and others which we have mentioned. What it seems to overlook is that all these were combined with fervent Protestantism, a feature which also seems to have somehow been linked in the English case.

Christianity, as we have noticed, like most religions, enjoined 'cleanliness'. After all, it was derived

⁷² Lock, *Medicine*, p.25

⁷³ Schama, *Embarrassment*, p.377

⁷⁴ Schama, *Embarrassment*, p.377-78

⁷⁵ Schama, *Embarrassment*, p.378

⁷⁶ Schama, *Embarrassment*, p.380

from the same set of purity taboos in Judaism which led to the levitical prohibitions and to the obsession with purity and danger in modern Judaism. As Andrew Wear points out, 'Christianity had helped to give a specific moral and even ascetic tone to hygiene. From the days of the early church, the sins of gluttony and drunkenness had been condemned; the health of the body (the house of the soul) had been linked to the health of the soul, and the Christian was enjoined to care for the body as well as for the soul.'⁷⁷ The dualism inherent in Christianity whereby man strives to keep pure in an impure world, is a significant factor. 'The quest for physical cleanliness sprang from a sense that the body was sacred and should be protected from the pollutions of the world.'⁷⁸ This was symbolically shown, for example, in the central rite of baptism; 'the baptismal ceremony preserved the notion of sin as something that could be washed off. "The blood of Christ washeth away sinne, as water doth bodily filthinesse", declared a Jacobean preacher.'⁷⁹ This tradition had been mixed with that of the Greeks, which also, according to Dodds, was pre-occupied with purity.⁸⁰ Yet a religion like Christianity also adapted to its environment and, as we have seen, many Catholic countries do not seem to have been obsessed with cleanliness. In the case of England, it would seem that a variant of the religion developed which emphasized the association between material and spiritual 'dirt, as had Shinto. A deeper search of medieval sources would no doubt find this association already widespread in England from early on, and particularly pronounced in 'reformist' tendencies, for instance in Lollard writing. 'Filthiness' was a concept which spanned the spiritual, the social and the material. For example 'filthy talking' bracketed immoral behaviour with dirt.⁸¹

This tendency to see a link between spiritual purity, simplicity, the maintaining of boundaries, and physical behaviour and dirt, grew more pronounced after the Reformation, It is not for nothing that the new sects were called 'Puritans'. The extensive dissection of their writings, for instance by Christopher Hill, shows a constant pre-occupation with equating bodily and spiritual purity.(REFS) There is a vast literature which suggests the connection. Some of it has already been quoted in the fierce diatribes of Philip Stubbes, a leading Elizabethan Puritan, against all kinds of 'filthiness', whether material or spiritual. Many other Puritan writers of that period could be quote to the same effect. For example, George Gifford in his sermons, warned that 'all men are by nature unclean, filthy, stinky and loathsome.'⁸² God's

⁷⁷Wear, Hygiene (xerox), 1292

⁷⁸Thomas, Cleanliness, 78

⁷⁹Thomas, Cleanliness, 61

⁸⁰ Dodds, Greeks, p.154

⁸¹ Furnivall, Meals and Manners, p.239

⁸² Gifford, 15 Sermons, a29

grace would 'purge', 'cleanse', turn the corrupt into the incorruptible. The biblical language and metaphors will be examined in a little more depth to show how the populace was exhorted to be clean in mind and body.(XXX) No doubt there is poetic and dramatic material of the 'Out out damned spot' kind to support this also.

Purification was, of course, central to many of the church's rituals. The infant was 'washed clean' at baptism by the pure element of water. Women were 'washed clean' after the pollution of childbirth in the ceremony of the churking of women.⁸³ People's sins were 'washed away' by the blood of Christ at the Holy Communion. The dead were washed clean and raised incorruptible. The symbolism of cleansing of the soul and body is of enormous importance. It may well be that as the external rituals were attacked by the Reformers, and the automatic cleansing performed by the Catholic Church was destroyed, the obsession with the need for personal responsibility in cleanliness grew. Each man his own priest, also meant that each individual was responsible for his or her purity of soul and body. A war against dirt had to be fought by all. Equations were made between levels of 'dirt'. Grimstone wrote of the Dutch that 'theire houses they kepe cleaner than theire bodyes, theire bodyes than theire soules.'⁸⁴ Some have seen this as neurotic. 'One of the most noticeable characteristics of a certain type of puritan is an obsessive fear of dirt...the dislike of dirt in the literal sense seemed to go with an extreme interest in dirt in the moral sense.'⁸⁵ Yet it was much wider than neurosis, for fairly 'normal' people were constantly concerned with the danger of dirt. Three examples will suffice for now.

The diarist Ralph Josselin constantly made associations between 'filthiness' of a moral and a spiritual kind. Early in his life he became involved with a 'neare and deare friend' but thanked god 'who kept mee from uncleannesse.'⁸⁶ He was constantly asking God to keep him 'clean', without dirt, for instance, 'the Lord bee with mee therein to keepe mee from sin and temptacion, and preserve mee spotlesse to his own Kingdome...'⁸⁷ George Herbert, the poet, advised his readers to reflect the purity of their minds in every aspect of their lives, a good Christian would be evident for 'the purity of his mind breaking out and dilating itself even to his body, cloaths and habitation.'⁸⁸ Herbert, we are told, 'urged his reader to

⁸³ cf e.g. Thomas, Religion, p.38

⁸⁴ Crimstone, Diary, p.223

⁸⁵ Taylor, Sex in History, p.166

⁸⁶ Josselin, Diary, 1632

⁸⁷ Josselin, Diary, 25 Jan 1653

⁸⁸ Herbert, A Priest, p.220

"Affect in all things about thee cleanliness,...Let thy mind's sweetnesse have his operation Upon thy body, clothes, and habitation".⁸⁹ No doubt a reading of Bunyan, Baxter, Muggleton, Heywood and others would find plenty of further evidence of this association.(REF XXX) The most extreme expression of cleanliness was to be found among the Puritan sects, particularly the Quakers. An eloquent later account by Charles Lamb in 1821 describes how "The very garments of a Quaker seem incapable of receiving a soil; and cleanliness in them to be something more than the absence of the contrary. Every Quakeress is a lily; and when they come up in bands to their Whitsun conferences, whitening the easterly streets of the metropolis, from all parts of the United Kingdom, they show like troops of the Shining Ones."⁹⁰

Purity, self-discipline, orderliness, all were closely linked to godliness long before John Wesley emphasized the connection. 'Let it be observed, that slovenliness is no part of religion: that neither this, nor any text of Scripture, condemns neatness of apparel. Certainly this is a duty, not a sin. 'Cleanliness is, indeed, next to godliness.'⁹¹ In this instance he referred specifically to dress, but in a letter of 1769 he urged his followers to 'take pattern by the Quakers, avoid all nastiness, dirt, slovenliness, both in your person, clothes, house and all about you, Do not stink above ground...Clean yourselves of lice...Do not cut off your hair, but clean it, and keep it clean.'⁹² Wesley's comments are interesting because he explicitly linked morality, disease and hard work. 'In his **Primitive Physick**, as well as providing medical prescriptions and hygienic advice (the latter drawn from Cheyne), Wesley put health and illness into a religious context.'⁹³ As Thomas comments, 'For him, as for so many after him, cleanliness was important because it was associated with such other qualities as self-discipline, regularity and hard work. Dirt, he remarked, was "a bad fruit of laziness", whereas cleanliness was "one great branch of frugality".'⁹⁴ It is not surprizing that Dean Swift, an heir to this tradition, should have seen the dislike of dirt as the main characteristic of Yahoos and humans.⁹⁵

⁸⁹quoted in Thomas, Cleanliness, 64

⁹⁰quoted in Thomas, Cleanliness, 64

⁹¹ Sermons, no.xciiii On Dress

⁹²quoted in Thomas, Cleanliness, 65

⁹³Wear, Hygiene (xerox), 1296

⁹⁴Thomas, Cleanliness, 79

⁹⁵ Swift,Gulliver's Travels, p.246

The religious and ritual associations between dirt and spiritual danger are therefore very deep-rooted in English culture, as they are in Japanese. Both are unusually 'puritan' and ascetic cultures, with that curious mix of self-control, asceticism, piety, guilt which so many analysts have tried to pin down. Most famously, as Fukuyama summarizes the Weber thesis, in the case of protestants, 'Their frugality, self-discipline, honesty, cleanliness, and aversion to simple pleasures constituted a "this-worldly asceticism" which he understood as a transmutation of the Calvinist doctrine of predestination.'⁹⁶ The associations become very blatant in the nineteenth century, in the dirt and impurity taboos of Victorian England.⁹⁷ It is thus easy to assume that they were something new. 'In the course of the nineteenth century, Britain had become a prudish, puritanical country which was also slowly getting used to the now customary practice of taking baths and showers.'⁹⁸ In fact, it had long been prudish and puritanical, but became more conspicuously so in the upper middle class in the nineteenth century.

The subtle blend of religions and medical ideas which developed into the cult of hygiene in the nineteenth century is well analysed in a number of articles by XXX Smith. She shows how Greek science had incorporated a strong concept linking hygiene and health. 'In the classical period, Galen (AD 129 - c.200/210) wrote that medicine was divided into hygiene and therapeutics, into the art of staying healthy and preventing disease, and into the art of treating disease.'⁹⁹ This continued through the medieval period, but something new was added by Puritanism. 'Rapid reading suggests that an actual cult of the body was associated with Puritanism, whereas the earlier medieval practices were more functional.'¹⁰⁰ The most notable expression of the new cult of hygiene was in the work of Thomas Tryon in the later seventeenth century. 'In many respects, Tryon's conception of the cleansing of the body of gross humours emerges as a seventeenth-century version, in full religious mystical language, of what has been described as "cult hygiene".'¹⁰¹ He mixed physical and moral cleanliness in all his writings, 'His

⁹⁶Fukuyama, *End History*, 227

⁹⁷ e.g. Hunt, *Love*, p.276

⁹⁸ Goubert, *Conquest*, p.241

⁹⁹Wear, *Hygiene (xerox)*, 1283

¹⁰⁰Smith, *Prescribing (xerox)*, 281

¹⁰¹Smith, *Tryon (xerox)*, 58

Rules of Cleanliness frequently included the sexual reference. The mind could either have "clean inclinations" or become "a cage of unclean thoughts"; the body should be "clean, chaste and healthy", a "well-prepared Temple to receive the sweet influence of god's spiti and company of good angels".¹⁰²

Goubert's assumption is understandable. England **was** unusual. Goubert believes that 'awareness of the risks of faecal contamination is a recent phenomenon which goes back only to Pasteur's time. Before that, until the middle of the nineteenth century, a minority of doctors but probably the majority of society at large believed in the beneficial properties of dirt and waste.'¹⁰³ Yet this was not the view of English doctors. [I will document for the sixteenth century doctors like Boorde, Jorden et al xxx]. In the eighteenth century Buchan was quite aware of such beliefs. 'The peasants in most countries seem to hold cleanliness in a sort of contempt. Were it not for the open situation of their houses, they would often feel the bad effects of this disposition. One seldom sees a farmhouse without a dunghill before the door, and frequently the cattle and their masters lodge under the same roof.'¹⁰⁴ He noted that 'Peasants are likewise extremely careless with respect to change of apparel, keeping their houses, etc. clean.'¹⁰⁵ Yet he himself took the opposite view, as had his predecessors. 'Few virtues are of more importance to society than general cleanliness. It ought to be carefully cultivated every where, but in populous cities it should be almost revered.'¹⁰⁶

Since 'peasants' of this kind did not exist in England, it is not surprising that the inhabitants were unlike this. After travelling round England, it was only when he went abroad that Arthur Young was astonished at the 'unbelievable uncleanliness' of the poor in France, Spain and Italy: it 'makes them less healthy and more disfigured then they are in England'.¹⁰⁷ Foreigners who toured England noted that 'People take the greatest possible pains to maintain the standard of cleanliness.'¹⁰⁸ The linking of hygiene and morals

¹⁰²Smith, Tryon (xerox), 59

¹⁰³ Goubert, Conquest, p.58

¹⁰⁴ Buchan, Domestic, p.102

¹⁰⁵ **4 chaan, Domestic, p.102**

¹⁰⁶ Buchan, Domestic, p.105

¹⁰⁷ Quoted in Braudel, Capitalism, p.240

¹⁰⁸ The Duc de Rochfoucauld, 1780 quoted in Porter, Eighteenth, p.221

which is a characteristic of reforms in nineteenth century England and France, was not something new. Nor was the opposition to doing anything about it. Buchan wrote that 'One common cause of putrid and malignant fevers is the want of cleanliness. These fevers commonly begin among the inhabitants of close dirty houses, who breathe unwholesome air, take little exercise, and wear dirty clothes. There the infection is generally hatched, which often spreads far and wide; to the destruction of many.'¹⁰⁹ Yet he lamented the fact that 'We are sorry to say, that the importance of general cleanliness does not seem to be sufficiently understood by the magistrates of most great towns in Britain; though health, pleasure, and delicacy, all conspire to recommend an attention to it.'¹¹⁰ Yet standards do seem to have been improving and, as we have seen, this had enormous effects. Kames may have the last word in this. He thought that the 'chief cause' for the decline of various plagues and 'other putrid diseases' was '...cleanness, which is growing more and more general, especially in the city of London.' The contrast could be seen, for instance, by comparing London with Constantinople where 'putrid diseases reign as much as ever; not from unhealthiness in the climate, but from the narrowness and nastiness of the streets.'¹¹¹

What seems to have happened is that a number of separate streams joined together in eighteenth and nineteenth century England to create an obsession with hygiene. There were the early pressures of Christianity and Greek medical science. There was the particular interest of Puritanism. At first this was somewhat limited to externals, particularly dress. As Thomas points out, 'most of these moralising injunctions related primarily to visible cleanliness, particularly clean clothes and clean houses. The Puritans and Quakers said very little about the desirability of washing all over'.¹¹² This was because the concern was mainly with symbolic dirt. 'Clean clothes symbolised moral purity: "In fairest weeds are cleanest thoughts and purest minds".'¹¹³ Thus foreigners suspected that the English were mainly concerned with external cleanliness. In the later eighteenth century, Rochefoucauld wrote 'At first I was quite astonished at all this and did all that I could to make sure whether this cleanliness was natural to the English and so pervaded all their activities, or whether it was a superficial refinement. I was led to see quite clearly that it was only external: everything that you are supposed to see partakes of this most desirable quality, but the English contrive to neglect it in what you are not supposed to see.'¹¹⁴ Yet the

¹⁰⁹ Buchan, *Domestic*, p.100-01

¹¹⁰ Buchan, *Domestic*, p.101

¹¹¹ Kames, *Sketches*, i, p.245

¹¹² Thomas, *Cleanliness*, 66

¹¹³ Thomas, *Cleanliness*, 62

¹¹⁴ Rochefoucauld, *Frenchman*, 43

symbolic and ritual merged with the medical and with social snobbery from very early on and created that world of hygiene obsession which is so remarkable a feature of nineteenth-century Britain and America. Religion, gentility, and health merged and intermingled in the writings on cleanliness. Alcott, who emphasized health, had in addition no doubt "that he who neglects his person and dress will be found lower in the scale of morals, other things being equal, than he who pays a due regard to cleanliness". In Alcott's mind, health and morals were opposite sides of the same coin.¹¹⁵ It prepared the ground for the medical revolution of the later nineteenth century, which demonstrated how it was that health, morals and cleanliness were indeed linked through the germ theory of disease. Bodily dirt, it was shown, 'forms a favourable medium for the absorption, and the transmission to the internal portions of the body, of noxious effluvia, vapours and gases, miasmata, and the aerial germs of infectious and contagious diseases.'¹¹⁶ The Japanese and West Europeans were the first to benefit from this finding. A different constellation was to be found in other civilizations.¹¹⁷

¹¹⁵Buchman, Cleanliness (xerox), 1224

¹¹⁶Cooley, Toilet, 186

¹¹⁷For the interesting contrasted case of India where ritual and physical dirt are dealt with differently, see Khare, ritual (xerox), 244-8