RESEARCH

Cultural Origins of Japan's Premodern Night Soil Collection System

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Night soil collecting was practiced to different extents wherever urbanization developed. For example, Japan relied on human waste as fertilizer to the point it became a profitable business, while in most Western countries it was considered a necessary evil. What is the reason behind such different attitudes? In this paper, I apply David Inglis' theory of a mode of excretion to premodern Japanese context in order to shed light on this phenomenon. First, informed by Mary Douglas, I propose slight alternations to the original theoretical framework of a mode of excretion so it emphasizes considerations of excreta in a culture's cosmology. Next, I examine scatological content in the oldest chronicle of Japan: Kojiki. Based on the analysis, I conclude the Japanese traditional notion of defecation is non-binary—it includes both positive and negative understandings of excrement. Most importantly, the notion lacks moral stigmatization; excrement is not kegare. Then, I characterize how defecation was practiced. Contrary to present norms, it was conducted relatively out in the open, without strict regularization. I argue it was because the notion was not stigmatized, thus there was no need to be particularly embarrassed about the body's excretory capacities. Finally, I conclude the holistic approach to the notion and practice of defecation in Japan's traditional fecal habitus is the reason why human waste could be viewed as productive and not merely an object of disgust. Thus, because of this cultural encoding, traditional means of excretory disposal in Japan relied on night soil collection.

Keywords: night soil; Japan; human waste management; toilets

1. Introduction

Sewers have become one of the indicators of modernity. They, together with modern toilets, by which we usually understand Western-style thrones, enable us to enter a secluded place, do our business (forbid one say shit), and flush it down the pipes where formerly private waste becomes a public matter. However, this arrangement is relatively new: municipal sewerage systems began to appear only in the 19th century as an answer to concerns about public health. Before, people used to dispose of their waste in different ways, with using excrement as fertilizer being the most common one. This is a well-documented phenomenon, yet there is no research asking why some societies were more open than others to this practice.1 For example, although night soil—a euphemism for human excrement—collecting developed almost everywhere urbanization did, there seems to be a scholarly consensus that it was more prominent in Asia than in the West (Ferguson 2014; Goldstein 2012; Hanley 1987; Rockefeller 1998). I surmise lack of research in this area is because, as it was mentioned at the beginning of this essay, sewers constitute modernity. Societies relying on different ways to dispose of excrement are considered backward by users of sewer-connected thrones (Anderson 1995; Jewitt 2011; Moore 2009), and this idea became internalized in people from developing countries so that '[n]o-one who aspires to be anyone in town chooses to live without a proper place to shit if they can afford one' (Black & Fawcett 2008: 51). Thus, night soil practices today are accepted only as a thing of the past, an episode on the way to becoming a modern and civilized nation.²

However, contrary to popular belief, some societies that managed human waste by reusing it as fertilizer had very high hygienic standards. One such example is Japan, which will serve as a case study in this paper. The value placed on human waste as fertilizer ensured that premodern Japanese cities remained relatively clean in comparison with the Western counterparts (Hanley 1987, 1999; Howell 2013), and even the occupiers admitted that the Japanese pre-war water purification standards 'compare[d] favourably with those in the United States' (PWH 00895, cited in Aldous and Suzuki 2012: 113). It means that Japanese 'backward' human waste management worked better than America's 'advanced' one.

The paper makes a case for the Japanese example of how excrement might be culturally encoded as productive and not merely an object of disgust. First, I briefly introduce the night soil collection system as a legitimate means

of excretory disposal in premodern Japan, by which this paper understands the period before the so-called opening on Japan in 1853. Then, I foreground the theoretical framework of a mode of excretion coined by David Inglis in his A Sociological History of Excretory Experience (2001). In this essay, I follow Inglis' approach but simplify the theory so it is easier to understand how the dominant attitude towards the excretory in a culture shapes the way members of this culture conduct defecation and dispose of human waste. Finally, I examine the scatological context in Japanese literary sources to characterize the traditional notion and practice of defecation. The analysis draws primarily on Kojiki (712), the oldest extant historical chronicle of Japan and the earliest source for the Japanese Shinto beliefs, but I augment it with references to other relevant sources. Based on examined materials, I argue the traditional notion of defecation in Japan can be characterized as non-binary: defecation is neither good nor bad, it is just a natural part of our bodily existence. This holistic take on the excretory influences the practice of defecation: I illustrate that it was conducted relatively out in the open, without much stigmatization of the process. In conclusion, I suggest the reason why Japan's premodern waste management evolved to reuse human waste as fertilizer, contrary to the Western example in Inglis' analysis, is because the excretory was not encoded as moral dirt in Japanese culture.

2. Night Soil Collection System in Premodern Japan

It is widely assumed that the 12th century marks the beginning of human waste usage in agriculture in Japan. The Heian period (794–1185) witnessed frequent famines, thus officials encouraged farmers to improve farming practices (Adolphson, Kamens & Matsumoto 2007). Improved irrigation, double cropping, and plowing boosted agricultural productivity in the ensuing Kamakura period (1185–1333) (Yamamura 1988), which in turn resulted in a lack of animal manure for crop fertilization.³

With time, night soil was becoming more and more important. For example, in *Keian ofuregaki*, a 1649 proclamation by the Tokugawa shogunate to regulate farm life, it states, 'Farmers should build the toilet with a roof over near the main house, so that even if it rains night soil will not dilute and waste' (Heibonsha sekai rekishi jiten henshūbu 1955: 333). This indicates that in the mid-17th century the use of night soil was already ingrained in everyday life and was even promulgated by the shogunate for use in agriculture, thus demonstrating its importance. Because of its value, night soil became a profitable commodity.

In the Edo period (1603–1868), the demand for fertilizer had progressed to the point that farmers began visiting towns to collect night soil for their crops, initially in return for vegetables (Hanley 1987; Tajima 2007). Landlords in Edo, present-day Tokyo, who sold excrement from shared privies in tenement houses could earn an extra 30–40 *ryō* of annual income—almost twice as much

as a normal carpenter earned annually (Ota kuritsu kyōdo hakubutsukan 1997). In Osaka, money for night soil from shared toilets became a standard part of the landlord's income, and rent was based on the number of tenantsif someone moved out from a tenement house, the rent would rise, as the landlord would have less product to sell. Feces belonged to the house owner, while urine was the property of the tenants (Agi & Ina 1990). Indeed, so large a part did night soil comprise of landlords' incomes, that the saying emerged, 'the landlord's child is brought up on dung' (ōya no ko wa kuso de sodatsu) (Ibid.: 121). Consequently, the price of fertilizer had risen so much in Osaka that farmers from neighboring areas formed associations to obtain monopsony rights on the purchase of night soil, with fights even erupting over collection rights and prices (Howell 2013; Nakamura 2015; Walthall 1988). By the mid-18th century, night soil was collected by professionals and sold to farmers for silver (Hanley 1987; Nakamura 2015)—it had become so expensive that poorer farmers had difficulty obtaining it in sufficient quantities and incidents of theft began to appear in the records (Hanley 1987).

Thus,4 commodification of night soil in Japan was remarkable. The situation started to change when Japan was forced to open its borders after over 200 years of limited contact with the outside world in 1853. Foreign visitors to the country were not exactly enthusiastic about what they observed in regard to sanitary conditions: in travel diaries, we can read complaints of 'miasmata produced by defective domestic arrangements' (Bird 2010 [1878]: 168-169) or descriptions of Tokyo as 'nothing but a huge collection of villages ... without a building fit to live in, or a sewer to relieve the stench of several hundred thousand open privies' (Henry Adams 1886, cited in Mansfield 2009: 117). Such comments come from the fact that at the time Western cities were already building sewer networks and defecation had become a private business (Inglis 2001; Laporte 2002; Vigarello 1988). In Japan, on the other hand, human waste was reused, thus there was no need for sewers, and elimination, especially urination, was conducted relatively out in the open as I will illustrate in the following sections. Westerners complained such customs were unbecoming for a civilized nation and, as Japan was desperate to be acknowledged as one in Western eyes, the critique hit a raw nerve. Thus, the government has since endeavored to alter traditional excretory habits of the Japanese to mimic those of the 'modern' West.

Therefore, I conclude the mid-19th century contact with the West constitutes the turning point in Japan's traditional waste management system. It does not mean that the country suddenly stopped its dependence on night soil—the reuse of human waste continued even in the postwar period (Hoshino 2008, 2014; Kreitman 2018) and the public sewage system became the main sanitation system only from the late 1980s. Nonetheless, from that time on the idea that the Western-style waste management system constitutes modernity, thus Japan should apply it, took roots at least amongst the policymakers. For

example, in November 1872 the Misdemeanor Law (*Ishiki kaii jōrei*) was first promulgated in Tokyo. Among other behaviors the government considered contrary to public hygiene, safety, or decency under a new moral order, it included a ban of public urination and defecation or transportation of night soil in buckets without covers. The construction of sewerage system in Tokyo dates back to 1884, when the Kanda sewer was constructed, but it did not progress further for economic reasons: in 1889 the Sanitary Department of the Japan Home Ministry proposed the construction of a sewer network in the capital, but the proposal had to be postponed (Takehara 2009).

In sum, this paper deals with the Japanese traditional human waste management system, by which I mean the period until the so-called opening of Japan in the mid-19th century. Until then, night soil was a valuable commodity and although it continued to be in use until the postwar period, Western pressure progressively transformed Japan's dependence on human waste. Moreover, in the words of the theory of a mode of excretion, this night soil collection system translates to Japan's traditional means of excretory disposal—'the means through which [a fecal] habitus is connected to the physical world' (Inglis 2001: 58). Hereon, I will introduce the theoretical framework to understand why Japan relied on night soil without reservations, while other societies, notably Western, used it as the last resort.

3. Theory of a Mode of Excretion

First, it is necessary to familiarize ourselves with the terminology. Mode of excretion, a term coined by David Inglis, is a set of defecatory manners and toiletry technologies dominant in a society. In his seminal *A Sociological History of Excretory Experience* (2001), Inglis traces the developmental path of what he calls the Western modern mode of excretion—defecatory manners and toiletry technologies presently dominant in the Western culture—to the formulation of the bourgeois fecal habitus. Habitus, a term coined by Bourdieu in his *Distinction* (1979), is 'a system of practice-generating schemes which expresses systematically the necessity and freedom inherent in [a] ... class condition about the difference [from other classes and

fractions] constituting that condition' (Bourdieu 1992: 172). It means that a class first has some differentiating assumptions about itself, and these assumptions, called schema, in turn generate a set of practices that reflect these beliefs. What is especially important about the schema is that they 'embed ... the most automatic gestures or the most apparently insignificant techniques of the body—ways of walking or blowing one's nose, ways of eating or talking' (Bourdieu 1992: 466), and, of course, defecating. Thus, fecal habitus is a 'concept we use to understand how members of a given class or class fraction, understand and evaluate excreta, and how, on the basis of such a system, they carry out excretory practices' (Inglis 2001: 42).

In short, Inglis argues that first bodily symbolism changed and excrement became negatively charged, which consequently was turned into the constitution of bourgeois fecal habitus. Shit started to symbolize the ultimate, moral, dirt, which was in contradiction with immaculate bourgeois bodies. Thus, a delusion that these superior bodies could not have excretory capacities began to occupy the bourgeois mind (see also Corbin 1986). As '[t]he more highly a habitus evaluates excreta as dirty, the more excretory practices will be highly regulated' (Inglis 2001: 44), it is not surprising that the bourgeois excretory practices underwent strict regularization in the realms of privacy (separate toilets), deodorization (low toleration of smell) and euphemism (we 'evacuate' to a 'water closet') (Ibid.: 54).

Moreover, imperatives of the dominant fecal habitus generate characteristic means of disposal. Thus, the symbolic-classificatory schema of the bourgeois habitus dictates where one can legitimately excrete (intimate means of excretory disposal: behind closed doors of a water closet, so no one can witness the *clean* body create *dirt*) and how the waste is taken care of (general means of excretory disposal: sewer system that with one flush transforms waste from a private to public matter). Inglis concludes that by the end of WWI the bourgeois fecal habitus became the standard in the West and even if some people continued to live without a sewer connection or a water closet, they at least *expected* to have such facilities' (Ibid.: 281).

Thus, **figure 1** sums up Inglis' characterization of a general mode of excretion and the modern mode of excretion.

A mode of excretion	The modern mode of excretion
1) Dominant fecal habitus	1) Modern fecal habitus
Symbolic-classificatory schema	Occupied by all social strata
Excretory practices	A mutation of the bourgeois fecal habitus
2) Means of excretory disposal	2) Modern means of excretory disposal
• General	General: water-based sewer system
• Intimate	Intimate: water closets

Figure 1: Comparison of Inglis' (2001) general and modern modes of excretion (60, 62).

As it was already mentioned, Inglis' work is essential in understanding the origins of modern human waste management. However, I propose two amendments to his theory: first, Inglis highlights that the way a class or class fraction understands and evaluates excreta influences how members of this group carry out excretory practices. Drawing on Norbert Elias' The Civilizing Process (1995 [1939]), a comparative study of English, French and German manners, he marks the post-feudal appearance of the bourgeoisie at the court as the first step in forging the bourgeois fecal habitus. Nobility used to constrain their behavior to look more sophisticated, which motivated the bourgeoisie to do the same in order to keep up with the dominant class, and these changes included more elaborate toilet habits. Thus, although both Inglis and Elias analyze how body image changed, they fail to explain why the body symbolism became negatively charged in the first place. Here I suggest turning to Douglasian concept of dirt as a 'matter out of place.'

Mary Douglas famously argued in *Purity and Danger* (2003 [1966]) that dirt is not a physical entity, but a socially constructed concept that thus differs over time and between cultures. Moreover, in *Natural Symbols* (1970) she emphasizes that cosmological symbolism shapes actions of the physical body. This is in line with Inglis' 'understanding of excreta drives practice of defecation,' and it is important to note here that Inglis thoroughly analyzes Douglas' theory. Nonetheless, he decides to translate the terminology to the one that accounts for the class-based form of society:

Douglas's position [...] is in effect a form of habitus analysis without the social class component. The two main elements in Douglas's account are 'cosmology' (as structured by social structural patterns), and bodily practices (corporeal dispositions and the forms of action deriving therefrom). The same components are in essence at the heart of Bourdieu's theorisation of habitus, but they are expressed in a (class-based) terminology which of course has somewhat different connotations than those deriving from the terminology utilized by Douglas. The most general difference between Douglas's and Bourdieu's positions is that, on the latter's conception, a habitus is the possession of a particular class or class friction, rather than a cosmological and practical system that pertains among all strata of a society (Inglis 2001: 31–32).

Inglis' decision to rely on Bourdieu's terminology seems valid given his goal of analyzing modern society. However, I argue that applying Douglas' findings would help understand the genesis of a fecal habitus; in Inglis' study this would answer why the Western water closets are 'the sine qua non of a society that denies the existence of the human body's excreta-making capacities' (Ibid.: 243; see also Hawkins 2006, Laporte 2002).⁵ Here it is important to note that originally Douglasian theory works in regard to 'primitive cultures.' Modern cultures, as she argued, are a mix of 'different fields of symbolic action' (Douglas 2003: 70) that do not follow the same logic. I acknowledge this discrepancy, yet I argue that even in modern societies many traditions are deeply-ingrained cultural mores that

often have roots in a society's cosmology. Moreover, if the aim is to analyze the trajectory of changes in the excretory experience starting in the premodern society, exploration of the cosmological patterns is even more justified.

Second, I suggest simplifying the general mode of excretion. Inglis' model consists of two elements:

- 1) Dominant fecal habitus, that consists of:
 - · Symbolic-classificatory schema
 - · Excretory practices
- Means of excretory disposal, which are further divided into:
 - · General
 - · Intimate.

In the model I propose (**Figure 2**), I leave these two main elements, namely fecal habitus and means of excretory disposal, but I slightly change their contents. First, incorporating Douglas' theory, I change symbolic-classificatory schema to the notion of defecation, by which I mean the way excreta are understood and evaluated in a culture's cosmology. This, in turn, influences the practice of defecation, which I leave as the second component of a fecal habitus. However, I suggest including a part of what Inglis calls the intimate means of excretory disposal in the practice.

Inglis argues that 'the more highly a habitus evaluates excreta as dirty, the more excretory practices will be highly regulated' (Inglis 2001: 44). Then he identifies three types of regulations as a part of the practice element of the fecal habitus: defecatory practices (legitimate forms of defecation), sensory practices (especially olfactory practices), and verbal practices (legitimate ways of referring to the excretory). This categorization itself is sound, yet I suggest that if these elements dictate the legitimate way people defecate, which Inglis acknowledges, thus shape the defecatory locale, then it is safe to understand the intimate means of excretory disposal as a part of the practice. Modern excretory space is designed that we defecate in private (regulation of defecatory practices), water is used to hide any foul smell (regulation of sensory practices), and it is in good taste to refer to the loo using euphemisms, such as 'water closet' (regulation of verbal practices). In other words, the excretory space—intimate means of excretory disposal in Inglis' terms—expresses all imperatives of what he calls excretory practices of a habitus. Therefore, strictly for simplifying reasons, I will analyze the excretory space and its regulations as a part of the second component of a fecal habitus: the practice of defecation.

Finally, as the above-explained alternation leaves only general means of excretory disposal in the category, I leave this element as it originally was. Here, as the name suggests,

A mode of excretion

- 1) Dominant fecal habitus
- Notion of defecation
- Practice of defecation
- 2) Means of excretory disposal

Figure 2: Proposed alternation of a general mode of

I will analyze what legitimate way a society employs to take care of its excreta. In theory, if the dominant fecal habitus is positive, meaning that the notion of defecation is positive and in turn the practice of defecation is not strictly regulated, then the means of excretory disposal allow to see excreta as something other than waste (for example reuse of human waste as fertilizer). In contrast, if the dominant fecal habitus is negative, meaning that the notion of defecation is negative and in turn the practice is strictly regulated, then the means of excretory disposal serve only one purpose: to eliminate excreta from the public space.

Having explained what a mode of excretion is, now it is time to apply this theoretical framework to Japan. In the previous section, I concluded that the night soil collection system was the legitimate means of excretory disposal in premodern Japan. This means that at the time excrement was considered productive, thus we can expect Japan's traditional fecal habitus to be on the positive side. Hereon, I will characterize the notion and practice of defecation to validate this hypothesis.

4. Identifying Traditional Fecal Habitus in Japan: Notion of Defecation

To reiterate, fecal habitus is a 'concept we use to understand how members of a given class or class fraction, understand and evaluate excreta, and how, on the basis of such a system, they carry out excretory practices' (Inglis 2001: 42). It consists of two elements: the notion and practice of defecation. The notion is especially important as it directs the overall character of the habitus—notion drives practice. Thus, I will pay special attention to identifying the traditional notion of defecation in the Japanese context, which I argue is shaped by a culture's cosmology. Cosmology, the study of the nature and origin of the universe, in the premodern period was both expressed in and shaped by religious beliefs.

In the Japanese context, there are three main religious systems: Shinto, Buddhism, and Confucianism. Shinto is the traditional religion of Japan, while Buddhism and Confucianism were both introduced to Japan from Korea in the 6th and 3rd centuries respectively. In this paper, I decided to analyze scatological content in Kojiki (712), the oldest extant historical chronicle of Japan, and the earliest source for the Japanese Shinto beliefs. First, it is because Shinto is the only originally Japanese religious system and many Japanese traditions and cultural norms have roots in Shinto: for example, it is Kojiki that establishes the Japanese imperial family as the descendants of Amaterasu, the Sun Goddess. Nonetheless, I am aware that for a thorough understanding of Shintoist take on excrement more texts and folklore should be analyzed. Because of the space constraints, however, I will concentrate mainly on Kojiki. I conclude it is enough to illustrate the overall tendency, as other texts show a notion of defecation consistent with the one in the oldest chronicle of Japan. Moreover, where appropriate, I will supplement information from other relevant sources to paint as comprehensive picture as possible.

For better understanding, I will categorize scatological content into three groups: positive, negative, and neutral.

In total, there are seven mentions of excrement in *Kojiki*, of which two are positive, two negative, and three can be called neutral.

4.1. Positive mentions of excrement

First, let us start with somewhat positive stories, amongst which is one of the most famous Shinto beliefs, the cosmogonic myth.

Book one, chapter 7

Because [Izanami-nö-mikötö] bore this child [the fire god], her genitals were burned, and she lay down sick.

In her vomit there came into existence the deity KANA-YAMA-BIKO-NÖ-KAMÏ; next KANA-YAMA-BIME-NÖ-KAMÏ.

Next, in her faeces there came into existence the deity PANI-YASU-BIKO-NÖ-KAMÏ; next, PANI-YASU-BIME-NÖ-KAMÏ.

Next, in her urine there came into existence the deity MITU-PA-NÖ-ME-NÖ-KAMÏ; next WAKU-MUSUBI-NÖ-KAMÏ. The child of this deity is TÖYÖ-UKË-BIME-NÖ-KAMÏ.

Thus at last, IZANAMI-NÖ-KAMÏ, because she had borne the fire-deity, divinely passed away (Philippi 1969: 57).⁶

Takeo Matsumura (1954–58), a scholar of Japanese mythology, notes that the Japanese story is the only creation myth in which gods are created from human waste, which reflects the importance of excreta in Japanese agriculture. Names of feces and urine deities respectively mean 'gods who protect the fertility of the earth' and 'goddess of the propitious leaf' (Watanabe 1989: 28–29). Watanabe Shōichi, professor emeritus at Sophia University, saw this traditional importance of night soil in the feeling of security Japanese get from their ancestral roots:

Our parents were raised by their parents; by eating rice and vegetables fertilized by their excrement we live on the excrement of parents in our turn. We exist in the world as a result of our parents' bodily existence. We can say our own bodies exist as a result of the circulation of the excrement of our forefathers, or, as we would say now, its recycling (Ibid.: 25).

Another positive mention of feces in *Kojiki* can be found in the following unconventional love story.

Book two, chapter 53

The daughter of MIZÖ-KUPI of MISIMA, whose name was SEYA-TATARA-PIME, was beautiful. [The deity] OPO-MÖNÖ-NUSI-NÖ-KAMÏ of MIWA saw her and admired her.

When the maiden was defecating, he transformed himself into a red painted arrow and, floating down the ditch where she was defecating, struck the maiden's genitals. Then the maiden was alarmed, and ran away in great confusion.

Then she took the arrow and placed it by her bed.

Immediately it turned into a lovely young man, who took the maiden as wife, and there was born a child named POTÖ-TATARA-ISUSUKI-PIME-NÖ-MIKÖTÖ (Philippi 1969: 178–179).

Arguably, courtship and defecation do not often go in pair, but Japanese traditional literature introduces other similar examples. Another can be found in a story from *Konjaku Monogotari*, a collection of Japanese tales from the late Heian period (794–1185). A man named Heichū decides to steal a chamber pot of a lady he fancies, in anticipation that the feces inside would make his feelings for her fade. However, once he steals the chamber pot and looks inside, he thinks: 'What a mystery. It must be the feces of a heavenly maiden from out of this world.' In the end, Heichū's feelings grew even stronger (quoted in Ikegami 2008: 422–424).

This may be why in Japanese folklore a toilet god (kawaya qami) was strongly associated with fertility. It was held that pregnant women should clean the privy, so they would bear beautiful children. Although it is nothing more than a superstition, this belief is so deeply rooted in Japan, that presently it has a scientific justification—if a pregnant woman cleans the toilet, it keeps her in shape, thus it is one of the strategies for easier labor (see Premama Town 2011 for one of many examples). Moreover, offering the toilet god sekihan, sticky rice steamed with red beans, is also believed to help have an easy and safe labor (Japan Toilet Association 2015: 160), while in some parts of Japan, most notably in East Japan, parents would take a newborn child to the lavatory as a 'privy worship' (secchin*mairi*). They pretend to feed waste to the baby, so the child would grow strong and beautiful (Ibid.).

Although there are only two positive mentions of excrement in *Kojiki*, they are very insightful. Gods are created from excrement, which crosses the boundaries of sacred and profane. It is in stark comparison with the Christian thought, where excreta symbolize sin (Bayless 2013). Moreover, association with fertility indicates the importance of feces as fertilizer.

4.2. Negative mentions of excrement

Next, I will identify *Kojiki* stories that present excrement in a more negative light. Both feature Susanoo, god of the sea and storms, which might explain his temper. First is a story portraying how Susanoo acts when he is... happy.⁷

Book one, chapter 16

Then PAYA-SUSA-NÖ-WO-NÖ-MIKÖTÖ said to AMA-TERASU-OPO-MI-KAMÏ:

'It was because my intentions were pure and bright that in the children I begot I obtained graceful maidens. By this it is obvious that I have won.'

Thus saying, he raged with victory, breaking down the ridges between the rice paddies of AMA-TERASU-OPO-MI-KAMÏ and covering up the ditches. Also he defecated and strewed the faeces about in the hall where the first fruits were tasted.

Even though he did this, AMA-TERASU-OPO-MI-KAMÏ did not reprove him, but said:

'That which appears to be faeces must be what my brother has vomited and strewn about while drunk. Also his breaking down the ridges of the paddies and covering up their ditches—my brother must have done this because he thought it was wasteful to use the land thus' (Philippi 1969: 79).

If defecating in your sister's house was not bad enough, in *Nihon Shoki* (720), the second-oldest book of classical Japanese history, we can find the following variation of this myth:

When the time came for the Sun-Goddess to celebrate the feast of first-fruits, Sosa no wo no Mikoto secretly voided excrement under her august seat in the New Palace. The Sun-Goddess, not knowing this, went straight there and took her seat. Accordingly the Sun-Goddess drew herself up, and was sickened. She therefore was enraged, and straightway took up her abode in the Rock-cave of Heaven, and fastened its Rock-door (Aston 2011: 47).

It is somehow understandable that finding feces under one's seat made Amaterasu so angry that the Sun Goddess chose to retreat to the cave, which plunged the earth into darkness and chaos (the same outcome is described in *Kojiki*, where the Storm God 'only' strewed his feces in the hall). What made Susanoo's behavior even more unacceptable, is that his poop tantrum was amongst 'heavenly sins.'

Engishiki, often translated to 'Procedures of the Engi Era,' is a book about laws and customs, which major part was completed in 927. In it are 27 norito—liturgical texts or ritual incantations in Shinto. In one of these, namely the 'Great Exorcism of the Last Day of the Sixth Month' (Phillipi's translation), we can find two lists of Earthly (kunitsutsumi) and Heavenly Sins (amatsutsumi). Earthly Sins mainly deal with diseases and calamities, such as skin excrescences, as well as forbidden sexual relations, for example violation of one's own mother. Heavenly Sins, on the other hand, include agricultural offenses, which are as follows:

- 1. Breaking down the ridges
- 2. Covering up the ditches
- 3. Releasing the irrigation sluices
- 4. Double planting
- 5. Setting up stakes
- 6. Skinning alive
- 7. Skinning backward
- 8. Defecation (Philippi 1969: 403-404).

Defecation being one of the heavenly sins puts excrement rather straightforwardly in the negative category. However, some theories offer a different interpretation.

Originally, the eighth sin is written using Chinese characters \mathbb{RP} . The first one, \mathbb{R} , is *kuso*, meaning excrement, but \mathbb{P} is used phonetically, thus it can be read in different ways. If we assume it is *he*, coming from the verb *heru*—to eject, then indeed we are left with the act of defecation as a sin. Traditional interpretation understands this in terms

of dirtying sacred places, which were to be kept clean and pure (Inoue 2005; Motoori 1968). However, others argue that 戸 should be read as *to*, as in the term *norito* itself (Shiraishi 1941; Uda 1963). In this case, *to* means a spell or magical device, hence the meaning behind 屎戸 is 'cursing with excrement' (this version is used in Bock's [1972] translation of *Engishiki*, p. 85). Therefore, given the agricultural character of the heavenly sins, it is plausible to understand the eighth sin as the prohibition of cursing excrement used to fertilize crops, so it would not hinder farming. In this sense, the above myth does not show excrement as a defilement per se, but rather emphasizes its proper usage.

The second myth with excrement used in a negative sense is about Susanoo killing a food-goddess. Because of his misdeeds with Amaterasu, the gods banish Susanoo from heaven and he comes to live on earth, where he meets the food-goddess.

Book one, chapter 18

Again, [Susa-nö-wo-nö-mikötö] asked food of OPO-GË-TU-PIME-NÖ-KAMÏ.

Then, OPO-GË-TU-PIME took various viands out of her nose, her mouth, and her rectum, prepared them in various ways, and presented them to him. Thereupon PAYA-SUSA-NÖ-WO-NÖ-MIKÖTÖ, who had been watching her actions, thought that she was polluting the food before offering it to him and killed OPO-GË-TU-PIME-NÖ-KAMÏ.

In the corpse of the slain deity there grew [various] things: in her head there grew silkworms; in her two eyes there grew rice seeds; in her two ears there grew millet; in her nose there grew red beans; in her genitals there grew wheat; and in her rectum there grew soy beans.

Then KAMÏ-MUSUBI-MI-OYA-NÖ-MIKÖTÖ had these taken and used as seeds (Philippi 1969: 87).

Here, Susanoo considers food offered from the body's orifices to be polluted, thus he kills the food-goddess. At first glance then, the story implies that anything coming from the anus, ergo excrement, is polluting. Again, however, closer analysis proves it is more complicated.

First, the version recorded in *Nihon Shoki* is significantly different: it is not Susanoo who kills the food-goddess, but the moon god Tsuki-yomi no Mikoto. Also, he kills her not because she served him food coming from her anus, but from her mouth, which he finds disgusting enough (for the whole story see Aston 2011: 32). Thus, pollution does not come specifically from the rectum. Moreover, Philippi notes that Matsumura Takeo gives some possible explanations for the slaying of the food-goddess: the idea that all things of value in life originated in a criminal act; the practice of slaying a victim to ensure a good crop; the practice of performing rites to pacify the grain spirits slain when plants are cut down at harvest (Philippi 1969: 405).

Furthermore, Lewis Hyde (1999) offers an interesting interpretation of the above-mentioned episodes. In the study of folklore and religion, a trickster is a character in a story that plays tricks or otherwise disobeys normal rules

and conventional behavior—a 'boundary-crosser,' as Hyde puts it. Analyzing what happened during Amaterasu's ritual activities, Hyde acknowledges, in a Douglasian fashion, that Susanoo is 'using dirt to disturb the line between heaven and earth and upsetting the way the cosmos has been differentiated' (Ibid.: 177). Thus, we see the opposition of sacred and profane-excrement is negative. At the same time, the author points out that the story can be read as recoding dirt-work that led to the invention of agriculture. By one reading, when Susanoo is banished to earth, the harvest riches formerly reserved for the gods are loosened by his descent. Then he kills the food-goddess and various seeds come from her dead body. So, '[t]he story that began with a heavenly harvest thus ends with earthly seeds that can be planted to feed the human race' (Ibid.: 178-179). Even if Susanoo's actions polluted his sister's sacred space, in the end they made the world a more fertile place to live, which from the human perspective is not a negative thing at all.

4.3. Neutral mentions of excrement

Finally, I will introduce the last three episodes in *Kojiki* with scatological mentions that do not use excrement in particularly positive or negative way. The first myth tells the story of a battle to pacify disobedient people of the Kosi region and 'the twelve regions of the East' (believed to correspond to the later Tōkaidō and Tōzandō districts).

Book two, chapter 67

The PIKO-KUNI-BUKU-NÖ-MIKÖTÖ said:

'Let your side first shoot the ceremonial arrow.'

Although TAKE-PANI-YASU-NÖ-MIKO shot, he could not make a hit.

Then the arrow shot by KUNI-BUKU-NÖ-MIKÖTÖ immediately hit TAKE-PANI-YASU-NÖ-MIKO, and he died

Then his army was completely defeated and fled in confusion.

Pursuing after the fleeting army, they arrived at the ford of KUSUBA. They were all so sorely pressed that they evacuated faeces, which adhered to their trousers.

This is why the name of that place is KUSO-BAKAMA. Now it is called KUSUBA (Philippi 1969: 207).

This story gives folk etymology of place names, one of which is Kusuba, coming from *kuso*—feces. In Japan, it was not unusual to name not only places after excrement—people would also put *kuso* in their children's names, for example 'Kusomaro' (屎麻呂). It is said such 'dirty' names were given so that evil spirits would not want to get close to the child, ergo calling your offspring poop-something served as a curse repellent (lijima 2015).

Furthermore, in *Kojiki* there are two instances in which privy is portrayed as a dangerous place. The first one can be found in book two, chapter 79. The story shows Emperor Keikō worried about one of his sons, Opo-Usu-Nö-Mikötö, who has not been coming for meals. When he asked his younger son, prince Wo-Usu, about the elder prince's whereabouts, Wo-Usu replied:

'Early in the morning when he went into the privy, I waited and captured him, grasped him and crushed him, then pulled off his limbs, and wrapping them in a straw mat threw them away' (Philippi 1969: 232).

Another murder in the privy takes place in book three, chapter 119. This mention is very brief; it describes how a man named Söbakari was deceived into killing his lord:

At this time, SÖBAKARI waited concealed until his prince went into the privy, then killed him with a spear (Philippi 1969: 328).

Nowadays, the toilet does not seem like a particularly dangerous place, but it was not always like that. For example, *Urbanus Magnus*, 'Book of the Civilized Man,' the first English courtesy book from the beginning of the 13th century, recommends:

While the guest is defecating, he should not press for vengeance, nor rouse to frenzy; it is common to attack while squatting. While your guest is defecating or while sleeping, do not strike him; it is an affront to him to strike in such a manner (cited in Whelan 2017: 134).

In the Japanese context, there are no confirmed cases of assassination in the privy, but the most commonly associated name with the phenomenon is Uesugi Kenshin. Uesugi was a daimyō, feudal lord, who died in 1578. The case of his death has been questioned throughout the years and the most widespread theories involve him dying in the toilet: he either died of a stroke while relieving himself or was assassinated by a ninja who had been waiting for him in the cesspool beneath the latrine with a short spear or sword (Nakatsu 2005).

Above I identified all scatological mentions found in *Kojiki*. Two of them are of positive nature: deities are created from excreta, and courtship takes place in the toilet. Both stories associate feces with fertility, which signalizes its importance in agriculture. Next, two negative mentions point to excrement's polluting powers. However, a different reading of the stories highlights the importance of human waste. Finally, there are three neutral uses of the excretory in *Kojiki*, which are only part of the narration.

How then does one characterize the notion of excrement in Japanese cosmology? Even negative mentions, upon closer analysis, lack any significant *moral* stigmatization. Nonetheless, it is difficult to call 'positive' the act of smearing one's feces in the hall—Susanoo did it because he knew this would pollute Amaterasu's pure space. Moreover, one might argue that the association of toilet with danger, which I categorized as neutral, is somehow negative. Therefore, I propose to call the Japanese notion of defecation 'non-binary'8—it can be both positive, as well as more negative. What is important, especially in comparison with the Western approach, is that it lacks moral stigmatization. Japanese shit is not a sin; it is not *kegare*—a state of pollution or defilement.

Furthermore, in other religious systems of Japan, namely Buddhism and Confucianism, we can come to similar conclusion. For example, Dōgen, probably the most well-known Japanese Zen Buddhist priest, described at length how to act in the lavatory in his <code>Shōbōgenzo</code> from the 13th century. He gave very detailed descriptions of how to use the lavatory and stressed how important it is to keep one-self clean. Thus, Dōgen acknowledged excrement as something materially dirty. At the same time, he argued that those who think that Buddhas do not use the lavatory are mistaken, as even the ones in the Pure Lands, the celestial realm of the Buddhas, need to defecate—excretion is not the line that distinguished sacred from profane:

Those folks who are poorly informed fancy that the Buddhas have no forms of dignified behavior for using the lavatory, or they imagine that the forms of dignified behavior for the Buddhas in this world of ordinary beings are not the same as those for the Buddhas in the Pure Lands, but this is not what 'learning the Way of the Buddhas' means (Dōgen 2007: 62).

An example from Confucianism comes from *The Twenty-four Filial Exemplars* (Èrshísì Xiào) written by Guō Jūjìng during the Yuan dynasty (1260–1368). The text was translated into Japanese and became extremely influential in Japan in the Edo period. Story number sixteen is about Yû Qiánlóu, who discovered that his father had been stricken with a strange illness:

'If you want to know your fathers prognosis and chances of recovering, you must test his stool. If it is sweet-tasting, then the malady is serious, and chronic. If it tastes bitter, then the problem is acute, and short-term,' said the doctor. Lacking any sophisticated testing procedure, the physician advised Yu Qiánlóu that he would have to taste the old mans excrement to determine whether he could quickly recover from the disease. Qiánlóu promptly sampled the stool and to his dismay, found it sweet-tasting (Guō).

Thus, although a thorough inquiry is needed, the fact that both Buddhist and Confucian texts include a scatological context we could characterize as positive suggests these two religious systems also offer a non-stigmatizing approach to defecation. This further supports my argument that the notion of defecation in the traditional Japanese fecal habitus is non-binary.

5. Identifying Traditional Fecal Habitus in Japan: Practice of Defecation

The practice of defecation is the second element of a fecal habitus. If a fecal habitus is left to develop naturally, then both notion and practice should be of the same character, because notions drive practices—if a habitus evaluates excreta as dirt, then excretory practices will express this attitude (as Inglis shows, one way of doing that is through strict regulation of practices); if a habitus does not evaluate excreta merely as an object of disgust, then the practice will not be negatively charged. Thus, in this final section, I will examine if the practice of defeca-

tion in Japan's original fecal habitus indeed is driven by the non-binary notion.

In short, yes. First, toilet facilities were shared and the only segregation was between urine or feces because these natural fertilizers were used for different crops. This indicates no strict regularization of the excretory practice as opposed to the Western example. To fully understand why I make this argument it is necessary to mention the ideological origins of sex-segregated toilets: they were to protect the women's virtue based on a separate spheres ideology (Anthony & Dufresne 2007; Cavanagh 2010; Kogan 2010). Following the industrial revolution, men began to work in public workplaces, while women mostly stayed at homes. This created the idea that the public is a male domain, while private is for women. Terry S. Kogan (2010), reviewing numerous American reports that examined conditions of working women of the time, points out reoccurring ideas regarding sex-segregation of toilets: women's bodies are weaker than men's and do not handle unsanitary conditions, they need more privacy, shared toilets are 'morally objectionable.' Although there is no elaboration on what is so immoral about sharing a toilet, considering the context of the late 19th century, I suggest that Inglis' understating of the Western notion of defecation as 'moral dirt' is telling. If a body's excreting capacity is considered 'morally objectionable,' then it makes sense that this practice should be hidden from others, especially in case of women who were, or rather still are, expected to embody notions of purity. Thus, I suggest sex-segregation of toilets is connected to the Western condemnation of excrement and this is why I argue unisex facilities in premodern Japan indicate a lack of stigmatization of the excretory.

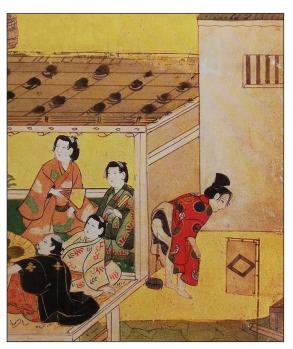
Furthermore, people used to take care of their biological needs relatively out in the open compared with modern standards—defecation was practiced in privies, but these show a quite different understanding of 'privacy' from the one we have now. In Edo, toilet doors covered only the bottom half, thus the defecating person was fairly visible, as **picture 1** illustrates. Interestingly, in the Keihan region (Kyoto and Osaka), doors were from top to bottom, much like today. It is not clear what the reason for this difference was, but some explanations for shorter doors in Edo include considerations for security, better turnover rate, or attempts to eliminate graffiti in toilets (Yamaji 2019).

Compared with defecation, urination was practiced even more in public. Both men and women were peeing into buckets in a variety of positions: it was fairly common for women to urinate standing (**Picture 2**), which does not mean they did not pee in a squatting position. Similarly, men generally urinated standing, but there are also pictures showing them urinating while squatting.

Finally, public urination was not only acceptable but sometimes even encouraged because of the night soil collection. For example, in *Tōkaidōchū Hizakurige* (1802~1822) by Jippensha Ikku, we can find a story of two main characters meeting a night soil collector on their way to Edo. They are approached by a man who urges them to urinate into his buckets in exchange for daikon radish (Rinoie 1988: 194–195). Although it is a fictional story, it suggests night soil was so valuable in agrarian Japan, that collection from travelers was a common practice.



Picture 1: Edo toilet with half doors by Hokusai (1878).



Picture 2: Female standing urination portrayed in *Kawa-guchi yūri zu byōbu*, early 1600s (printed in Yamazaki 2016: iii).

Drawing on the above, it is clear that the practice of defecation in Japan's traditional fecal habitus can be characterized as conducted relatively in public without strict regularization. It matches the essence of the non-binary notion of defecation, together creating a holistic fecal habitus. This habitus, in turn, was embodied in Japan's premodern means of excretory disposal: night soil collection system. To summarize, Japan's traditional mode of excretion is as follows (**Figure 3**).

Japanese traditional mode of excretion

- 1) Fecal habitus:
- Notion of defecation: non-binary
- Practice of defecation: conducted relatively in public without strict regularization
- Means of excretory disposal: night soil collection system

Figure 3: Japanese traditional mode of excretion.

6. Conclusion

In this essay, I endeavored to understand the origins of Japan's premodern reliance on the night soil system. To do that, I applied theoretical framework proposed by David Inglis, with slight alternations so that a mode of excretion consists of: 1) a fecal habitus with two components-notion and practice of defecation; and 2) means of excretory disposal. First, I introduced Japan's premodern human waste management system, namely night soil collection, which in the terminology of foregrounded theory constitutes means of excretory disposal. Then, informed by Mary Douglas' findings, I examined how the excretory was portrayed in the country's cosmology. Here I focused on scatological content in Kojiki, the basis of Shintoism, and provided supporting evidence from relevant literary sources. I categorized the scatological mentions in Kojiki into three groups: positive (two stories), negative (two stories), and neutral (three stories). Consequently, I concluded the traditional notion of defecation in Japan should be characterized as non-binary. Finally, I analyzed the second component of Japan's traditional fecal habitus: practice of defecation. Drawing on historical and literary sources, I concluded that defecation was conducted relatively in public, which indicates little stigmatization regarding this biological function. Thus, both the notion and practice of defecation indicate a holistic approach that is expressed in Japan's traditional means of excretory disposal: night soil collection system.

Therefore, with this paper, I argue that whether excrement is considered productive or disgusting is culturally encoded. Nowadays, water-based sanitation systems that see excrement only as waste have become the modern norm. 10 Indeed, it is so in modern Japan: the country has universal access to improved sanitation, and 79.3% of the population are connected to the sewage system (Japan Sewage Works Association 2018). The reason that Japan chose to rely on this highly unsustainable human waste management system is connected to Western dominance in the world—to be considered modern, Japan had to do things the Western way (Szczygiel 2016). And, as Inglis shows, the legitimate way of dealing with excrement in the West is 'out of sight, out of mind.' If power relations at the time had been different, it is possible today we would be using different, more eco-conscious means of excretory disposal.

However, the silver lining is that the Japanese-Western power struggle gave the world Japanese high-tech toilets

that pamper users' butts with heated seats and a cleansing jet of water. Interestingly, these too might partially be a product of Japan's non-stigmatized approach to defecation: while the Western excretory space has seen no major improvements since the 19th century, Japan took the Western prototype to another level and became a toilet superpower. Why? As Inglis claims, Western consideration of excrement as moral dirt created the need to conceal the body's excreta-making capacities. Accordingly, the excretory space was designed to hide bodies' most degrading moment and as such is not worthy of any extra care.11 In Japan, however, as this paper argues, the non-binary notion of defecation created a more holistic understanding of the excretory and the practice of defecation was relatively free of stigmatization. Currently, even though Japan visually recreated the Western excretory space, there still is less societal taboo regarding defecation (Szczygiel 2019). I suggest this is why when Japan became an economic power and the standard of living improved, toilets and excretory spaces upgraded on par with other aspects of material culture, so now Japanese toilets have our back (ends).

Notes

- ¹ Esrey et al. (1998) suggest societies could be categorized as having either fecophobic or fecophilic attitudes, but they do not explain what exactly shapes the dominant take on the excretory of a society.
- ² Having said that, there are instances where the reuse of human waste is actually encouraged, such as ecological farming (Jenkins 2005), or ecological sanitation (Esrey et al. 1998). Shit seems to have its moment right now, with more attention paid to alternative uses, such as fecal transplantation (Filip, Tzaneva, & Dumitrascu 2018; see also McGlotten & Webel 2016). Nevertheless, it is still mostly considered the opposition to modernity and the accepted order. Lucy Pickering (2010) illustrated it in her study of hippies in Hawaii. For them, composting their feces is not only a part of a lifestyle that emphasizes environmental sustainability, but also, or maybe even more, a form of a social critique of the mainstream American life and values.
- ³ Further support for the beginning of night soil usage in the 12th century can be found in the fact that from the Heian period on, *kusobera* or *chūgi* (literally 'dung stick,' wooden sticks used to scrape away the feces after defecation) disappeared from cesspit toilets, probably because they interfered with night soil collection. Moreover, from the 12th century, large cesspit toilets appeared—until then, they had been relatively small—plausibly as a result of night soil collecting habits (Ota kuritsu kyōdo hakubutsukan 1997).
- For more detailed information on night soil practices in Japan in English see Bay 2019; Hanley 1987; Howell 2013; Kreitman 2018; Tajima 2007; Walthall 1988.
- ⁵ Investigation of the negative charging of excreta in the Western context falls beyond the scope of this paper, but I propose to link it with Christendom and the growing role of the Church in medieval Europe.

- For a preliminary analysis see Szczygiel 2017, while for a thorough exploration of excreta in Christendom see Bayless 2013.
- ⁶ All citations from Philippi's translation are left with the original spelling.
- ⁷ For discussion on Susanoo bizarre behavior see Philippi 1969: 403–404.
- 8 In my previous research I used the term 'neutral' to describe Japanese notion of excrement. However, I decided to change it to 'non-binary' so it includes both positive as well as more negative understandings of the excretory experience.
- ⁹ I emphasize this is the case when a fecal habitus takes shape naturally, in contrast to it being altered by outside influence. This distinction is especially important in the Japanese context, as I argue that Western influence progressively changed the traditional Japanese fecal habitus so now, in the modern Japanese fecal habitus, we can talk about dichotomy between the notion and practice of defecation. This phenomenon will not be discussed here, but I direct interested readers to my future publications.
- Shortages of clean water draw attention to how wasteful flush toilets are. It is necessary to rethink our reliance on water-based sanitation system to secure sustainable future. For example, Bill & Melinda Gates Foundation is working on toilets that transform waste into fertilizer and do not require water or sewers (Bill & Melinda Gates Foundation 2019).
- ¹¹ Similarly, disgust is capable of 'contaminating' other objects: People are unlikely to drink their favorite beverage if it had even a brief contact with a thoroughly sterilized dead cockroach (Rozin, Millman & Nemeroff 1986).

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Competing Interests

The author has no competing interests to declare.

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