

Hygiene in a Landlord State: Health, Cleanliness and Chewing Gum in Late Twentieth Century Singapore

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This article provides historical context for Singapore's fabled preoccupation with cleanliness. Beyond the legacy of British colonialism and post-colonial concerns with international branding, the city-state was globally unique in shifting nearly all its citizens into a new urban infrastructure in one sustained campaign. Public health bureaucracies came to play an important supporting role in the creation of this 'landlord state', in which health became imbricated with cleanliness and habitation, all three becoming realms of state responsibility. The ban on the importation of chewing gum in the early 1990s can also be set within this context, that substance having emerged for infrastructure builders as not just a nuisance, but a tool of low-level sabotage.

SINGAPORE IS well-known globally for the priority it gives to order and cleanliness. For a society now self-consciously embarked on a process of liberalisation, however, this decades-old reputation is something of a double-edged sword (Tan, 2003). Order and cleanliness are two of the qualities that attract global capital—in the form of multinational corporate headquarters and tourists—and are generally on the positive side of the ledger for urban-dwellers whoever they are and wherever

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they might live. On the other hand, they're also easy metaphors for Singapore's authoritarian mode of republicanism, its attraction to social engineering, and its reputation as a 'nanny state'. If there is only one thing that many foreigners know about Singapore it is that the government bans the importation of chewing gum.¹ Outlawing a substance associated with the casual playfulness of youth—though also with a confrontational body-language and critique of decorum—strikes many as extreme, even if city governments (and cleaners) around the world might quietly envy that power.²

The cleansing campaigns that contributed to the look and feel of modern Singapore are closely associated with Lee Kuan Yew's People's Action Party (PAP) state, and, for some commentators, with the personality of Lee himself. But they also continued an agenda introduced by the British colonial administration, and often used bureaucratic organs and practices typical of that period (Yeoh, 1996).³ The post-colonial state enforced colonial values, however, with a thoroughness and earnestness unattainable by the colonial system itself, which could not easily mobilise subject populations. Frequent 'public cleansings' of the streets led the Health Minister to boast, as early as 1971, that Singapore cleansed itself more often and more thoroughly than any city in the world.⁴ The Health Ministry likewise described Singapore in 1969 as 'the oasis of Southeast Asia' because of its lesser susceptibility to communicable diseases.⁵ Specific actions that would cement this branding included a ban on street hawking—selling food on the street from carts—the institution of stiff fines for littering and spitting, the near-total elimination of farms and farm-animals, a war against insect vectors, and the (very late) banning of chewing gum, among many other measures. The eradication of insect vectors was particularly remarkable given Singapore's location on a tropical island in a region of rain forests. Despite still-periodic dengue fever outbreaks, one is arguably less likely to be bitten by a mosquito in central Singapore than in New York or London.

In the immediate post-independence period (after 1965), the enthusiasm for cleanliness knew few bounds, and extended in the early 1970s to people's physical appearances. At the launch of Operation Broomstick in 1971, the Health Minister declared 'Youths with long and scruffy hair pose a danger to public health', and that such hair styles were 'an open invitation for lice to form colonies and spread disease like the plague'. The Ministry was 'watching with concern the growing number of scruffy-looking individuals and contemplating some form of action' declared the minister, who threatened to enforce personal hygiene using the 'Destruction of Disease-Bearing Insects Act'.⁶ Immigration officials, school principals and those in charge of Singapore's media all joined in the national campaign to humiliate or isolate long-haired men. Police round-ups of 'hippies' were organised the same week the Health Minister made his threat. Although long hair was not technically illegal, men brought to the police station were stripped to the waist and photographed before being released, just as those arriving at the airport were required to be shorn before entering the country. A senior official of the Home Affairs Ministry explained the police action as a research project: 'We are studying ways to keep Singaporeans clean and tidy.'⁷

It is no revelation that public health officials the world over, colonial or otherwise, have had a difficult time distinguishing between germs and people, cleanliness and personal expression, and health and political control (Anderson, 2006; Arnold, 1993). But I want in the following essay to read beyond the sensational and fit Singapore's public health initiatives of the 1960s to the early 1990s into a more complicated and yet mundane framework; a picture of hygiene-consciousness in Singapore that places it within a political economy specific to that time and place. Doing so will also result in a more finely-grained picture of how hygiene became such an all-purpose category, and for reasons that transcended anxiety about foreign lifestyle choices, the instinct for control, the personality of the prime minister, the 'clean' image of his political party, or the imperative of international branding. All of these are partially explanatory, but they are not enough.

While there was no single context in which Singapore's post-independence cleanliness campaigns unfolded, one that is too often ignored was the creation of what I'll call the 'landlord state'. This is more accurate than the often used label 'nanny state' as it emphasises the role of infrastructure—its creation and maintenance—rather than acts of instruction and punishment. It is also not burdened with the snobbery of a term coined by British conservatives in the 1980s to denigrate their liberal opponents, and which, a decade later, was too casually extended by British journalists to Singapore. As Polly Toynbee wrote about the journalistic circle surrounding Auberon Waugh, who was one of the early and most frequent promoters of that term 'nanny state':

Their language is as self-consciously class-identifying as their voices . . . (which) cling to the prep school and nursery of the 1940s and 50s—hence that bizarre conservative epithet 'nanny' or 'nanny state', applied to the Labour women they especially loathe. (Toynbee, 2001)⁸

This misogynist phrase of the political right sits uneasily with the masculinist orientation of Singapore under Lee Kuan Yew, and its emphasis on large-scale infrastructure-building. A landlord's range of powers are more spatial and technical than a nanny's, in particular the ability to physically place and displace, and set rules for habitation. But the landlord is also responsible, in the end, for fixing the plumbing. This is more than metaphorical in the present case.

Singapore is unique among modern nations in having literally re-housed over 80 per cent of its citizens in one extended campaign, moving them into flats which the government itself constructed and continued to manage, even if the inhabitants technically owned their homes. This massive investment in infrastructure and its management, unusual even for the most closely managed cities, meant few if any spatial issues were outside the government's day-to-day awareness or concern. In addition to serving as a rule-maker, arbiter, checker, and enforcer, as many urban administrations have and do, the Singapore government and its agents were additionally planners, builders and managers of nearly all dwelling units as well as most collective spaces (including centres for eating and shopping), not to mention

the connective tissue between them, from lifts to mass transport. The creation of a new urban environment top-down and from scratch, or at least the perception that that was the project at hand, was the organising frame for almost all social action in this period, and thus fundamental to the way that cleanliness and order were willed and justified. Arguably no other twentieth-century regime, communist or capitalist, re-ordered its national space with this degree of completeness, and within so short a time-frame (Chua, 1997; Clancey, 2004; Koolhaas, 1995).

Given the size and ambition of that project, however, it necessarily mobilised a great number of disparate groups, inside and outside of government, who did not always march in lock-step. In the 1960s and 1970s, Singapore's Ministry of Health was one of the most visible organs of state social engineering. While birth control is the programme that has generated the largest social science literature from this period, the Ministry also managed a nearly endless series of public health campaigns, with names like 'Keep Singapore Clean', 'Keep Singapore Mosquito-Free' and, beginning in 1971, aggressive 'Anti-Pollution Campaigns' some of which were run jointly with the Prime Minister's office. Most of these were directed at codifying new forms of public behaviour within this new national space, and were accompanied in many instances by the fines and penalties which would make Singapore's enforcement regime globally famous decades before chewing gum was banned. Even more powerful and ubiquitous was the Housing & Development Board (HDB), whose role in re-moulding Singapore's landscape and all life within it was out of proportion to its name. Along with other components of its parent Ministry of National Development (MND), it had a large role to play in policies involving health and cleanliness, although one not as readily acknowledged in public health literature.

The Health and National Development ministries were not coequal, however, in terms of budget, organisation, reputation, charisma or effectiveness. The Health Ministry was arguably among the least successful of government bureaucracies in co-opting its natural 'clients', in this case physicians, who would account for some of the most vocal critics of the regime among civil society groups. Some of its campaigns also revealed the limits of public coercion. By contrast, the National Development Ministry and its (technically autonomous) Housing Board were more successful in marginalising local architects and planners who sought to challenge or influence the infrastructure-building mission (Clancey, 2007). The Housing Board too, however, faced limits in controlling public behavior in their estates.

This article shall initially focus on how these two bureaucracies (The Health Ministry and the HDB) contributed, sometimes together, other times apart, and other times at cross-purposes, to enforcing what might be called 'infrastructural values' in the period of the 1960s and beyond. It will start with the campaign against street-hawkers, who with their mobile carts constituted a hindrance to the government's attempts to 're-space' the island. It will end with a focus on chewing gum, which began as an uncontroversial component of both the hygienic and economic scene in Singapore, but ended up literally 'jamming the works' of state-built infrastructure.

The Great Re-housing: Government as Landlord

The re-housing campaign that began in late 1950s under the colonial Singapore Improvement Trust (SIT), and continued even more earnestly and effectively under the post-colonial Housing & Development Board (HDB), has been well-discussed elsewhere and need only be summarised here. This government-directed rehousing of the majority of the national population was among the most comprehensive in the history of modern cities, both in terms of the percentage of citizens affected and the speed and deliberation with which it was carried forward (Chua, 1997, 2000; Clancey, 2004; Harris, 2002; Loh, 2013). Nonetheless, it can also be seen as a part of a more widespread twentieth century re-housing project, near-global in its manifestation. One common thread in such housing campaigns around the world was the invocation of ‘emergency’ as both a rationale and rhetorical context for citizen mobilisation. Indeed almost every rehousing regime used ‘emergency’ or ‘crisis’ as a rationale for demolishing neighbourhoods, migrating populations and containing them within high-rise housing. Although ‘development’ was also a keyword in this project, I’ve argued elsewhere that this extended global re-housing should also be seen as part of a history of mass mobilisation linked to war and the threat of war (Clancey, 2006; Loh, 2016).

In the case of Singapore, that conflict was the Cold War. From the late 1940s through 1960, Singapore was caught up in the so-called Malayan Emergency, which resulted in almost the entire rural Chinese population in neighboring Malaya being rehoused in so-called ‘new villages’. These were essentially camps enclosed in barbed wire meant to separate the rural population from the Chinese communist guerillas whom the colonial regime was fighting in the Malayan jungles. At the same time, so-called ‘new towns’ began to be constructed by the British in Singapore city itself, with the intention of moving the urban Chinese population from the crowded Chinatown and squatter communities that had grown up as a result of the Japanese occupation. These were considered by the government to be beyond surveillance and policing. The SIT and later HDB planned for an orderly, more transparent, and (it was hoped) socially progressive new environment. But though it paralleled the British project of urban rehousing occurring simultaneously in the metropole, Singapore’s rehousing ultimately had as much to do with the fight against Communism in Asia. The same can be said of the British housing policy in Hong Kong, which helps explain why these two Chinese-majority cities, uniquely among British colonies, saw such extensive government-directed re-housing of their inhabitants (Castells, Goh & Kwok, 1990; Clancey, 2004; Loh, 2016).

Throughout the colonial period Singapore’s slums and *kampungs* (rural villages) were described as ‘breeding grounds’ for disease, and the rehousing was presented as mainly a public health measure (Manderson, 2002, p. 122).⁹ This was also typical of rehousing campaigns of the nineteenth and early twentieth centuries around the world. Whether in the United States, the UK, Japan, or the colonies which they and other powers managed, housing reform efforts through, at least, the 1920s were heavily couched on public health and medical language (Clancey, 2006).

Tuberculosis and other contagious diseases were believed to have a spatial origin, and the solution was thus to re-order space. The fit between health and re-housing was so tight that under the colonial SIT, TB sufferers were given priority in moving to new housing estates.¹⁰

In the Singapore of the 1960s, however (and much earlier in the US and other places), public health language began to drop away or became peripheral as the main justification for such mobilisation. Re-housing was now more commonly spoken of in terms of poverty-relief, wealth-sharing, technology, economics, politics, etc. One explanation is that in rehousing campaigns like that of Singapore, the targets eventually extended so far beyond traditional ‘slums’ that the medicalised language of ‘festering sore centers’ and ‘disease-breeding neighborhoods’ no longer described the more expansive landscape that planners wished to plough up and remake. The attenuation of public health language, in other words, was the result of an escalation in government ambition and scale.

Health was never fully abandoned as a justification for re-housing, it was just no longer as necessary for policy implementation. In the late 1960s, J. W. L. Kleevens, a lecturer at the University of Singapore, conducted research on the comparative prevalence of intestinal parasites (helminths) in children who lived in squatter communities or *kampung*s, as compared to those who were being moved in high-rise flats. The research was carried out in the midst of the second HDB five-year plan, using as a laboratory the Bukit Ho Swee district, where contrast between the two environments was most extreme. Kleevens found that residents in HDB flats in that area had fewer intestinal parasites than residents of the squatter settlement next door to those flats, whose children were more likely to be in frequent contact with the soil. He supplemented this with other studies making similar comparisons of incidents of common cold, etc., and published his findings in 1972 as *Housing and Health in a Tropical City: A Selective Study in Singapore, 1964–1967* (Kleevens, 1972). Modern housing infrastructure, he seemed to have conclusively proven, was freer of germs, parasites, and all manner of maladies.

What is notable about this document is not its findings, which were unsurprising, but how relatively old-fashioned this type of research had become in the context of the early 1970s, even as it simultaneously became so precise, data-rich and sophisticated as to require a whole book. Despite its conclusiveness, it was almost entirely ignored as a useful piece of propaganda by Singapore’s housing bureaucracy, giving it little circulation or impact outside the community of helminthologists. Singapore had by that time moved beyond public health reasons for relocating its population from the ground into the sky. By the 1970s, and into the 1980s, publications on the motivation and success of the rehousing campaign were more likely to mention the threat of communism, fire or racial riots than the threat of disease as the prime movers for rehousing. Pests inside one’s body were not visible, and hence not as compelling, as those seen to be infecting the body politic.

To put it another way, the charisma of the so-called ‘public health crisis’ related to ‘slums’ began to dissipate as other perceived crises relating to the Cold War and to economic competition arose to take its place. At the same time, however,

the new infrastructural ‘solution’ to perceived ills began to generate public health problems of its own. For public health officials seeking to maintain a voice in social policy, this created an environment in which the old messaging no longer resonated but new messaging was increasingly controversial and fraught with political risk.

Public Health in a Regime of Infrastructure-building

British colonial housing policy had only just begun to be implemented in Singapore when the British left. By contrast, the colonial public health agenda had been largely accomplished by the time of independence. There had been a major hospital expansion in Singapore in the early 1950s under the last colonial administration, for example, and medical training, unlike engineering or other technical disciplines, was well-ensconced in the colonial system of higher education (Singapore Ministry of Health, 1968). A brief polio outbreak in the 1950s had been effectively dealt with through a mass importation of the new Sabin vaccine, making Singapore something of a model in the global effort to defeat that disease (Wilson, 1963, p. 202). A dramatic increase in inoculations of schoolchildren was simultaneously putting diphtheria on the path towards eradication (Singapore Ministry of Health, 1968–1971). TB, which had been the major infectious disease in the colonial period, and had an entire hospital dedicated to it in Singapore, was also on the run by the time Singapore became a republic in 1965. So much so that Tan Tock Seng Hospital, built to treat TB patients, was concentrating on performing open-heart surgery by the late 1960s.¹¹ Cancer and heart disease were then emerging as major killers in Singapore, replacing communicable diseases formerly on the top of the list, and indicating that the city’s disease environment was now radically different than the rest of Southeast Asia. Its health problems were becoming more akin to those of the ‘developed’ world. A top priority for private physicians, from 1962 onward, was indeed an anti-smoking campaign.

Without necessarily promoting it, the HDB was also fulfilling that part of the colonial public health agenda which had called for spatial re-ordering, and which TB and other epidemic diseases had so often served to justify. It was the HDB that emptied out Chinatown and the *kampung*s, and that greatly increased and improved the public drainage system. With *kampung* dwellers snatched away from farming and farm animals and relocated in flats, what might be called the traditional constituency (or target) for public health control was increasingly reduced to the street-hawker population.

To point out that traditional scourges like TB, typhoid and diphtheria were on the run in the 1960s is not to say that public health was a placid field. There was cholera in Singapore in 1972 and outbreaks of typhoid continued through the rest of the decade.¹² Moreover, the appearance of dengue fever, which was first recorded in Singapore in 1960, posed a new challenge which continues to the present day (Kai, 1985, p. 4). The greater ease of modern travel, anti-biotic resistance, and similar factors have in hindsight, made the mid-twentieth century optimism about creating totally healthy and disease-free environments seem as much a modernist dream as

unmetered electricity or personal helicopters. Still, a certain medical triumphalism was warranted in that decade, and often displayed. Parliamentary Health Secretary Sheng Nam Chin opened the World Health Day Celebration in 1961 with the theme 'Accidents Need Not Happen' because, as he noted, accidents for the first time in Singapore's history now killed more people than diseases.¹³

It was this very moment of public health triumphalism, however, which witnessed the heightened drama of new public health campaigns around cleanliness and order. How to account for this seeming paradox? The vigour and visibility of the cleanliness campaigns may have had to do with a perception of excess capacity in the old public health bureaucracy, if not a crisis of political relevance. As early as 1959, the *Straits Times* had declared that the period of great changes and rapid expansion in health reform was passing, and noted (disapprovingly) that the government was giving less publicity to medical services.¹⁴ It may also have represented a desire on the part of the Health Ministry to become more integral to the new National Development agenda, which was all about the physical re-ordering of the island. 'Health' now took on a broader and less clinical definition in public discourse, overlapping more with *cleanliness* and a heightened sense of order than with anything as specifically medical as tuberculosis or helminths. One specific thing it often referenced was the habitation and maintenance of the new public infrastructure.

The most significant new Health Ministry policy of the period around 1970 indeed involved infrastructure building and required close coordination with the Housing & Development Board. This was the forcible movement of all street-hawkers (mobile food vendors) into settled enclosures. Announced in 1971 and scheduled for full implementation by 1975, the project was so ambitious that it was taken out of the Health Ministry the following year and given, with certain other public health projects, to a newly-formed Ministry of the Environment (Singapore Ministry of Health, 1970–1971). There were an estimated 40,000 to 50,000 people in Singapore in the late 1960s who cooked or served food for a living from mobile street-carts scattered all about the city. Considering also their dependents and those supplying the raw materials, as many as 300,000 Singaporeans may have directly depended on this sector for their financial sustenance, not including their customers, who depended on the cheapness and availability of their food to keep the cost of living low.¹⁵ The hawkers had long been the target of surveillance and policing by public health authorities, who were constantly concerned with their ability to spread disease through food handling. But through most of this period their mobility, and often anonymity, had mitigated against tight control.¹⁶

In the early 1970s, with the re-housing project well under way, the decision was taken by the government to eliminate street-hawking once and for all, or rather to move all food-vendors off the street and into permanent 'hawker centres', many (but not all) of which would eventually be located within HDB new towns. This was, of course, partly a master planning decision related to making communal eating areas available to a newly displaced population at their sites of re-location. But it was equally and sometimes more stridently represented as a public health

imperative. As such, it was largely left to the management of the Hawker Division within the Ministry of Health, which, like the HDB, now took on the added function of a construction bureau. Indeed, in taking on the new responsibility of certifying hawkers, the Ministry also became something of an employment bureau as well.

Long before the decision was taken to build hawker centres, ‘hawker control’ was often the cause of political friction, and not only between the authorities and the hawkers themselves. After a typhoid outbreak in 1965, for example, the Health Ministry identified a particular hawker as a carrier. His name, coincidentally or not, was given in the newspapers as ‘Little Pig’. The ministry publicised the fact that when he first took ill, he visited a traditional Chinese doctor and three private Western-style physicians, none of whom reported his case to the public health authorities. This complaint highlighted the tension and mistrust between public health doctors and private specialists characteristic in this era. The Singapore Medical Association (SMA), which represented private doctors, resisted ministry attempts to publish lists of doctors who ‘helped’ after such epidemics, believing that the lists were intended to embarrass doctors who were not perceived as helpful.¹⁷ During the ‘Little Pig’ episode, the head of the General Practitioner Society of the SMA wrote in the *Straits Times* pointing out that typhoid was notoriously difficult to diagnose during an office visit, and stating that blaming doctors was an attempt by the Minister of Health ‘to draw attention away from himself’.¹⁸

As in Britain, the Singapore public health service was egalitarian—doctors were of the same rank and generally low-paid—and were often suspicious and perhaps jealous of specialist colleagues in private practice. In 1963, for instance, the Health Minister referred to doctors who opposed one of his policies as ‘unscrupulous’, while in 1968, the president of the Singapore Medical Association (SMA) referred to the ‘self-generating bureaucratic arrogance’ of the Health Ministry.¹⁹ Another editorial in the *Singapore Medical Journal* (the organ of the Singapore Medical Association) in 1970 spoke of a breakdown in dialogue between doctors and the government, the later displaying an ‘obvious lack of cooperation if not active undermining of professional activity’, and doctors responding with ‘arguments’ and ‘indignation’ (Gwee, 1970, p. 62). Private doctors among the civil society groups were the most apt to insist on their political and professional autonomy in the Singapore of the late 1960s and early 1970s.

Hawker policing could also disturb particular ethnic communities. One example occurred during a 1971 typhoid outbreak in Geylang, a largely ethnic Malay district. The Ministry described the problem as a ‘breakdown of personal hygiene amongst residents’, and prohibited hawking there until every food-seller could be individually examined. This created a fire-storm of protest, the Malay MP representing the area saying that ‘residents had been washing their hands ever since they were kids’ and blaming the epidemic on nearby highway construction which had backed up drains and flooded the neighbourhood. This put the Ministry under great pressure to identify a Malay version of Little Pig, which it eventually did. But along the way, all the other hawkers in the district demanded that they be certified as clean. The newspapers reported on a weekly basis that about twenty or thirty hawkers

have been found disease-free, cumulatively undermining the government's original case of a large-scale 'breakdown in personal hygiene'.²⁰

Thus, for all the visibility of these campaigns, the Health Ministry in this period was often on the defensive, and would in the long run suffer bureaucratic losses in terms of organisation and budgets.²¹ The new Environment Ministry would hive off many of its public health functions in 1972, including Hawker Control, while the government clinics and hospitals under its control would face increasing competition with private hospitals and clinics. It was perhaps not coincidental that the Health Minister's personal contributions to the campaign against hippies in 1971–1977, discussed earlier in this article, came at the very moment his ministry was surrendering its historic responsibility for public 'cleansing', while also experiencing an exodus of doctors from the public service to specialist practice due to what the Singapore Medical Association called 'job dissatisfaction'.²²

Another complication for the Ministry, as suggested by the Geylang case, was the increased realisation that the new and massive infrastructure-building project may be generating its own health problems. For example, the Ministry's anti-mosquito campaigns that began around 1965 typically concentrated on errant citizens as unwitting mosquito-breeders. One pronouncement early in the first campaign warned that hawkers and *kampung* dwellers who didn't cooperate in the anti-mosquito campaign were 'saboteurs of the nation's war against disease and they should be punished'. This set the tone for the predictable round of inspections and fines. Fogging at that time was only done at the airport, so eradication was mainly preventative, and mainly targeted at individuals who allowed standing water to remain in plant pots and other containers on their balconies. Journalists were not shy to point out, however, that HDB land-filling in the Kallang Basin had greatly increased the mosquito population, and later that the Garden City campaign—the planting of so many trees and bushes—had possibly increased the population of the particular type of mosquito causing dengue fever.²³ Thus was the Ministry's emphasis on fining individuals often questioned by journalists, politicians, University of Singapore lecturers, and other knowledgeable sources, even if this made little difference to those who were fined or had their hawker licences revoked.

Some public health campaigns could hardly be separated from infrastructure-building projects, particularly those involving the word 'pollution'. The best example was the Anti-Noise Pollution Campaign, which seems to have begun with surveys of HDB residents which indicated 'the noise' to be one of the major complaints about life in the new estates (Ling & Chen, 1977, p. 38). An article in one of the HDB's own publications medicalised the problem by warning that increased and sustained noise levels could cause complications with pregnancies, trigger stress, etc. (Heng, 1974). The purpose of the article was undoubtedly to scare people into being quieter. But in medicalising noise, the government's own policies were increasingly held to account. The Singapore Medical Association warned in 1972 that 'with industrialization, not only will there be more sources of noise in the environment, but there will also be inevitably a growing army of

shift workers' who require sleep during daylight hours, when construction-related noise was most acute.²⁴

Some physicians also linked Singapore's internal migration to a rising mental health problem. By 1971, Singapore's suicide rate was comparable to that of the 'developed' countries and mental patients occupied one out of three hospital beds. The newly formed Singapore Association of Mental Health (SAMH) had begun lobbying for more resources, its president listing among the vulnerable those 'who have been used to a more protected way of life in the kampongs'. He suggested having sociologists 'find out how people living in high rise flats . . . cope with their problems'. The great migration from *kampung*s and informal communities into HDB estates constituted a 'traumatic change in style of living' in the words of one journalist, with the potential to trigger a mental health crisis.²⁵

Thus with the ubiquity of construction from the early 1960s onwards, the re-housing (and later urban renewal) campaigns began generating more and more complaints about dirt, dust, pollution, mosquitos, noise, trash, clogged drains, etc., which was the hapless task of the Health Ministry (and later the Environment Ministry) to address. One letter to the editor of the *Straits Times* by a writer who styled himself 'What Price Progress' seemed to run the full gamut of public health concerns in describing the effects of infrastructure-building in his/her neighborhood:

The cacophony of the several pile-drivers is matched for maddening effects only by the black dirty smoke which they emit. Nor is this all. All night we are treated to the music and stings of outrageous mosquitos. They emerge from the pools of water left unattended in holes and pits of the uneven reclaimed land.²⁶

This was almost a decade after Senior Health Officer Dr Thong Kah Leong had answered a similar complaint in the *Straits Times* with the admonition 'the public is urged to take a more tolerant view of the situation as we are in the process of National Development, involving tremendous development schemes'.²⁷ But once passions for cleanliness and health were unleashed as a result of its own campaigns, and the Ministry had emerged in the public mind as the main guarantor of local cleanliness, it was under constant if not impossible scrutiny from the public. The letters to the editor section of the *Straits Times* in the 1960s and early 1970s is filled with admonitions to the Ministry to clean up this or that scandalously dirty spot, usually next to the letter-writer's house. Many of these letters were written after an initial inspection had been made, and complain about the lack of follow-up. The Ministry's responsibilities by that time included everything from removing night-soil in older housing areas without proper plumbing, to policing and relocating hawkers, to mosquito inspection, to even rounding up and putting down stray cattle, whose meat they distributed to local charities. This last team within the Ministry was known as the 'cowboys' and their extreme vigilance, as regularly reported by the ST, likely made them as unpopular with the dwindling number of Singaporean farmers as their urban counterparts were with hawkers and gardening homeowners.²⁸

Chewing Gum

Nothing better illustrates the infrastructural context of the post-colonial cleanliness campaigns than the battle over chewing gum, which reached its climax in the ban on importing and selling the substance in 1992. In announcing that policy, the government referenced the threat posed by gum to civil and mechanical engineering, specifically the operation of the modern Mass Rail Transport System, or MRT. MRT engineers reported that the doors of the trains were sometimes not getting shut, and thus stopped service, because the sensors were being purposely covered with gum.²⁹ The spectre of trains stopped in their tracks by chewing gum was only the final skirmish in a long war between Singapore's gum-users and infrastructure-builders which began in the early 1970s, if not earlier. Singapore's technical agencies had long identified chewing gum as the bane of a whole raft of technologies, from lifts, to public telephones, to ATMs, and even mailboxes. The material was associated in the minds of local engineers and planners not just with untidiness and the expense of clean-up, but low-level sabotage.

The habit of chewing gum was widespread in Singapore by the late twentieth century, as it was around the world. And as in other parts of the world, it had never lacked social censure. Prior to the First World War, Singaporeans associated chewing gum almost exclusively with American culture and ways of behaving. A Singapore newspaper article of 1912, for example, purporting to compare female etiquette in major world cities, singled out the girls of New York for their chewing gum habit. Another article that same year called American gum in Britain a 'new invasion', which was finding 'numerous exponents' among the working class.³⁰ By 1916 American chewing gum was being marketed in Singapore itself, with Wrigley's, the leading brand, advertised as an aid to hygiene. Specifically it was described as aiding digestion, quenching thirst, preserving the teeth, and perfuming the breath among other positive attributes.³¹ In 1919, a local paper reported the substance was 'becoming popular in the Far East' generally.³² After the Great War, the British military even began issuing sticks of gum as troop rations, government purchases reaching over three million packs a year by 1926.³³ As a military garrison, Singapore must have soon been flooded with the substance.

In the same decade (the 1920s), chewing gum even became a partly local product. Malaya began to see potential in supplying American manufacturers like Wrigley with *gutta jelutong*—a raw material for gum extractable from a type of native rubber tree—as the cost of *chicle*-based gum from Central and South American sources began to rise. In 1922 a *gutta jelutong* refinery was established in Penang, and by 1928 it was reported that Malayan *jelutong* 'is now replacing *chicle* to a very considerable extent' in American gum.³⁴ Food chemists with the Malayan Department of Forestry had worked to make the raw material even better suited for human consumption. By the early 1930s, the Forestry Department was reporting that 'the Government of this country (Malaya) were deriving considerable revenue from the fact that our American cousins were chewing quite a lot of gum provided by Malaya'.³⁵ Hope was expressed that Malayan *jelutong* might soon displace *chicle*

altogether. 'Will British Malaya be responsible one day for keeping most of the jaws of America's millions active?' asked one *Straits Times* article of 1933.³⁶ This hope was dashed by the war, however, and then by the post-war development of synthetic substitutes for *chicle* and *jelutong* both.

The local relationship with gum further deepened, however, when the substance began to be manufactured in Singapore itself in 1961. The now post-colonial government provided special incentives to makers of select products, granting them 'pioneer' certificates. Chewing gum was one of these. The first plant was set up by Mizhamex Ltd. whose sister firm Mizrahie and Co. Ltd. was also the first local pharmaceutical company. Chewing gum thus belonged to a Mizhamex/Mizrahie product line that also included vitamin tablets, cough drops, aspirin and chocolate.³⁷ This made sense to producers and consumers because it was still marketed as having minor health and hygienic benefits. A second chewing gum company, Merrymay Industries, Ltd. moved into a factory built by the Singapore Economic Development Board in 1965.³⁸

The pioneer certification programme began to be questioned in the early 1970s, one newspaper editorial noting that such incentives 'can produce a glut of certain products and shortages of others'. 'Chewing gum and paper bags' were singled out by the same source as lower-order industries that needed to surrender their places to light engineering and metal manufacturing, perceived as the next stage in Singapore's development.³⁹ Whether coincidental or not, generally positive newspaper articles about chewing gum manufacture and use disappeared around this period, replaced by articles presenting gum as not just undesirable, but an impediment to the new technological infrastructure being rolled out across the island.

The identity of chewing gum as a tool of vandals, thieves, and mischief-makers had also begun to be formed in the colonial period. A report of 1930 had a thief attaching chewing gum to a stick and using it to pull letters out of mailboxes.⁴⁰ The same trick (chewing gum on a stick) was being used by local pickpockets in 1946 to fish money from shopping baskets in crowded markets.⁴¹ These techniques continued to figure in newspaper crime stories into the 1970s.⁴² They began to be surpassed in that decade, however, by reports of gum-related vandalism. The first bank ATM machines, introduced in 1974, were initially plagued not just by faulty cards, but also by chewing gum being stuck into slots.⁴³ Public telephones were likewise under attack from gum by 1975, and continued to be so targeted into the early 1990s, when it was reported that a remarkable 700 phones were jammed with gum and other substances each month.⁴⁴

The greatest public opprobrium, however, was reserved for so-called 'lift vandals' who were disabling the lifts in HDB flats by jamming gum into the button mechanism. While the practice was apparently widespread, it first made headlines in 1977 when vandals targeted lifts in the so-called VIP block in Tao Payoh Central, which was used to showcase Singapore's HDB flats to visiting dignitaries. The lifts there were being jammed daily by what the *Straits Times* initially dubbed a 'chewing gum gang', embarrassing the government and making daily life unbearable for residents on upper floors. 'Vigilante Corps and Special Constabulary' were

activated to patrol the lifts. The drama ended when a vandal was eventually caught by a lift mechanic, who lay in ambush atop one of the cabs for a period of three days, watching riders through a peep-hole. The culprit (an adult) claimed to be acting alone, and out of an uncontrollable impulse rather than a definite purpose, but it remained unclear whether he was one of many, or even a copy-cat.⁴⁵

Chewing gum was not the only weapon of convenience for Singapore's infra-structural saboteurs. Reports also mention wads of paper, matches, and even string, suggesting that anything would do when the urge to disable arose. And from the 1970s onward, it would appear the urge was strong indeed. HDB lifts, in particular, broke down so often that one newspaper dubbed them, in 1973, 'Lifts of Shame'. Lift supplier Fuji Engineering claimed its 400 units in Singapore's HDB flats had an excellent maintenance record, and that breakdowns were mainly caused by vandals who not only used handy materials like gum and matches, but in some instances entered the lifts with what must have been deliberately-gathered materials like screws, wood, or cardboard intent on jamming the doors. Graffiti and urination in lifts was likewise reported as common. In some HDB estates, entering a lift was to enter a closed space of anger, disorder, and filth in the middle of what otherwise was an increasingly cleansed and ordered world.⁴⁶

While one cannot know who was sabotaging lifts, phones, and ATMs, and what their motives might have been, this was a period of brutal rapid change in the lives of Singaporeans, with *kampungs* being razed and people moved into new towns on the government's own schedule, and according to social engineering protocols. Communities were disrupted and dispersed, sometimes away from family and work as well. The flats were certainly more modern than most dwellings being vacated. But many people also found themselves paying rents and utility bills for the first time, not to mention living in the air and dependent on lifts (Clancey, 2004). Surveys of HDB residents in the 1970s by research teams from Singapore's two universities thus found a significant minority of disaffected residents, 20 per cent saying in one survey they had been 'forced to move', likely because of evictions and demolitions, and 27 per cent wanting to move out of the estate they'd been assigned. A full 46 per cent in the same survey describing their new environment as 'crowded and noisy' (Hassan, 1977; Ling & Chen, 1977, p. 29).

The ubiquity of casual sabotage suggests that some in this disgruntled minority were striking back at their landlords, 'weaponizing' materials like chewing gum in a form of low-level luddism. The relevant government bureaucracies likewise considered chewing gum not just an expensive-to-clean nuisance, but a readily-accessible plastique wielded by an anonymous, gangsterish youth population. While gangsterism and delinquency were the usual explanations for such behavior, sociological rather than political analysis being favoured, the persistence and intentionality of some gum-wielding vandals gives one pause. It was reported in the mid-1980s, for example, that the War Memorial at Kranji 'has to be cleared regularly of chewing gum pressed by vandals into some of the 24,000 inscriptions on the stone walls'. Which inscriptions are unclear, but a trip to Kranji was far from casual, as was the act of covering words.⁴⁷ Murals at HDB estates were also targets

for defacement. As for the lifts, the explanation advanced by some residents that the culprits were mischievous children was rejected by the *Straits Times*, which asked ‘how do you account for the cigarette burnt marks on the lift buttons, the smashed lights, and the door that was so badly battered that it actually caved in?’⁴⁸

In any case, chewing gum turned out to be an unplanned-for and surprisingly ubiquitous impediment to infrastructure-building and re-settlement. The proposal to ban the substance outright was first publically mooted by the then-Minister for Foreign Affairs S. Dhanabalan in 1983. On a ‘walk-about’ in his local constituency, he suggested that the initiative was coming from the HDB, which he claimed was spending SGD \$150,000 annually to remove gum stuck to floors and walls. The HDB then had 4,600 blocks under its charge, and ‘the problem was prevalent’ in 3,500 of them. Given his dual portfolio, the minister also anticipated the future fire-storm from foreign critics, saying ‘from being a country that has become associated with cutting the long hair of men, we’ll become associated with the banning of chewing gum’, before adding with bravado that such a foreign reaction ‘isn’t something I’m particularly concerned about’.⁴⁹

Others, however, must have been at least concerned with domestic opinion, because the policy was quickly walked back. Gum advertising was banned from television, but there was no blanket prohibition on sale or use as yet. The HDB instead tried to persuade shop-owners within its precincts to simply stop selling it, and the airport was allowed to prohibit its sale in its own shops. Prime Minister Lee Kuan Yew later wrote in his memoirs that ‘at first, I thought a ban too drastic’, and indeed one was not implemented on his own watch, as he was careful to note (Lee, 2000, p. 183). Two years earlier the PAP had lost its first parliamentary seat in thirteen years in a by-election, and was facing a general election the following year. So it was hardly the time, as one newspaper opinion column put it, to ‘very quickly make law-breakers of our children, some of whom will not go along with a ban’. In fact, the newspapers were full of debate on the matter, some supporting a ban but others seeing it as the sinister (or simply ineffective) start of a campaign of larger prohibitions. ‘We might as well, at the same time, ban magic markers, screwdrivers, nails, and stones’, wrote the same correspondent, listing just a few of the other weapons regularly deployed against lifts.⁵⁰

Banning only resurfaced as a policy option in 1991–1992 under the new Prime Minister Goh Chok Tong. Again technological sabotage was the trigger, but this time it was the placing of gum over the sensors of MRT train doors, stopping them from closing, and thus stopping the trains from moving.⁵¹ As a food item, gum had already been prohibited from MRT trains and stations, but around 400 used lumps of it were still being removed from the trains every night by cleaners, according to the government.⁵² Instances of lift vandalism had also increased through the 1980s as the process of internal migration to HDB flats reached its peak. A *Business Times* article of 1986 claimed that the HDB spent 6.5 million dollars in the previous year repairing and replacing vandalised lifts, though the majority of this was due to ‘urine corrosion’. However, chewing gum was still being deployed as well.⁵³ The heightened stakes of transport disruption on the new MRT likely tipped the

balance in favor of those members of the cabinet who had long supported a total ban, which was announced in January 1992.

The timing of the policy could not have been worse, however. The American president, George Bush Sr., arrived in Singapore for trade talks a few days after the ban was announced, and the American company Wrigley's was still the leading brand among Singaporean gum-chewers. Moreover, Bush was accompanied by the gum-chewing Washington press corps, looking for 'human-interest' stories about Singapore in order to acquaint their American readership with this less-familiar part of Southeast Asia. 'Forget the pending arrival of US President George Bush' read the first line of a UPI wire story about the presidential visit, 'Singapore has stickier issues' (*The New Paper*, 2 January 1992, p. 8). Singapore's long-standing struggles with gum did not register in this and other reports, nor did Singaporean protests over American hypocrisy. One local source pointed out, for instance, that the substance had been banned the year before at the Statue of Liberty.⁵⁴ What might have been the quiet roll-out of yet another domestic cleansing campaign, instead became a global news story which still shapes global consciousness of the nation.

Although far less reported, the chewing gum ban would be partially lifted in 2004 to allow 'therapeutic gum' to be prescribed by dentists and doctors, thus reviving the earlier, near-forgotten link between gum, health and hygiene. This policy shift did not arise from pressure by medical personnel or their patients, however, but from powerful US congressman Phil Crane, who represented Chicago (headquarters of Wrigley), and threatened to delay or scuttle the then-concluding negotiations over the US-Singapore Free Trade agreement unless gum was included. By drawing the line at a gum designed to help people quit smoking—thus cleansing lungs, the air and the street (of cigarette butts)—Singaporean negotiator Ambassador Tommy Koh effected a smart compromise between his country's infrastructural interests and America's pecuniary ones (Koh & Li, 2004; Pang, 2011).

Conclusion

Singapore's modern branding as clean and healthy is largely the product of post-colonial ministries and government boards bent on fully and finally achieving British colonial aims. It was not, however, as centrally-directed and smoothly-managed as it has sometimes seemed from outside the country, or has seemed to nearly everyone with the passage of time. Infrastructure building and the government's new role as a landlord was a context not as apparent to foreign visitors who noticed only the fines and prohibitions. This led to Singapore being branded in the 1990s with a term ('nanny state') crafted by British conservative opponents of Labour initiatives (e.g., bans on smoking) whose misogynist air was always out of place with Singapore's muscular paternalism.

We have all learned the lesson that public health was and is a political realm. But how it was linked to (or de-linked from) political and social projects varied tremendously over space and time. Although public health language had long been used to direct migrations from 'slums' to government housing, it proved largely

unnecessary to direct that migration in Singapore, except in the special case of containing street-hawkers. With the island having achieved perhaps the best public health record in Asia even prior to independence, excess capacity within the Health Ministry was directed more towards ‘cleanliness’, and making public health in that sense an appendage of the infrastructure-focused national development plan, rather than a centre of policy-making in its own right. Many of the new policies the public health bureaucracy did initiate, such as the anti-noise campaign and greater resources given to mental illness, were secondary reactions to changes wrought by developmentalism itself.

Whatever term of critique one accepts or rejects in characterising modern Singapore, most tend to miss the depth of the state’s imbrication with its built environment, and thus to neglect the boxes into which nearly all policy initiatives were packed in this period. In the case of lifts, the box is more than just a metaphor. The rooms whose doors automatically closed and left citizens alone and unseen for seconds or minutes became voting booths for an angry minority of the physically displaced.

NOTES

1. A google search of ‘chewing gum’ plus ‘Singapore’ on 23 April 2016 yielded 433,000 hits, which is nearly the same as the 435,000 hits for ‘merlion’ plus ‘Singapore’. The merlion is the national mascot and near-official symbol.
2. In 2014 the UK’s Local Government Association (LGA) representing about 400 councils in England and Wales, called chewing gum ‘a plague on our pavements . . . which costs councils a fortune to clean up and takes hours of hard work to remove’. They estimated that the average price of cleaning up a stick of gum was 50 times its purchase price. The LGA call for a tax on the industry to defray that cost was rejected by the conservative government (Wescott, 22 November 2014).
3. As early as 1953, an article in the Singapore newspaper *Straits Times* boasted that Singapore was ‘the cleanest city in the East’ (Joseph Ezekiel, ‘Keeping Singapore Clean’, *Straits Times* [hereafter ST], 30 November, 1953, p. 4).
4. ‘We are Better off than Advanced Cities’ (ST, 24 March 1971). The Health Minister compared Singapore’s street cleaning to that of New York, London, and Tokyo, and found that only Singapore cleaned daily, even on public holidays.
5. Singapore, MoH, 1969; *ibid.*, 1970–1971. The 1970 report stated that ‘communicative and infectious diseases are no longer prevalent’ in highlighting the dissimilarity between Singapore and its neighbours.
6. ST (4 October 1971, p. 10).
7. ST (2 October 1971, p. 30).
8. Waugh’s use of the term at an Australian Chamber of Commerce seminar in 1988, to denigrate the efforts of various governments to ban smoking advertising, was perhaps the first time it appeared in print (at least in Australasia). Early uses of the term by conservatives in the UK and US targeted everything from anti-smoking campaigns, to the Democratic and Labour parties, to state aid to illegitimate children. Its earliest application to Singapore may have been a column in the British newspaper *The Independent*, in 1996, by Hong Kong based journalist Stephen Vines, who described Singapore as ‘the world’s most advanced nanny state’. His immediate target was the government’s encouragement of neglected elderly people to sue their children for support. That may also have been the first time the term was applied to what in the West could have been interpreted as a conservative social policy (*The Advertiser*, 7 April 1988; *The Independent*, 9 June 1996).

9. Manderson cites a particularly influential report on TB in Singapore from 1923 ‘which stressed the link between substandard accommodation and the prevalence of disease’, though legislation addressing that issue was delayed until 1927. For late examples of this linkage, see ST (2 December 1951, p. 7); ‘Singapore Losing Poverty and Disease War’ (ST, 11 January 1951, p. 7).
10. *Singapore Free Press* [hereafter SFP], 25 July 1952.
11. Singapore MoH (1968). The TB Control Unit reported a slow decline in the disease had been occurring over the previous 10 years, and mandatory inoculations against diphtheria since 1961 had led to a ‘breakthrough’ in the control of that disease.
12. For the cholera outbreak of 1972, see the ST (10 June 1972, p. 14); recurrent typhoid was also accompanied in the 1970s by some cases of malaria (ST, 22 January 1975, p. 12).
13. ST (23 April 1961, p. 11).
14. ST (Editorial, July 1959) (in ‘Medical and Health Services in Singapore’ clippings collections, Singapore-Malay Collection, National University of Singapore Central Library).
15. This figure of 40,000 was given in a letter by C. B. Wilson, the Chairman of the General Practitioner’s Society to the *Straits Times* (12 May 1965). A 1972 report in the *New Nation* puts the figure at 55,000 (on which the figure of 300,000 dependents was based), which suggests either the imprecision in counting or perhaps that hawking was increasing as the internal migration gathered momentum (*New Nation* [hereafter NN], 8 August 1972, p. 7).
16. In 1939, the *Straits Times* had observed ‘There is an endless struggle between the health authorities and itinerant hawkers in all towns in Malaya; the former to protect the health of the public, the latter for a living’ (ST, 12 April 1939, p. 17).
17. ST (24 April 1965, p. 4); ST (26 April 1965, p. 10); ST (5 May, 1965, p. 8).
18. ST (5 May 1965, p. 8).
19. ST (22 June 1963, p. 10); ST (29 June 1963, p. 15); ST (26 March 1968, p. 8). The 1968 address by Dr. Lim Siew Ming was published in full in the *Singapore Medical Journal* 9 (1) (September 1968, p. 127). For more on the politics of medicine in Singapore, see Clancey (2012).
20. ST (3 February 1971, p. 10); ST (4 February 1971); ST (10 March 1971); ST (11 March 1971); ST (24 March 1971, p. 3); *New Nation* (hereafter NN) (20 March 1971, p. 3).
21. In the government’s 1962 Annual Budget, when Singapore was still a part of Malaysia, the Ministry of Health budget was well below that of the Ministry for Agriculture and Cooperatives, Rural Development, or Education (ST 30 November 1962, p. 11). Budgets would increase in the post-independence period, and an Environmental Health Branch would be set up within the Ministry of Health in 1968 to police littering and pollution. It worked closely with the HDB and in 1971 issued 11,630 tickets to offenders. This unit was split off in 1972 and formed the core of the new Environment Ministry.
22. ST (31 August 1971, p. 6).
23. ST (12 December 1965, p. 12); ST (28 November 1971, p. 13).
24. ST (9 November, 1972, p. 15).
25. NN (28 September 1971, p. 9); for mental health services in Singapore, see Ng (2001).
26. NN (28 September 1972, p. 10).
27. ST (16 September 1964, p. 8).
28. ST (29 October 1966, p. 6).
29. *New Straits Times* (2 January 1992, p. 9). The train door problem was the explicit reason given for the ban when the Ministry of the Environment announced it soon after the new year.
30. ST (11 July 1913, p. 10); ST (1 November 1912, p. 10).
31. *Singapore Free Press and Mercantile Advertiser* (hereafter SFP&MA) (13 May 1916).
32. SFP&MA (3 May 1919, p. 12).
33. SFP&MA (16 April 1927, p. 6). Another indicator of how ubiquitous gum-chewing was becoming in the Empire was a 1929 report that an attempt to ban gum chewing in an Australian shoe factory had resulted in a strike by 150 women employees (ST, 4 October 1929, p. 17).
34. ST (21 June 1923, p. 8); SFP&MA (7 July 1928, p. 19).
35. ST (10 February 1931, p. 18).
36. ST (12 May 1933, p. 12).

37. ST (16 June 1961, p. 12).
38. ST (3 November 1965, p. 14).
39. ST (13 July 1970, p. 10).
40. SFP&MA (15 May 1930, p. 8).
41. ST (13 October 1946, p. 7).
42. NN (8 October 1976, p. 8).
43. ST (21 December 1974, p. 15).
44. ST (7 December 1975e, p. 12); ST (13 November 1990, p. 19).
45. NN (11 April 1977, p. 1); NN (13 April 1977, p. 2); ST (12 April 1977, p. 7); ST (14 April 1977, p. 9).
46. NN (29 August 1973, p. 7); ST (21 December 1974, p. 15); ST (7 December 1975, p. 12); ST (10 April 1977, p. 7); ST (30 November 1984, p. 18).
47. ST (16 April 1985, p. 12).
48. ST (30 November 1984, p. 18).
49. ST (21 November 1983, p. 9).
50. ST (27 November 1983, p. 18).
51. Train stoppages due to gum had happened four times before the ban, and at least once after it was announced (*The New Paper*, 8 February 1992, p. 9).
52. ST (5 December 1989, p. 28); ST (27 June 1989, p. 3); ST (21 June 1989, p. 2); ST (5 January 1992, p. 20); *The New Paper* (26 October 1991, p. 6).
53. *Business Times* (20 September 1986, p. 2).
54. *Business Times* (29 March 1991, p. 11).

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