

A War Against Garbage in Postwar Japan

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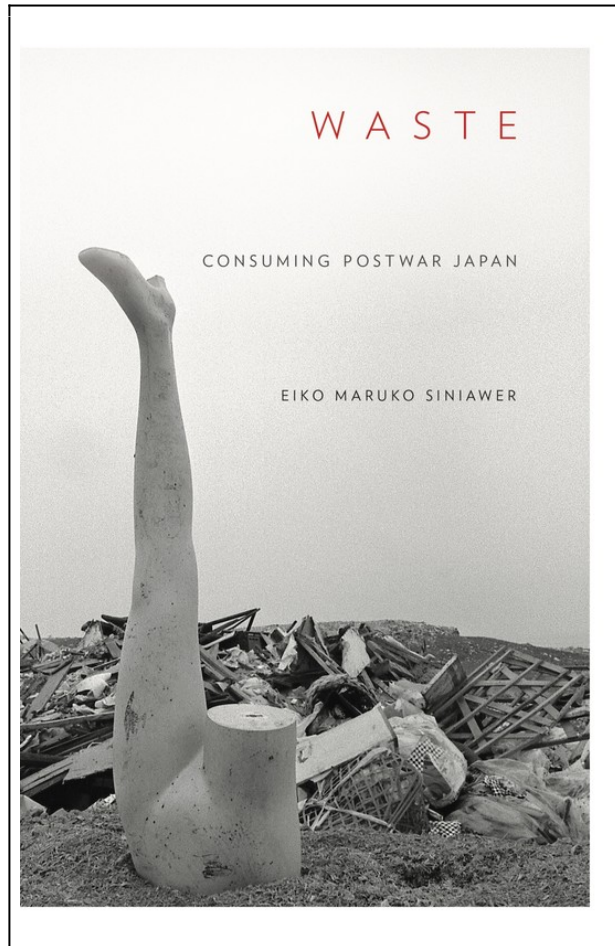
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When Minobe Ryōkichi declared war against garbage in September 1971, he thrust waste into the public's attention and rendered it visible. The governor of Tokyo was not just encouraging the construction of incinerators and landfills to deal with the rapid proliferation of rubbish then facing the metropolis, but was also provoking discussions about the inescapable costs of high economic growth and mass consumption. The Garbage War (*gomi sensō*), described below in an excerpt from *Waste*, ultimately proved to be pivotal in changing conceptions of waste in postwar Japan. Coupled with the Oil Shock of 1973, it revealed how deeply waste had insinuated itself into the values and practices of everyday life, and how a society of mass production and mass consumption was also one of mass waste. Shaped too by ideas of environmental protection, the waste of things, resources, and energy came to be seen as tightly interwoven problems that threatened the security and longevity of middle-class lifestyles.

At this moment in the early 1970s, garbage was not just a material reality that demanded the attention of urban infrastructure development, but also a symbol of the many desires of middle-class life: the convenience of disposable goods, the comforts fueled by energy consumption, the purchase of electric appliances, the preservation of natural resources, and more. In subsequent years, people's production of rubbish continued to pose problems, as it does today with plastic polluting the world's oceans and trash

accumulating after China's refusal to continue serving as the world's dump. But what has changed over the postwar decades in Japan are the views of rubbish and the larger sociocultural issues that it has been seen to reflect. It is this more capacious understanding of garbage that best captures the central concerns of *Waste*, which is less about rubbish and much more about the idea of waste—about what was considered to be waste and to be wasteful in Japan from the mid-1940s to the present day.

A fundamental quality of garbage—that it has been rejected as valueless—can be applied to waste of all sorts, material or otherwise. To deem anything a waste, be it energy or food or money or time, is to make a determination of value. By tracing shifts in conceptions of waste and wastefulness, the book illustrates how people gave meaning to and found value in their daily lives. And it tells a story of the concerns, aspirations, disappointments, and hopes that have marked people's experiences in the long postwar.



"I intend to become a clean-up man for Tokyo," announced Minobe Ryōkichi in a speech after winning the governorship in April 1967. Speaking both literally and figuratively, he went on to lay the philosophical groundwork for what would become the Garbage War. He articulated his commitment to addressing "some of the biggest distortions of high-speed growth," to raising the quality of living in the metropolis, and to keeping his campaign promise of "correct[ing], if even only slightly, the inequities, the foulness, the inequality and the ill treatment of the weak by society."¹ In terms of concrete priorities, sanitation and environmental pollution were high on the list. Demonstrating that his words were not empty, he appointed as his chief economic planner Shibata Tokue, a professor at Tokyo Metropolitan University and an expert on

matters sanitary. Shibata was the author of several books, including *Nihon no seisō mondai* (Japan's Sanitation Problem), which was published a full decade earlier and was well ahead of its time in considering the relationship between economic changes, societal shifts, and waste.²

What Minobe hoped to do was build incinerators in wards throughout the metropolis, so that each area of the capital would become more directly responsible for its own garbage, and the disproportionate onus for disposal then placed on one particular ward, Kōtō, would be alleviated. At a pragmatic and strategic level, the Garbage War was a campaign to convince residents that ensuring their standard of living might very well require assenting to an incinerator in their backyard. The declaration of war in September 1971 was thus an appeal to Tokyoites: that the dire state of the garbage problem would have to be addressed to preserve their lives and lifestyle, and the most effective weapon in this battle would be the modern incinerator.³ On a societal and political level, the Garbage War was about how to apportion more fairly the responsibility for disposing of the undesirable by-products of modern civilization.

In many ways, Minobe's offensive sought to thoroughly modernize waste. Rubbish was to be treated as the creation of a modern and civilized society, and was to be managed with technology so advanced that incinerators could stand and be seen in the heart of metropolitan neighborhoods as symbols of their capacity to tame waste. What Minobe was fighting was the enduring view of garbage as, to borrow the historian David Howell's description of human shit, yucky.⁴ And not just yucky but potentially dangerous, so that it should be kept at the city's margins or, at the very least, outside of one's own backyard.

Even before the fall of 1971, it was clear that many residents would resist the construction of

new incinerators for various reasons having to do with environmental impact, health, and safety as well as financial costs and the intervention of the metropolitan government into ward affairs. A prime case was the refusal of Sugunami ward to house an incinerator on its soil, a position that rendered it a combatant in an eight-year war of its own. Plans for a facility in Sugunami had been in the works since 1939, were put on hold in the war-torn 1940s, and were resuscitated as part of the metropolitan government's (unkept) promise in 1964 to be incinerating all garbage by 1970. Understanding that facilities would have to be built in various wards throughout Tokyo, the residents of Sugunami began to discuss the prospect for their ward. But in November 1966, they were abruptly informed by the metropolitan government of the specific site that had been chosen, one that was located near an elementary school and a train station and would require the sale of privately owned land. Stunned by this unexpected decision, ward residents organized a resistance movement that was still holding its oppositional stance in the fall of 1971.⁵

Parallel to Sugunami's battle against the introduction of an incinerator into its ward, Kōtō had been defending itself against an onslaught of garbage for years.⁶ Kōtō was located on the shores of Tokyo Bay and was home to two-thirds of the capital's landfills. Garbage trucks transported waste from all across Tokyo, converging in a daily parade of noise and odor in the ward's congested streets. Official figures put at five thousand the number of trucks that passed through each day, with the area of Edagawa near the landfills most affected. There were regular outbreaks of flies, and rubbish whirling through the air on windy days. Long frustrated by its inordinate obligation to dispose of the capital's waste, the ward resisted stridently when it was asked by the metropolitan government in mid-August 1971 to support extending the life of Landfill Number Fifteen (the infamous Island of

Dreams, or Yume no Shima, and technically the new, or second, Island of Dreams).⁷ Over the next month, the ward formally expressed its opposition to the government's plan, and on September 27, one day before Minobe's declaration of the Garbage War, the Kōtō ward assembly adopted questions to be posed publicly to the metropolitan government and to the twenty-two other wards of the capital about the structures, assumptions, and unequal burdens of waste disposal.⁸

Particularly irksome to Kōtō residents was the irresponsibility of Sugunami ward which, though wealthy and populous with roughly half a million residents, did not have its own sanitation plant and was entirely reliant on Kōtō ward for waste management. In the eyes of the frustrated citizens of Kōtō, Sugunami's continued refusal to build an incinerator not only suggested its indifference to the inequities of the situation but also symbolized the unwillingness of other wards to take responsibility for their garbage. The conflict between the two wards grabbed significant public attention in late December 1971, when Kōtō ward decided to forcibly block trucks carrying Sugunami's trash from entering Landfill Number Fifteen. Beginning early in the morning on December 22, all of the arriving trucks were checked and those from Sugunami were turned away; as one sign read, "Take Back Sugunami's Garbage." The ongoing showdown between the citizens of Kōtō and Sugunami came for many to epitomize, and adopt the moniker

of, the Garbage War.⁹

This dimension of the Garbage War, the confrontation between citizens of Kōtō and Sugunami wards, heightened the visibility of the garbage problem even as it was about who should be obliged to render garbage invisible. In late May 1973, when Kōtō again refused to accept garbage from a Sugunami that had not yet agreed to house its own incinerator, people

opened their newspapers and turned on their televisions to witness members of the Kōtō ward assembly in helmets, physically barring entrance to Landfill Number Fifteen. And for at least the few days when collection was suspended, denizens of Suginami ward encountered piles of garbage spreading across their sidewalks.¹⁰ The presence of rubbish, made inescapable by Kōtō's actions, helped force an intervention by Minobe, who persuaded Kōtō to end its blockade and resumed negotiations with a Suginami ward more committed to figuring out a site for construction of its incinerator.¹¹



Members of the Kōtō ward assembly checking garbage trucks entering their ward for those carrying rubbish from Suginami ward. May 22, 1973. Photograph by *Mainichi shinbun*.



The sign reads, "Take Back Suginami's Garbage." May 23, 1973. Photograph by *Mainichi shinbun*.

The political conflicts about the construction of incinerators shone a light on the sheer volume and unceasing accumulation of garbage, as well as on the desire of many Tokyoites not to have to see or deal with that garbage in their daily lives. Insofar as Minobe had hoped to draw attention to the garbage problem, he succeeded; but his aim of urban infrastructure development bumped up against the understanding, even the visceral feeling, that garbage was filthy, that it was to be carted away and kept at a distance. This conception of rubbish was implicit in the stances of Suginami ward and others that resisted Minobe's sanitation plans. A documentary aired by the national broadcaster NHK in October 1973 highlighted and exemplified the ways in which concerns about visibility and invisibility were inherent in the clashes over garbage. The very title of the half-hour program, *Gomi to tokonoma* (Garbage and the Alcove), alluded to the question of how garbage should be seen with its evocation of the *tokonoma*, a raised and recessed space in a Japanese-style room in which an object (typically art, a scroll, or

flowers) was displayed. The specific issue taken up in the documentary was the proposed construction of a sanitation plant in the heart of Shinjuku ward, a major hub of business, entertainment, and government administration. Minobe's plan, announced in September 1973, was to build a forty-eight-story facility in a location that was highly visible, purposely and purposefully not hidden.¹² Residents of Shinjuku responded with indignation, and the local neighborhood association (*chōnaikai*) collected ten thousand signatures from those who opposed the construction of the facility. At one boisterous meeting of residents with representatives of the Minobe administration, many opponents succinctly broadcast their position by wearing headbands emblazoned in red with "Down with Garbage" or "No to Garbage" (*Gomi hantai*). Shouting at the government administrators, they expressed their concern that Shinjuku would become a "toilet neighborhood" (*benjo no machi*)—both a place where shit resided and a shitty place. The government representatives tried to assure the residents that the image of Shinjuku would not be damaged, that the facility would be a model of new town planning which mitigated the dangers of pollution and traffic, and that the ward would become a *tokonoma*, a space that displayed a state-of-the-art sanitation facility. In interviews with men and women on the streets of Kōtō, many found it unfair that all of Shinjuku's garbage was brought into their ward, that Shinjuku, like Suginami, did not have to deal with its own waste, and that two years into the Garbage War, not a single incinerator had yet been built. In the words of one resident, Kōtō would also like to be a *tokonoma*. Although the documentary itself did not explicitly stake out a position in this conflict, it did use images to suggest impatience with Shinjuku's resistance. After it was stated that the planned incinerator would handle the 500 tons of garbage thrown out per day in Shinjuku, there was a lingering shot of a discarded McDonald's paper cup surrounded by other rubbish in a garbage can. After

Minobe explained his plan for each area of the metropolis to dispose of its own trash, the camera panned slowly over empty metal cans and other litter, giving weight to his argument that the garbage problem needed to be addressed. And in the closing scenes of the documentary, the loud voices of opponents in Shinjuku were juxtaposed with a final image, in foreboding silence, of garbage being dumped.¹³

Minobe was ultimately victorious in his war, winning the assent of residents to the construction of inescapably conspicuous facilities in more areas of the capital. In November 1974, all parties on the Suginami side agreed to have an incineration plant built in the Takaido area of the ward, having secured concessions to mitigate its visibility, risk of pollution, and disruption to the lives of residents. The plant itself was to use cutting-edge technology to control any possible pollution; underground tunnels were to be constructed for garbage trucks; and the trucks themselves were to be redesigned to contain as much as possible their smells and rubbish. And the incinerator also provided amenities for the area: the heat generated was to warm the water for a nearby swimming pool and senior citizens' home, and new community spaces and facilities were to be constructed, such as a large plaza and a library. After several hundred local meetings, many rounds of negotiations, and legal action, construction started in 1979 on the Takaido plant, which came online in 1982.¹⁴ Minobe and his allies had managed to usher in the era of the modern incinerator. And though a facility in Shinjuku never came to pass, other wards did accede, as ground was broken in Adachi in 1974 and Hikarigaoka in 1980. Over the next twenty or so years, more than a dozen incinerators would be built.¹⁵

Through the waging of the Garbage War, views of rubbish were modified. It would be too simplistic to reduce the various and numerous conflicts down to just the meaning of waste, given the many interests involved concerning

the health and safety of communities, equity, land-ownership, and the democratic process. Complicated too were the differences of opinion even within wards. But the eventual construction of incinerators suggests that, despite lingering concerns about its contaminating potential, there were shifts in ideas about garbage—that its danger and filth could be controlled; that with certain guarantees and proper incentives, a sanitation plant could be tolerated; and that waste could be made safe enough to be in your neighborhood.

There were other indications of a general softening in resistance to the idea of a sanitary treatment plant in one's neighborhood. The Tokyo Metropolitan Citizens' Office (Tokyo-to Tominshitsu) conducted multiple public opinion surveys about the garbage problem which included questions about views toward incinerators, a sign of how central their construction was to the Garbage War. In November 1971, when residents were asked how they would react if a sanitary treatment plant had to be built near their home, almost a quarter (24.3 percent) of the 1,080 respondents said that they would be absolutely opposed. Roughly three-quarters (75.1 percent) said that they could find it acceptable, either with or without conditions.¹⁶ When the same question was asked two years later, in late November and early December 1973, the percentage of the 973 survey takers who would assent remained about the same (75.6 percent), but of those people, many more agreed without conditions. And the percentage who were opposed declined markedly (24.3 to 8.1 percent).¹⁷ This downward trend was loosely corroborated by answers to other questions; it was, for example, consistent with a declining aversion to the principle that each area should dispose of its own

Garbage.¹⁸ A qualification does need to be made. All of these responses were to questions about hypothetical situations or general ideas,

which likely made survey participants seem more amenable to the building of new incinerators than they might actually have been. When asked about the specific, concrete issue of a facility in Suginami ward, almost a third (31 percent) of the respondents did not support its construction. This meant that more people objected to the real possibility of an incinerator in Suginami ward than to the abstract principle of each area taking responsibility for its own garbage.¹⁹ But at least in the realm of the hypothetical, there was somewhat greater comfort with the ability of incinerators to manage distasteful and potentially harmful garbage.

There were also changes, more intentional and self-conscious, in the ways that the Tokyo Sanitation Bureau (Tokyo-to Seisō kyoku) conceived of garbage and its industry. Around 1971, the bureau came to think of its work as being less about the disposal of filth (*obutsu*) for the purpose of beautification or even cleaning and more about the creation of a comprehensive system for preserving the environment. The bureau started to speak not of filth but of waste (*haikibutsu*), which it saw as exceeding levels tolerable for the environment. The large amount of garbage produced by expanded economic activity as well as the dumping of waste where it did not belong breached the capacities of the environment. The bureau thus saw its responsibility as less about hygiene or sanitation, and more about restoration of the lost balance between waste and the environment.²⁰

The Sanitation Bureau's view of waste as its own kind of pollution, or "the third *kōgai*" after that of air and water, was informed by greater acknowledgment in the late 1960s and early 1970s of the environmental costs of the country's rapid economic rise. Particularly hard to ignore was the human price extracted by the environmental degradation and disasters wrought by industrial pollution. Citizens'

antipollution movements were especially active in these years, and victims aggressively sought redress in the courts. Most widely known were the so-called “big four” pollution lawsuits which brought national attention to the four major “pollution diseases” caused by the mishandling of industrial waste by corporations: Minamata disease from methylmercury dumped by the Chisso

Corporation off the coast of Kyūshū; Niigata Minamata disease from methylmercury discarded by the chemical engineering company Shōwa Denkō; itai-itai disease from cadmium released by mining companies in Toyama prefecture; and Yokkaichi asthma from the sulfur oxide pollution of petrochemical processing facilities in Mie prefecture. All four of these cases resulted in legal victories that secured compensation for the victims and helped make pollution an issue of social and political prominence.²¹ Such litigation and environmental protests were largely responsible for landmark legislation, including the passage by the so-called “pollution Diet” in November 1970 of fourteen new laws that established strict antipollution regulations. And in May 1971, Prime Minister Satō Eisaku established the Environment Agency (Kankyōchō).²² It was in this context that the Tokyo Sanitation Bureau increasingly approached waste as an environmental matter that affected people’s lives.

In addition to framing their work in terms of environmental protection, sanitation professionals used the subject of garbage to voice skepticism and pose questions about the society’s direction and priorities. The Tokyo Sanitation Bureau, nodding toward the link between the garbage problem and environmental degradation, urged people to focus on what was being lost with the “immense profits of businesses” and the attainment of “an affluent, consuming lifestyle.”²³ Expounded here was not just the implications of waste proliferation but also its

understood causes of mass production and mass consumption. And both of these phenomena were connected to high economic growth, which was identified as the source of the abundance of things available for consumption and the production of large amounts of garbage. As was expressed in one pithy phrase: GNP is both gross national product and “garbage [*gomi*] national product.”²⁴

Garbage was viewed not just as a result of economic growth but also as evidence of the inability of gross national product (GNP) to effectively capture and measure progress. There was vocal criticism in the early 1970s of an obsession with GNP growth for its elision or even exacerbation of environmental degradation and social problems, and for its obfuscation or even obstruction of understanding what a high quality of life might be. In 1970, the *Asahi* newspaper published a long multipart series titled “Down with GNP!” (*Kutabare GNP!*) to examine one hundred years of Japan’s history as a late-developing capitalist country as well as the “distortions” of postwar economic growth, and to look ahead toward stable and healthy economic growth for the sake of an affluent life that all Japanese people could enjoy. Its inaugural installment expressed doubt about whether GNP growth alone was sufficient, especially when it came to broader concerns about people’s welfare, and asked whether there might be a better measure of societal affluence.²⁵ In one piece in the series that addressed rubbish, the economist John Kenneth Galbraith discussed “the external diseconomies of high level consumption” and listed as examples “disposable beer cans and bottles from the beverage industries, discarded containers from other consumers’ food industries, [and] the garbage and sewage and other wastes of the high consumption household.”²⁶ Among the other authors in the series was the economist Tsuru Shigeto, an adviser to Minobe, who wrote regularly about his skepticism toward GNP: “Numerical

measures such as GNP will not automatically carry connotations as to the magnitude or extent of economic welfare. We shall have to question increasingly the meaningfulness of certain quantitative measures or indexes which in the past we have been conditioned to take for granted.”²⁷ Like Tsuru, Minobe found GNP an inapplicable metric when it came to success in the Garbage War. It should be noted that none of these men, nor the editors of the *Asahi* newspaper series, were rejecting economic growth outright. Nor were they talking about pollution as having enabled high economic growth, as some did.²⁸ What they stressed were the costs of economic growth, the particular negative consequences of the high-speed variety, the shortcomings of GNP as an index of societal health, and the need for people to think beyond GNP to what their values and commitments should be.

Sharp criticisms of the mass consumption fanned by economic growth were presented in an exhibit about the garbage problem housed in the metropolitan government building just after Minobe’s declaration of the Garbage War. Titled “Let’s Shine a Light on Garbage,” the display consisted of graphs, charts, and photographs as well as a pamphlet that identified the root cause of the garbage problem as “an economy of mass consumption that creates waste [*muda*].” Viewers were encouraged to confront the meanings of mass consumption and to ponder two sweeping, even existential, issues: What is truly important and of value in life, and what should modern civilization be?²⁹ Implicit in these questions was the belief that mass consumption should not define modern lives and modern civilization, and that the economic success it enabled was not all it had been hoped to be. In the view of the sanitation expert and chief economic planner Shibata Tokue, the optimistic logic that high levels of consumption and high economic growth would deliver high levels of happiness was being overturned. There was thus a need, he said, to reconsider modern economics and

culture.³⁰

Sanitation professionals strove to disseminate their conceptions of garbage to the public at large, to convince people that their rubbish could and should be managed in environmentally conscious ways and that what they threw out should be seen as a reflection of modern life. As part of the Garbage War, the Tokyo Sanitation Bureau took great pains to spread an understanding of incinerators as safe, clean, and modern. One arrow in the bureau’s quiver was public tours of sanitation treatment plants, to challenge any images and preconceptions Tokyoites might have about dirty and filthy incinerators and to reduce the likelihood that they would oppose one in their own neighborhood. In 1972, the bureau conducted 173 such tours with a total of 7,635 participants. The bureau’s outreach strategy also included meetings with neighborhood associations (of which it conducted 1,300 in 1973), panel discussions, symposia, and “summer schools,” or multi-day instruction sessions about garbage matters. In 1974, responding to a particularly aggressive push that summer, 44,392 Tokyoites took part in a plant visit or symposium; in 1976, 60,000 people saw an incinerator and 11,000 a landfill.³¹ The bureau also did some targeted outreach to the next generation of residents, and through them to their parents as well. Special parent-child tours of incinerators were organized. And the bureau sponsored an annual contest and exhibition of children’s drawings on garbage-related themes, for which it received thousands of entries from elementary school students across the metropolis.³²

It is hard to gauge the extent to which the bureau’s programs and own thinking about garbage influenced the views and behaviors of Tokyo residents, but the Garbage War certainly brought the garbage problem to people’s attention and garbage to their consciousness, even if results in terms of their knowledge and actions were mixed. Less than two months after

Minobe's declaration of war, almost three-quarters of respondents (73.6 percent) in a survey of 1,080 Tokyoites reported that they were familiar with the term "Garbage War."³³ More than that, their sense that the production of garbage had been increasing in recent years was in line with the metropolitan government's description of the proliferation of trash. Asked how they would compare the amount of garbage in Tokyo to that of three or four years earlier, a full 95 percent observed that it had increased to some extent. And many survey takers did not exempt their own behavior from this trend, with 69.1 percent saying that the amount of garbage that their household threw out had increased over the same period. The sense of urgency that the metropolitan government projected about this trend was mirrored in the widespread belief that the streets of Tokyo would become "mountains of garbage" some years hence, with 62.3 percent of participants reporting that this was a possibility.³⁴

Although there seems to have been familiarity with the contours of the garbage problem as the metropolitan government defined it, knowledge about specific systems and practices was murkier, suggesting a limit to residents' interest in and attention to matters of waste. During the ongoing conflict over a possible sanitation facility in Sugunami, the Sugunami Association of Consumers (Sugunami Shōhisha no Kai) and daily life schools (*seikatsu gakkō*) conducted a survey of 493 housewives who lived in their ward. These groups had been spearheading trash reduction efforts even before the fall of 1971 and were curious about how housewives were thinking about garbage, especially in the context of the protracted struggles over the incinerator. While a member of the association spoke highly of the Garbage War as bringing to the surface an issue previously considered unsavory, she was dismayed about the lack of knowledge revealed by the survey. For instance, the ward had a particular system for the collection of large

refuse according to which a resident had to contact the sanitation office three days before a designated date to schedule a pickup. Only 58 percent of respondents knew that this was how to dispose of such items; 37 percent thought that the method was the same for regular and large garbage, which likely meant that they were throwing out bulky objects for normal trash collection. A measly 4 percent of the participants knew the ultimate fate of Sugunami's garbage—that roughly 60 percent was incinerated in other wards and that the rest was transported to Landfill Number Fifteen. Perhaps most alarming given the long-standing and vocal opposition to the construction of an incinerator in their ward, 19 percent of the housewives believed that their garbage was disposed of at a (then nonexistent) plant in Sugunami.³⁵

From the perspective of garbage collectors, there were different impressions about the influence of the Garbage War on residents' awareness of trash matters. In conversations with twenty garbage collectors from five different areas of the capital, some noticed that people had become more responsive to requests and directives from their office. Some observed that in certain places and among certain dedicated people, such as members of particular organizations, there was more recognition of the garbage problem. And one worker suggested that a higher level of interest in general could be attributed to newspaper and radio coverage of the Garbage War. But most said that people treated their garbage as they had before—that trash piled up again shortly after collection and that the level of knowledge about how to dispose of rubbish was low, especially among those who lived in large apartment buildings. One sanitation worker noted that many residents still did as they pleased with their garbage.³⁶

On its own, the impact and legacies of the Garbage War on attitudes toward waste would have been significant, if not monumental.

Waste was rendered visible—through the construction of incinerators and as the topic of discussions about the contemporary economy and society. Sanitation experts shifted their thinking about garbage (from a symptom of civilizational inadequacy to a product of civilizational excess), and about their industry

(from beautification and cleanliness to environmental protection). And rubbish came to be viewed as a problem of postwar modernity to be tackled in new ways.

What amplified, extended, and expanded all of these developments was the Oil Shock.

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Notes

¹ Ōno Osamu, “Minobe to the Rescue,” *Japan Quarterly* 16, no. 3 (July–September 1969): 268; Laura Hein, *Reasonable Men, Powerful Words* (Berkeley: University of California Press, 2004), 191.

² Shibata Tokue, *Nihon no seisō mondai* (Tokyo: Tokyo Daigaku Shuppankai, 1961).

³ In April 1957, the Tokyo Sanitation Bureau had replaced the term “garbage incinerator” (*jinkai shōkyakujō*) with “incineration plant” or “sanitary treatment plant” (*seisō kōjō*) to underscore its technological capabilities. Tokyo-to Seisōkyoku Sōmubu Sōmuka, ed., *Tokyo-to seisō jigyō hyakunen shi* (Tokyo: Tokyo-to, 2000), 149.

⁴ David L. Howell, “Fecal Matters,” in *Japan at Nature’s Edge*, ed. Ian Jared Miller, Julia Adeney Thomas, and Brett L. Walker (Honolulu: University of Hawaii Press, 2013), 137.

⁵ Tokyo-to Seisōkyoku Sōmubu Sōmuka, *Tokyo-to seisō jigyō*, 249–50; Tokue Shibata, “Land, Waste and Pollution,” in *Sustainable Cities*, ed. Tamagawa Hidenori (Tokyo: United Nations University Press, 2006), 103–4.

⁶ This area of the capital had, in fact, been a dumping ground in the prewar period when residents of what was then Fukagawa ward “had been suffering from fumes, offensive odor, and swarms of flies originating in the open trash landfills.” Indeed, Fukagawa had an “association with waste” as early as the 1700s. Mariko Asano Tamanoi, “Suffragist Women, Corrupt Officials, and Waste Control in Prewar Japan,” *Journal of Asian Studies* 68, no. 3 (August 2009): 805–7.

⁷ The original Island of Dreams was Landfill Number Fourteen, which was in use from 1957 to 1967. The (new/second) Island of Dreams was Landfill Number Fifteen, which was in use from 1965 to 1974. Multiple generations of the Island of Dreams would follow.

⁸ Tokyo-to Seisōkyoku Sōmubu Sōmuka, *Tokyo-to seisō jigyō*, 233; Nakamura Masanori, *Ōraru hisutorī no kanōsei* (Tokyo: Ochanomizu Shobō, 2011), 9; Shibata, “Land, Waste and Pollution,” 101.

⁹ Tokyo-to Seisōkyoku Sōmubu Sōmuka, *Tokyo-to seisō jigyō*, 238–39; Shibata, “Land, Waste and Pollution,” 101–2; “Gomi sensō, sono sengen kara Suginami no kaiketsu made,” *Gomi sensō shūhō* 135 (December 27, 1974): 2–4.

¹⁰ *Yomiuri shinbun*, May 22 and 23, 1973; *Asahi shinbun*, May 23 and 24, 1973; *Mainichi shinbun*, May 22 and 23, 1973; Tokyo-to Seisōkyoku Sōmubu Sōmuka, *Tokyo-to seisō jigyō*, 243; Nakamura, *Ōraru hisutorī*, 2, 34.

¹¹ *Yomiuri shinbun*, May 24, 1973; *Asahi shinbun*, May 25, 1973; *Mainichi shinbun*, May 26, 1973.

¹² An exhibit titled “Let’s Shine a Light on Garbage,” displayed in the metropolitan government building in the fall of 1971, sought to “shine a light on” and “make magnificent” what was in the shadows: the kitchen, the garbage bin, and the privy. Yorimoto, “Gomi ni hikari o ateyō,” 14.

¹³ *Gomi to tokonoma* (Nippon Hōsō Kyōkai, October 5, 1973).

¹⁴ Nakamura, *Ōraru hisutorī*, 40–44; Tokyo-to Seisōkyoku Sōmubu Sōmuka, *Tokyo-to seisō jigyō*, 252–54; Shibata, “Land, Waste and Pollution,” 104–5; Margaret A. McKean, *Environmental Protest and Citizen Politics in Japan* (Berkeley: University of California Press, 1981), 105.

¹⁵ Tokyo-to Seisōkyoku Sōmubu Sōmuka, *Tokyo-to seisō jigyō*, 614–15.

¹⁶ The percentage of respondents who required conditions was 69.6 percent; those who did not, 5.5 percent. Tokyo-to Tominshitsu, ed., *Gomi mondai ni kansuru seron chōsa hōkokusho* (Tokyo: Tokyo-to Tominshitsu, 1971), 31.

¹⁷ In the 1971 survey, only 5.5 percent of the respondents did not require conditions; in 1973, 18.6 percent. Also, note that the wording of the multiple-choice answer changed from “absolutely opposed” in 1971 to “opposed” in 1973. Tokyo-to Tominshitsu, ed., *Gomi mondai ni kansuru seron chōsa* (Tokyo: Tokyo-to Tominshitsu, 1973), 18. For those who agreed to the construction of an incineration plant with conditions, the most commonly cited condition by far was no emission of pollution (64.1 percent), followed by cleanliness (22.5 percent), and no pollution by garbage trucks (20.7 percent). For those who were opposed, the top reason by far was emission of pollution (70.9 percent).

¹⁸ On the question of whether each area should dispose of its own garbage, the percentage who were opposed or somewhat opposed in 1971 was 20.3; in 1973, it was 4.9. Tokyo-to Tominshitsu, *Gomi mondai ni kansuru seron chōsa hōkokusho*, 27; Tokyo-to Tominshitsu, *Gomi mondai ni kansuru seron chōsa*, 19.

¹⁹ On the question of building a sanitary treatment plant in Suginami ward, 44.1 percent agreed or agreed somewhat; 31 percent were opposed or somewhat opposed. Tokyo-to Tominshitsu, *Gomi mondai ni kansuru seron chōsa hōkokusho*, 25. At the same time, there was empathy (72.9 percent in support) for the stance of Kōtō residents against the transporting of others’ garbage into their ward. Tokyo-to Tominshitsu, *Gomi mondai ni kansuru seron chōsa hōkokusho*, 23.

²⁰ Tokyo-to Seisōkyoku, *Tokyo no gomi*, 44–46.

²¹ On citizen activism and antipollution movements, see McKean, *Environmental Protest and Citizen Politics*; Timothy S. George, *Minamata* (Cambridge: Harvard University Asia Center, 2001); Simon Andrew Avenell, *Making Japanese Citizens* (Berkeley: University of California Press, 2010); Simon Avenell, *Transnational Japan in the Global Environmental Movement* (Honolulu: University of Hawaii Press, 2017); and Brett L. Walker, *Toxic Archipelago* (Seattle: University of Washington Press, 2010).

²² Jeffrey Broadbent, *Environmental Politics in Japan* (Cambridge: Cambridge University

Press, 1998), 120–28.

²³ Tokyo-to Seisōkyoku, *Tokyo no gomi*, 46.

²⁴ This phrase was published by the Tokyo Metropolitan Government in a weekly report on the Garbage War. Oshida Isao, “‘Suteru’ to wa (2),” *Gomi sensō shūhō* 80 (July 13, 1973): 4–6; “Gomi kara mono o kangaeyō,” *Gomi sensō shūhō* 41 (September 29, 1972): 2.

²⁵ *Asahi shinbun*, May 17, 1970; Asahi Shinbun Keizaibu, ed., *Kutabare GNP* (Tokyo: Asahi Shinbunsha, 1971), iv.

²⁶ John Kenneth Galbraith, “The GNP as Status Symbol and Success Story,” in Asahi Shinbun Keizaibu, *Kutabare GNP*, vii.

²⁷ Tsuru Shigeto, “In Place of GNP,” *Social Science Information* 10 (August 1971): 8. See also Hein, *Reasonable Men, Powerful Words*, 206.

²⁸ Scientist Ui Jun, for example, argued that “understanding pollution as a distortion or a consequence was a mistake. On the contrary . . . pollution made high-speed growth possible; it was the third pillar [*daisan no hashira*] of the miracle.” Avenell, *Making Japanese Citizens*, 155.

²⁹ Yorimoto, “Gomi ni hikari o ateyō,” 13–14.

³⁰ Shibata Tokue quoted in Nakamura, *Ōraru hisutorī*, 25.

³¹ Tokyo-to Seisōkyoku Sōmubu Sōmuka, *Tokyo-to seisō jigyō*, 246–47. See also *Yomiuri shinbun*, December 16, 1974.

³² Each year from 1972 to 1976, the bureau received well over four thousand entries from over one hundred elementary schools. Tokyo-to Seisōkyoku, ed., *Minna de gomi mondai o kangaeru* (Tokyo: Tokyo-to Seisōkyoku, 1977), 4–5, 30–32, 35.

³³ Tokyo-to Tominshitsu, *Gomi mondai ni kansuru seron chōsa hōkokusho*, 13.

³⁴ On the question about the amount of garbage discarded, 70.2 percent responded that it had increased “very much” and 24.8 percent said “somewhat.” *Ibid.*, 5–7.

³⁵ Ōhashi Tomoko, “Gomi sensō to Sugunami Shōhisha no Kai,” *Shimin* 7 (March 1972): 135.

³⁶ “Ankēto,” *Toseijin* 362 (February 1972): 48–49.