

Offprint from
The Consumer on the Home Front
*Second World War Civilian
Consumption in Comparative Perspective*

EDITORS: HARTMUT BERGHOFF,
JAN LOGEMANN, AND FELIX RÖMER

GERMAN HISTORICAL INSTITUTE LONDON

OXFORD
UNIVERSITY PRESS

2017

Contents

Introduction

1. Consumption on the Home Front during the Second World War: A Transnational Perspective 3
HARTMUT BERGHOFF

Part I. Food: Organization and Experience of Subsistence and Survival

2. The Home Front and Food Insecurity in Wartime Japan: A Transnational Perspective 29
SHELDON GARON
3. The Hidden World of Soviet Wartime Food Provisioning: Hunger, Inequality, and Corruption 55
WENDY Z. GOLDMAN
4. Food Consumption in Britain during the Second World War 75
INA ZWEINIGER-BARGIELOWSKA
5. Deprivation and Indulgence: Nazi Policy on the Consumption of Tobacco 93
NICOLE PETRICK-FELBER

Part II. Advertising and the Media: Diversion, Compensation, and Postwar Promises

6. 'Not the least of all that you will prize among the blessings of peace': Commercial Advertising and Imagining the Postwar World in Britain 119
DAVID CLAMPIN

7. For the Sake of the Nation: Mobilizing for War in Japanese Commercial Advertisements 1937–1945 145
ANNIKA A. CULVER
8. Advertising and Consumers in Second World War Germany 175
PAMELA E. SWETT

Part III. Fashion and the Media

9. Vicarious Consumption: Fashion in German Media and Film during the War Years 1939–1943 199
MILA GANEVA
10. Soviet Wartime Fashion as a Phenomenon of Culture and Consumption 223
SERGEY ZHURAVLEV

Part IV. Legacies: Wartime Impact on Postwar Mass Consumption

11. Strategic Austerity: The Canadian Middle Path 249
BETTINA LIVERANT
12. From Wartime Research to Postwar Affluence: European Émigrés and the Engineering of American Wartime Consumption 279
JAN LOGEMANN
13. A Consumer Society Shaped by War: The German Experience 1935–1955 301
UWE SPIEKERMANN
14. War after War: The Soviet Mobilization Model and Mass Consumption in the 1940s and 1950s 313
OLEG V. KHLEVNIUK

Conclusion and Outlook

15. The Lessons of War: Reordering the Public and Private Capacities and Dynamics of Consumption FRANK TRENTMANN	331
--	-----

<i>Notes on Contributors</i>	357
------------------------------	-----

<i>Index</i>	361
--------------	-----

The Home Front and Food Insecurity in Wartime Japan: A Transnational Perspective

SHELDON GARON

Food is a weapon of war. Nowhere was this aspect of modern warfare more clearly apparent than in Japan during World War II.

(BRUCE F. JOHNSTON, Chief of the Food Branch, SCAP, 1946–8)¹

American planners assumed that killing a massive number of civilians and destroying cities would shock Japan into accepting surrender. . . . This strategy failed because it was based on a false assumption. The Japanese leaders did not care about civilians; in fact, they were more than willing to sacrifice them to preserve what they cherished most: the *kokutai* [the emperor's position as head of the national polity].

(TSUYOSHI HASEGAWA, historian)²

The Second World War was a global experience, yet histories of the home fronts remain confined to individual nations. The British recall their 'Finest Hour', and the Americans their 'Greatest Generation' and the spirit of shared sacrifice. The vanquished powers remember their home fronts in explicitly exceptional terms. Germans today emphasize the incomparable nature of the Nazi terror, while Japanese focus on the extraordinary deprivations suffered by women and children at home. Established by the Japanese government in 1999, the Shōwakan (National Shōwa Memorial Museum) dedicates itself to communicating to 'future generations . . . the everyday hardships of the Japanese people' during the Second World War and its aftermath.³ Visitors to the Tokyo museum learn how ordinary

¹ B. F. Johnston, *Japanese Food Management in World War II* (Stanford, Calif., 1953), 3.

² Tsuyoshi Hasegawa, 'Were the Atomic Bombings of Hiroshima and Nagasaki Justified?', in Yuki Tanaka and Marilyn B. Young (eds.), *Bombing Civilians: A Twentieth-Century History* (New York, 2009), 97–134, at 116–17. (Following East Asian practice, Japanese surnames precede given names.)

³ (<http://www.showakan.go.jp/information/greeting.html>) [accessed 5 Aug. 2016].

people coped with worsening food shortages, the virtual disappearance of new clothing, and the saturation bombing of nearly every city. On display are ration cards, the barely digestible food substitutes for rice and fish, and the threadbare, drab wartime clothing that came to predominate.

By training the spotlight on everyday life, however, collective memory in Japan—as elsewhere—ignores the important transnational dimensions of consumption on the home front during the Second World War. The dire shortages experienced by Japanese civilians were not the result of some natural disaster, but rather the product of strategies pursued by both the Japanese state and its enemies. These strategies in turn can only be understood in the context of transnational thinking that evolved during the First World War and the inter-war years. Planners in each country systematically studied other nations' preparations for war, convinced that the next conflict would be won or lost not only on the battlefield, but also on the home front. They therefore worried about the common challenges of 'total war': how to maintain production and civilian morale, how to extract surpluses from households to finance the war effort, and how to defend their cities from aerial bombardment. One of the greatest challenges involved the civilian food supply. Not merely sustenance, food loomed as a deadly double-edged weapon of war. Militaries strove to attack the enemy's home front by depriving civilians of adequate food. At the same time, regimes recognized that if they could not feed their own civilians sufficiently, the nation would cease to support the war effort and might even rise in revolt.

As historians, we would do well not only to compare the home fronts of the Second World War, but also to link them. Although each had its particularities, home fronts were consciously constructed as part of transnational flows of ideas and institutions. By 1941, one could have journeyed from nation to nation and recognized many familiar features of wartime civilian life: savings and economizing campaigns, air raid wardens, blackouts, and the ubiquitous ration coupons. These similarities were hardly coincidental: rather, they were the result of learning from allies and enemies alike.

The case of wartime Japan offers new perspectives on the transnational nature of home fronts. Japan has generally been marginalized in comparative scholarship on civilians in war because of the country's perceived cultural differences and sheer distance from the

European theatre.⁴ In fact, Japan was much more connected to world trends during the Second World War than we commonly think. As they had in prewar days, Japanese officials methodically studied models of home front mobilization among the Western belligerents. This essay on food scarcity in wartime Japan thus offers insights into the processes of transnational learning on all the home fronts. In addition, my account goes beyond the history of everyday life to relate food issues to some of the biggest political questions of the Second World War. How important were considerations of civilian food supply in the Japanese leadership's decisions to go to war, fight protracted war, and ultimately to *end* the war in August 1945?

The Lessons of the First World War

Starving the enemy is a time-honoured tactic. Armies have besieged towns for centuries. Naval blockades against entire nations are a more modern phenomenon, beginning with British blockades of French ports in the Seven Years War and Napoleonic Wars. By the early twentieth century, the highly industrialized economies of Britain and Germany had become heavily dependent on imported foods. Accordingly, in the First World War the navies of both powers devoted enormous resources to blockading the other nation. It may seem ironic that Britain the island empire easily survived, whereas Germany the continental power succumbed to the Royal Navy's blockade. However, the outcome was not particularly surprising, considering the greater effectiveness of Britain's blockade plus the home islands' reliance on well-established imperial networks of food supply. British strategists in the Naval Intelligence Department had begun planning the blockade of Germany as early as 1905. They were pioneers in what became known as 'economic warfare' and 'total war'. A war with Germany, they reasoned, might be won without a substantial commitment of ground forces, but rather by targeting the civilian economy at home. British planners envisioned a chain of events culminating in the enemy's *social* collapse. A blockade of food and raw materials would result in mass unemployment, rising living costs, and subsequently levels of unrest among the German working class that would make it impossible to continue the war. To be sure, this strategy flew in the face of the past half-century's

⁴ One exception is Ian Nish, 'Japan', in Jeremy Noakes (ed.), *The Civilian in War: The Home Front in Europe, Japan and the USA in World War II* (Exeter, 1992), 93–103.

developments in international law that attempted to protect civilians in war and specifically to exempt food from the contraband that could be seized by navies. Speaking about the difficulties that an enemy would encounter in blockading the British Isles, the Director of Naval Intelligence himself had noted in 1903: 'Then there is the larger question of humanity. You cannot condemn forty millions to starvation on the ground that they assist in defending their country, because you include women and children.'⁵

When war broke out in 1914, such scruples were swept aside and the Royal Navy blockaded Germany's access to the Atlantic. The naval action was part of an Entente embargo aimed at stopping shipments of goods to Germany from neutral nations as well. Initially porous, the blockade tightened considerably after the United States entered the war in 1917. Germany effectively lost direct shipments from five Entente nations, including the United States, which had provided 46 per cent of total German imports before the war.⁶ The blockade compounded the government's problems in increasing food production and feeding the civilian population. German authorities had not planned on a lengthy war, and they did not centralize food policies until the third year of the war. Although Germany began rationing food in 1915 before France and Britain, the actual rations often fell well below the amounts that consumers needed in order to work efficiently without serious weight loss. Most civilians were forced to supplement rations by paying high prices on the black market. During the 'turnip winter' of 1916–17 and again in summer 1918, the population suffered absolute food shortages. The postwar German statistical office estimated the excess of wartime civilian deaths over the prewar level at 762,000 (excluding deaths in the influenza epidemic of 1918), and some extrapolate that similar numbers of Germans died of starvation. Avner Offer challenges those figures, while agreeing that many more children, young adult civilians, and others died in the last years of the war than in peacetime. Much of the population experienced long periods of hunger.⁷

⁵ Captain Prince Louis of Battenberg to Supply of Food, Royal Commission, Evidence, 5 Nov. 1903, quoted in Avner Offer, *The First World War: An Agrarian Interpretation* (Oxford, 1989), 272, also 230–2, 270–1; see also Nicholas A. Lambert, *Planning Armageddon: British Economic Warfare and the First World War* (Cambridge, Mass., 2012).

⁶ Lance E. Davis and Stanley L. Engerman, *Naval Blockades in Peace and War: An Economic History since 1750* (Cambridge, 2006), 201.

⁷ Offer, *First World War*, 2, 27–38.

The impact of food shortages on the German home front was devastating. The extent to which the blockade triggered social unrest exceeded the British strategists' wildest dreams. German housewives and others engaged in increasingly violent street-level protests against the government's inadequate food policies. Food issues also lay behind factory strikes in spring 1917 and January 1918. Concerns about their families' hunger spread among servicemen, fuelling sailors' mutinies in October and early November 1918. Workers' and soldiers' councils sprang up in many cities as revolutionary sentiments swept through Germany. The Kaiser abdicated and the new democratic leaders agreed to the Entente-dictated armistice on 11 November. They recognized not only the army's inability to win at the front, but also that civilians had become too hungry and disenchanted to support a continuation of the war. The British navy maintained the blockade for eight months *after* the armistice in order to force German acceptance of the Versailles settlement.⁸

British food policy, by contrast, emerged as the First World War's success story. Despite fears of working-class protest in the early stages, the government increased food production and introduced a centralized rationing system that appeared reasonably fair and democratic. Whereas German nutritional experts insisted on maintaining the high-protein, high-fat diet in wartime food policies, the British moved to diversify the nation's diet with more nutritious substitutes. Above all, the British successfully imported a significant portion of the nation's food from its dominions and the United States. The German blockade proved ineffectual. Not launched until February 1917, Germany's unrestricted submarine campaign failed to decimate British food imports from North America and Latin America, while provoking the United States to enter the war.⁹

Just two decades later, these contrasting stories of success and failure would powerfully inform the home front food policies of all the major belligerents in the Second World War. Once again, the British Isles appeared particularly vulnerable. On the eve of war, the British imported more than half of their food as measured by caloric consumption. Beginning in 1936, the British government actively prepared for expected German threats to the food supply,

⁸ Ibid. 68–76; Thierry Bonzen and Belinda Davis, 'Feeding the Cities', in Jay Winter and Jean-Louis Robert (eds.), *Capital Cities at War: Paris, London, Berlin 1914–1919* (New York, 1997), 305–41, at 334–9.

⁹ Bonzen and Davis, 'Feeding the Cities', 326–8; Offer, *First World War*, 41–3, 53, 354–66.

building on its food control and rationing programmes from the previous war. The authorities stockpiled wheat and other foods. After hostilities commenced in September 1939, some 50 million ration books soon became available to the civilian population, and a Ministry of Food (another of the nation's First World War innovations) was re-established to control food supply and the rationing system. Attentive to the lessons of the previous war, the ministry was charged with ensuring the provision of sufficient food to satisfy the country's nutritional requirements and 'to avoid calling upon the nation to make changes in its normal dietary habit which will seriously reduce public morale'.¹⁰ Nonetheless, the German attackers, too, were much better prepared than in the last war. Reinforced by Luftwaffe air raids on ports and storage facilities, the much larger fleet of U-boats seriously threatened the British food supply between 1940 and 1942. Britain's salvation again lay in the Allies' capacity to send food to their beleaguered partner. In June 1942, President Roosevelt and Prime Minister Churchill jointly declared that 'in principle, the entire food resources of Great Britain and the United States will be deemed to be a common pool'.¹¹ Massive amounts of canned meats, dried egg and milk, fats and oils, and wheat flour flowed from the United States and Canada. New Zealand also sent Britain significant quantities of cheese, butter, and dehydrated and canned meats (while Australian surplus meat primarily supplied US forces in the Pacific). Despite some decline in consumption in the early years of the war, British civilians never experienced real hunger. Their wartime diet, notes Ina Zweiniger-Bargielowska, was 'nutritionally adequate and healthy', albeit 'dull and monotonous'.¹²

For Hitler and other Nazi leaders, the vivid memories of mass hunger in their own country led to intense preparations for food

¹⁰ War Cabinet, Food Policy Committee, 'Programme of Imports and Home Supplies of Food up to the End of the Third Year of War', Memorandum F. P. (M) (41), no. 70 (30 June 1941), 2, in Memoranda Papers, nos. 41-132, 1941, CAB 74/6; also Minutes of 7th Meeting (16 July 1937), 4-6, and 9th Meeting (18 Apr. 1939), 3-7, 12, Committee of Imperial Defence (Cabinet), Sub-Committee on Food Supply in Time of War, Meetings 1-9, CAB 16/156, The National Archives of the UK (hereafter TNA).

¹¹ Combined Food Board, *Food Consumption Levels in Canada, the United Kingdom and the United States: Report of a Special Joint Committee Set Up by the Combined Food Board* (Ottawa, 1944), 1.

¹² Ina Zweiniger-Bargielowska, 'Fair Shares? The Limits of Food Policy in Britain during the Second World War', in ead. and others (eds.), *Food and War in Twentieth Century Europe* (Farnham, 2011), 125-38, at 126-7; Lizzie Collingham, *The Taste of War: World War Two and the Battle for Food* (London, 2011), 96-9, 103-15.

security. Never again, they vowed, would German people be vulnerable to maritime blockades. Hitler was convinced that if German civilians were not well fed, they would give up on the war effort and undermine him just as women, workers, and sailors had turned on the Kaiser's state. In contrast to Germany's ineffective programmes in the First World War, the newly established Food Ministry had stockpiled huge grain reserves by the start of the war in September 1939, quickly instituting an elaborate system of wartime rationing and food distribution.

Germany's more successful food policy in the Second World War, however, cannot be fully explained by its domestic programmes. This time, as British strategists sadly recognized on the eve of war, Germany would probably blunt their blockade by creating a vast continental supply system.¹³ The Nazis went on to plunder occupied Europe. They expropriated increasing amounts of foodstuffs from Western Europe, causing malnutrition and many deaths in France, the Netherlands, and Belgium. But it was in the East that the world witnessed the full measure of food as a weapon. One of the most powerful objectives behind Hitler's invasion of Soviet territories in 1941, scholars argue, was to seize the wheat fields of Ukraine. By controlling the 'bread basket of Europe', Nazi leaders fed German troops and civilians while consciously seeking to starve 30 million Soviet city dwellers who depended on Ukrainian grain. In the horrific 900-day siege of Leningrad, German commanders aimed to starve the entire urban populace. An estimated one million residents would die of starvation. To maintain German nutrition, related policies resulted in the wilful starvation of Jews and Soviet prisoners, and the severe malnourishment of Poles. Altogether, Nazi food policies caused mass famines in Poland, Greece, Ukraine, and elsewhere in the Soviet Union. As Hermann Göring declared: 'If someone has to go hungry, let it be someone other than a German.'¹⁴

In terms of overall consumption, Germans lived relatively comfortably and ate fairly well for most of the war, although urban residents experienced periodic food shortages. Consumption un-

¹³ Committee of Imperial Defence (Cabinet), Sub-Committee on the Question of Food Supply in Time of War, 'Food Situation in Germany—Spring 1939', F.S. 52 (23 May 1939), 1, in Memoranda, nos. 24–5, 1937–9, CAB 16/158, TNA.

¹⁴ Göring, meeting of 6 Aug. 1942, quoted in Götz Aly, *Hitler's Beneficiaries: Plunder, Racial War, and the Nazi Welfare State*, trans. Jefferson Chase (New York, 2006), 170, also 169–79; Zweiniger-Bargielowska, 'Introduction', in ead. and others (eds.), *Food and War*, 1–12, at 3; Collingham, *Taste of War*, 25–39.

questionably declined from prewar levels. Taking 1938 as his base, Richard Overy measures the decline in per capita consumption at 18 per cent by 1941 and 30 per cent by 1944, although the US Strategic Bombing Survey estimated a more gradual drop in consumption. Moreover, notes Götz Aly, German households benefited from the rampant private plunder of occupied territories by family members in uniform, as well as from the Aryanization of Jewish property. The consumption of textiles and clothing in 1943 fell only slightly to 83 per cent of the 1939 level, leading the United States Strategic Bombing Survey after the war to conclude that German civilians had experienced no serious hardships regarding clothing through the first half of 1943. From late 1944, consumption plummeted, but Germany was militarily defeated in spring 1945 before living standards collapsed.¹⁵

Stability on the German home front confounded British strategists, who tried their hardest to bring about another '1918'. A series of cabinet-level reports in 1943 and 1944 confidently predicted that the German home front would again 'collapse' as in 1918. Allied air strikes, economic deprivation, and heavy casualties would culminate in civilian 'demoralization' and 'some change of régime' and, finally, the 'request for an armistice'. Those events never came to pass, and British intelligence had to acknowledge the differences between 1918 and 1943. Not only did the Nazi state have a much tighter hold over the population, but 'to-day, the food position is not so serious'.¹⁶ The fate of Japan in the Second World War would be another story.

What Were They Thinking?

Japan's wartime leaders lacked the murderous intentions of Nazi counterparts to starve the populations of occupied territories. In their efforts to feed civilians at home, Japanese authorities never developed systematic plans to loot the food stores of the rest of Asia.

¹⁵ Collingham, *Taste of War*, 382–3; R. J. Overy, *War and Economy in the Third Reich* (Oxford, 1994), 261, 278; United States Strategic Bombing Survey (hereafter USSBS), Overall Economic Effects Division, *The Effects of Strategic Bombing on the German War Economy* (Washington, DC, 1945), 130–2; Adam Tooze, *The Wages of Destruction: The Making and Breaking of the Nazi Economy* (New York, 2006); Aly, *Hitler's Beneficiaries*, 2, 41, 75–6, 328–31.

¹⁶ Joint Intelligence Sub-Committee, War Cabinet, 'Probabilities of a German Collapse', J.I.C. (43) 367 (9 Sept. 1943), 1, PREM 3/193/6A, TNA.

To Winston Churchill, the Japanese decision to launch a war against the Western Allies in 1941 was difficult to reconcile 'with prudence or even sanity'.¹⁷ One is tempted to agree. Japanese planners were well aware of the power of the blockade and its devastating impact on the German food supply in the First World War. On the eve of the Pacific War (1941–5), Japan imported 20 per cent of its total food supply (by tonnage, and 19 per cent by calories).¹⁸ Unlike continental Germany, Japan imported all of its food by sea. And unlike the other island empire Britain, Japan lacked powerful allies that could provide food and help maintain its sea lanes.

So, it is puzzling that Japanese strategists would challenge the two mightiest naval powers, Britain and the United States, thereby exposing the entire population to blockade and the risk of starvation. Western observers commonly explain wartime Japanese decision-making in terms of Bushido (the Way of the Samurai) and emperor worship. More persuasive are explanations that Japanese officials became seduced by their own rhetoric of 'spiritual mobilization', concluding that Japanese spirit could overcome all material constraints.¹⁹ The best explanation, however, may be that Japanese thinking suffered not from too little science, but rather from an over-confidence in the power of science and planning to keep civilians nourished in wartime.

The story of the Japanese home front begins during the First World War. Although Imperial Japan played only a modest role in fighting on the side of the Entente, Japanese officials studied the European home fronts more intensively than any other belligerent. Nearly every ministry sent teams of young bureaucrats to investigate home front mobilization in Britain, France, Italy, and the United States. Many also monitored developments in Germany from nearby Switzerland and other neutral countries. Their voluminous reports informed the special investigative commissions established in the ministries of Army, Navy, Foreign Affairs, Home Affairs, Finance, Education, Posts and Communications, and Agriculture and Commerce. Even before the war ended, these commissions were already distilling the lessons of the Great War for Japan's future.²⁰

¹⁷ Churchill to the US Congress, 26 Dec. 1941, in Robert Rhodes James (ed.), *Churchill Speaks, 1897–1963* (New York, 1980), 784–5.

¹⁸ Johnston, *Japanese Food Management*, 135.

¹⁹ See Sheldon Garon, *Molding Japanese Minds: The State in Everyday Life* (Princeton, 1997).

²⁰ Jan Peter Schmidt, 'Nach dem Krieg ist vor dem Krieg: Der Erste Weltkrieg

Despite the variety of perspectives, the Japanese ministries reached similar conclusions. In a 1917 report on the European war and use of women, the Army's Provisional Military Investigative Commission declared that 'warfare in this day and age truly demands the total energies of the nation'.²¹ The words 'total war' would not be a common term globally until the publication of Erich Ludendorff's *Der Totale Krieg* in 1935. However, an influential clique of Japanese Army officers had already embraced the concept by 1920. The Great War, they insisted, had shown the importance of 'total national mobilization' (*kokka sōdōin*). Henceforth, success in war would depend not only on soldiers and war industries, but also on the mobilization of the material, human, and financial resources of the entire nation. Reduction in popular consumption became a strategic objective. Japanese military and civil officials actively investigated the belligerents' savings and economizing campaigns. Organized by states and reaching down to street-level savings associations and women's groups, these drives in Europe and the United States appealed to civilians to cut spending, save money for the war effort, and free up scarce goods and services for military needs. To reduce foreign debt and generate investment capital in the mid-1920s, Japanese ministries mounted a sweeping peacetime savings campaign modelled on Britain's National War Savings Movement. The Japanese campaign similarly relied on a Central Council to Encourage Diligence and Thrift that worked with prefectural and local campaign committees, teachers, women's groups, and religious organizations. After Japanese forces invaded China in 1937, the Ministry of Finance again chose the British model to create the National Savings Promotion Bureau, which oversaw the establishment of 'national savings associations' in nearly every locale, school, and workplace. Throughout the Second World War, these savings associations pressured households to make drastic reductions in consumption while saving more and more for the war effort.²²

The issue of food in Europe at the time of the First World War had long intrigued Japanese investigators. Officials admired their fellow

in Japan. *Medialisierte Kriegserfahrung, Nachkriegsinterdiskurs und Politik, 1914–1918/19* (Ph.D. dissertation, Ruhr-Universität Bochum, 2013), 267–72.

²¹ Quoted in Garon, *Molding Japanese Minds*, 126.

²² Rinji gunji chōsa iinkai [Nagata Tetsuzan], 'Kokka sōdōin ni kansuru iken', May 1920, in *Kōketsu Atsushi, Sōryokusen taisei kenkyū* (Tokyo, 1981), 213–44; Schmidt, 'Nach dem Krieg', 273–5, 286–7, 307–8; Sheldon Garon, *Beyond Our Means: Why America Spends While the World Saves* (Princeton, 2012), 225–6, 236–43.

island nation Britain's achievement in surviving U-boat attacks on food imports. They also noted British success in securing the public's co-operation in rationing, wasting less food, and growing vegetables even in parks and schools. Germany's food crisis, on the other hand, furnished the oft-repeated cautionary tale of what happened to a powerful nation that could not feed its civilians. As early as mid-1917, Japanese officers were reporting on Germany's worsening food shortages and their role in sparking workers' 'riots'. Responsible for both public order and welfare, Home Ministry officials too blamed Germany's defeat on mass hunger, the cold, and domestic 'rebellion' that had sapped the people's 'will to fight'. By the time of the Second World War, the lessons of 1918 for Japan were axiomatic if not ominous. Retired Major-General Marumoto Shōzō, a leading food expert, declared: 'the more protracted the war, the more food will be the key'. He further echoed the erroneous claims of his German Army counterparts that 'in the previous European War, although Germany was winning militarily, it collapsed from within because of food shortages'.²³

Events closer to home likewise persuaded Japanese authorities to formulate new policies of food self-sufficiency and diversification of the national diet. Japan experienced its own '1918'. In July and August, the wartime boom and heightened demand culminated in endemic rice shortages and rocketing prices. One to two million townspeople and workers engaged in nationwide 'Rice Riots', intimidating rice merchants and looting their shops. The government deployed 92,000 troops. Several deaths and scores of injuries resulted. The riots raised the spectre of food-related uprisings currently sweeping Russia and central Europe. In the aftermath, Japanese authorities vigorously responded on two fronts. During the 1920s, the Home Ministry and Ministry of Education mounted 'daily life improvement' campaigns to encourage the public to consume cheaper, nutritious substitutes for rice. Nutritional scientists, educators, women's groups, and housewives' magazines were enlisted to bring 'science' to the kitchen. They instructed households to mix rice with barley or beans, while eating more vegetables. White rice, the experts explained, might be a status symbol, but the process

²³ Fujioka Manzō, 'Saihō senjō sakusen keika oyobi kōsenkoku no jōtai (shōzen)', *Seiyū*, no. 208 (5 July 1917), 7–18, at 8; Moriya Sakao, 'Naigai no jōsei to fujin no shimei', in Naimushō Shakaikyoku, *Dai 1-kai katei keizai kōshūkai kōenshū* (Tokyo, 1925), 289–336, at 318; Marumoto Shōzō, *Kūshū to shokuryō* (Tokyo, 1944), preface, at 40–4.

of polishing rice removed vitamin B₁ and commonly resulted in beriberi. Indeed, Japanese nutritional scientists were leaders in the global discovery of the importance of vitamins. Working on rice bran, Suzuki Umetarō had been the first to isolate a vitamin complex in 1910. Following the First World War, the Japanese military too played an influential role in diversifying the national diet by introducing Western and Chinese foods such as cutlets, rice curry, and stir-fries.²⁴

The Rice Riots also persuaded the authorities to increase the supply of food available to Japanese from *within* the Japanese empire. The authorities moved aggressively to encourage the cultivation of Japanese varieties of rice in colonial Korea and Taiwan. They recognized that Japanese consumers detested imported ‘Chinese rice’ (*nankinmai*), which referred also to South-East Asian rice. The campaign was a big success from the perspective of Japanese consumers. By 1931–5, Korea and Taiwan supplied 95 per cent of Japan’s rice imports. Similarly, because of subsidies and tariff protection against Japanese and Cuban raw sugar, Taiwanese sugar came to dominate Japan’s sugar imports by the 1930s. After the establishment of Manchukuo as a puppet state in 1932, Japanese authorities also rapidly increased Manchurian food production and exports to Japan, particularly of soybeans and soybean cake.

Writing shortly after the Second World War, the Allied Occupation’s Bruce Johnston concluded that ‘by the early 1930s, the Japanese Empire had very largely achieved its goal of self-sufficiency in food supply’. Japanese experts themselves declared food self-sufficiency in 1936.²⁵ Even after two years of war with China beginning in 1937, the Japanese enjoyed ample food supplies. The economist Elizabeth Schumpeter would write in 1940: ‘Not only is the Japanese Empire self-sufficient in food; it now on balance is an exporter of foodstuffs. . . . On balance the food supply is more than sufficient *even under war conditions*.’²⁶

Thus one can more readily understand how Japanese planners in the late 1930s might believe, in a wider war, that the home front

²⁴ Michael Lewis, *Rioters and Citizens: Mass Protests in Imperial Japan* (Berkeley, 1990), 12–21, 26; Katarzyna J. Cwiertka, *Modern Japanese Cuisine: Food, Power and National Identity* (London, 2006), 68–9, 79–84, 120–2; Garon, *Molding Japanese Minds*, 10–11, 129.

²⁵ Johnston, *Japanese Food Management*, 67–8, also 50–66.

²⁶ E. B. Schumpeter, ‘Japan, Korea and Manchukuo, 1936–1940’, in id. (ed.), *The Industrialization of Japan and Manchukuo, 1930–1940* (New York, 1940), 271–474, at 277, 279 (emphasis added).

would not descend into mass hunger as had happened to Germany in the last war. Although war with the Anglo-Americans might expose the sea lanes from Taiwan, the routes to nearby Korea and Manchuria appeared well protected. And as late as 1943, leading nutritional experts such as Inoue Kaneo maintained that Japanese food rations—rich in protein and low in fat—sustained the populace at lower caloric levels than the much fattier German diet. He based his calculations on the lower average weight of a Japanese, predicting the national diet would be further enriched by increased rations of sweet potatoes. Germany, judged Inoue, had lost the First World War because it ‘neglected nutritional science’. Possessing twice the food per capita as neighbouring Denmark, Germans nonetheless suffered malnutrition whereas Denmark, which employed the new nutritional science, remained healthy. The German regime kept supplying large quantities of meat, squandering vast stores of cereals on livestock that could have more efficiently nourished consumers.²⁷ Inoue echoed international scientific opinion about Germany’s mistaken maintenance of a high-fat, high-protein diet in the last war. As one American physiologist opined (with perhaps some hyperbole) after visiting Germany in 1916: ‘Had the Germans been vegetarians, there would have been no problem.’²⁸

Looking back, however, we spot the danger signs that Japanese leaders missed—or chose to overlook—in the decision to fight the Western Allies. During the summer and autumn of 1939, rice production plummeted within the empire. Taiwan experienced widespread flooding while Korea and Japan suffered record drought. Before this time Korea had provided half of Japan’s total rice imports, averaging 1.2 million tons annually in 1936–9. From November 1939 to October 1940, imported rice from Korea fell to only 59,000 tons, and never recovered to anything approaching prewar volumes. Moreover, Japanese became victims of their own success in mobilizing the colonies. As war-related industrialization in Korea raised wages, Koreans consumed increasing quantities of domestic rice. This, too, diminished exports to the metropole. The Japanese government attempted to remedy shortfalls in rice at home. It prohibited the sale of fully polished white rice, restricted sake (rice wine) production, and launched a sweeping campaign to persuade

²⁷ Inoue Kaneo, *Kessen eiyōgaku* (Tokyo, 1944), 16–17, 103–5.

²⁸ A. E. Taylor, quoted in Offer, *First World War*, 25.

the nation to cut down on rice and instead eat more wheat, barley, and potatoes. These home front measures proved inadequate.²⁹

In 1940 Japanese officials took the fateful step of buying huge quantities of rice from *outside* their empire.³⁰ They arranged purchases from the French colony of Indo-China (ruled by Vichy after June), the pro-Japanese regime of Thailand, and even the British colony of Burma. British officials hotly debated whether to sell Burmese rice to Japan. In January the newly established Ministry of Economic Warfare proposed that Burma and Indo-China drastically curtail sales in order to dissuade the Japanese from expanding into South-East Asia. Yet the Foreign Office opposed the use of food as a weapon, fearing it would push Japan closer to Germany and the Soviet Union. The Foreign Office prevailed, but both sides agreed that the food problem had weakened Japan's hand. The costly rice purchases required Japan to draw on dwindling supplies of foreign exchange. Japanese leaders would surely realize, wrote one official, that in the event of war the British could cut off an essential supply of food. That realization 'ought in itself to be a potent deterrent'.³¹

Japanese leaders were not to be deterred. Imperial Japan attacked US and British forces in December 1941, already dependent on distant sources of rice. From November 1940 to October 1941 Japan acquired a staggering 65 per cent of its total rice imports from South-East Asia. It remained nearly as dependent on the region during the war's first year of 1942. In March the government decided 'at all costs' to import 170,000 metric tons monthly of Indo-Chinese and Thai rice. Voicing anxieties reminiscent of 1918, Foreign Minister Tōgō Shigenori secretly explained that widespread rice shortages at home had given rise to 'grave social problems' and an 'alarming' situation.³² Then there was the challenge of shipping all that rice to the home islands. Japanese leaders responded with an ever increasing number of optimistic calculations. Although the authoritative Cabinet Planning Board prepared for at least

²⁹ Johnston, *Japanese Food Management*, 135–7, 198–9.

³⁰ Michael A. Barnhart, *Japan Prepares for Total War* (Ithaca, NY, 1987), 143.

³¹ Kerwick (Ministry of Economic Warfare), attached to telegram from Sir R. Craigie (Tokyo), 11 Oct. 1940; also R. G. Howe to Frederick Leith-Ross, 17 Jan. 1940, in Code 23, file 222, pp. 397, 251, Foreign Office: Political: Far Eastern, Japan, 1940, FO 371/24735, TNA.

³² 'Japanese Food Shortage: Arrangements for Imports of Rice', secret telegram from Foreign Minister, Tokyo, to Japanese Ambassadors, Bangkok and Saigon, 7 Mar. 1942, intercepted and translated by Government Code and Cypher School, HW 1/420, TNA.

three years of war, planners grossly underestimated shipping losses involved in transporting food and raw materials from South-East Asia. They erred further in expecting Japanese shipyards to replace the losses fully. In retrospect, the Japanese navy prepared poorly for anti-submarine warfare, perhaps because U-boat attacks on British vessels had not proved decisive in the First World War. The Imperial Navy emulated the British convoy system in part but would not devote scarce resources to providing the vital escort vessels to protect cargo ships. US and British submarines, joined by aircraft and surface ships, wreaked havoc on Japan's merchant marine in the first year and a half. From April 1943, Allied attacks on Japanese cargo ships were so deadly that rice imports from South-East Asia and Taiwan dropped to extremely low levels in 1944. They came to a virtual halt in 1945.³³

The failure to maintain sufficient food imports brought misery to the home front, but for South-East Asia, Japanese food policies sometimes proved catastrophic. Unlike the Nazis, the Japanese occupiers had no genocidal plans to starve occupied peoples. But indirectly or directly, they contributed to the starvation of several million Asians. The worst case was northern Vietnam, where an estimated one to two million Vietnamese died in the famine of 1944–5. Historians debate where to apportion blame for this disaster. Vietnam had been plagued by prewar shortages under the French, who shared the rule of Indo-China with the Japanese until March 1945. By bombing railway lines and bridges and menacing coastal shipping, the Americans and their allies also prevented shipments of rice from southern Indo-China from reaching the north. Still, Japanese appear the most culpable in their insatiable demands to purchase Indo-China's entire rice surplus, often at the expense of native consumers.³⁴ Pan-Asianist beliefs inhibited Japanese commanders from actually saying it, but their behaviour frequently exhibited Göring's logic: if someone has to go hungry, let it be someone other than a Japanese.

Coping

The year 1940 was the third of Japan's gruelling war against Nationalist forces in China. On the home front, however, civilians had yet

³³ Johnston, *Japanese Food Management*, 138–43.

³⁴ Geoffrey Gunn, 'The Great Vietnamese Famine of 1944–45 Revisited', *Asia-Pacific Journal*, 9/5, no. 4 (Jan. 2011), 1–21.

to suffer major deprivations. Even after the terrible harvests of 1939, food remained sufficient thanks to imported rice from South-East Asia. Exhilarated by Hitler's lightening victories in Europe, Japanese leaders began planning for war with a weakened Britain and the United States. At the same time, they strove to create a 'home front' (*jūgo*) capable of supporting a much wider war. Planners drew not only on their investigations of European nations in the First World War, but also on first-hand reports of British and German rationing and food-control policies in the current war.³⁵ In April 1941 the regime introduced rationing of rice, the primary staple, in the six largest cities. Following British and German precedents, authorities also readied a scheme for nationwide rationing of rice once the war with the Western powers broke out—effected from February 1942. The Ministry of Agriculture and Forestry was transformed in Johnston's words into a 'ministry of food' as found in key European countries—responsible for the production, collection, distribution, and pricing of all food. The Central Food Corporation bought rice, other cereals, potatoes, and sweet potatoes directly from farmers at official prices, as well as imported staples, and sold them to prefectural Local Food Corporations, which in turn distributed the food to local suppliers. Soy sauce, *miso* soup, sugar, and other commodities were also centrally distributed and rationed. For the first time, the Japanese government guaranteed every civilian the right to purchase a daily minimum level of rice with a ration card.³⁶

While adopting many European practices to control the food supply, Japanese officials soon diverged in the distribution of rationed food to consumers. British and German systems were based on consumers obtaining rations from local stores with which they registered. The Japanese system initially adopted this approach, but bureaucrats found the large number of shops to be unwieldy and wasteful in matching supply to demand. From 1942, the authorities established distribution stations that relied on a national network of newly established block associations (*chōnaikai*) in cities, towns, and villages. Below them were neighbourhood associations (*tonarigumi*) of ten to twenty households. These officially imposed local associations functioned as the lowest rungs of the wartime state: extracting savings from households, conducting surveillance, co-

³⁵ See Gaimushō Ōakyoku dai-3-ka, *Senjika no Eikoku jijō* (Tokyo, 1941), 124–38; Endō Saburō, *Shokuryō seisakuron* (Tokyo, 1943).

³⁶ Johnston, *Japanese Food Management*, 178–84.

ordinating air-raid protection, fighting fires, and even delivering the mail.³⁷ Increasingly the block associations operated as food distribution stations, and representatives of the neighbourhood association obtained and distributed rations to members not as individual consumers, but as one economic unit. The associations offered the state several efficiencies. Officials encouraged neighbourhood associations to conserve food and fuel by cooking communally. An army of nutritional experts and activist women were dispatched to the block associations to instruct housewives on how to prepare substitute foods and improve nutrition. Neighbourhood associations were also mobilized to cultivate vegetable gardens in urban spaces.³⁸ The local associations, moreover, enabled the regime to use food to enforce compliance with other aspects of wartime mobilization. If, for example, a family declined to tender savings to the local 'national savings association', neighbourhood associations were instructed to withhold all rations.³⁹

Far from perfect, the rationing system enabled the Japanese home front to sustain itself, albeit barely, from 1942 to 1945. The fundamental problem was not distribution, but supply. Despite energetic efforts to increase food production, the regime could not compensate for declining imports. As one British diplomat reported shortly before the Pacific War, Japanese agriculture, almost entirely unmechanized, was in an even worse position than German and French counterparts in the First World War. Densely populated, Japan was already cultivating nearly all of its arable land, with little margin to increase productivity and production.⁴⁰ Moreover, full-scale mobilization of adult males for the military and the factories decimated the farm labour force. Women and older men filled in, as did mobilized elementary-school students and students from agricultural colleges, but this was not enough to reverse wartime decreases in cultivated land. Another problem resulted from shortages in fertilizers. Japanese farmers had grown heavily dependent on chemical fertilizers by the 1930s, only to see supplies

³⁷ Gregory Kasza, *The Conscripted Society: Administered Mass Organizations* (New Haven, 1995).

³⁸ Eric Pauer, 'A New Order for Japanese Society: Planned Economy, Neighbourhood Associations and Food Distribution in Japanese Cities in the Second World War', in id. (ed.), *Japan's War Economy* (London, 1999), 90–102; Cwiertka, *Modern Japanese Cuisine*, 122, 132.

³⁹ Garon, *Beyond Our Means*, 240–2.
⁴⁰ A. J. de la Mare, 'A Report on Japanese Agriculture under War-Time Conditions, with Special Reference to the Food Supply', 23 Oct. 1939, in Code 23 file 222, p. 281, FO 371/24735, TNA.

drop sharply as trade in imported fertilizers ceased and the war effort demanded ammonia for the production of high explosives. Given the enormous constraints, notes Johnston, the campaigns to increase agricultural production were moderately successful. The production of potatoes and especially of sweet potatoes (whose caloric yield per unit of land was 30 per cent higher than for rice) rose far above prewar levels. Rice production barely fell because the government channelled fertilizers into production of the nation's most important staple. On the other hand, wheat, barley, vegetables, fruit, peas, and beans declined significantly. The supply of available fish fell some 35 per cent from 1939 to 1945. Japanese consumed very little meat and dairy products, while fish had formed a major part of protein intake in the prewar Japanese diet. The fishing industry, too, declined as a result of conscription, commandeering of vessels, and enemy encirclement. Other than the infusion of sweet and white potatoes, the only significant increase in the food supply came from Manchuria in the form of soybeans, soybean cake, and coarse grains such as corn, kaoliang, and millet. Exports to Japan in the last two years of the war rose 30 per cent above the 1940–3 level.⁴¹

By 1943, food shortages had become the central aspect of everyday life on the home front. Established in 1941, the official rice ration of 330 grams per day for ordinary consumers yielded only an estimated 1,158 calories, whereas Japanese experts judged the per capita average requirement to be 2,160. The ration varied according to work, age, and sex, with males engaged in heavy work receiving 2,001 calories. It soon became clear, however, that the rice ration was actually the 'staple food' ration, and the government's only commitment was to maintain the caloric total of the ration, mixing in barley, wheat, and soybeans. Consumers increasingly grumbled about 'five-colour rice', alluding to the mix of white rice, yellow (old) rice, green beans, red grains, and brown insects.⁴² From 1943 sweet potatoes or white potatoes could be substituted outright for rice in the ration, and this was soon extended to include coarse grains from Manchuria. As sugar from Taiwan all but disappeared in 1944, Japanese found it difficult to eat sufficient quantities of the coarse grains and other barely digestible substitutes. Fruit, vegetables, and

⁴¹ Johnston, *Japanese Food Management*, 102, 107, 113, 126–8, 143–5; USSBS, Manpower, Food and Civilian Supplies Division, *The Japanese Wartime Standard of Living and Utilization of Manpower* (Washington, DC, 1947), 14.

⁴² Pauer, 'A New Order', 93.

fish were centrally rationed only in the six large cities, and the actual rations steadily declined.⁴³ By the latter half of 1944, civilians were commonly eating grasses and weeds, often with government encouragement.⁴⁴

As the war wore on, the daily quest for food occupied much of people's time and energy. Already in 1942, one survey found that Tokyo families queued for food an average of 4.5 hours each day.⁴⁵ To supplement insufficient rations, families were compelled to buy vegetables, fruit, and fish on the black market. They also made frequent trips to the countryside to buy food directly from farmers. It became common for urban block or neighbourhood associations to send their members to farms, ostensibly to volunteer their labour. However, country folk believed it was a ploy for lazy city people to eat their fill.⁴⁶ Wartime diaries reveal endemic grumbling about unfairness in the food distribution system. Many complained that the rich were inflating prices on the black market. It is noteworthy that endemic shortages in the cities served to reduce the age-old cultural gap between urban dwellers and the so-called peasants. Farmers now held the cards, often holding back crops from official markets while driving hard bargains with foragers from the cities.⁴⁷

Among the major belligerents in the Second World War, only Soviet consumers suffered worse food deprivation than the Japanese. While Soviet cities lost their richest sources of food early in the war because of the German invasion, Japanese experienced the shortages incrementally. Compared with Germans, Britons, and Americans, wartime Japanese enjoyed little cushion in consumption. Caloric intake, even in the immediate prewar years, had been none too high. During the last two years of the war, Japanese suffered widespread malnutrition, as Table 1 reveals.

Japanese consumers fared no better when it came to clothing in wartime. The marked deterioration in what they wore was shaped by dwindling supplies of cloth, but also by concerted efforts by the state

⁴³ USSBS, *Japanese Wartime Standard of Living*, 1, 18–29.

⁴⁴ Kawashima Takane, *Jūgo* (Tokyo, 1997), 126–9; *Shūhō*, nos. 432–3 (14 Feb. 1945), 3–7.

⁴⁵ *Jōkai* (Chūō Kyōka Dantai Rengōkai), 4, no. 11 (1942), cited by Ishizuka Hiromichi and Narita Ryūichi, *Tōkyō-to no hyakunen* (Tokyo, 1986), 263.

⁴⁶ Johnston, *Japanese Food Management*, 102.

⁴⁷ Samuel Hideo Yamashita, *Leaves from an Autumn of Emergencies: Selections from the Wartime Diaries of Ordinary Japanese* (Honolulu, 2005), 15–16, 84–5; also id., *Daily Life in Wartime Japan, 1940–1945* (Lawrence, Kan., 2015).

TABLE 1. *Average Calories per Civilian per Day*

	JAPAN	UNITED KINGDOM	GERMANY	UNITED STATES
Prewar ^a	2,265	2,987	2,907	3,080
1944	1,900	2,923	2,941	3,215
1945	1,680	—	1,721 ^b	—

^a Japan: 1931–5; United Kingdom: 1934–8; Germany: 1937–9; United States: 1935–9.

^b Caloric content of Germany's daily food ration for 'normal consumers' in Jan. 1945. The US Strategic Bombing Survey considered approximately 2,000 calories to be the 'minimum emergency level', below which one's health would be impaired if long sustained.

Source: Jerome B. Cohen, *Japan's Economy in War and Reconstruction* (Minneapolis, 1949), 386 n. 53; USSBS, *Effects of Strategic Bombing on the German War Economy*, 132.

and reformers to mould a 'wartime lifestyle'. Prewar Japan had been one of the world's leading textile producers. However, following the outbreak of war with China in 1937, the regime steadily cut back on the cloth and clothing available to domestic consumers, diverting them to the military. Textiles continued to be exported in order to earn foreign exchange, until international tensions and war curtailed Japanese trade with Western nations. Moreover, beginning in 1937, the government ordered that all manufactured clothes for civilians contain increasing proportions of staple fibre (*sufu*), a poor-quality short staple rayon, which was mixed with natural fibres. Because of military needs, leather, too, became scarce by 1941. Uncomfortable clothing was made worse by shoes made of pig or fish skin that cracked when wet, or even paper shoes. After 1940, many factories stopped producing textiles altogether, forced by the state to convert to munitions production. The civilian consumption of wool and especially cotton cloth dropped to small fractions of prewar levels by the beginning of the Pacific War. The rationing system offered consumers points for the purchase of clothing, but there was in fact little supply by early 1943. Incredibly, most households were unable to replace their clothing during the last three years of the war. What little cloth they could obtain went to patching up threadbare garments.⁴⁸

At the same time, moral suasion campaigns encouraged Japanese

⁴⁸ USSBS, *Japanese Wartime Standard of Living*, 31–2, 38–9; US Office of Strategic Services, Research and Analysis Branch, *Price Control and Rationing of Consumers' Goods Other than Food in Japan*, R&A, no. 2701a (Washington, DC, 1945), 5–13.



FIG. 1. Typical end-of-the-war clothing. Hungry civilians scavenge burnt rice (lower right) from a bombed government granary in Tokyo's Ōta ward on 24 May 1945. The two women in front of the pole wear *monpe*, and the men wear the national uniform.

Source: Ishikawa Kōyō, *Tōkyō daikūshū no zenkiroku* (Tokyo, 1992), 121. Reproduced by kind permission of Iwanami Shoten, Publishers, Tokyo. Photographer: Ishikawa Kōyō.

consumers to wear special wartime clothes. To conserve cloth and create outfits for active war work, the state and fashion experts strove to create a 'national uniform' for civilian men in 1940, consisting of a brown, military-looking suit without tie. Officials later established several designs for active wear for women, although most women adopted only one, the *monpe*. These were pantaloons that were well suited to agricultural work and air-raid exercises. Neither male nor female civilians were compelled to wear the wartime clothes. Nonetheless, during the last two years of the war, *monpe* and the male uniform became nearly universal as civilians engaged in heavier labour to produce more munitions, erect firebreaks against bombing, and clear rubble after air raids (see Figure 1).⁴⁹ Officials and reformers touted the wartime clothes as evidence of an austere lifestyle that united all classes. By the time Japanese greeted the New Year in 1945, most were constantly hungry, cold, and physically exhausted.

⁴⁹ Andrew Gordon, *Fabricating Consumers: The Sewing Machine in Modern Japan* (Berkeley, 2012), 141–8; USSBS, *Japanese Wartime Standard of Living*, 4–5.

Operation Starvation

Americans hold this truth to be self-evident: the United States dropped two atomic bombs on 6 and 9 August 1945, and those bombs ended the Second World War. Pure and simple. Never mind that the Soviet Union entered the war against Japan on 8 August. Or that the top Japanese leadership on 9 August seemed far more unsettled by the prospect of a Soviet takeover of Manchuria, Korea, and Hokkaido than they were by the first and second atomic bombs. In addition, Japanese leaders were reaching the end of their willingness to endure the massive conventional bombing campaign by the United States which had begun in earnest over Tokyo on 9–10 March 1945. On that night, as many as 100,000 people lost their lives. From then until a few hours before the Japanese government announced its decision to surrender on 15 August, B-29s relentlessly firebombed central districts in some sixty-four cities, including many provincial cities in June and July.

A handful of historians discuss Soviet intervention and fire-bombing as important factors in persuading Japanese leaders to surrender.⁵⁰ Curiously, few international historians have written more than a word or two about the Allied blockade and other efforts to deprive the Japanese home front of food. In fact, as we have seen, US and British attacks on Japanese shipping in the waters surrounding South-East Asia and Taiwan had devastating effects on the civilian food supply from 1943. But the worst was yet to come. In late March 1945 the US Army Air Force managed to spare a few B-29s for a new mission. The Superfortresses began dropping aerial mines in the waters of the Straits of Shimonoseki, the Inland Sea, and the major Japanese ports that handled vital shipments of food and fuel from Korea, Manchuria, and China. Secretly called Operation ‘Starvation’, the aerial mining campaign intensified over the next five months until Japanese leaders announced the surrender. In the last phase, 9 July to 15 August, the B-29s mined harbours in the small ports of north-west Honshu and Kyushu. They also mined *all* the ports in Korea. Following the war, the US Strategic Bombing Survey judged that in this final phase the USA achieved ‘Total

⁵⁰ Tsuyoshi Hasegawa, *Racing the Enemy: Stalin, Truman, and the Surrender of Japan* (Cambridge, 2005); Yukiko Koshiro, *Imperial Eclipse: Japan's Strategic Thinking about Continental Asia before August 1945* (Ithaca, NY, 2013).

Blockade'. To compound Japan's misery, US air raids destroyed vast stocks of food in government warehouses and homes while crippling the port facilities and transportation links essential to distributing food. The USSBS speculated that some 7 million Japanese 'would have starved to death if the war had continued another year'.⁵¹

This little-known story compels us to re-examine the last weeks of the war in a new light. Notwithstanding Tsuyoshi Hasegawa's opening judgement here that Japanese leaders 'did not care about civilians', the ruling élites had worked hard during the war to feed civilians. This was partly out of national solidarity, but also out of pragmatic interests in maintaining a populace strong enough to work in factories, farm the fields, and, ultimately, to resist invading Allied forces in the so-called decisive battle (*kessen*). However, by July 1945 élites widely recognized that Japanese civilians were too hungry to be effective. On 2 July the Cabinet abandoned the 1941 rice ration of 330 grams, deciding to cut it by 10 per cent—and effectively admitting the failure of the wartime food policy.⁵² At the time, leading industrialists informed military leaders that workers were too malnourished and too preoccupied with survival to maintain production. Factories were plagued by high absenteeism. An incredible 8.5 million Japanese fled the cities not only to escape bombardment but also to move closer to food sources in the countryside. When USSBS officials interrogated political leaders, military men, and industrialists after the war, they discovered that Japanese élites deemed the blockade to have been the Allies' most effective tactic in ending the war.⁵³ Mindful of 1918 in both Europe and Japan, former Prime Minister Konoe Fumimaro warned that worsening deprivation on the home front would fuel popular unrest and a 'Communist revolution'.⁵⁴ In reality, most Japanese were so famished by August 1945 that they could neither fight nor revolt.

We shall never know precisely which developments pushed Japan's top leaders to surrender when they met on 9–10 August. Yet we do know that several ministers and senior statesmen commented on

⁵¹ USSBS, Naval Analysis Division, *The Offensive Mine Laying Campaign against Japan* (Washington, DC, 1946), 14–16; Frederick M. Sallagar, *Lessons from an Aerial Mining Campaign (Operation 'Starvation')*, A Report Prepared for United States Air Force Project Rand (Santa Monica, Calif., 1974).

⁵² Johnston, *Japanese Food Management*, 149–50.

⁵³ USSBS, *Offensive Mine Laying Campaign*, 3–4.

⁵⁴ 'Konoe Memorial', 14 Feb. 1945, in David Lu (ed.), *Sources of Japanese History*, 2 vols. (New York, 1974), ii. 169–72, at 170.

Japan's precarious food situation, their fears of domestic unrest, and rising public antipathy to the military. In the absence of a detailed record, we might credibly imagine the rest of their conversation. Everything around them was developing 'not necessarily' to Japan's advantage, to cite the emperor's famous understatement. There were A-bombs, firebombs, Soviets, and the imminent prospect of mass starvation. To the Japanese, this was an utter catastrophe. But to the victorious Americans, it ranked as a teachable moment. The USSBS team reported that aerial mining had a bright future:

In areas that were mined and not subjected to bombing attack, the populace escaped without physical harm. . . . At the same time, the civilian population as well as the military *suffered acute shortages in food* and essential commodities. In some areas there were indications that resentment was awakened against the local government by such acute shortages. The people, not seeing apparent damage from attacking aircraft, were evidently not aroused against the mine layers. . . . Mines can be dropped so as to produce a blockade effect *without actually resulting in direct harm* or bloodshed to the local populace. The economic effects of such blockade might well assist settlement of disputes *without actual combat*.

The Mine, concluded the Americans, should be considered 'An International Peace Weapon'.⁵⁵

Here we see the decades-long evolution of total-war thinking on food supply. The First World War introduced the possibility of winning a protracted war by degrading the enemy's home front and demoralizing the populace. Inspired by the widely perceived success of the British blockade, inter-war strategists in several nations formulated plans to target civilian food supplies in the next big war. In an effort to disrupt the delivery of food by sea and land, they would increase submarine fleets while looking to air power as the newest weapon in the war on food transport. At the same time, each belligerent strove to nourish its own home front. Learning from allies and enemies alike, they took steps to diversify the national diet, increase production and supply, stockpile key foodstuffs, ration consumption, and scientifically improve nutrition. It is noteworthy that a variety of regimes—Nazi Germany, Soviet Russia, democratic Britain, and Japan under military-bureaucratic rule—understood the latent power of civilians in total war in surprisingly similar ways. All wished to avoid a repeat of 1918, when famished, disenchant-

⁵⁵ USSBS, *Offensive Mine Laying Campaign*, 29 (emphasis added).

civilians withdrew their political and economic support for the war effort.

Among the belligerents, Japanese authorities may have been the most adept at studying the home front tactics of others. Indeed, it is remarkable how long their methods kept the island nation fed in the face of formidable shortages. Nonetheless, transnational learning has its limits, and no two situations are identical. The Japanese might carefully study Germany's food crisis in 1916–18 or British rationing in 1939, but it was Japan's misfortune to suffer an onslaught on popular nourishment by submarines, mines, and aircraft of a type that the world had never seen. No people can wage total war on empty stomachs, regardless of the regime's efforts at 'spiritual mobilization'. Unlike Adolf Hitler, Japanese leaders *did* surrender before their homeland was invaded. And hunger on the home front, I have argued, was a key reason for doing so.

