

Food Aid and the Starved Personality

“The hungry” are always plural. They have no past; if they had one, they have forgotten it. They have no politics. They cannot make decisions for themselves. They are animals. They are asocial, aggressive, irritable, lawless, or apathetic and listless. They are not as well tied together as they once were. They are recognizable—hard stare, emaciated frame, swollen limbs, or distended belly. They are dangerous, deprived, dependent. They risk falling into political extremism. They cannot participate in democracy. They require rescue. They are suffering. The hungry are a population, a multitude, a quantity (thousands, millions). There are too many of them. They have outstripped carrying capacity; their supplies do not meet their demands. They are unproductive. They need to be prevented. The hungry are always elsewhere.

All of these statements are derived from mid-twentieth-century memos, studies, news articles, and agency directives for hunger relief. It is so common these days to see a reference to “the hungry” and their numbers—850 million, 10 percent of the world population—that we might not stop to ask how so many people come to be known, first and foremost, by their hunger. That number—so many millions of hungry people—mobilizes money for charity and development aid, and sensitizes the comfortable to the plight of the impoverished. That number gathers together multitudes of individuals with unique histories of wealth and poverty, food and eating, violence, exploitation and deprivation (Yates-Doerr 2015a; Yates-Doerr 2024). Grouped together in one global statistic, “the hungry” appear as passive victims collectively waiting for rescue. There seems to be only one thing to be done: give them food. This chapter is about how hunger and “the hungry” became objects of knowledge and governance in the post-World War II

world. Relief operations established in the aftermath of the war set the foundation for eighty years of international aid and development, and would also shape welfare policy at home.

Since World War II, massive charity operations, international organizations, diplomacy, and media productions focused their efforts on feeding the world's hungry. In the closing years of the war, violence by starvation was visited on millions of people worldwide. The United States and its allies implemented a vast program of hunger management and relief. In the process millions came to be identified, first and foremost, as "the hungry." They were counted and classified in various stages of deprivation. In the eyes of the Allied relief workers and experts, hunger determined their attitudes, emotions, hopes, and social status. Relief workers and policy makers looked at refugees, displaced persons, peasants in drought-struck or destroyed regions, residents of bombed-out cities, and saw "the hungry." Hunger, in all its guises, threatened the new world order that the United States and Allies sought to establish after the war. At the same time, hunger came to be understood as something "elsewhere," happening outside of the United States.

Three assumptions defined knowledge and governance of hunger beginning in the postwar period. First, "hungry" became known as a type, a set of qualities, a way of being, a mode of human otherness. Physiologists defined the physical symptoms. Anthropologists and psychologists profiled the culture and personality. Policy makers and relief agencies ascribed "the hungry" with a certain kind of politics. To be hungry came to mean much more than to be without food. Above all, *the hungry were characterized by their lack of physical, psychological, and political autonomy*. Hunger had to be governed in a very particular way. The hungry had to be treated and reformed, bodily, mentally and politically. Their fate could not be left to their own judgment. Weak-willed, apolitical, antisocial, they could be easily swayed by a Nazi strongman or a Communist infiltrator. Hungry people were constitutionally unable to make decisions, collaborate with others, or participate in democracy.

Relatedly, hungry people who complained, held hunger strikes, or otherwise made their hunger political were marked as pathological. Protest became pathology. Political grievances appeared as symptoms of psychological regression. The proper subjects for rehabilitation and relief, in the eyes of Americans and their allies, were passive victims awaiting rescue. Those who demanded better conditions, or who protested against prevailing power relations, were dismissed as acting out their psychological fears and insecurities. Hostility and contestation were understood as symptoms of food deprivation, to be treated and cured by a firm and benevolent authority. In the postwar world, *hunger was antidemocratic*.

Finally, and in consequence, *food aid was used to get people, and entire nations, to think, feel, and do things differently*. Rehabilitation measures sought

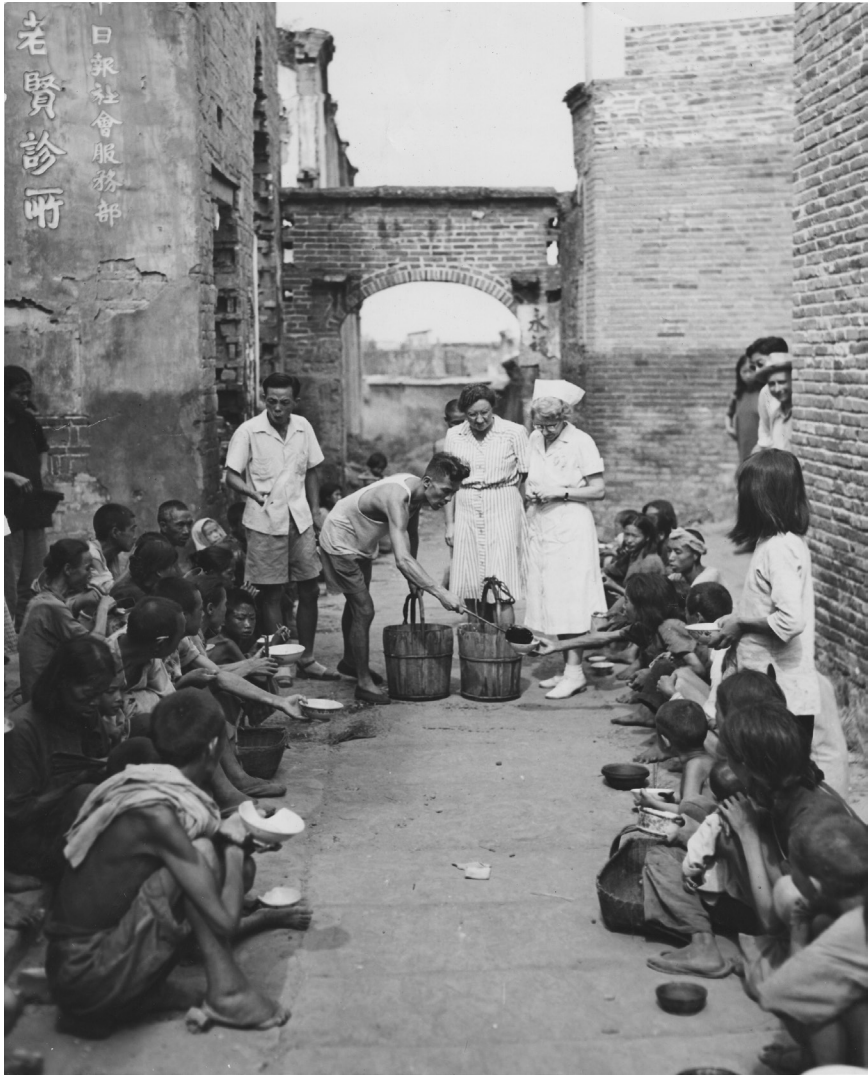


FIGURE 5. “Amid war-damaged buildings, the American Presbyterian Hospital cooks for the daily lineup of homeless,” July 1946. *Source:* S-0801-0006-0004-00029, United Nations Relief and Rehabilitation Administration (UNRRA) Photographs, United Nations Archives.

to modify the psychology and behavior of poor and starving people, to make them more modern and market-oriented. Hunger relief was designed to change people's relations to food and to politics, to accept the advice of technical experts, to shift to industrialized forms of agriculture, to lessen the numbers of their children. American food aid after World War II was most often

conditional on specific policy goals. In this sense, food aid served as one of the most powerful instruments of the international development project (Escobar 2011, 72, 122–123).

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In November 1944 a group of thirty-two conscientious objectors were starved, experimentally and on purpose. They were volunteers for a semistarvation experiment at the University of Minnesota Laboratory of Physiological Hygiene. Subjects were kept for six months on strict diets that had been designed to replicate wartime hunger rations and that reduced their body weight by 25 percent. Researchers recorded changes in their physiological, cognitive, emotional, and behavioral abilities. The starved men lost interest in everything but food; hunger eclipsed all other drives and motivations (Guetzkow and Bowman 1946, 23). Men who were once viewed as “sincere and upright” in their commitment to civilian service lost psychological and “ethical control” under starvation. Some of them cheated and stole. They became irritable and “blew up’ at each other on occasion.” They were unable to concentrate. They stopped going out with others, and their social lives deteriorated. They passively let themselves be pushed around by crowds in public places. Even though the men knew that the experiment would end and that their own safety was guaranteed, they experienced intense feelings of anxiety and insecurity (Guetzkow and Bowman 1946, 27–32).

The starving Minnesota volunteers embodied human otherness. These hungry men were not the same as other people. After six months of deprivation the volunteers each became a “special kind of person.” They lost their passions and interests, their moral standing, their motivation, and their social abilities. Their bodies had changed, their minds were warped, and their self-governance was compromised. In researchers’ eyes, the volunteers lost their individuality and particularity. Collectively they embodied a uniform typology: “the hungry.” The Minnesota research group published their findings in *Men and Hunger*, a manual to advise relief workers, physicians, dietitians, and volunteers heading to postwar Europe. Laboratory head Ancel Keys explained to relief workers that “the person who has been starved for long is a special kind of person, different from the ordinary patient or relief client back home as well as from you and me” (Guetzkow and Bowman 1946, 11). The manual outlined changes in behavior, sociability, and mental and emotional capacity, relevant to rehabilitating people who had been starved and devastated by the war. Psychologist Harold Guetzkow observed of the Minnesota subjects: “These are men who were being torn apart by stress, and were not as well knit as formerly” (Guetzkow and Bowman 1946, 45).

The Minnesota researchers, alongside social scientists in Europe and Asia during and after the war, defined “the hungry” as a political subject. Hunger, warned physiologist Walter Cannon (1916, 232), “is a sensation so peremptory, so disagreeable, so tormenting, that men have committed crimes in order to assuage it. It has

led to cannibalism, even among the civilized. It has resulted in suicide. And it has defeated armies—for the aggressive spirit becomes detached from larger loyalties and becomes personal and selfish as hunger pangs increase in vigor and insistence.” Cannon (1941, 9) feared that that hungry people risked falling under the sway of strong-arm dictators who took advantage of “the plasticity of people when they are uneasy and anxious.”

The hungry had a specific kind of politics. They lacked the capacity for autonomy, judgment, and self-government. In many ways this politics of the hungry drew directly from assumptions and tropes in colonial government. The hungry could not be trusted to think for themselves. They had to be treated, rehabilitated, and guided toward a state of full autonomy. “The processes of good government, and especially of democracy, are very difficult to organize in starvation situations because of the breakdown in group life” (Guetzkow and Bowman 1946, 69). Paul Bowman, a member of the Minnesota research team with several years’ experience in food relief, suggested that relief workers avoid organizing their community democratically. “The starving usually have little interest in government and cannot call up enough energy to participate in self-government” (Guetzkow and Bowman 1946, 69). Hungry people required a specific form of governance: technical expertise, fair management, and firm administration. Information, not decision-making, should be shared with hungry subjects, and discontentment patiently and impartially addressed. These ideas were applied on a massive scale in the decade following World War II.

Hunger and starvation were weaponized during the world wars. Millions suffered from blockades, sieges, wartime restrictions, and starvation campaigns. Starvation caused more devastation than combat in the Netherlands, Greece, and elsewhere in Europe during World War II (Valaoras 1946; *Malnutrition and Starvation* 1948). The Bengal famine of 1943, precipitated by a cyclone and British wartime restrictions, killed between two million and three million Bengalis (Ó Grada 2009, 159). Nazi plans for German colonization of Eastern Europe led to the programmatic mass starvation of “surplus” Slavic and Jewish populations, including a half-million Jews who died of hunger in ghettos, millions who starved in concentration camps, and three million starved Russian prisoners of war (Gerlach 1998, 13; Snyder 2012, xiii). Well over a million residents died of starvation during the German siege of Leningrad in 1941–1942 (Leigh Smith 2015, 214; Manley 2015). Mental hospitals in Germany, and to a lesser extent in France, practiced euthanasia by starvation as a form of racial hygiene (Proctor 1988, 187; Bueltingersloewen 2005). In Japanese-occupied northern Indochina, a severe famine killed one million to two million people, perhaps up to one-fifth of the population there (Leigh Smith 2015, 218).

After the end of hostilities in Europe and Asia in 1945, hunger grew worse for many people in those regions. Millions were famished in Korea and Java. One hundred thousand people starved to death in Tokyo in fall 1945 (Collingham 2011, 467).

Rations fell across Western Europe. A drought in 1946 impacted almost the entire globe, with the exception of North America. The monsoon failed in India. The United Nations estimated in 1946 that seven million Chinese people risked starvation, and one-third of the world's population was hungry (Collingham 2011, 470, 476). International governance in the wake of the world wars began with hunger relief (Reinisch 2011). In November 1943 leaders of the Allied powers signed into existence an international body destined to manage the hunger of people liberated from German and Japanese occupation: the United Nations Relief and Rehabilitation Administration (UNRRA). UNRRA was the first nonmilitary international organization to emerge during the war. Unlike earlier humanitarian relief, which relied primarily on nongovernmental charities, UNRRA carried out an intergovernmental effort at a scale never before attempted (Riley 2017, 90, 92, 135).

In its brief existence from 1944 until it shut down in 1947, UNRRA administered aid to sixteen countries. In Europe operations focused on Albania, Czechoslovakia, Greece, Poland, and Yugoslavia; in Asia, UNRRA worked primarily in China, Formosa (Taiwan), Korea, and the Philippines. In less than three years, UNRRA delivered more than nine million tons of food, grains, fats, dairy, and fish (Woodbridge 1950, 1:409). In Germany alone UNRRA employed four thousand aid workers, medical personnel, and welfare officers (E.R.O. 1946, 36). UNRRA's work relied on funding and supplies from the United States. The organization collapsed when the US Congress voted to stop that funding and the United States withdrew from multilateral cooperation. After 1947 the United States pursued a more focused program of food aid in service of its own national security objectives (Reinisch 2013, 89).

On the occasion of UNRRA's founding in 1943, President Franklin D. Roosevelt warned that German and Japanese forces had "one purpose in mind: that in the lands they occupy there shall be left only a generation of half-men, undernourished, crushed in body and spirit, without strength or incentive to hope—ready, in fact, to be enslaved and used as beasts of burden by the self-styled master races" ("On the Hunger Front" 1943). In Roosevelt's dark vision hunger would reduce entire nations to a state of brutish and submissive animality. These people would lose forever their humanity and their free will. Denied proper nourishment, passive and broken, they were destined to submit to authoritarian rule. Even as Roosevelt hailed an international effort to relieve wartime hunger, the specter of enslavement by starvation hung heavy. The future of world democracy appeared to hinge on the bodies and minds of hungry civilians.

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Physiologists, psychologists, and anthropologists mobilized to study these weak and potentially dangerous masses. Displaced Persons (DPs) camps and bombed-out cities became "laboratories" where British and American social scientists



FIGURE 6. “Italy—Refugees line up for noon-day meal at the UNRRA camp,” 1946–1948. *Source:* S-0801-0006-0004-00029, UNRRA Photographs, United Nations Archives.

tested their “individualist, psychoanalytic, and familialist visions” (Zahra 2011, 40). As Dutch psychiatrist Joost A. M. Meerloo (1952, 352) wrote after the war, “every emergency is a kind of new psycho-pathological experiment, raising new questions and giving new answers.” As the war neared its end, Allied authorities turned to psychologists to help manage the ensuing confusion and chaos. In late summer 1944 the UNRRA Welfare Division assembled social scientists attached to military units in London to form an Inter-Allied Psychological Study Group. The group included Meerloo, who was serving as psychiatric advisor to the Royal Netherlands army; American sociologist Edward Shils, who was attached to the US Office of Strategic Services; Canadian social worker Marjorie Bradford; and British military psychiatrists with ties to the Tavistock Clinic. The Study Group produced a white paper on “Psychological Problems of Displaced Persons” for use by UNRRA relief workers (UNRRA 1945). Their report examined a range of issues related to displacement, forced labor, and subservience; first among them was hunger.

The Inter-Allied Study Group drew from prior experiences working with hungry and displaced people in Europe and the UK. Meerloo had lived in occupied Holland from 1942 through 1944, masking his Jewish identity, until he was arrested for resistance. At his Amsterdam psychiatric clinic he saw patients from across the social spectrum, “to give not only medical advice, but counsel on every type of difficulty” (Meerloo 1945, 17). Food rations at that time only provided for about

60 percent of residents' physical needs. Meerloo described advising a mother how to cook with nettles, and consoling a Jewish man who lost half his family to bombing and the other half to concentration camps. Arrested, tortured, and interrogated, Meerloo managed to escape from a German transport train and walked across France and Spain to finally reach Great Britain (Woody 2022, 3–4). He drew the lesson from his years living under occupation that “the cave-man has appeared once more, and stands scowling outside his cave, club in hand, ready to defend himself against any danger. The elements, hunger, cold, his fellow-men” (Meerloo 1945, 76). Meerloo's ideas about regression and primitivity strongly influenced the Study Group report.

The Study Group sought to summarize the state of knowledge about the impacts of starvation and displacement. They asked military authorities permission to visit and investigate Displaced Person camps on the continent, but their superiors denied them access (Meerloo 1952, 354). Instead, the group gathered reports from European contacts, including a Dutch physician who had escaped from a German concentration camp. British Study Group members drew from their experience with the Tavistock Clinic rehabilitating British prisoners of war. As clinicians in Civil Resettlement Units, they sought to cure POWs' individual personality defects, such as apathy and irritability (Roberts-Pederson 2021, 103). The Inter-Allied Study Group's desk report therefore reflects experts' assumptions and prior experiences, rather than direct observations in Europe or Asia after the war. That said, these assumptions continued to replicate long after the initial postwar period. The Study Group report illustrates a prevailing view of a hungry person's psychological state. “The Psychology of Displaced Persons” profiled a shattered and infantile personality. In the Study Group's analysis, hunger and displacement caused people to regress to a childlike, primal mental state, “falling back to earlier more primitive and for example infantile habits.” Regression was “the most characteristic personality change” of people faced with violence, starvation, and “severe emotional straining.” Under starvation conditions “acquired forms of civilization” and “cultural decorum” disappeared. Restraints were cast aside; “the brakes have been taken off” (UNRRA 1945, 18). The Study Group's analysis led to practical conclusions about how best to organize relief; there were also political consequences for future global stability.

Hungry and displaced people, it seemed, were ruled entirely by fears around food. As the Inter-Allied Group remarked, “food is the primal token of security” in human life. “It is quite certain that because food is the most vital of all provisions of security, feeling about it is always likely to run high and to reflect many disturbed social attitudes” (UNRRA 1945, 34–35). The Study Group described a range of emotional consequences of hunger: “rivalry, jealousy and greed . . . emerge in great strength” (UNRRA 1945, 4). Many hungry people responded to the mortal fear of starvation with “primitive behavior” and “heightened aggressiveness.” They felt “deep feelings of guilt and hostility toward a world that has starved them

and ‘let them down.’” Others felt “nausea, poor appetite and even food rejection” (UNRRA 1945, 35). The Study Group predicted that these psychological symptoms would endure long after the physical body returned to health.

Fear of deprivation led the hungry to steal and stuff their pockets with food even after a full meal, “just as a well fed child who feels itself robbed and cheated of love may take to stealing food from its parents.” These hungry people felt a “desire for revenge and privilege” and a “greed for affection” (UNRRA 1945, 35). “Such people’s demands become insatiable like a greedy baby’s” (UNRRA 1945, 4). The report identified mistrust and selfishness as symptoms of infantile regression. In keeping with their individualistic, psychoanalytic orientation, the Study Group focused on dysfunctional personality traits rather than collective trauma or historical injustice. The Study Group dismissed political protests as a psychological pathology. DPs in Allied refugee camps angrily complained about relief distribution, demanding more food and supplies, protesting, and occasionally breaking out in violence. The Study Group report observed that many displaced and hungry people expressed “mistrust and hatred of any gesture from any authority” and “a hostile undervaluation of the purpose, quantity and quality of the food supplies” (UNRRA 1945, 35). The report suggested that DPs’ political views were “inevitably colored” by “disturbed attitudes toward authority” (UNRRA 1945, 39).

Hungry people had regressed to an infantile mental state. Political protests therefore should be treated like childish tantrums. Study Group member Edward Shils (1946, 7, 13) warned that hungry DPs were “depoliticized” and risked getting caught up in violent or radical actions: “for one . . . whose capacity for rational judgment has declined and who is motivated by strong anti-authority sentiments, the most radical programs are likely to be attractive.” Protests should be treated as expressions of emotional disturbance and “sycophantic, apathetic, guilty, submissive, cynical, rebellious, mistrustful” feelings. The Study Group encouraged UNRRA personnel to establish a strong authority on which these people might “lean” and “feed, as it were, on a tolerant atmosphere” (UNRRA 1945, 39).

If protest was pathology, the Study Group thought that UNRRA administrators should exercise their authority over the DPs as a cure. The report suggested that camp administrators should facilitate a “slow move towards increasing self-government and away from the relatively firm benevolent central authority necessitated by the passive dependence of early days.” Each “stage of recovery” from the psychological symptoms of starvation allowed for more autonomy. First and foremost, people in the camp should take on “responsibility for making and cooking food” (UNRRA 1945, 23). This diagnosis was reflected in UNRRA’s “Welfare Guide” for displaced people in Germany (UNRRA, Welfare Division 1945). The guide recommended a “democratic organization” for displaced people’s camps, but only under certain conditions including length of time spent in the camp (UNRRA, Welfare Division 1945, 19). Shils (1946, 18) suggested that “camps must be operated as experiments in group therapy.”

By the same logic, hunger depoliticized the Allies' former enemies. The suffering of hungry Germans and starving Japanese people after the war purged them of agency in the eyes of many Allied officials. These former enemies should not be allowed to go hungry, experts argued, lest starvation dissuade them from moving toward democracy (Weinreb 2012, 52, 70). When the United States entered Japan, American policy prohibited relief aid for Japanese civilians except in the case of famine. Japanese officials (and later, occupying American forces) gathered evidence to establish that the country did in fact suffer from famine, opening the door to relief. Jenny Leigh Smith (2015) has suggested that this moment marked a new era of hunger relief, in which an outside authority was empowered to validate a state of famine and release food aid. According to Leigh Smith (2015, 213), General MacArthur shared his concern with US officials "that chronic hunger would erode the psychological well-being and democratic impulses of the new Japan."

It is not clear how much influence the Psychological Study Group's report or the UNRRA Welfare Division had at the ground level of UNRRA's relief operations. Meerloo (1952, 353–354) complained that authorities dismissed the Study Group's focus on individual therapy in favor of "mass regulations" and the "administrative machine." UNRRA's directorate and technical divisions remained suspicious of the Welfare Division and its project of psychological rehabilitation, in contrast to the massive effort and infrastructure needed to acquire, transport, and distribute supplies. The number of psychologically trained UNRRA welfare workers on the ground was relatively small compared with technical staff (Woodbridge 1950, 2:26–28). Thomas Davidson (1947, 14), UNRRA team director of DP Operations in Germany, complained that welfare officers were useless and "pathetic." Nevertheless, the Interallied Study Group was one component of a far-reaching "psychological Marshall Plan" that, in Tara Zahra's (2011, 52) words, "linked psychoanalytic methods to both individualism and democratization."

Social scientists mobilized by the Allies published multiple studies along the same lines. UNRRA relief workers were particularly drawn to cultural anthropologists, given their exposure to cultural relativism while serving abroad (Reinisch 2013, 78). Anthropologists of the "modal personality" and "culture and personality" schools applied psychoanalytic methods to study food habits and cultures. Cora Du Bois (1944) studied culture, personality, and food insecurity among highland residents of the Dutch colony of Alor. Du Bois went on to serve as a high-ranking research officer in the US Office of Strategic Services at Indonesia and Ceylon. Margaret Mead (1943, 50) served during the war as executive secretary of the National Research Council Committee on Food Habits, where she promoted the "application of psychoanalytic theory and techniques to [the problem] . . . of altering American food habits to preserve nutritional standards in the midst of war shortages." This body of social scientific work on hunger had political consequences. Authorities felt justified in guiding hungry people toward autonomy and self-government—but only when they were ready for it. Until then, the

hungry were treated as passive victims in need of guidance, treatment, and rescue (Salvatici 2012, 440).

Even as hunger justified the rehabilitation of former enemy peoples, many DPs experienced Allied relief as a loss of bodily and political autonomy. Some DPs went on hunger strike. Despite experts' assumptions about hunger and depoliticization, hungry people in camps, colonies, and occupied areas organized and staged hunger strikes to protest their subjection to Allied authority. Anticolonial fighters in India, Ireland, and British Palestine continued a long tradition of hunger strikes for freedom and independence (Vernon 2007, 60–80). In 1947 thirteen thousand displaced Jewish people in ten DP camps on the island of Cyprus went on a one-hundred-hour hunger strike, to protest the shooting of an escapee from the camp and the lowering of return quotas to Palestine (Guebenlian 1947, 1). Jewish DPs in occupied Germany went on hunger strikes to assert political demands (Holian 2011, 190). Industrial workers in both Japan and Germany also went on hunger strike in 1946 and 1947 to protest their working conditions and lack of food ("Japan Bans Hunger Strike" 1946, 6; "Hunger Strike" 1947, 7). Hunger strikers in the postwar years wielded hunger as a collective weapon of protest ("Hunger Strike Over" 1946, 1).

Hunger, in the wake of World War II, appeared psychologically incompatible with democracy. In a direct echo of colonial discourse about Native peoples, the hungry were deemed incapable of self-government and in need of expert guidance. Their mental and physical state led hungry people to submit to, even require, a strong authority. Their political views were "weak" and "colored" by the ravages of hunger. As William Vogt warned in 1948 (207), "hungry people are not likely to be willing to suffer the slow process of democracy. Freedom seems far less important when one's belly is rubbing one's backbone—and the Man on Horseback, or the man in the red-starred tank, takes on plausibility as a leader out of the wilderness." Only well-nourished people were capable—physically and psychologically—of participating in their own democratic self-determination.

The United States and Allied powers subjected hungry people around the world to regimes of disciplinary control. Hungry and displaced people were kept in camps, even against their will, for their own good. Their fragile mental state required a "firm benevolent" authority. Even as the Allies claimed victory for democracy at the end of the World War, spaces of exception opened up for the hungry, the poor, and the psychologically "underdeveloped." Such spaces of exception would multiply around the globe in the late twentieth and twenty-first centuries (Agamben 1998; Ibrahim 2021). At the same time, hunger became biomedical.

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The Minnesota Experiment was designed to test and validate the best treatment for mass starvation. To do so, researchers first had to starve the volunteer subjects for six months. As the experiment advanced, the starving men felt a "disconcerting

sensation of growing old quickly, as indeed, in effect, they were." "In starving," wrote research leader Ancel Keys (1946, 14), "a person literally begins feeding off his own body." Keys described the gradual process of starvation as a "battle against hunger," from a "slowing down" of pulse and movement to a loss of strength, will, and endurance and defenselessness against disease. Metabolism slows down and circulation decreases by up to half of what it once was. The body no longer heats itself and always feels cold. Brain function and mental abilities remain intact at the cost of energy elsewhere in the body. A starving person's tissues "waste away and are partly replaced by water (edema). Then, without adequate food, he dehydrates and the battle is lost" (Keys 1946, 14). Keys's metaphor of a rapidly and prematurely aging body suggests that it might be difficult or even impossible to regain homeostasis, to return to a stable state. The Minnesota Experiment challenged prevailing assumptions about bodily equilibrium.

When Keys began the refeeding, or rehabilitation, stage of the experiment, he was surprised to discover that many men took a turn for the worse. More calories did not necessarily lead the men to revert back to health. Keys divided the study subjects into three groups, each receiving different amounts of extra calories beyond the starvation rations that they had received during the previous six months. To the researchers' surprise, many subjects' condition deteriorated in response to increased rations. While most of the men began to regain weight, some lost even more than they had under starvation conditions. Hunger edema appeared in subjects who had not had it before. The psychological condition of some subjects took a downward turn. Several felt more hungry, depressed, and irritable than they had under starvation conditions (Keys et al. 1950, 2:837).

Keys was so alarmed by this deterioration that after six weeks of rehabilitation, he decided to increase all the subject's calories significantly (Keys et al. 1950, 2:126). Even after twelve weeks of ample refeeding, study subjects' metabolism was still a good deal lower than it had been before the study began (Keys et al. 1950, 2:330). Vitamin and protein supplements, which some subjects received on top of their increased calories, seemed to have no impact on their rate of recovery (Keys et al. 1950, 2:332). Keys concluded that starvation could not easily be reversed. "Are the processes in rehabilitation merely a reversal, a mirror image, of those of atrophy? There is reason to think that it is more complicated than this" (Keys et al. 1950, 2:296). The balance of water, fat, and muscle tissue of subjects in rehabilitation was not the same as before starvation. In recovery, starved people lost body water and accumulated large quantities of fat, to the point that Keys described a "post-starvation obesity" (Keys et al. 1950, 2:126).

Once subjects were allowed to eat as much as they wished, they gorged themselves and their weights rose even higher than before the study began. Many of the subjects felt hungry all the time, months after the end of the experiment. "Some men reported that at times they had a physical sensation of hunger even after they had eaten a large meal; subject No. 27 commented . . . on having 'an odd sensation

of being full yet still hungry” (Keys et al. 1950, 2:127). Subjects spoke of their fear that their food would not last and there would not be enough to eat. Keys decided that this incessant hunger was not due to any biochemical imbalance and instead was “psychogenic” (Keys et al. 1950, 2:128). Neither the body, the mind, nor the emotions returned completely to their prior state, even after months of refeeding. Keys warned relief workers and Allied officials that “recovery from starvation is not as simple as it might seem.” Rebuilding the body was a “slow process” and required long-term, massive supplies. “Starved people cannot be rehabilitated in a few weeks on small hand-outs of vitamin pills and protein concentrates or by a bare subsistence diet.” They required “calories—plain cereals in great quantities and all the dried and condensed milk, dried eggs, cheese and meats that we can spare.” Even with an abundant diet, formerly starving people would require “probably many months” of care before their muscles and motivation regrew sufficiently to return to a normal and productive life (Keys 1946, 28). Stability appeared far out of reach.

Medical researchers and relief workers in Europe and Asia after the war discovered that recovery came slowly, if ever, to starved civilians. Extreme hunger seemed to require specialized, expert biomedical intervention. Jack Drummond (1950, 13), British biochemist and nutrition specialist, remarked that “it was frightening to realize,” as the extent of wartime starvation became apparent, “how little any of us knew about severe starvation.” Beyond a certain level of starvation, it took months, if not years, to return to a stable state. As medical workers discovered while caring for starving civilians and concentration camp survivors, starvation disease resisted treatment. Rehabilitation took far longer than medical authorities expected, and required far more calories than they had imagined possible.

Medical work during and after the Second World War established extreme hunger as a distinct disease, also labeled undernutrition, denutrition, famine disease, or starvation disease (Simmons 2008; Moraes 2019). Hunger came to be understood as a biomedical condition, in need of expert surveillance and specialized medical treatment. Most medical research in the period before World War II focused on vitamin deficiency diseases like beriberi or pellagra, whose symptoms could be resolved simply by supplying quantities of that vitamin or mineral. By contrast, extreme hunger was a total illness, impacting every bodily system. In this sense medical research on hunger and starvation disease during World War II formed a precursor to contemporary work on the total effects of metabolic illness. Starvation appeared to profoundly alter the body’s ability to regulate itself under strain. It was unclear whether or how a body could recover from it.

Recovery from postwar starvation required massive infusions of calories, grains, milk, and other goods. Yet the world’s main supplier of these goods—the United States—refused to curtail domestic consumption or imperil export prices to support starvation relief abroad. The US government eliminated price

controls at the war's end and refused to requisition wheat for international aid (Woodbridge 1950, 1:409, 432). In the wake of the global failed harvests of 1946, former president Hoover took to the airwaves to urge Americans to cut home consumption of wheat by 40 percent and fats by 20 percent, to spare supplies for starving nations. Hoover pleaded with listeners to reduce food waste and eat less bread and meat, which together could save twenty-five million European lives (no mention was made of non-European lives). President Truman, speaking alongside Hoover, intoned that "we have a high responsibility, as Americans, to go to their rescue" (Riley 2017, 112–113). But Americans paid little heed to these pleas and rapidly increased their intake of both grains and fats in the postwar years. Instead of reducing and redistributing, the United States entered a crisis of overconsumption.

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"The hungry" were always plural, always too many, and to be eliminated. In the 1950s and 1960s, American farms produced more food than its consumers could absorb. At the same time, the world was full of hungry people. American experts devised strategies to dispose of these excesses. Both food and people were apparently too much, too many, overproduced. The world appeared overfull. The United States implemented policies designed to eliminate surplus, designating both food and people as excessive and expendable. Out of the 1950s and 1960s a regime of hunger management emerged, including modes of knowledge and modes of governance (Escobar 2011, 123). The United States and its allies sought to control hunger not just for humanitarian reasons but also to achieve economic, geopolitical, and ideological ends. American agro-industry dealt with overproduction of food in two ways: by marketing, to get Americans to eat more, and by sending excess production abroad in the form of food aid. Producers viewed food aid as a tool to open world markets to America's excess production. "Surplus disposal" was how Americans in the 1950s called the food aid program.

The United States leveraged international food aid to push for political, psychological, economic, social, and reproductive reforms. Recipient nations were asked to shift from traditional farming to high-input agriculture, open their domestic and export markets, ally with US foreign policy goals, and reduce birth rates. Once again, hunger was employed as a technology. The United States used postwar food aid as a "lever," in the words of one presidential staffer, to "get something done" (Riley 2017, 262). Food aid served as a tool of soft power in the non-aligned world. Soft power operated most impactfully at the level of individual people, their attitudes, economic choices, and personal lives. Technical experts created "infrastructures for experimentalizing populations" (Murphy 2017, 8). They rolled out programs of agricultural modernization and population control designed to change people's everyday acts and feelings. Development programs intruded into the most intimate aspects of their targets' lives (Cullather 2010, 7).



FIGURE 7. "Greece—The first shipload of UNRRA supplies from Brazil is unloaded at Port of Piraeus," 1944–1948. *Source:* S-0800-0006-0001-00055, UNRRA Photographs, United Nations Archives.

The reproductive decisions and possibilities of poor women and families became objects of foreign policy and technoscientific control.

Postwar food aid programs served three goals: anticommunism, economic liberalization, and population control. Each of these priorities operated on several levels, from national leaders to individual citizens, often at contradictory and cross purposes. US policy makers sought to enforce cooperation with their geopolitical objectives, on the one hand; on the other, they sought to "modify the psychology of the peasant," oriented toward free-market, participatory, democratic values (Cullather 2010, 7). Americans made food aid contingent on agricultural "modernization" (Ahlberg 2008, 76). Recipients of American aid were required to promote the use of high-intensity agricultural inputs, chemical fertilizer and pesticides and hybrid seeds, sold by American companies. As a result, countries would remain dependent on US suppliers (Ahlberg 2008, 76–77). Some farmers who had been

self-sufficient came to rely on imported fertilizer. Cash crops replaced subsistence foods (Escobar 2011, 123). Large commercial producers benefitted to the detriment of small subsistence farmers (Olsson 2017, 132). Many of these strategies ultimately aggravated hunger among traditional farming communities.

"The hungry" were located in the realm of the underclass, the underdeveloped, the Third World, the formerly enslaved, and the Indigenous. Entire regions, continents, nations, ethnicities, and groups were characterized as hungry, deficient, starved, and dependent (Tappan 2017, 47). A standard imagery congealed around "the hungry," something like Binyavanga Wainaina's (2005, 31) satirical description of the "Starving African": "The Starving African . . . wanders the refugee camp nearly naked, and waits for the benevolence of the West. Her children have flies on their eyelids and pot bellies, and her breasts are flat and empty. She must look utterly helpless." As Wainaina's satire suggests, such imagery strips away individuality, humanity, personal histories, and identities. Arturo Escobar (2011, 123) describes such imagery, of dark and starving bodies, as a form of extreme symbolic violence.

Postwar populationists and foreign policy makers sought to contain this figure of the less than human, the hungry. Neo-Malthusians Joseph Spengler and William Vogt justified population control as a harsh but necessary reality; if policy makers did not reduce the number of people in the world, they warned, hunger and famine would. Vogt (1948, 206, 211) complained that poorer countries had "planted [their] hand firmly in America's dinner pail" and argued that "any aid we give should be made contingent on national programs leading toward population stabilization through voluntary action of the people." Policy makers followed suit. John F. Kennedy, for example, linked population control and hunger relief in a 1963 speech to the World Food Congress (Riley 2017, 224).

After World War II, policy makers justified massive programs of food aid to Europe as an inoculation against communism. House Foreign Affairs Committee chairman Charles Eaton warned that "if the Italian ration falls below what it is, there is no power that can keep the communists from taking over Italy," Greece, Turkey, and others "around the world" (cited in Riley 2017, 132). Aid to Italy was instituted despite the objections of Ethiopia, which had been one of the first countries liberated from Axis occupation but which received almost no aid for recovery (Woodward 1945, 12). In what became a standard policy approach, the United States leveraged food aid in exchange for compliance with American geopolitical objectives. Having abandoned UNRRA, the United States established its own food aid programs, tightly linked to anticommunist and development agendas. Food was used to pull Tito's Yugoslavia away from Soviet influence in the 1950s. Conversely, the United States withdrew food aid when Egypt nationalized the Suez Canal in 1956. In the 1960s, India, Israel, and South Vietnam received significant food aid in the service of foreign policy goals. In the case of Israel, food aid indirectly subsidized defense purchases (Ahlberg 2008, 23, 9).

Lyndon Johnson's Food for Peace program conditioned food aid on agricultural modernization and alliance with American foreign policy priorities. Food for Peace was commonly referred to as a program of "surplus disposal." As Senator George McGovern remarked, "It is acceptable to describe the garbage units in our kitchen sinks as disposal units, it is insensitive, if not insulting, to so describe feeding a child, a mother, or humankind in general" (cited in Ahlberg 2008, 27). Kristin Ahlberg (2008) revealed evidence that Johnson overtly wielded hunger as technology; he used hunger in the wake of the 1965 famine to keep India on a "short tether." Indian grain production fell by 20 percent in two consecutive harvests from 1965 through 1967. In the state of Bihar, food grain harvests were down more than 50 percent compared with harvests earlier in that decade. National food stocks were low, and India relied on imports from the US Food for Peace program to avoid catastrophe. Experts predicted a severe famine (Drèze 1991, 45–49).

Instead of shipping aid to famine regions immediately, however, Johnson made famine aid to India conditional on agricultural modernization and alliance with US foreign policy priorities. If India could "keep this [reform] program going," Johnson told the Indian food minister, "we can help you more." Free-market reforms "permitted" the United States to provide aid (Ahlberg 2008, 124). Johnson privately complained: "I don't know if we got an obligation the rest of our lives just to ship them 10% of what they eat. And not without even having agreement or discussions, or tying in any alliance, or to be sure of serving our national interests" (Ahlberg 2008, 114). Johnson's aide Robert Komer later recalled that Johnson "said, '... you tell that guy to go over there and when he's got a real authenticated case [of starvation], pack up [the] bones and send them back here then I'll believe him.' ... Well, by God, no Indians starved to our knowledge." Komer lauded Johnson's short tether on Indian famine aid as "a great example of how a master politician can pull the lever and get something done" (Riley 2017, 262).

World leaders, relief organizations, physiologists, and social scientists lay the groundwork for what Sylvia Wynter (2003, 323) has called the "new master code": hunger defined a dividing line between the fully human, the First World; and the underdeveloped, the Third World, the less-than-fully human. "The hungry" became a type: lacking autonomy, incapable of self-government, and subject to technoscientific intervention. The hungry are always elsewhere, never at home. They are found in hungry nations, regions, continents. Yet there is a parallel with American domestic politics, in the ways by which hunger relief became conditional on personal, economic, and psychological reform. Domestic welfare policy, like foreign food aid, was designed to reduce the number of its recipients through work, reproductive restraints, and sometimes through pure violence. Hunger within the United States, as abroad, was used as an instrument of elimination.