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## **Freshness from Afar: The Colonial Roots of Contemporary Fresh Foods**

### **Abstract**

*The late nineteenth century and early twentieth centuries saw both increasing trade in perishable foods and the expansion of European overseas empires. This article argues that these seemingly unrelated developments were in fact connected. It also shows how modern meanings of freshness in food took shape during this period, and were influenced by some of the same ideologies and anxieties that informed the imperial project.*

### **Keywords**

*Colonialism  
Refrigeration  
Africa  
California  
Beef  
Vegetables  
Freshness*

### **Introduction**

In his landmark work *Europe and the People without History*, the late anthropologist Eric Wolf sought to show that the world's so-called "primitive" societies were in fact shaped by and active participants in the same history of global capitalism as the Europeans who colonized them.<sup>1</sup> The empirical details of his story were familiar, as Wolf himself noted. But he wove them together in ways that challenged long-held assumptions about the imperial project, the supposedly simple and integral nature of non-European societies, and the connections between them. This article has a similar aim, except that in place of "people without history" it shall focus on a food quality presumed by its very definition to have no history: freshness.

More specifically, this article explores the historical relationship between freshness and empire: between a food quality inherently limited in how far it can last over space and time, and a form of power that inherently stretches across space, and leaves its mark over time. This relationship has a few

<sup>1</sup> Eric WOLF, *Europe and the People without History* (Berkeley, 1982).

dimensions. The first is simply temporal overlap. The modern meanings and value of freshness in food took shape during the era of late Euro-American colonialism, in the late nineteenth and early twentieth centuries. This was no coincidence. As a marketable, mass produced food quality, freshness relied on some of the same technologies as imperial expansion, as well as similar ideologies of progress and improvement. Like the imperial project, freshness also addressed certain popular anxieties about the health, vigor and integrity of the nation. Not least, the provision of certain fresh foods relied on colonized lands and labor, establishing lasting patterns of trade and dependency.

The partial histories of two basic kinds of perishables, beef and vegetables, illustrate the different ways that the modern understandings of freshness have drawn on the discourses and resources of empire. They also shed a critical light on a food quality that we have come to associate with enlightened eating, and enlightened consumption more generally.

### Perishability and empire through the ages

In the history of human foodways, it is hard to exaggerate the significance of perishability as a structuring force. It limited the reach of food trades and dietary patterns, both geographically and across the seasons. It influenced the distribution of certain foods within social groups and over the course of a day's meals. It informed theories of dietetics, hygiene and climate. It imbued certain foods with status, due to the difficulty and expense of getting them out of season or far from their source. And of course perishability inspired all manner of innovation in food preservation as well as transport.<sup>2</sup>

Preservation techniques such as curing, pickling, fermenting and canning have in turn had far-reaching consequences for diets and cuisines, migration, commerce, warfare, and even the fate of species. With the increasing ability to slow food's decay came greater potential to control and profit from much more than food. Thus the epic battles waged over sources of salt; thus Napoleon's sponsorship of the contest won by Nicolas Appert, inventor of canning.<sup>3</sup>

Yet for all their historical importance on a global scale, these technologies are blunt instruments at the much smaller scales determining food's physical qualities and how we perceive them. They preserve fresh foods by turning them

<sup>2</sup> Braudel, among others, appreciated the significance of perishability in trade and urban development, Page 386. See also F. BRAUDEL, "Alimentation et Catégories de L'histoire", *Annales. Histoire, Sciences Sociales*, vol.16, no. 4 (1961), pp.723-728.

<sup>3</sup> Mark KURLANSKY, *Salt: A World History* (New York, 2002); Sue SHEPARD, *Pickled, Potted, and Canned: How the Art and Science of Food Preserving Changed the World* (New York 2000); C. Anne WILSON, *Waste Not, Want Not: Food Preservation from Early Times to the Present Day* (Edinburgh, 1991).

irreversibly into other kinds of food, *not* fresh. In the past as today, exactly how this transformation affected the monetary or cultural value of particular perishables depended on many factors. But it is one reason why the advent first of ice manufacture and then mechanical refrigeration in the mid-to-late nineteenth century marked a quantum leap in the history of food preservation. These technologies did more than slow spoilage. More and more convincingly, they could claim to keep foods fresh. And together with advances in steam transport, they could bring freshness from farther away, in greater quantities and at lower prices than ever before. That said, early refrigeration suffered not only from technical flaws but also, in many quarters, from popular distrust and opposition. Alongside fears about how “artificial cold” affected food quality were worries about how it could be used to deceive and cheat consumers, and expose local markets to distant competition. All these concerns were well founded.

How, then, did refrigeration become an accepted and eventually ubiquitous tool, at least in wealthy countries? Traditional accounts such as Anderson’s *Refrigeration in America* and Woolrich’s *The Men who Created Cold* focus mostly on technical advances that made it safer and more reliable.<sup>4</sup> They tend to understate the larger socioeconomic, cultural and even geopolitical conditions that made refrigeration very much a product of its time. It went from controversial novelty to infrastructural necessity during an era that saw exploding demand for certain perishable foodstuffs; the discoveries of first bacteria and later vitamins, which in turn heightened concerns about food safety and nutrition; the rise of mass retailing and advertising industries, and dramatic shifts in women’s work in and beyond the household.<sup>5</sup> Together these changes defined an era when freshness in food became more possible, desirable, but also questionable. The spread of refrigeration as well as later freshness-preserving technologies must be understood in this larger context.<sup>6</sup>

This era also saw the “Scramble for Africa”, the imposition and reconfiguration of European colonial rule in large parts of the Middle East and Asia-Pacific, and the rise of the United States as a colonial power in its own right. The massive scale and consequences of Euro-American imperialism during this period make it doubly important to specify how it figures into the larger history of freshness. For starters, perishable foodstuffs did not rank high on the list of natural resources as incentives for colonial occupation, relative to minerals, forest products, and tropical stimulants such as sugar and tea.<sup>7</sup>

<sup>4</sup> O. ANDERSON, *Refrigeration in America* (Princeton, 1953); Willis R. WOOLRICH, *The Men Who Created Cold: A History of Refrigeration* (New York, 1967).

<sup>5</sup> Harvey LEVENSTEIN, *Revolution at the Table: The Transformation of the American Diet* (Berkeley, 2003).

<sup>6</sup> All discussed at greater length in Susanne FREIDBERG, *Fresh: A Perishable History* (Cambridge, Mass, 2009).

<sup>7</sup> On how these tropical crops shaped British imperial trade and foodways, especially pre-1800, see Troy BICKHAM, “Eating the Empire: Intersections of Food, Cookery and Imperialism in

Initially the transport was inadequate, and the markets uncertain. Yet a few of the nearest colonies (Ireland, Algeria) did become early and important suppliers of meat, butter (in the case of Ireland) and fruits (Algeria). Many more attracted experimentation and investment in perishable food production destined either for colonial markets or preservation industries.<sup>8</sup> With the advent of refrigerated shipping some colonies, such as South Africa and Australia, saw the rapid development of new export enterprises.<sup>9</sup>

Empire during this period did not always involve formal colonial occupation. Indeed, most of the earliest major fresh food industries arose in the Americas, and depended more on the instruments of informal empire: finance, commercial treaties and often the implicit threat of military force.<sup>10</sup> British investment in railroads, shipping and refrigerated packinghouses (*frigoríficos*) turned Argentina into the world's largest exporter of frozen and chilled beef by the early twentieth century.<sup>11</sup> This infrastructure also lured to Buenos Aires companies that later became world powers themselves, with operations spanning former imperial borders. In Central America, United States capital built the rails, ships, towns and plantations that made the banana the first (and still the biggest) globally-traded fresh fruit commodity. And in California, early orange growers tapped into the waves of Chinese labor emigration that followed the Opium War and other British 'informal' imperial exploits. Later growers replaced Chinese workers with Filipinos, emigrants from the United States' own colony.<sup>12</sup>

As scholars of this migratory period rightly note, empire does not explain everything. Even in regions hard hit by taxation and dislocation, people moved for different reasons, most of which went unrecorded.<sup>13</sup> By contrast, the fresh food industries that employed immigrants made their imperial

Eighteenth-Century Britain", *Past and Present*, vol. 198, no. 1 (2008), pp. 71-109; Sidney MINTZ, *Sweetness and Power: The Place of Sugar in Modern History* (New York, 1986); James WALVIN, *Fruits of Empire: Exotic Produce and British Taste, 1660-1800* (Houndmills, 1997).

<sup>8</sup> Marie-Noëlle BOURGET, Christophe BONNEUIL, "De l'inventaire du monde à la mise en valeur du globe. Botanique et colonisation (fin XVII<sup>e</sup> siècle-début XX<sup>e</sup> siècle)", *Revue Française d'Histoire d'Outre-Mer*, vol. 86, (1999), pp. 5-38; Michael A. OSBORNE, *Nature, the Exotic, and the Science of French Colonialism* (Bloomington, 1994).

<sup>9</sup> Keith FARRER, *To Feed a Nation: A History of Australian Food Science and Technology* Keith Farrer (Collingwood, Australia, 2005).

<sup>10</sup> J. GALLAGHER, R. ROBINSON, "The Imperialism of Free Trade", *Economic History Review*, vol. 6, no. 1 (1953), pp. 1-15. Not all scholars of this era agree about the significance of non-territorial forms of imperialism. See R. THOMPSON, "Informal Empire? An Exploration in the History of Anglo-Argentine Relations, 1810-1914", *Journal of Latin American Studies*, vol. 24, no. 2 (1992), pp. 419-436.

<sup>11</sup> Simon Gabriel HANSON, *Argentine Meat and the British Market: Chapters in the History of the Argentine Meat Industry* (Stanford, 1938), p. 141.

<sup>12</sup> Lucie CHENG, Edna BONACICH, *Labor Immigration under Capitalism: Asian Workers in the United States before World War II* (Berkeley, 1984).

<sup>13</sup> Y. CHEN, "The Internal Origins of Chinese Emigration to California Reconsidered", *The Western Historical Quarterly*, vol. 28, no. 4 (1997), pp. 521-546.

ambitions explicit. Here California deserves special mention. Although it was not technically a U.S. colony, an ideology of Manifest Destiny pervades the state's early "booster" literature as well as the records of the growers who made fortunes in crops such as citrus and lettuce. As Sackman describes in *Orange Empire*, boosters portrayed Hispanic California as a lush but lazy land, bound for greatness under the disciplined rule of Anglo-American agrarian enterprise. Horticulture would civilize both the Californian landscape and the various dark-skinned peoples who worked it.<sup>14</sup> Later, once the state had become what the Los Angeles Chamber of Commerce called "the empire of agriculture", this sense of destiny helped justify violent crackdowns on those who challenged the industry's racial hierarchies.<sup>15</sup>

Across the United States and West Europe, labor-intensive horticultural and meatpacking industries still depend, of course, on migrants from poorer lands. This uneven development is the most global of imperial legacies, and its implications for the geography of freshness go beyond labor flows. By the late 20<sup>th</sup> century fresh vegetables were also traveling from global South to North. These transnational trades won favor among development agencies, because they generated jobs and foreign exchange in countries that badly needed both. In an era when traditional raw material exports – cotton, coffee, tea – offered disappointingly low returns, crops such as French beans and asparagus were seen as fresh opportunities. Yet as we shall see, the hope that freshness would bring development is really not new at all.

#### Beef: national progress and corporate power

"Chilled beef is such a high-class trade that the future of the meat export of any country which can grapple successfully with the various problems concerned therein is certain to be brilliant."

Critchell, *History of the Frozen Meat Trade*, 1912.<sup>16</sup>

In the history of fresh foods and empire, beef belongs in an early chapter partly because it was one of the first perishables mass-produced for a global market. More fundamentally, demand for fresh beef fueled the innovations that later transformed not just the production, transport and storage of all kinds of fresh foods, but also the very meaning of freshness itself. In the words of William Sickel, a turn-of-the-century shipping manager, "The desire to

<sup>14</sup> Douglas C. SACKMAN, *Orange Empire: California and the Fruits of Eden* (Berkeley, 2005).

<sup>15</sup> Don MITCHELL, *The Lie of the Land: Migrant Workers and the California Landscape* (Minneapolis, 1996).

<sup>16</sup> James CRITCHELL, Joseph RAYMOND, *A History of the Frozen Meat Trade* (London, 1912), p. 397.

export fresh meats was the father of all ideas of refrigerating transportation, both by land and sea.”<sup>17</sup>

These ideas took shape in the mid to late nineteenth century, a time when “fresh” simply meant beef that had not been dried, salted, or canned. Europe’s working classes ate relatively little beef in this form, especially in the warm seasons. But they tended to eat more whenever they could afford it. “Affordable” of course, is a subjective term, reflecting consumers’ priorities and expectations as well as their disposable income. In the cities of Britain and later France, rising demand for fresh beef signaled changes on both fronts. Workers’ buying power was improving, gradually though unevenly, as wages rose relative to the cost of staple goods. Equally important, city life gave them new aspirations. More than their rural cousins, they saw how the other half ate. They saw that well-off shoppers bought steaks and roasts, not salt pork and stew bones.<sup>18</sup> They came to feel that Sunday dinner was not complete without a good-sized hunk of fresh beef – even if, as Engels observed in *Conditions of the Working Class in England*, the meat was actually a “half-decayed” slab bought just before the Saturday closing time, when butchers liquidated their stocks.<sup>19</sup>

In the 1860s, British government officials generally worried less about the meat’s decay than its cost. After all, few foods were more closely associated with wealth, wellbeing and overall national progress than fresh beef. Traditional ideas about its strength-giving powers found support in the contemporary chemistry of Justus von Liebig, who posited that digestion converted red meat directly into blood and then tissue.<sup>20</sup> Liebig claimed that beef was “flesh-forming” sustenance in whatever form – a stance that helped market the bouillon named for him, Liebig’s Extract.<sup>21</sup> But despite its commercial success, government authorities never expected that a beef bouillon could satisfy demand for real, fresh meat.

The problem with beef was that it demanded so much land, Britain’s scarcest natural resource. Converting millions of acres in Ireland to pasturage

<sup>17</sup> William G. SICKEL, “Refrigeration on Ocean Steamships”, in *Premier Congrès international du froid Paris, 5 au 12 octobre 1908*, ed. J.D. LOVERDO (Paris, 1908).

<sup>18</sup> Kyri CLAFLIN, *Culture, Politics and Modernization in Paris Provisioning, 1880-1920* (Ph.D. thesis, Boston University, 2006); Vincent J. KNAPP, “The Democratization of Meat and Protein in Late Eighteenth and Nineteenth Century Europe”, *Historian*, vol. 59, no. 3 (1997), pp. 541-551.

<sup>19</sup> Friedrich ENGELS, *The Condition of the Working Class in England* (New York, 1967 [1st. ed., 1887]) p. 104.

<sup>20</sup> Jack Cecil DRUMMOND, Anne WILBRAHAM, *The Englishman’s Food; a History of Five Centuries of English Diet* (London, 1958), p. 53. Jeremy RIFKIN, *Beyond Beef: The Rise and Fall of the Cattle Culture* (New York, 1992), pp.53-54. Drummond and Wilbraham, *The Englishman’s Food...*, p. 350.

<sup>21</sup> Mark FINLAY, “Early Marketing of the Theory of Nutrition: The Science and Culture of Liebig’s Extract of Meat”, in H. KAMMINGA, A. CUNNINGHAM (eds.), *The Science and Culture of Nutrition, 1840-1940* (Atlanta, 1995), pp. 48-76.

provided only a temporary fix. While cured meats could be (and were) imported from any number of countries, on-the-hoof supplies could not, or at least not without risk. A long history of livestock-borne epidemics, including a bout of cattle plague in 1865, made the government understandably wary of this method of securing fresh supplies.<sup>22</sup>

So as beef prices rose, experts conferred about “the meat question” – namely, where and how to get more of it. Some efforts focused on breeding, feeding, and other means of intensifying production at home. The more inventive responses to the meat question focused on new food preservation methods suited for long-distance transport. Many aimed to replace ice, which was too heavy and perishable for voyages across the equator.<sup>23</sup> One of the arbiters of these new methods was the Royal Society of Arts, an organization founded to encourage technological and social progress. In the 1860s the Society’s Food Committee offered prize money for advances in preservation, and reported on them in the Society’s weekly journal.

Among the contenders were barrels of Australian beef that had been soaked in calcium sulfite and then packed in melted butter, and Uruguayan meat that had been injected with an “anti-putrescent solution” of salt, saltpeter, vinegar and spices. The British Meat Preserver Company proposed a powder that, when mixed with water, “restored” already tainted flesh.<sup>24</sup> And the chemist G.C. Steet suggested keeping meat in containers full of “artificial atmosphere.” Like many of the presenters, Steet waxed patriotic; Britain’s “gallant defenders”, he said, deserved better than salted rations. Indeed, securing meat from overseas was nothing short of a Christian responsibility:

“While in our densely populated towns and districts we can scarcely supply sufficient cheap food for the bodily sustenance of our laboring population who chiefly require good animal food...and while at the same time there exists in other regions of the earth a superabundance of animal food not only fit for sustenance but of excellent quality, it should be the duty of every philanthropist – to say nothing of mercantile and social interests – to make use of the abundance of one part of the earth for the supply of the necessities of another part, and thus act up to the precept of our great Exemplar, who required his followers to gather up the fragments, that nothing should be lost.”<sup>25</sup>

<sup>22</sup> Richard PERREN, *The Meat Trade in Britain, 1840-1914* (London, 1978), pp. 108-114.

<sup>23</sup> HANSON, *Argentine Meat and the British Market*, p. 19. CRITCHELL, RAYMOND, *A History of the Frozen Meat Trade*, p. 435.

<sup>24</sup> DRUMMOND, WILBRAHAM, *The Englishman’s Food...*, pp. 316-317; B.C. STEET, “On the Preservation of Food, Especially Fresh Meat and Fish, and the Best Form for Import and Provisioning Armies, Ships and Expeditions”, *Journal of the Society of Arts*, vol. 13, no. 644 (1865), pp. 309-315.

<sup>25</sup> STEET, “On the Preservation of Food.....”, p. 315.

Meanwhile, the number of patents taken out in Britain for mechanical refrigeration methods leapt from 11 in the 1850s to 30 in the 1860s to 56 in the first four years of the 1870s. Yet ultimately the creator of the breakthrough technology – a system of ammonia-powered onboard refrigeration that could keep meat fresh, but not frozen, for at least a month – was French. The engineer Charles Tellier proved that his chilling system worked by installing it on a steamship and sailing to Buenos Aires with a load of meat in 1877. His memoir, *Le Frigorifique: Une Invention Moderne*, described both the journey and the vision that inspired it.

Tellier imagined, first, an end to isolation and backwardness in remote, cattle-rich lands, such as Argentina, Uruguay, Australia, and France's own colony, Madagascar. French colonial officials agreed that refrigerated shipping could help the Indian Ocean island become "the Australia of France." Madagascar, said one, "is called to such a grand future...if we could just make use of the meat that it could provide for its own well-being and for ours."<sup>26</sup> The Argentine press was even more enthusiastic about Tellier's invention. "The big problem that has preoccupied thinkers of both hemispheres for nearly two centuries can now be considered definitively resolved", declared Buenos Aires' *Le National*, reporting that a 105-day steak from the *Frigorifique's* cargo was not just edible, but "excellent." "Hurray", effused the city's *La Liberté*, "Hurray a thousand times for the revolutions of science and capital. The dawn of a new day rises for La Plata."<sup>27</sup>

Closer to home, Tellier believed that refrigeration could bring working-class consumers *la vie au bon marché* – the good life for less. An abundance of fresh red meat was an important measure of this good life, and one that would make consumers not just happier, but also healthier and more productive.<sup>28</sup> This view found support among physicians such as Maurice de Fleury, who attributed "Anglo-Saxon" economic and imperial advance partly to a diet that put *boeuf rôti* quite literally at the center of the plate. By contrast, he argued in *Le Corps et l'Âme de l'Enfant*, the paucity of meat in French children's diet was creating "a nation of office workers."<sup>29</sup>

Fleury's concerns, like his cross-Channel dietary comparisons, were not unusual in late nineteenth century France. Much more controversial was Tellier's answer to the meat question. What he called a "rational" food supply French farmers and butchers saw as a dire threat to their own livelihoods.

<sup>26</sup> A. JORET, "Le Transport Des Produits Coloniaux Au Moyens Du Froid", *L'Industrie Frigorifique*, vol. 1 (1903), pp. 27-30.

<sup>27</sup> "Le 'Frigorifique' à Buenos-Ayres", *L'Illustration* (10 March, 1877); Charles TELLIER, *Communication aux actionnaires de la société fondatrice pour la conservation de la viande fraîche par le froid* (Paris, 1877).

<sup>28</sup> Charles TELLIER, *La Vie À Bon Marché* (Paris, 1880).

<sup>29</sup> Maurice DE FLEURY, *Le corps et l'âme de l'enfant* (Paris: Armand Colin et Cie., 1899) pp. 45, 77.

Within a few years of Tellier's landmark voyage, they had convinced the French government to impose such stiff tariffs on imported refrigerated meat as to effectively shut down the trade for nearly a quarter century.

In the meantime, though, the notion of the "good life for less" (or at least good fresh beef for less) helped justify the expansion of commercial empires in and beyond the Anglophone world. From the 1880s onward, British investment in refrigerated steamships and overseas meatpacking took off.<sup>30</sup> Initially most of the meat shipped out of the southern hemisphere was frozen, which made it easier to handle than fresh (or "chilled") meat but also lowered its value. A convenient military provision, frozen beef did not impress British consumers, partly due to its grayish, distinctly non-fresh appearance. It sold best among those who could not afford British or North American beef.<sup>31</sup>

As on-board cooling technology improved, however, Argentina's chilled exports surged ahead of the United States'. The country's ranchers imported British bulls, so as to assure that their Pampas-fed beef suited British tastes. The wealthiest also adopted the lifestyles of the British landed gentry. They did not worry that British firms controlled three-quarters of the trade, because Argentina was getting rich. By the turn of the century, in fact, it was the ninth wealthiest country in the world. Buenos Aires boasted a \$10 million opera house and better water and sewer systems than most European cities. In 1906 the *New York Times* called it "the Paris of America", pointing out that despite a booming population, its crime rate was only a tenth of Chicago's.<sup>32</sup>

Chicago was an apt comparison, for its meatpacking houses were the models for Buenos Aires' own. Soon after, members of the city's Beef Trust (the companies Swift, Armour and Morris) bought their own *frigorificos*. They wanted a bigger chunk of the voracious British market, and cheaper beef than they could find in the American Midwest. To get both, they employed tactics similar to those they had used at home: huge purchases to win over politically-powerful ranchers, price wars to knock out competitors, hard-line labor policies, and public relations that insisted, in a word, that bigger was better. They countered American antitrust campaigners and leftist Argentine politicians with arguments about how big companies could innovate, streamline, *improve*. "By adopting the best known methods", as Philip Armour once put it, "nothing is wasted, and things are made cheaper and better for the world in general."<sup>33</sup>

<sup>30</sup> Peter H. SMITH, *Politics and Beef in Argentina: Patterns of Conflict and Change* (New York, 1969).

<sup>31</sup> CRITCHELL, RAYMOND, *A History of the Frozen Meat Trade...*, p. 207.

<sup>32</sup> "Buenos Ayres: The Paris of America", *New York Times* (19 August 1906); Michael JOHNS, "The Antinomies of Ruling Class Culture: The Buenos Aires Elite, 1880-1910", *Journal of Historical Sociology*, vol. 6, no. 1 (1993), pp. 74-101.

<sup>33</sup> Quoted in William CRONON, *Nature's Metropolis: Chicago and the Great West* (New York, 1991), p. 250.

The Chicago meatpackers built a commercial empire, but one that took advantage of (and to a certain extent depended on) the legacies of earlier, state-sponsored forms of imperialism. They expanded into lands where indigenous populations had been “pacified” if not entirely exterminated, and where *mestizo* ranchers hungered for commerce, however compromised, with metropolitan markets.<sup>34</sup> But in these ventures the Chicago packers were not alone. In terms of the sheer global reach achieved in the name of cheap fresh provisions, Britain’s Vestey brothers outdid American Big Beef.

The sons of a Liverpool grocer, in the 1880s they founded the Union Cold Storage Company (which later became the world’s biggest) as well as the Blue Star shipping line.<sup>35</sup> By 1921 the Vestey family were Britain’s biggest meat retailers, with more than 2300 butcher shops. They owned cold storage or meatpacking enterprises on every continent. In a few countries, such as Venezuela and Australia, they bought huge tracts of ranchland – a degree of vertical integration that not even the Chicago packers attempted. The Vestey family’s quest for cheap beef even took them to Madagascar, where their subsidiary, *Compagnie Frigorifique Generale* (CGF), opened a refrigerated packinghouse on the eve of World War I – right around the time that France decided it needed meat from its colonies after all.

Compared to Argentina, Madagascar was never a very big beef exporter. It suffered from scarce shipping and France’s tendency to shut down the trade whenever its own beef farmers protested. Nonetheless the 1000-worker CGF plant was considered a symbol of progress. A 1927 French study described it as a “true industrial city”, complete with housing, a library, and two tennis courts. The study remarked on the “appreciable prosperity” in the region where the plant drew its thousand-person workforce, and praised the *système Taylor* used on the Chicago-style disassembly line:

“Just like in the great American packing plants, the work gives the maximum results with perfect regularity, thanks to the division and specialization of tasks. This parceling-up of the work also suits perfectly the Malagasy labor force. The worker, staying in place and repeating always the same movements, acquires great dexterity. He cannot dawdle because the assembly line rolls constantly...”<sup>36</sup>

<sup>34</sup> Silvio R. BARETTA, John MARKOFF, “Civilization and Barbarism: Cattle Frontiers in Latin America”, *Comparative Studies in Society and History*, vol. 20, no. 4 (1978), pp. 587-620. For examples of other American companies that pursued similar strategies, see Mona DOMOSH, *American Commodities in an Age of Empire* (New York, 2006).

<sup>35</sup> Scholarly treatment of the Vestey family enterprises remains remarkably scarce. See however Phillip KNIGHTLEY, *The Rise and Fall of the House of Vestey: The True Story of How Britain’s Richest Family Beat the Taxman and Came to Grief* (London, 1993); Doug YARRINGTON, “The Vestey Cattle Enterprise and the Regime of Juan Vicente Gómez, 1908–1935”, *Journal of Latin American Studies*, vol. 35, (2003), pp. 89-115.

<sup>36</sup> Antoine GENER, *De l’élevage du gros bétail à Madagascar* (Ph.D. thesis, Université d’Alger, 1927), p. 188.

In fact, the assembly line only rolled for awhile. Beef-borne progress proved brief in Madagascar, where the Vesteyes had come only because it had some of the world's cheapest cattle. After World War II, Malagasies began to appreciate the value of their zebu, and to eat more of their fresh meat. Prices rose, and soon the packing plants closed, leaving the island still a long way from being "France's Australia."<sup>37</sup> It was one episode in an era when meat moguls like the Swifts, Armours and Vesteyes did (for better or worse) deliver cheap fresh beef to the industrialized world. But they did not bring industrial revolutions to the far reaches of their empires. However tasty, chilled beef was ultimately just a raw material like any other colonial export, generating few linkages or innovations, and little that could be called development.

### Vegetables: healthful nature, hidden labor

"The vegetable kingdom is the storehouse of all nutrition, unblemished by the hand of man."

O. Carqué, *Rational diet; an advanced treatise on the food question* (Los Angeles, 1923)

"The circumstances of gardeners, generally mean, and always moderate, may satisfy us that their great ingenuity is not commonly over-recompensed."

Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Book 1, Ch. 11 (1776)

Relative to beef, fresh vegetables fed imperial ambitions only indirectly. Certainly botanists and merchants had long been interested in the dietary and medicinal uses of exotic edible plants. By the late nineteenth century, European and North American foodways, like their botanical gardens, were well-stocked with species native to other continents.<sup>38</sup> But the place of fresh vegetables in these foodways provided little reason to conquer other continents. Most cities drew the bulk of their supplies from regional, intensively cultivated truck farms. Vegetables were seasonal but not scarce, and not much valued for their nutrition. While certain crops enjoyed gastronomic prestige,

<sup>37</sup> Archives d'Outre Mer de France, Compte Rendu du tournée dans le district de Vohemar (Majunga 22-26 Mai 1954 par delegue du Gouverneur General, Cl. Cozanet) (MAD PM 574): Correspondence, affaires économiques 1954-6 (MAD PM 710); Compte-Rendu de la session du Conseil Supérieur de l'Élevage, 16 Octobre 1954 (MAD GGM 5 (14) D).

<sup>38</sup> Richard H. DRAYTON, *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (New Haven, 2000); OSBORNE, *Nature...*; Londa L. SCHIEBINGER, Claudia SWAN, *Colonial Botany: Science, Commerce, and Politics in the Early Modern World* (Philadelphia, 2005).

this status did not justify long-distance trade – which often was not practical anyway, given how quickly many vegetables lose their fresh qualities.<sup>39</sup>

Once it did become viable to ship these crops across continents and oceans, however, their production relied on racialized labor regimes shaped by the imperial past. It relied, in other words, on the seasonal, flexible, skilled yet cheap workforce supplied by countries where various forms of conquest and colonialism had impoverished agrarian livelihoods. In California especially, this pattern was established early and on an industrial scale. Yet the marketing of the state's fresh vegetables emphasized their naturalness. Even crops as carefully engineered and labor-intensive as iceberg lettuce were portrayed as products "unblemished by the hand of man." Indeed, in the first part of the twentieth century, iceberg lettuce was seen as a shining example of California vegetable growers' successful mobilization of machines, cheap labor, and savvy marketing.

Depictions of unlabored freshness went beyond conventional commodity fetishism. They appealed to consumers' concerns about how other parts of their diet – and indeed their life – were becoming increasingly *unnatural*. In *No Place of Grace*, Lears suggests how such anxieties reflected the broader "antimodernism" that suffused Anglo-American middle class and elite culture in the late nineteenth and early twentieth centuries. It found expression in various forms: the idealization of rural life in art and literature, the search for authentic experience through athleticism and outdoor adventure and, increasingly, in the products that promised to make consumers feel more alive.<sup>40</sup> California's fresh vegetables counted among these supposedly revitalizing products. Their marketing benefited from the state's own cultivated image as a corner of American empire where Nature was at once healthful, beautiful and economically fruitful.<sup>41</sup>

California's exports of fresh vegetables, especially lettuce, began to increase dramatically in the early 1920s. One reason was improved railcar refrigeration, which made it more viable to ship lettuce and other fragile crops cross-country.<sup>42</sup> The culinary status of fresh vegetables also benefited from the popularization of the so-called "Newer Nutrition", which followed the discovery of vitamins in the nineteen-teens. In contrast to the meat-and-wheat diet prescribed by their predecessors, "Newer Nutritionists"

<sup>39</sup> Vijay K MISHRA, T.V. GAMAGE, "Post-Harvest Physiology of Fruit and Vegetables", in S. RAHMAN (ed.), *Handbook of Food Preservation*, (New York, 2007), pp. 19-48.

<sup>40</sup> J. T. J. LEARS, "American Advertising and the Reconstruction of the Body, 1880-1930", in Kathryn GROVER (ed.), *Fitness in American Culture: Images of Health, Sport, and the Body* (Amherst, MA, 1989), pp. 47-66; T.J. Jackson LEARS, *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880-1920* (Chicago, 1994).

<sup>41</sup> William R. NUTTING, *California Views in Natural Colors* (San Francisco, 1889); Sackman, *Orange Empire...*; David VAUGHT, *Cultivating California: Growers, Specialty Crops and Labor, 1875-1920* (Baltimore, 1999).

<sup>42</sup> W.H. WINTERROWD, "Design and Construction of Refrigeration Cars", *Ice and Refrigeration* 63 (1922), pp. 144-148.

January, 1930

LADIES' HOME JOURNAL

# Bodies that cry "HANDS OFF" to Old Winter



## The *Mystery Vitamin* in Iceberg Lettuce Preserves Youthful Vigor

ANY woman would envy the radiant vitality of these girls—snow-balling in their bathing suits "just for fun"—skins aglow, eyes flashing, every fibre tingling.

Such health comes from the right frame of mind, from exercise and from proper foods—what we call a "balanced diet." Many foods go into such a diet, but fruits and vegetables play a most important part. Lettuce, in particular, according to physicians and dietitians, has many virtues unsuspected by the average person.

It contains all the vitamins and many mineral salts, without which, from some source, life would perish. It also contains the "mystery vitamin," as some writers call it, just recently discovered and still under investigation. This vitamin is thought to play a vital part in prolonging youthful vigor—a universal yearning of mankind and exemplified dramatically by Ponce de Leon's search for the Fountain of Youth.

### Wanted—A Slender Figure!

You would be surprised at the number of graceful, beautiful women who eat a generous portion of Iceberg head lettuce twice a day. Many of them—matrons with the suppleness of a girl—confess to eating nothing for luncheon except half a head of lettuce, sprinkled with salt or savored with a thin French dressing. It satisfies, adds scarcely a grain of fat, and there is a purity, a crispness, a succulence about the golden-green heart that make it a delicious

tidbit. See the famous Eighteen Day Diet for the part lettuce plays.

But if you wish to reduce, go slowly—do not starve yourself. If you confine yourself to half a head of lettuce at luncheon, you will not go hungry. And let us suggest a test of successful reduction: Throw your charts and scales away. Forget the twaddle about "boyish" figures. Every day stand undraped before your bedroom mirror and take a good look at yourself. You know what a beautiful figure is—you see them on the stage and screen, in the magazines and newspapers. What other guide do you need?

### A Protective Food

Lettuce is known to scientists as a "protective" food, like milk. It promotes the assimilation of all your other foods. This is because lettuce abounds in vitamins. It also contains a liberal supply of another important element in the building of perfect men and women—the mineral salts. If you eat half a head of lettuce a day, along with staple foods, you need never worry about a shortage of vitamins or mineral salts in your body.

The food which is good for you is equally good for your family. Write for the booklet "Charging the Human Battery." It will tell you much about foods that you do not know but should know, and it contains many new and unique recipes for lettuce salads.



### Holiday Iceberg Salad

Cut a head of Iceberg lettuce crosswise into inch slices and place each round on a salad plate. Cut pimento into narrow strips and arrange on the lettuce as the outline of a poinsettia. Use a little mayonnaise for the center with bits of green pepper dotting it; make a poinsettia stem of green pepper also. Serve with French dressing.

Get this Free Book! Send your name and address for your free copy of the booklet, "Charging the Human Battery," which reveals the rôle played by lettuce, the "Sun Food," in promoting physical and mental health.



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Western General Protective Association  
Dept. A-2  
Los Angeles, California  
Please send me free the booklet, "Charging the Human Battery."

Name \_\_\_\_\_  
Address \_\_\_\_\_



## ICEBERG HEAD LETTUCE

Nature's Concentrated Sunshine  
From ARIZONA and CALIFORNIA

Early advertisements for California iceberg lettuce claimed it restored youth and melted fat.  
Source: *Ladies' Home Journal* (January 1930)

recommended more vitamin-rich fresh produce and dairy products. They also warned against overly processed foods, such as refined flour, and overnutrition more generally. This advice resonated in a society that had in recent years embraced raw food diets and flapper-slim ideals of bodily beauty.<sup>43</sup>

California's lettuce growers made the most of these concerns. Their preferred crop was iceberg, a relatively new and sturdy crisphead variety suited for long-distance shipping and year-round production.<sup>44</sup> Although it ranks among the most nutritionally vapid of greens, the growers' publicity claimed that iceberg contained a fat-melting, youth-restoring "mystery vitamin."<sup>45</sup> Since vitamin science was in its infancy, these claims went unchallenged. Iceberg became a favorite celebrity diet food; the Hollywood actress Jane Wyatt was said to make a lunch of "half a head... minus even the dressing."<sup>46</sup>

Other iceberg advertisements made the most of Easterners' perceptions of the California climate:

This lettuce is grown under the smiling, sunny skies of the great Far West. Day after day the ardent sun irradiates it – shoots myriad of rays into it ... in short, puts up a package of sunshine for you. This is Nature's way. And when your home skies are dull, and the sun never peeps out all day, or shows only a pale, wan face, you can still take your internal sun-bath. For Iceberg head lettuce is at your grocer's in winter as well as in summer. Every day of the year you can serve Nature's concentrated sunshine on your table.<sup>47</sup>

These advertisements appeared in 1930. By that time, per capita lettuce consumption had nearly tripled from a decade before.<sup>48</sup> "You might say that we have entered the Vegetable Age", proclaimed the *Western Grower and Shipper*, in an article entitled "Why Western Vegetables are Popular". Typical of many of the articles that appeared in the trade journal as well as the local press, it detailed the "progressive and forceful tactics" that had made California iceberg the nation's favorite lettuce.

<sup>43</sup> C. Houston GOUDISS, *Eating Vitamines: how to Know and Prepare the Foods That Supply These Invisible Life-Guards, with Two Hundred Tested Recipes and Menus for Use in the Home* (New York, 1922); E.V. MCCOLLUM, Nina SIMMONDS, *The Newer Knowledge of Nutrition: The Use of Foods for the Preservation of Vitality and Health* (New York, 1925). Useful overviews of early twentieth century American dietary trends include; LEVENSTEIN, *Revolution...*

<sup>44</sup> William H. FRIEDLAND, Amy E. BARTON, Robert J. THOMAS, *Manufacturing Green Gold: Capital, Labor, and Technology in the Lettuce Industry* (New York, 1981); Gabriella PETRICK, "Like Ribbons of Green and Gold: Industrializing Lettuce and the Quest for Quality in the Salinas Valley, 1920-1965", *Agricultural History*, vol. 80, no. 3 (2006), pp. 269-295.

<sup>45</sup> "Selling Western Sunshine", *Western Grower and Shipper*, vol. 1 (December 1929), p. 7.

<sup>46</sup> "Vegetable Salads Are Praised as Health Food Par Excellence", *The Washington Post* (20 May 1928); "Beauty Diets Still Require Freak Menus", *Los Angeles Times* (12 January 1936).

<sup>47</sup> *Ladies' Home Journal* (March 1930), p.155.

<sup>48</sup> Helen B. LAMB, *Industrial Relations in the Western Lettuce Industry* (Ph.D. thesis, Harvard University, 1942) p. 16.

“He [the grower] improves the quality by seed selection . . . He ascertains by careful investigation the style of package and grade desired by the carlot receiver and jobber in the large markets and makes use of the inspection and market news service furnished by the Department of Agriculture. In co-operation with the railroads he determines the number of packages which should be loaded into a refrigerator car for the long trek . . . He has discovered that clean ‘shook’ or the lumber used in the construction of the crate, is essential. Attractive, colorful labels, advertising various brands, are also popular.”<sup>49</sup>

In short, the growers saw themselves as “industrial farmers” due both to the scale of their production and the attention they gave to marketing.<sup>50</sup> The sharp contrast between this professional self-image and the advertised images of iceberg as a “sun food” – a product of Nature rather than industry – is a constant theme in what Sackman calls the “fable of progress” that justified the U.S. conquest of previously Mexican California. It also underscores the imperial underpinnings of the fresh fruit and vegetable industries that turned the state into one of the world’s largest agricultural economies.<sup>51</sup>

Like many California specialty crop producers, the lettuce growers considered themselves pioneers. Although hardly the region’s first settlers, many had migrated from the East Coast and from business or professional careers. They boasted about how much their immense demand for agro-inputs, from irrigation to fertilizer to crate labels, had contributed to economic development in and around Salinas, the regional iceberg packing capital. Local lettuce shippers used more ice than New York City, and sent more telegraphs than San Francisco.<sup>52</sup> Tripling in size in just a decade, Salinas had become a prosperous city where millionaire growers enjoyed golf, gambling, and dancing. Land once left idle by Mexican ranchers had become valuable, rapidly appreciating real estate. Altogether their “sunshine industry” had brought wealth and civilization to the American Far West. It had helped fulfill California’s destiny to become an agricultural empire.<sup>53</sup>

From the beginning, this fable of progress assumed that California’s fruit and vegetable growers would oversee the labor of others, rather than engaging in the grueling toil required of homesteaders elsewhere in the rural West.

<sup>49</sup> A. E. PRUGH, “Why Western Vegetables Are Popular”, *Western Grower and Shipper*, vol. 1 (1930), p. 8.

<sup>50</sup> Ross GAST, “My Own Page”, *Western Grower and Shipper*, vol. 1 (1930) p.16.

<sup>51</sup> Richard WALKER, *The Conquest of Bread: 150 Years of Agribusiness in California* (New York, 2004).

<sup>52</sup> Burton ANDERSON, *America’s Salad Bowl: An Agricultural History of the Salinas Valley* (Salinas, 2000); F. H. HIGGENS, “A ‘Programmed’ Agriculture”, *Western Grower and Shipper*, vol. 1 (1930), p. 114; B. DOTY, “Grower-Shipper Association celebrates golden year”, *Salinas Californian Weekender* (1980), pp. 35-36.

<sup>53</sup> William GRUL, L. W. WING, “Salinas and Watsonville, Take a Bow”, *Western Grower and Shipper*, vol 1 (1930), p. 8; Sackman, *Orange Empire...*, p. 42.

Edward Wickson, editor of the widely-read *Pacific Rural Press* and the author of several books on California horticulture, saw this division of labor as a natural and positive outcome of the growers' own enterprising spirit. "The American settler", he wrote, "has incomparably more energy and industrial ambition than his predecessors, the Mexicans. But he shares with them a liking for doing his work in the saddle or on the seat of a riding plow, cultivator or harvester."<sup>54</sup>

According to the fable, growers' responsibility was to supervise laborers who were naturally suited, even destined, for work in orchards and vegetable fields. Whether Chinese, Sikh, Filipino, or Mexican, Sackman puts it, "their brown or yellow hands had been provided by nature to serve its crops and be guided by the white man's brains."<sup>55</sup> In the 1850s *The California Farmer* declared it the "decree of the Almighty" that "those great walls of China are to be broken down and that population – educated, schooled and drilled in the cultivation of these products – are to be to California what the African has been to the South."<sup>56</sup> It was an imperfect analogy, for the Chinese workers were not enslaved. In later decades, in fact, their economic mobility fueled a racist backlash that led to the passage of the 1882 Chinese Exclusion Act.<sup>57</sup> But once Chinese laborers grew scarce, growers found others, revising their ideas about which foreign workers were naturally best suited to which farm tasks. Filipinos' supposedly short stature and long arms, for example, recommended them for "stoop" work, using the short-handled hoe. Mexicans were considered diligent and impervious to long hours in the hot sun.<sup>58</sup> Neither was deemed qualified for the higher paying, unionized packing shed jobs, which went to predominantly white U.S. citizens.

By the late 1920s the packing shed workers were considered the "aristocrats" of the West's farm workers.<sup>59</sup> But the Great Depression threw this status into question. As waves of Dustbowl refugees poured into Salinas Valley in the mid-1930s, growers took advantage of the labor surplus to slash wages. In 1936 the shed workers threatened a harvest-time strike – a traditionally effective strategy given that even a few day's delay would ruin the crop's value. In response, growers who had once called themselves "industrial farmers" now claimed that they should not be held to industrial labor laws, due to

<sup>54</sup> Edward J. WICKSON, *The California Vegetables in Garden and Field; a Manual of Practice, with and without Irrigation, for Semitropical Countries* (San Francisco, 1910), p. 15.

<sup>55</sup> SACKMAN, *Orange Empire...*, p. 9.

<sup>56</sup> *The California Farmer* (25 May 1854), p. 164, quoted in SACKMAN, *Orange Empire...*, p. 127.

<sup>57</sup> Alexander SXTON, *The Indispensable Enemy: Labor and the Anti-Chinese Movement in California* (Berkeley, 1975).

<sup>58</sup> William O. JONES, *The Salinas Valley: Its Agricultural Development* (Stanford University, 1947), p. 282. On the history of racial stereotypes in California agricultural labor relations, see also MITCHELL, *The Lie of the Land...*

<sup>59</sup> LAMB, *Industrial Relations...*, p. 190.

the perishability and seasonality of their products. As their trade association announced in a local newspaper,

“This Association is favorable towards betterment of working conditions when warranted... However it must call attention to the fact that the vegetable business is solely agricultural and *cannot by its nature* be regulated as a manufacturing business. Consequently we cannot entertain or discuss questions pertaining to closed shop, guaranteed hours, seniority or like matters...”<sup>60</sup>

The workers did strike, and the growers responded with vigilante violence. The “Battle of Salinas” received widespread news media coverage and provided material for Carey McWilliams’ *Factories in the Fields* and John Steinbeck’s best-selling *Grapes of Wrath*.<sup>61</sup> In other words, the strike briefly threatened the image of lettuce as a straight-from-nature sun food. It also drew attention to the fact that the shed workers were, as Steinbeck put it, “undeniably American and not deportable.”<sup>62</sup>

Ultimately technological advance made these American workers dispensable. Vacuum cooling was developed in the late 1940s by a Salinas shipping company employee whose own concern was freshness, not labor. Before produce could be sent eastward it had to be chilled to near-freezing temperatures, which could take anywhere from one to three days using ice. Vacuum cooling could suck the heat out in just half an hour, adding valuable shelf life to the final product. It also made it possible to pack vegetables in cardboard cartons, which the industry’s supermarket clients much preferred over heavy, ice-filled crates.

For growers, though, the most important advantage of vacuum cooling was that it allowed them to get rid of not just ice, but also the packing sheds and the unionized workers inside them. Within a decade they had moved trimming and packing tasks to the lettuce fields, where Mexican guest workers (*braceros*) performed them for half the pay. Growers expressed little worry about whether supposedly unskilled “stoops” could take over work for which they were previously considered unqualified. Instead, as vacuum cooling was quickly followed by innovations in fresh vegetable packaging (starting with shrink-wrap), their main concern was that changes in on-farm technology and labor processes *not* make them once again reliant on a unionized – or

<sup>60</sup> *Salinas Independent* (28 August 1936), quoted in Judith C. GLASS, *Conditions Which Facilitate Unionization of Agricultural Workers: A Case Study of the Salinas Valley Lettuce Industry* (Ph.D. UCLA, 1966) pp. 77-78. Emphasis added.

<sup>61</sup> Carey MCWILLIAMS, *Factories in the Field: The Story of Migratory Farm Labor in California* (Boston, 1939); John STEINBECK, *The Grapes of Wrath* (New York, 1939). On the “Battle of Salinas”; Cletus E. DANIEL, *Bitter Harvest, a History of California Farmworkers, 1870-1941* (Ithaca, N.Y, 1981).

<sup>62</sup> John STEINBECK, “Dubious Battle in California,” *The Nation*, vol. 143 (1936), pp. 302-304.

even potentially unionized – workforce. Besides higher wage costs, they wanted to avoid workers whose rights might clash with their crops' grueling and time-sensitive labor demands. The industrial production of "Nature's sun food" depended on workers whose vulnerable status as racialized foreign migrants had itself been naturalized by the imperial past.<sup>63</sup>

At the end of the twentieth century this dependency remained, despite the end of the Bracero program in 1965 and the subsequent organizing successes of Cesar Chavez's American Farm Workers. In place of *braceros*, California's fresh produce growers tapped ever-increasing flows of undocumented migrants – as did their counterparts in other major North American and European production regions. But now they faced competition from other regions, where labor was even cheaper. Indeed, some of the highest value fresh vegetable products on supermarket shelves came from the world's poorest countries, traveling under conditions much more climate-controlled and hygienic than those endured by desert-crossing migrants.<sup>64</sup>

Trans-hemispheric trades in highly perishable crops first became feasible in the early 1970s, when the advent of big-bellied passenger jets such as the Boeing 747 increased the availability of air cargo space. Over the next two decades, the spread of airport cold storage as well as improved packaging and communication technologies helped these trades grow. So did strong demand in the global North. Influenced by culinary fashion as well as supermarkets' promotion of value-added produce, well-off consumers developed tastes for the kind of counter-seasonal, extra-delicate and hand-picked and packed fresh vegetables that many poor countries in the global South, with their cheap labor and mild winters, could competitively produce.<sup>65</sup>

But technology and market demand alone do not explain why exports of fresh vegetables from Latin America, Africa and parts of Asia took off in the late twentieth century. Equally important were the global macroeconomic pressures that pushed poor countries to seek new sources of export revenue. Especially after the early 1980s international debt crisis, many countries could

<sup>63</sup> Tomas ALMAGUER, *Racial Fault Lines: The Historical Origins of White Supremacy in California* (Berkeley, 1994).

<sup>64</sup> Susan FERRISS, Ricardo SANDOVAL, Diana HEMBREE, *The Fight in the Fields: Cesar Chavez and the Farmworkers Movement* (New York, 1997), Cindy HAHAMOVITCH, *The Fruits of Their Labor: Atlantic Coast Farmworkers and the Making of Migrant Poverty, 1870-1945* (Chapel Hill, 1997); K. HOGGART, C. MENDOZA, "African Immigrant Workers in Spanish Agriculture", *Sociologia Ruralis*, vol. 39, no. 4 (1999), pp. 538-562.

<sup>65</sup> "What's Really Big Now? Tiny Vegetables", *New York Times* (15 June 1985); William FRIEDLAND, "The New Globalization: The Case of Fresh Produce", in A. BONANNO, L. BUSCH, W. FRIEDLAND, L. GOUVEIA, E. MINGIONE (eds.), *From Columbus to Conagra: The Globalization of Agriculture and Food* (Lawrence, KS, 1994); G. LUCIER, S. POLLACK, M. ALI, A. PEREZ, *Fruit and Vegetable Backgrounder* (Washington, DC, 2006) Outlook Report No. VGS-313-01, U.S. Department of Agriculture, Economic Research Service, April 2006, available at <http://www.ers.usda.gov/Publications/vgs/apr06/VGS31301/> (accessed 8 August 2010).

no longer rely solely on their traditional cash crops, such as cotton, coffee and tea. They faced stagnant global markets for these commodities, rapidly growing populations, and strict lending conditions from the World Bank and other major development donors.<sup>66</sup>

The World Bank encouraged poor countries' fresh vegetable export trades, and not just because of their capacity to earn badly-needed foreign exchange. They tended to be freer of government controls than traditional tropical commodity trades, and thus (in theory) less prone to corruption. Fresh vegetables were also labor-intensive – a plus in countries with more idle hands than capital – and could be profitably grown on very small plots. And unlike oil, diamonds and other mineral resources that have historically brought more violence than wealth, fresh vegetables seemed to foster a healthy industriousness and entrepreneurialism on and beyond the farm.<sup>67</sup>

In short, these “non-traditional” export commodities appeared to offer poor countries a chance to make a fresh start on the road to development. Yet their farm-to-market path followed ruts worn by earlier relations of domination. This is especially apparent in Africa. In the former British settler colonies of Kenya and Zambia, much of production now comes from landholdings once reserved for white farmers. Still today, most of the owners and top managers of these large operations are of European or Asian origin. And they still depend overwhelmingly on the British market.<sup>68</sup> Francophone exporters such as Morocco, Senegal, Burkina Faso, and Madagascar, meanwhile, sell mostly to France. These trade patterns reflect not only linguistic and logistical considerations (i.e., which countries are linked by direct flights) but also cultural and even culinary ones.<sup>69</sup> Whereas the French colonies specialize in fine-grade *haricot vert*, for example, Zambia and Kenya produce prepackaged vegetables such as mangetout and baby corn, which British supermarket shoppers buy both for their convenience and association with

<sup>66</sup> C.L. DELGADO, “Agricultural Diversification and Export Promotion in Sub-Saharan Africa”, *Food Policy*, vol. 20 (1995), pp. 225-243; Peter NUNNENKAMP, *The International Debt Crisis of the Third World: Causes and Consequences for the World Economy* (Brighton, Sussex, 1986).

<sup>67</sup> Steven JAFFEE, *How Private Enterprise Organized Agricultural Markets in Kenya* (Washington DC, 1992); Steven JAFFEE, John MORTON, *Marketing Africa's High-Value Foods: Comparative Experiences of an Emergent Private Sector* (Dubuque, IA, 1995).

<sup>68</sup> H. BARRETT, B. ILBERY, A. BROWNE, T. BINNS, “Globalization and the Changing Networks of Food Supply: The Importation of Fresh Horticultural Produce from Kenya into the UK”, *Transactions of the Institute of British Geographers*, vol.24, no. 2(1999), pp. 159-174; C. DOLAN, J. HUMPHREY, “Changing Governance Patterns in the Trade in Fresh Vegetables between Africa and the United Kingdom”, *Environment and Planning A*, vol. 36 no. 3 (2004), pp. 491-509; Susanne FREIDBERG, “Culture, Conventions and Colonial Constructs of Rurality in South-North Horticultural Trades”, *Journal of Rural Studies*, vol. 19, no. 1(2003), pp. 97-109.

<sup>69</sup> Susanne FREIDBERG, *French Beans and Food Scares: Culture and Commerce in an Anxious Age* (New York, 2004).

various ethnic cuisines. The latter, of course, found their way into the nation's foodways through imperial ties.<sup>70</sup>

While such ties help to explain enduring trade patterns, they do not guarantee that Africa's fresh vegetable exporters find customers. Increasingly, this depends on compliance with not only European food safety and phytosanitary regulations, but also supermarket criteria governing quality, hygiene, and on-farm environmental management and social responsibility. Many of these criteria now form part of the GlobalGAP standard of "Good Agricultural Practice." Formerly known as EurepGAP, the organization was created in 1997 by several retailers (most of them British) that, in the wake of the BSE ("mad cow" disease) crisis, were understandably eager to reassure shoppers about the safety and ethics of their products. Initially GlobalGAP focused on fresh fruits and vegetables, which retailers considered particularly risky products because so many came from regions they associated with questionable hygiene, agrochemical and labor practices. Today, as the name suggests, GlobalGAP aims "to establish ONE standard...capable of fitting to the whole of global agriculture." It also wants GlobalGAP certification to become a prerequisite for producers seeking to do business with its supermarket members.<sup>71</sup>

Relative to the long history of international trade in fresh foods, GlobalGAP is a new initiative. Many of the code's specific criteria also reflect relatively recent notions of food-borne risk. And compliance with these criteria depends on having access to a variety of modern technologies (which is far from assured in poorer countries). However GlobalGAP's basic mission – declaring particular European cultural norms of "good agricultural practice" to be universal, and then imposing them on overseas food producers – is not new at all. On the contrary: it amounts to what Campbell calls a "re-inscription of part of the old European colonial food order."<sup>72</sup> This order justified the exploitation of colonial nature and labor on the grounds that it would improve both, while also enriching the home country.<sup>73</sup>

<sup>70</sup> BICKHAM, "Eating the Empire..."; L. COLLINGHAM, E.M. COLLINGHAM, *Curry: A Tale of Cooks and Conquerors* (Oxford/New York, 2006); Ian COOK, Philip CRANG, "The World on a Plate: Culinary Culture, Displacement and Geographical Knowledge", *Journal of Material Culture*, vol. 1, no. 2 (1996), pp. 131-153.

<sup>71</sup> Hugh CAMPBELL, "The Rise and Rise of EurepGAP: European (Re)Invention of Colonial Food Relations?", *International Journal of Sociology of Food and Agriculture*, vol. 13, no. 2 (2005), pp. 1-19, GlobalGAP, "GlobalGAP: About Us", <http://www.globalgap.org>; accessed 7 August 2009.

<sup>72</sup> CAMPBELL, "The Rise and Rise of EurepGAP..."; Susanne FREIDBERG, "Supermarkets and Imperial Knowledge", *Cultural Geographies* vol. 14 no. 3 (2007), pp. 321-342; Catherine DOLAN, "Benevolent Intent? The Development Encounter in Kenya's Horticulture Industry", *Journal of Asian and African Studies*, vol. 40, no. 6 (2005), p. 411-437.

<sup>73</sup> Alice L. CONKLIN, *A Mission to Civilize: The Republican Idea of Empire in France and West Africa, 1895-1930* (Stanford, 1997); DRAYTON, *Nature's Government...*; J.M. HODGE, *Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism* (Columbus, OH, 2007).

For generations, even centuries, one stubborn limit on this exploitation was spoilage: many of the “fruits of empire” (like the vegetables, meats, and other fresh goods) simply could not survive the long distances to metropolitan markets. An assortment of technologies – refrigeration, railroads, airplanes, packaging – effectively shrunk these distances, opening the door to the transnational trades characterizing our contemporary globalized fresh food supply. But technology did little to narrow the gulf in wealth and power that defined the old colonial order. Like the patterns of trade and labor migration, the governing role of the aptly-named GlobalGAP demonstrates that fact. It reminds us how much the provisioning of perishables still relies on enduring imperial legacies.