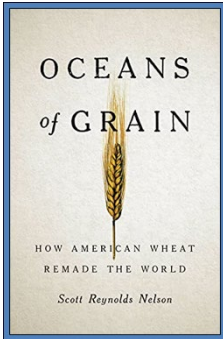




## Oceans of Grain

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When we think about tensions between Russia and the United States we think about spying, election interference, nuclear weapons, the space race, or even the Cold War. But we should really be thinking about grain, because the U.S. and Russia both expanded rapidly into grain regions between 1770 and 1914, becoming what I call physiocratic empires. They seized grasslands from nomadic empires like the Mongols and the Delaware Indians, and encouraged grain farmers to emigrate there. These superpowers grabbed flat plains, promised tax incentives, modernized ports for export, then sold the grain to feed cities around the world. Their competition to feed grain to the world long predated the Cold War.

Historians and economists mostly think about large wheat farms as something that frees workers to do non-food production, which allows industrialization. Well, wheat as a commodity is more than that. It's the source of our fables, the building block of empires, a spur to technology, the cornerstone of finance, the intestines of armies and navies, and the weak point in any plan for world conquest.

To understand grain, we need to look back to the origins of human civilization. Modern genetic analysis suggests that trade in grain was actually prehistoric. A prehistoric plague called *yersinia pestis* spread rapidly along these trade routes around 2800 BC moving from Ukraine outward to Ireland and Manchuria, Finland and Sudan. Millions died, and ancient empires emerged in their wake. Would-be emperors absorbed portions of those pathways, seeking to seal off its edges, and so created kingdoms, then fiefs, and finally states. Heroic nation-building stories notwithstanding, empires did not build themselves, they could only reach along ancient grain traders' pathways and lay claim to food trade networks that long preceded them. And then around the time of the American Civil War, a ten-thousand-year-old world system of traded grain became unhinged when the price of grain began to plummet.

The pressure to produce food every day for survival is a task as old as the Book of Genesis: when God banished Adam he cursed the ground beneath him, condemning him to work for his daily bread. Thousands of years later, the parson Thomas Malthus famously argued that the capacity to produce food might improve but it could never match the geometric growth of human populations. After Malthus, the "dismal science" of economics became a matter of choosing between policy options that only delayed famine and economic catastrophe. Charles Darwin furthered the argument, positing that his theory of evolution derived from "the doctrine of Malthus applied ... to the whole animal and vegetable kingdoms." In this sense the disciplines of modern economics and modern biology both flow from the observation of the fundamental pressure of the availability of food on the shape of human populations.

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The military mobilization of American society during the Civil War diminished the Malthusian imperative. Five competing railway corridors soon carried midwestern grain to eastern cities on the east coast. A futures market based on grain graded for the U.S. Army revolutionized long-distance trade in food, and soon stretched across the Atlantic. The pressure of food on population began to ease first in America and then, after 1865, in Europe as the percentage of income that working people needed to devote to bread fell from eighty percent to forty percent. The subtle, powerful force of these oceans of grain forced empires to change their shapes between the crisis presided over by Abraham Lincoln and the political revolution that brought Vladimir Lenin to power.

While the revolution in food prices started in America and led it to displace the Russian Empire as the world's cheap-food hinterland, that cheap commodity had a greater political impact in the empires of Eurasia. As wheat flooded from the United States across the Atlantic, grain prices fell, and so did the rent that landlords could charge in agricultural empires. By the early 1870s Europeans flocked to what I call gullet cities, in part because bread was suddenly cheaper there than in the countryside. By the 1880s European workers rode back to the U.S. in the very ships that carried American grain to Europe. The "steerage" section, which carried grain east carried European workers west. European landlords in Germany, France, and Italy lost their influence and wealth while newly federated states of Germany and Italy drew their income from a carefully calibrated tax on the imported grain that fed workers in its cities.

But the grip of old empires – as food delivery engines – began to break down. Cheap American wheat soon helped to fracture, and finally destabilize, the Ottoman, Austro-Hungarian, and Qing Empires. Indeed, the term "Imperialist" first emerged in the 1870s to describe the latter-day European states that scrambled to kick out the last foundations of the Ottoman and Chinese empires while expanding English, French, and German influence over them. Imperialism came to mean mineral expeditions, wars in Africa, mile-long port facilities, and elaborate coronations. Dreadnoughts, funded by the tax on workers' bread, gave European states greater reach. But even these European empires were endangered.

Indeed, conflict over grain routes helps explain the origins of World War I as Russia fearing Germany's growing influence on the Black Sea provoked Germany into war. Grain routes help explain why the British failure at the vital chokepoint at Gallipoli was so important, and how a few dozen Bolsheviks with access to Russian grain stores on the Baltic could revolutionize St. Petersburg and Moscow in 1917.

After World War I we are inclined to see the influence of a new commodity as most important: oil. But oil is not everything. Insiders in the Soviet cabinet argue that the crucial event that ended the Soviet experiment was Russia's decision after 1960 to buy grain with oil. That worked in the 1970s but failed spectacularly in the middle of the 1980s when oil prices dropped and grain prices rose again. An international balance of payments crisis followed.

When Russia reentered the world economy after the Soviet Union collapsed in 1991, it tried to drop a new Russian oligarchy into place along the edge of the Black Sea and sell grain again to the world. Ukraine's separation from Russia, and its resistance to Russian influence, have severely weakened Russia as a world power. This story is beyond the scope of my latest book, [Oceans of Grain](#). How some of these empires saw their end in revolutions during World War I, and how this was prefigured in America's Civil War, is the story I tell in my new book.



Part of this story is about new technologies – including dynamite, the futures contract, the grain elevator, and the screw steamer – that let loose grain across the world’s oceans, with profound economic and political consequences. Surrounded as we are by cheap food it is difficult to imagine how important these changes were, and how vital and essential the hunt for food had been for the grandparents of our grandparents. The dependence on the sweat of one’s brow in their time became a dependence on international food trade in ours. The change was dramatic, yet it appeared almost invisible to millions who lived through it.

But for those who meditated on the shifting lines that bound empires and nations together, who saw its powerful currents and its fatal points of weakness, a new Archimedean lever had opened up, a lever that could move the world. And so the cheap wheat produced by the American Civil War helped bring the world to the brink of famine, world war, and international revolution. Modern conflict between Russia and Ukraine over those same grain corridors in the modern city of Odessa may be the defining event of the twenty-first century.

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## Endnotes

This article is excerpted from Dr. Reynold’s newly published (and very timely) book, [Oceans of Grain: How American Wheat Remade the World](#).

Dr. Reynold’s previous insightful work was cited in the *GCARD* article: [“Looking into a Distant Mirror: the 1870s.”](#)

## Author Biography

**SCOTT REYNOLDS NELSON, Ph.D.**

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Professor Nelson writes about 19th-century US history including the history of slavery, international finance, the history of science, and global commodities.

His most recent book is *Oceans of Grain: How American Wheat Remade the World* about the U.S. and the Russian Empires’ competition to feed Europe between 1789 and 1919.

His other books include *Steel Drivin’ Man* (2007), about the life of Black folklore legend John Henry, which won four national awards including the National Award for Arts Writing and the Merle Curti Prize for best book in U.S. social history. A young-adult book he co-wrote with Marc Aronson, *Ain’t Nothing But a Man* (2007), describes how historians do research. With Carol Sheriff he wrote *A People at War: Civilians and Soldiers in America’s Civil War* (2008). His book on the history of financial crashes, *A Nation of Deadbeats: An Uncommon History of America’s Financial Disasters* (2012), was named a best business book of the year by *Business Week*.

He has been a research fellow at Harvard University, the École des Hautes études en Sciences Sociales (EHESS) in Paris, and Chicago’s Newberry Library. In 2019-20 he was named a Guggenheim fellow.

He has a forthcoming chapter for UNC Press’s new Ferris & Ferris imprint titled “The Bourbon South” in 2023.

In his spare time he reads science fiction and drinks too much espresso.