The Convoy, the Grain, and their Influence on the French Revolution

Laurence Evans

Captain Mahan's account of the Battle of the Glorious First of June demonstrates clearly why he appealed to a wide audience, including professional Navy men, intellectuals, and policymakers from Congressmen to the Kaiser. A thorough professional who made the transition from sail to steam and from the broadside to the turret gun, Mahan was a master of his subject. A clear writer whose prose was uncluttered by technical jargon, he gave a concise yet vivid description of the damage the Revolution did to the French Navy and a measured evaluation of its effect on her fighting ability. This was paralleled by a survey of the Royal Navy that discussed the great improvements since the American war and the ascension of a group of outstanding officers who drove the French from the seas. There is an overview of the actions of the two navies, as well as their strategic assumptions and performance. The combat is described definitively from the opening salvo to the withdrawal of the two fleets. Who won? Mahan's assessment was that in a way both sides did, since the Royal Navy sank or captured several French warships while the French convoy got through. But one might say with equal truth that both sides lost. Either way, that is mere score-keeping.

A battle is not an end unto itself. The real question is whether an engagement improved or impaired a state's ability to conduct war. Was France's fighting ability improved by the success of the convoy more than it was harmed by the loss of several valuable naval vessels? In other words, what was the influence of the Battle of the Glorious First of June on France? The answer to that question depends on a comprehension of the state of the grain supply. Certainly the French armada was willing to pay a high price and to take great risks for that grain.

In considering the grain supply, it must be noted that because France was normally self-sufficient, the convoy represented an extraordinary effort. It was not part of a "bridge of boats" carrying essential supplies, and the attack did not represent a threat on a par with the assault on the Atlantic convoys in World War I. Still, the fact that twenty-five million people — France's population at the time — consumed at least three million tons of grain per year raises the question of why Robespierre placed such a high value on a shipment that would make little difference to the total. As a further

The Northern Mariner/Le Marin du nord, V, No. 1 (January 1995), 45-51.

complication, transport within France was extremely expensive: the value of a shipment from Brittany to Paris — the focus of the problem — could be erased by such costs.

It is clear that a myopic examination of the confused and contradictory state of the grain supply in 1793 and 1794 cannot by itself produce an intelligent understanding either of the convoy affair or its affect on the Revolution or government policies. For that perspective we must consider how and why the crisis developed. Until the nineteenth century, France was a society based on what was essentially subsistence agriculture. Most people produced food; over seventy percent depended on grain for seventy to ninety percent of their caloric intake. The surplus left for the non-agricultural population provided only a narrow margin of security; with ten percent of the population living in urban areas, a drop of five percent in the harvest — which was not uncommon — would in fact cut the surplus available for the cities by half.

On average, French farmers grew enough grain in normal years to feed the population and provide a substantial surplus, but the country had only enough storage capacity to tide it over one bad harvest; two successive poor years would cause substantial want and even starvation. Although this level of production was typical, many regions failed to attain it. France had several agricultural areas, distinguished by climate and physical conditions, with their own problems and advantages. Some produced two, three, or four times their own grain requirements, while others generated less than half; some concentrated on grain, while others focused on wine and imported grain; in the Mediterranean region some left half their land fallow, while many in the north left a third; some — in the Midi, for example — grew enough grain in good years but because of poor transportation could suffer famine in a bad year when their neighbours faced only shortages and high prices.' In general, French grain production seems to have peaked in the eighteenth century, both in production per unit and area under cultivation, while at the same time population increased from about twenty to twenty-six million. The impact was felt with varying intensities in different regions, but everywhere the margin grew narrower. As a result, the impact of pessimistic projections about next year's harvest or any evidence that grain might be in short supply had an increasingly profound effect on supplies and prices.

The outbreak of war in 1792 and the second revolution, culminating in the uprising of 10 August, absorbed much of the energy of all parties. But while that year's harvest was more than adequate to meet normal demand, the army's requirements, the loss of manpower to the *volontier* movement, the depreciated *assignats,* and elevated prices in general meant continued high prices for grain.[2] The situation in Paris was particularly bad during the winter of 1792-1793. Popular demonstrations were frequent; in February the most radical sections of the city demanded the establishment of a maximum price for bread. By the end of March the supply had failed and mobs ransacked bakers' shops. The uncertain future, breakdown of traditional authority, and depreciated currency led producers to hoard grain; the little that did come to market had to pass the gauntlet of local officials and the demands of producing regions before it could be sent to Paris. High

prices cut the real incomes of townspeople, particularly Parisians, by fifty percent and more.

On 4 May the Convention passed the first Law of the Maximum. This plan might have worked had it not been for the continued depreciation of paper money and the reluctance of producers to part with their grain. In the end, the Paris markets remained empty. Government responded with a law that created a new category of monopolists, those who kept from public sale any goods "of the first necessity;" failed to place them on the market daily; or permitted them to deteriorate in storage. On 9 August it declared all such goods to be public property since they were produced in *la patrie* and established public granaries in each district of Paris. The movement to re-establish a controlled grain trade culminated in a new Law of the Maximum of 11 September 1793, which set wheat prices throughout France at fourteen *livres* a quintal (later raised by one *livre* to cover transport). Maximum prices for other necessities and official wage scales were set by the Law of 29 September. In addition to setting prices, these laws required farmers, proprietors, and suppliers to declare all the grain in their possession on pain of confiscation.[3]

The new Law of the Maximum merely guaranteed that almost no domestic grain would be sent to public markets. Moreover, it was so rigid that many millers and merchants were prosecuted for moving or selling grains in the normal course of business, while others were denounced by neighbours out of animosity or spite. As a result, there was wholesale evasion with the active assistance of local officials; even those caught and prosecuted often faced court proceedings conducted by their own relatives and friends. Underlying all the confusion and distress brought about by the new laws was the universal official price of grain, which totally ignored the great variations in production and transport costs, even in normal times; the consequences of this anomaly spread through the entire economy and had important effects on wages paid to farm workers, which varied from village to village, and created a great reservoir of dissatisfaction and resentment against the authorities.[4]

The demands by the army put the seal on the breakdown of the food supply. The requisition of horses and wagons and the loss of manpower reduced the harvest significantly. Furthermore, the huge requirements for grain and fodder needed to feed the hundreds of thousands of soldiers imposed intolerable burdens on the agricultural sector, which comprised the great majority of Frenchmen. These were compounded by the stupidity and ignorance of officials. Parisians, far more than the army, drew upon themselves the curses of the peasants because they were perceived as controlling government, particularly after the fall of the *Gironde* and the rise to power of the Jacobins.

The Jacobin philosophy that all necessities were public property and thus at the disposal of the government reached its logical development in 1793-1794. The government controlled the grain supply from the fields to the mouths of the consumer, with the guillotine as the ultimate sanction. Government policy had it that the harvest would be conducted under the eyes of soldiers stationed in the fields, the grain would be distributed by the communes and municipalities, ground in mills run by the government,

baked in communal ovens, and sold under a strict rationing system. The reality, however, was the creation of a vast illegal market based on cash and the repudiation of *assignats,* and a rapid shift in allegiance from the Jacobins to the hard core of Paris' *sans-culottes.*[5]

Part of the problem facing the French government lay within the structure of contemporary transport. As a whole, eighteenth-century transportation was extremely expensive, consuming both food and cash. Land transport was the most expensive. Experiments in Britain during the first canal boom provide some revealing figures on the relative efficiency of various means of transport measured by the capacity of a single horse: pack-horse, 275 lbs.; stage wagon, 1350 lbs.; wagon on a macadam road, two tons; wagon on iron rails, eight tons; barge on a still river, thirty tons; and barge on a canal, fifty tons.[6]

Eighteenth-century France had the most highly developed land transportation system in Europe. By the end of the Napoleonic wars there were about 8500 leagues of royal highways (about half, however, in poor condition), 9500 leagues of provincial roads in various states of disrepair, and 10,000 leagues of local and communal roads, almost all of which were bad. The kingdom had potentially good, if undeveloped, natural water transport. There were four major rivers: the Seine, Loire, Rhône, and Garonne. By 1789, the Seine and Loire, and the Rhône and Garonne, were connected by canals, with the Loire-Rhône and Seine-Rhône connections under construction. There were 121 developed navigable rivers covering 2000 leagues and 900 leagues of canals, including those under construction and planned.[7]

The rivers varied in usefulness as arteries of communication from the raging torrent of the Rhône in the spring and fall to the usually placid waters of the Seine and its tributaries. The Rhône had decent conditions for only three months. For four months it was impassable; for six weeks there were floods in which the current might reach ten or twelve miles an hour and the tow-path would in any case be submerged; and for two months or more the river would be too low to float the barges. For five months the barges made their way with reduced loads according to the depth of the river.[8] Navigation on the Loire was little better, although conditions were not as extreme as on the Rhône; there was drought in the summer and floods in the spring, and often ice after a bad winter. Traffic usually stopped from July to October.[9] The Seine was navigable for most of the year, at least in one direction. In former days the river was tidal for much of the distance from the sea to Paris, and vessels could move with the tide up and downstream except in the spring floods, when traffic ran only down. These conditions were also to some degree characteristic of the tributaries such as the Oise and the Marne.[10] The Garonne was also tidal and the estuary was difficult to navigate; traffic, however, was light and little used for the shipment of food.

Road transport in France was expensive, slow, and uncertain. The only good roads were the principal royal highways, but they had been built for strategic rather than economic purposes. The rest ranged from mediocre to impassable." In 1770 it took thirty days by freight wagon to travel from Paris to Marseilles, a daily distance of twenty miles. The cost per 100 kilos was 13.50 francs, Paris-Marseilles, and 19.50 return, about half British levels; this was raised to twenty-one and twenty-five francs in 1785. Even in 1825,

after major work on the roads, it took twenty-five days at a cost of 14.5 and eighteen francs, respectively. Between Lyons and Marseilles wagons competing with river barges took ten days at a charge of eighty francs a ton (when the Rhône was impassable rates were higher).[12] Throughout the eighteenth century, overturned and stranded wagons were common and thievery was rife. Those goods that did reach their destinations often were damaged by weather or rough handling.

Inland water transport in France cost about half to a third of land transport. It was also more certain, but on many river systems, such as the Rhône and the Loire, no traffic was carried for a third of the year or more. Moreover, the duration of a trip was more uncertain by river than by land and depended on the state of the river. The journey from Lyons to Aries might take three days travelling with the current at six or eight miles an hour, and over twenty days the other way; when the river was slack it could take a week with the current and two or even three months against it. On average a barge could make eight round trips a year from Aries to Lyons.[13] The journey from Nantes to Paris via Orléans took three weeks as a rule. With a good west wind and enough water under the keel a barge took a week or eight days to haul against the current from Nantes to the Canal d'Orléans, two days to transfer the cargo to the special barges for the journey up the Orléans canal, then ten days to Paris via the Loing and the Seine; the return trip took two weeks. If conditions were unfavourable the journey to Paris could take six weeks to two months.[14] Even after the canals from the Seine to the Rhône were completed and barges could travel directly from Le Havre to Marseilles, it still took over a month and many shippers preferred to use the sea routes, even though they might take up to three months.[15]

Sea transport, as a whole, was not a major factor in the internal trade of France.[16] Geology and meteorology had combined to make French coastal shipping expensive and uncertain in the days of sail; harbours were few and difficult to access, and in the Channel the tides and prevailing winds often made westerly passages impossible for weeks on end. The most glaring deficiency was in secure anchorages; there are no French equivalents of the Downs, Solent, Torbay or Falmouth, where ocean-going vessels could wait indefinitely for a fair wind. Anchorages for coastal vessels were even more deficient. From Jutland to Brest the only comparable facilities are the Scheldt to Antwerp and the mouths of the Rhine. The ports, though reasonably secure once a vessel was inside, were significantly inferior to British ports in access and anchorages.

Low-cost bulk cargoes such as grain were not economically viable. The French economy could not absorb the costs of high freight rates, inadequate insurance facilities (a growing factor in any efficient shipping industry and one brought to a high level in Britain) and, most important, uncertainty due to the destruction and capture of vessels during wartime — and occasionally the cessation of shipping altogether. Not only deep-sea shipping but also cabotage was affected by these conditions until after the Napoleonic wars. Only in the Mediterranean did French maritime trade maintain any vigour during the Revolution, and this activity included only the most limited internal traffic.

Traffic in the Channel was particularly vulnerable in wartime and the normal trade from the Baltic that had been an important supplement to French grain production essentially ceased when the enemy was Britain. The French Navy was unable to protect sea traffic in the Channel. The same obstacles that constrained commercial traffic limited the effectiveness of the French Navy, which had no place like the Solent in which to assemble and organize a fleet where it could wait indefinitely in safety for an opportune circumstance to attack the British fleet or blockade a port. Nor did the French have safe havens such as Torbay or Falmouth to which they might withdraw temporarily. A French fleet entering the Channel could never be sure that it could get out again except by the route of the Armada and for the same reasons that drove the Spanish around the north of Scotland. In other words, the British could maintain a naval presence in the Channel and off the Atlantic coast of France, while France could only mount what amounted to intermittent patrols off her own coast and none at all off Britain.

The grain fleet from North America sent to relieve the dearth of 1794, which the British fleet failed to intercept, was headed for Brest on the Brittany coast, although the ultimate destination of the grain was Paris. Shipment via Rouen and Le Havre, the natural ports for Paris, was impossible. But when the grain reached Brest, it was only on the French periphery and still had to be transported to consumers at a cost greater than that of shipping it across the Atlantic and with a substantial proportion of the grain consumed in the process.[17]

Nevertheless, it was a cost the French government was willing to pay because Paris needed grain. Had the convoy not made it to Brest, the grain would not have reached Paris and the hardships would have continued. Would the effects of this have been great enough to have a clearly discernable impact upon the war effort? There is no question that the government would have been weakened had it been unable to add the American grain to its own unsteady supply. France was volatile and Paris remained a veritable powder keg. The loss of the grain would have represented the destruction of an extremely valuable commodity. Yet France had still not truly come to grips with the issue of distribution. None of the governments that ruled during the Revolution — the Girondins, Jacobins, Directory or even Napoleon — came any closer to resolving the problem than the Bourbons.[18] Without a solution, the convoy represented little more than a stop-gap. In the end, it succeeded, but one grain convoy was not enough to strengthen the troubled French government. Paris was fed and the army re-occupied Belgium, but Robespierre fell and France went on to struggle with the logistics of feeding its population despite the changes of government which followed.

NOTES

* The late Laurence Evans, who wrote widely on a variety of naval and economic history topics, was until his recent untimely death Professor of History at the State University of New York at Binghamton. This paper was first read as the opening lecture at the Bicentennial Celebration of the Glorious First of June at the National Maritime Museum in Greenwich.

1. For a concise account of French agricultural regionalism see A.N. Duckham and G.B. Masefield, *Farming Systems of the World* (London, 1970), 260 ff.

2. L. Sangier, *La Crise du Ble a Arras al la fin du XVIIIe Siècle 1748-1796* (Fantenoy le Comte, 1943), 52-53.

3. *Ibid.,* 53-54.

4. *Ibid.,* 67 ff.

5. *Ibid.,* 108-121, 127-128, 141-144.

6. L.T.C. Rolt, *Navigable Waterways* (Harlow, 1969), 1. There is no parallel in the French literature to the detailed and all-inclusive studies of British transport; the fascination that railways and canals have for British professional and amateur historians has deep roots. Typically Pierre Goubert, *Les Français et l Ancien Regime* (2 vols., Paris, 1984), cites no references in the section that deals with the importance of transport. There is a comprehensive bibliography of governmental and other primary sources and secondary works on French canals in H. Grosskreutz, *Privatkapital und kanalbau in Frankreich 1814-1848* (Berlin, 1977). For the American experience, see George Rogers Taylor, *The Transportation Revolution, 1815-1860* (New York, 1951), 132. For a detailed historical analysis of the role of transportation in the development of an entire coalfield, see John Langton, *Geographical Change and Industrial Revolution. Coalmining in South West Lancashire, 1590-1799* (Cambridge, 1979).

7. For a contemporary account of the French transport system in the pre-railroad era, see Michel Chevalier, *Les intérêts matériels en France: travaux publics, routes, canaux, chemins de fer* (Paris, 1838); for a brief account see P. Chaunu et R. Gascon, *L'État et la Ville. I: Histoire économique et social de la France* (Paris, 1971), 379 ff.

8. Felix Rivet, *La navigation à vapeur sur la Saône et le Rhône, 1783-1863* (Paris, 1962).

9. H. Pinsseau, *Histoire de la construction de l'administration et de l'exploitation du canal d'Orléans de 1676 à 1954* (Paris, 1963).

10. Cf. Jean Meuvret, *Etudes d'histoire économique: recueil d'artciles* (Paris, 1971); and Abbott Payton Usher, *The History of the Grain Trade in France, 1400-1710* (Cambridge, MA, 1913), 71 ff.

11. Chevalier, *Les intérêts matériels.*

12. Rivet, *La navigation à vapeur,* 24-25, 42.

13. *Ibid.,* 29.

14. Pinsseau, *Histoire de la construction,* 147-148.

15. Chevalier, *Les intérêts matériels,* 62-63.

16. Cf. Pierre Jacques Charliat, *Trois siècles d'économie maritime Française* (Paris, 1931); also, Eugene Daubigny, *Choiseul et la France d'outre mer après le traité de Paris: etude sur la politique coloniale au XVIIIe siècle* (Paris, 1892).

17. On the naval operations during the Revolutionary period, see Mahan, *The Influence of Sea Power upon the French Revolution and Empire, 1793-1812* (2 vols., Boston, 1898).

18. Evans, "The Sea, Logistics and the State: An Essay in Maritime History" (unpublished mss., 1993). This was Dr. Evans' last manuscript. It is a reassessment of economic conditions and development in the pre-industrial world of the eighteenth century. The three most advanced economies, China, France and Britain, are examined through their trade and transport of grain. This is supplemented by briefer treatments of classical Rome, supplied entirely by sea, and eighteenth-century Madrid, supplied entirely by land, to provide some parameters for the subject.