The Exchange of Products of the Soil and Industrial Goods in the Anglo-French Commercial Treaty of 1786

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In its famous *Observations* on the Anglo-French Commercial Treaty of 1786, the Chamber of Commerce of Normandy remarked that it would be a gross error "if, as a result of confidence placed in the opinions" of advocates of that agreement, France relied on products of the soil to balance her trade with Great Britain. The British, Rouen complained, had not increased their consumption of French wines even though it had been presented as compensation for the admission of British manufactures which under the terms of the new treaty "flooded" France.[1]

Much of the historical debate over the so-called "Free Trade" Treaty centres on these perceptions: that the French, addled by fuzzy-headed theory or advice, proceeded with the negotiations in blissful ignorance, sacrificing helpless manufacturers and workers to superior British technology for paltry and ultimately meaningless concessions on agricultural goods; that the treaty embodied an exchange of French agricultural goods for cheap British merchandise which was admitted almost without restraint; that the resultant deluge of these goods caused economic crisis that helped trigger revolution. François Dumas, who stressed physiocratic influence, lamented the poor quality of Franch research, their failure to consult interested parties such as the Chambers of Commerce, the preference given to agriculture.[2] But then, as one historian pointed out, the physiocrats saw no point in protecting industry because it was "only a non-productive manipulation of agricultural products".[3] Yet the Controller General, Charles de Calonne, who made the

[1] Chamber of Commerce of Normandy, *Observations de la Chambre du Commerce de Normandie sur le Traité de Commerce entre la France et l'Angleterre* (Rouen, 1788), p. 11.

[2] F. Dumas, *Etude sur le Traité de Commerce de 1786 entre la France et l'Angleterre* (Toulouse, 1904), pp. VI, 11, 19-23, 44, 71, 93, long considered the definitive work on the treaty, was based largely on an uncritical reading of the papers of the British negotiator at the British Museum.

[3] J.F. Bosher, *The Single Duty Project* (London, 1964), p. 72, based his discussion of the physiocrats, free trade and the Commercial Treaty of 1786 on Dumas, pp. 71-83.

decisions on commercial concessions, was at the very same time engaged in a massive effort to make French industry competitive with that of Great Britain.[4] Whatever pretences the Commercial Treaty of 1786 had to being a free-trade agreement derived from a single article, Article VI, which replaced an unenforced section of the Commercial Convention of Utrecht reducing duties to 1664 levels that had been rejected by Parliament in 1713. Oddly enough, formation of this article has escaped real scrutiny. Indeed, Camille Bloch, who concluded from British correspondence that "things turned to the entire advantage of England" dismissed its negotiation as "useless to report".[5] Yet French memoranda surrounding preparation and negotiation of this article should not only indicate to what extent it represented an exchange of agricultural products for British merchandise but also provide insight into French attitudes on their own economic and industrial needs. Finally, recent studies on the Commercial Treaty have tried to refute charges that admission of British merchandise under its terms plunged France into depression by arguing that her economy was in crisis *before* the new agreement took effect.[6] Largely ignored was the possibility that the crisis itself served as a major incentive for expanding trade through recovery of an old market. Examination of the exchange of products of the soil and industrial wares, then, should reveal if this was a factor and afford other clues concerning French economic motivation.

Persuading the British to take seriously trade negotiations called for in the Peace of Versailles (1783) to replace the moribund Commercial Convention of Utrecht had not been easy. Indeed, it had only been after French diplomatic successes on the Continent had denied the British an opportunity to break out of a not-so-splendid isolation and imposition of a series of trade restrictions that hurt major British industries that the Pitt administration had begun to prepare for the inevitable and despatched an agent, William Eden, competent to make new commercial arrangements. Soon after his arrival at the end of March 1786, Eden and the French negotiator, Gérard de Rayneval, completed a draft agreement on what was to be negotiated that became the basis for declarations exchanged in June. British adherence to the negotiations was

[4] MARIE DONAGHAY, "Calonne and the Anglo-French Commercial Treaty of 1786", *Journal of Modern History*, L, 3(1978), D1157-84.

[5] CAMILLE BLOCH, "Le Traité de Commerce de 1786 entre la France et l'Angleterre", *Etudes sur l'Histoire Economique de la France 1760-1789* (Paris, 1900), pp. 263-64.

[6] BOSHER, *op. cit.*, p. 83; LEON CAHEN, "Une Nouvelle Interpretation du Traité Franco-Anglais de 1786-1787", *Revue Historique*, CLXXXV (1939), 271-85, who leaves discussion of the detail of the negotiations to Dumas; W.O. HENDERSON, "The Anglo-French Commercial Treaty of 1786", *The Economic History Review*, 2nd series, X (1957-1958), 110-12; ORVILLE T. MURPHY, *Charles Gravier, Comte de Vergennes* (Albany, NY, 1982), pp. 432-58, *passim*, who sees revenue as an important factor on the French side.

by no means certain[7] when the Foreign Ministry laid its case for the commercial concessions France would have to make and what would be sought in return before the King in Council on 21 May 1786. This presentation began with a statement of principle followed by a long exposé. While the discussion has passed largely unnoticed, historians have seized upon the list of principles as a "triumph" of physiocratic ideas. One authority declared that "The French Government had so strong a belief in physiocratic dogmas, that they were ready to make considerable sacrifices for their maintenance.[8] Of the eight principles, only two are pertinent to this thesis. One described trade in "natural" products as the most useful "because it encourages and enlivens agriculture, which is the most solid base of the prosperity of states, and which when it flourishes, makes industry flourish by rebound". The other proposed that industrial interests cede to those of agriculture in the negotiations.[9]

The discussion that followed made quite clear what sacrifices the Foreign Ministry had in mind: France would send Great Britain her wines, brandies and vinegars in return for reciprocal admission of hardware, and that was to be the only exchange that involved industrial and agricultural goods.[10]

Following a lengthy discussion of the hardware industry and French trade, an internal memorandum which recommended the same exchange ended with this response to domestic critics:

> Without doubt manufacturers will cry out against this principle: they will pretend that manufacturers ought to have preference over agriculture. Unfortunately for them, it has long been shown that agriculture is the basis of national wealth, and that without this base, there would be no need for manufactures: it is a matter of a great nation, and not a simple city...[11]

Such rhetorical flourishes seemed to portend the use of Du Pont de Nemours as defender of the treaty a few years later. Certainly, such a response would not arouse British suspicions — suspicions that could destroy

[7] For the diplomatic milieu of the commercial negotiations as well as a step by step account, see Marie Martenis Donaghay, "The Anglo-French Negotiations of 1786-1787" (Ph. D. diss., University of Virginia, 1970).

[8] Oscar Browning, "The Treaty of Commerce between England and France, 1786", *Transactions of the Royal Historical Society*, NS II (1885), 358; Dumas, *op. cit.*, p. 59.

[9] Rayneval, "Lu au Conseil d'Etat et Approuvé le dimanche 21 Mai 1786", Archives des Affaires Etrangères, Corréspondance Politique, Angleterre 556, fo. 195-95 vo.

[10] *Ibid.*, fo. 206vo-207vo, 214vo.

[11] Rayneval, "Reflexions delacher sur notre commerce avec l'Angre", 1785, Archives des Affaires Etrangères, Mémoires et Documents, Angleterre 74, fo. 78. This appears to have been written sometime before France imposed general prohibitions on goods which formed a large part of illicit trade from Great Britain (July 1785).

the negotiations or leave their product as sterile as the Commercial Convention of Utrecht.[12]

Reference to agriculture as the engine of the French economy may have reflected the influence of physiocratic principles, but the growing crisis in rural France during the 1780's certainly sharpened awareness of its importance and focused attention on the plight of a particular sector. As the major industry of France, wine culture was found in nearly every province and employed some eight per cent of the population directly. Some areas, including the great wine ports of Bayonne and Bordeaux, were dependent on its prosperity, as were certain industries such as bottlemaking. Just before French intervention in the American Revolution, wine valued at 42.6 million livres tournois was the largest export, followed by sugar, coffee, silk stuffs and linens. But during the final decade of the old regime, the wine industry was in crisis as a result of wartime restriction of foreign markets, the high price of grain, and enormous harvests of inferior grapes. By 1786, the French economy was awash in *vin ordinaire* of deplorable quality,[13] giving special meaning to ministerial comments on the need to secure "a market for our wines whose abundance is sometimes harmful to us".[14] The French ambassador suggested another reason for urgency: "Our middle provinces... will find a market ...since the dearness of wood precludes making brandy".[15] Unlike the fortified wines of Portugal, the French product was unstable, and distilling had become the preferred method of turning it into a durable and commercially valuable product: brandy. Indeed, brandy had superceded wine in some areas, especially around La Rochelle. Unsold or poor quality wine could also be made into vinegar, but demand for that product was limited. The primary European market for French wine and brandy lay to the North in the Dutch Republic, the Baltic and the British Isles. Until the War of the Spanish Succession, Great Britain had been the "mainstay," of the Bordeaux wine trade in a relationship that spanned five centuries. But British policy

[12] As for the hang-over left by the Commercial Convention of Utrecht, see MARIE DONAGHAY, "The Ghosts of Ruined Ships: the Commercial Treaty of 1786 and the Lessons of the Past", *The Consortium on Revolutionary Europe Proceedings* (Athens, GA, 1981), pp. 111-18.

[13] C.E. LABROUSSE, *La Crise de l'Economie à la Fin de la Ancien Régime* (Paris, 1944), 1 pp. 207-11, 255, 327, 332, 344, 385, 569; ALAN FORREST, *Society and Politics in Revolutionary Bordeaux* (London, 1975), pp. 14-24, discusses wine, the economy and politics of the most famous wine center; PIERRE DEJEAN, "L'Exportation des Vins Bearnais", *Revue d'Histoire Moderne*, XI (1936), 212-15; ROBERT FORSTER, "The Noble Wine Producers of the Bordelais in the Eighteenth Century", *Economic History Review*, 2nd series, XIV (1954), 18-22; WARREN C. SCOVILLE, *Capitalism and French Glassmaking* (Los Angeles, CA, 1950), pp. 95-96; Archives Nationales, F[12] 245.

[14] Vergennes to Barthélemy, 26 November 1786. CPA 558, fo. 191.

[15] Adhémar to Vergennes, 21 March 1786. CPA 555, fo. 283 vo.

since then had reduced this trade. Even so, the British remained the principal buyers of the most expensive wines Bordeaux produced,[16] and before the Franco-American alliance in 1778, wine, brandy and vinegar had accounted for 26 to 41% of recorded trade with Great Britain. If Bordeaux was the principal contributor, French statistics show imports from other regions as well, especially Burgundy, Champagne and Languedoc. In 1776, Languedoc sent wine worth a quarter million livres, while 37% of champagne exports crossed the Channel the following year.[17] It is hardly surprising that the "principal" merchants of Rheims would petition the king in 1783 concerning the potential of the British market,[18] nor that the French government would give its recovery serious thought. Moreover, products of other troubled industries that had once enjoyed prominence in trade with Great Britain also topped the list of concessions the French would seek in the negotiations.[19]

Of all the products France had to offer, wine received the most attention in the case set before the the Conseil d'Etat in May 1786. What the French government wanted was British admission of wine, brandy and vinegar on most favoured nation terms, but between such treatment and French wine stood the Methuen Treaty (1703) in which the British had agreed to admit Portuguese wine on a duty one third less than the one on those of France in return for concessions on woollens. Violation of this agreement had brought rejection of key provisions of the Commercial Convention of Utrecht by Parliament. Trade relations had suffered from this defect for nearly three

[16] A.D. FRANCIS, *The Wine Trade* (New York, 1973), pp. 7, 49, 74-75, 143-44, 155-56, 245-48.

[17] AN, F^{12} 242-245 (statistics for 1775-1777). French statistics do not distinguish between those goods that entered other countries through legal channels or as contraband.

[18] "Memoire concernant le commerce des vins de Champagne", 12 April 1783. CPA 542, fo. 18-20.

[19] The products of other troubled industries that topped the list of French demands were silks and fine linens. Negotiations on both are treated fully in MARIE DONAGHAY, "Textiles and the Anglo-French Commercial Treaty of 1786", *Textile History*, XIII, 2 (1982), 205-24, *passim*. In both cases, bargains envisioned by the French involved the exchange of cloth for cloth. Concerning fine linens, St. Quentin had petitioned the government, saying it faced "near ruin" if something were not done to reopen their trade with Great Britain, see "Mémoire des Negocians et Marchands de Toiles de la fabrique de St. Quentin en Picardie sur les avantages du retablissement de leur commerce en Angleterre", 27 March 1783. CPA 541, fo. 282-83. The silk industry which had enjoyed its "last great wave of prosperity" on the eve of the American war, was as troubled as the wine industry during the 1780's and for many of the same reasons: restriction of foreign markets, failure of the silk harvest, and contraction of the domestic market as a result of the growing crisis in rural France. The centre of that industry, Lyons, fell under the jurisdiction of the Foreign Minister, the Comte de Vergennes. L. TRENARD, "The Social Crisis in Lyons on the Eve of the French Revolution", *New Perspectives on the French Revolution* (New York, 1965), 69-71, 83.

quarters of a century. Since 1713, the tax on French wine had spiralled to 99 pounds sterling per ton, more than double the Portuguese duty. While the British seemed ready to reduce duties to a level consistent with the Methuen Treaty or 65 pounds sterling, France planned to demand parity with Portugal or a duty of 46 pounds sterling but would not persist if this endangered the new arrangements. Both sides estimated legitimate trade in wine at between 500 and 600 tons per year. And though the Foreign Ministry envisaged a wine trade of nearly 10,000 tons a year in its presentation to the Council,[20] Rayneval's own projections show France achieving such levels only if the duty were less than half the present levy on Portuguese imports. These projections did suggest improvement in sales, but they also indicate that the Foreign Ministry never expected France to supplant Portugal in the wine trade nor even send half as much.[21] Doubts were evident elsewhere. A Control General summary noted that the British might continue to drink Portuguese wine through force of habit. It asked how much the brandy trade would increase if duties were reduced from an estimated 30% to the Spanish tax which was about 15% or if the British would try to protect rum.[22] The answer to the first question, according to a Foreign Ministry memoire, would be little or nothing based on "different reports of a committee of the Chambers of Commerce charged with doing research on contraband". The British preferred gin to rum or brandy because it was cheaper and stronger.[23] And the French ambassador suspected "secret opposition on the part of M. Pitt" to any real expansion of the wine trade because it would promote drunkenness.[24]

In London, testimony before the Board of Trade during preparations for the negotiations recommended that French brandies receive most favoured nation treatment because that duty (about 15%) equalled the cost of smuggling. But the British also focused most of their attention on wine. Wine imports would triple if the duty were decreased to Portuguese levels, but witnesses felt this increase would most benefit Bordeaux, whose last vintage was poor. They pointed to Portuguese contempt for the Methuen Treaty, their

[20] RAYNEVAL, "Lu". CPA 556, fo. 200vo-08, *passim*, 214. FRANCIS, *op. cit.*, p. 246, cites 475 tons.

[21] RAYNEVAL, "Observations", 10 August 1786. CPA 557, fo. 134-34vo., estimated trade at 10,000 tons if the duty per ton were 20 pounds sterling, 26 pounds sterling under the duty the French were seeking. French expectations or lack thereof is confirmed in Rayneval to Barthelemy, 29 October 1786. CPA 558, fo. 87.

[22] "Observations", (early 1786?). Public Record Office, PC 1/123 (the Calonne papers): #15 (annotated), summarizes a range of views on the goods to be traded with ministerial marginalia.

[23] H? "Observations sur le Commerce entre l'Angleterre et la France", October 1786. MDA 136, fo. 301vo.

[24] Adhémar to Vergennes, 21 March 1786. CPA 555, fo. 284.

harrassment of the wool trade.[25] Thus both sides were close to agreement on appropriate duties for wine, brandies and vinegar long before negotiations on specific goods actually began.

If the French liquor trade was hurt by policy, the British, who made the best iron, steel and hardware in Europe, maintained a firm grip on the French market despite exclusion in the Arret of 1701. British dominance rested on French inferiority. Iron works were scattered throughout France, but with the exception of that sector devoted to armaments, most were small-scale operations designed to meet local needs. The industry was plagued by ignorance, internal duties and a dwindling supply of fuel: wood. Efforts to substitute native coal were fraught with difficulty. Domestic iron manufacture was so inferior that the French had to rely on British steel for hardware and other goods, while the armaments works at Indret were forced to "subsist on remelted French cannon and English coke pig".[26] Through various means: grants, privileges, scientific analysis, instruction, enticement of foreign artisans, the French government sought to introduce coal-fuel technology and upgrade the domestic iron and steel industry. By the 1780's, France produced steel that was suitable for coarser works, boasted "a handful of hardware factories" including a large operation in Lyons, but still made inferior iron.[27] Petitions spoke of the need to import edged tools used in trades, the annual flow of 600,000 livres in British needles to Paris, while the British industry estimated that 25% of its exports went to France.[28] During the Calonne administration, the drive to make French industry competitive through application of coal-fuel technology and steam power on the British model intensified - witness the massive support given Le Creusot and involvement with the works at Amboise.[29] Some thought the latter ready "to furnish works as well finished as those made in England", but a skeptical Foreign Ministry mémoire complained that even if such optimism were warranted,

[25] Minutes of the Board of Trade, Public Record Office, BT 5/3, fo. 18-20vo, 23vo., 38, 41, 73, 128-28vo.

[26] J.R. Harris, *Industry and Technology in the Eighteenth Century: Britain and France* (Birmingham, UK, 1972), p. 12.

[27] Harold T. Parker, *The Bureau of Commerce in 1781* (Durham, NC, 1979), pp. 126-39, 136. The reference is to a fine hardware factory established by Antoine and Joseph Orsel in 1779. In 1785, Du Pont de Nemours transmitted a statement of British goods entering France as German products by a M. Orsel, see Du Pont de Nemours to Rayneval, 17 November 1785. Eleutherian Mills Historical Library, Wilmington, DE: Winterthur MSS, Group 2, Series A, Box 2.

[28] Harris, *op. cit.*, p. 14; BT 5/3, fo. 124vo.

[29] J.R. Harris, "Attempts to Transfer English Steel Techniques to France in the Eighteenth Century", *Business and Businessmen* (Liverpool, 1978), 211-20, argues that the French were bound to have trouble when they tried to "telescope" and introduce fragments of coal-fuel technology that had taken the British years to develop.

the wares of Amboise would still have to overcome the "prejudice in favour" of British steel.[30]

In the earliest and frankest discussion of the hardware deal, Rayneval wrote that British goods had "a decided advantage"over those of France. Though prohibited, British hardware entered France "under other denominations", a reference to its admission as Dutch and German wares under a 10% *ad valorem* duty. Later he would estimate fraud through Ostend and Holland at 8 million livres per year, a figure that is consistent with estimates found in British testimony.[31] Nevertheless, the domestic industry had survived such competition without "striking prosperity". The only way to stop entry of British hardware was through general prohibition, but he questioned whether that would be in the French interest. Smuggling would probably continue, depriving the manufacturer of gain and the King of revenue. If the measure were effective, any advantage secured by the hardware industry would be offset by losses of other manufacturers hurt by destruction of "a considerable branch" of exchange. Statistical studies for the mid-1770's conducted by the Bureau of the Balance of Trade clarify this point. The Dutch Republic, a leading source of hardware that was often of British origin was a major recipient of French sugar, wine and brandy while Germany was the principal market for silk stuffs. Trade with both was very large and favourable to France.[32] Since a general prohibition would result in "no national advantage" and possible harm, Rayneval proposed in essence most favoured nation treatment for British hardware in return for concessions on wine, brandy and vinegar. [33] In mid-1785, France excluded all foreign hardware in an effort to force the British to take seriously trade negotiations called for in the definitive peace - a measure which according to British testimony cut hardware exports by 33 to 50%.[34] A Control General summary felt the prohibition would be circumvented, but acknowledged that it had thrown British manufacturers into temporary "confusion". With the help of Parisian merchants familiar with such goods, the Control General hoped to ascertain a moderate duty that would stifle fraud, which according to British witnesses cost between 5 and 20%, while minimizing the danger to the domestic industry- an industry the government was trying to make competitive because the best way to stop smuggling was "to make hardware as common in France as

[30] H? "Observations". MDA 136, fo. 303.

[31] Rayneval, "Reflexions", MDA 74, fo. 77-78; Rayneval, "Lu", CPA 556, fo. 206vo-07; BT 5/3, fo. 124vo.

[32] AN, F^{12} 242-46.

[33] Rayneval, "Reflexions", MDA 74, fo. 77-78; Notes taken in April 1786 or later and left with Calonne confirm the intention to make this a most favoured nation proposal in fact if not in letter, Rayneval, "Articles principaux sur les quels il convient de regler les droits d'entrée", PC 1/123: #35iv.

[34] BT 5/3, fo. 112vo.

it is in England".[35] In the optimistic report to the Conseil d'Etat, the Foreign Ministry argued that French hardware was improving and might even rival that of Britain some day- something the British could never hope to achieve in wine. Indeed, introduction of British hardware would encourage this by stimulating the industry. Finally, any excess could be sent to Spain and Italy with France reaping the benefits of "commission" and "entrepot".[36] An internal memorandum, on which the Foreign Minister noted that high duties produced fraud, indicated less confidence in French abilities to meet British competition: efforts "we have made for the establishment of hardware manufacture will be lost unless the government accords ample bounties".[37] French activities did not escape British notice: Boulton of Birmingham, himself the object of French enticement, pointed to attempts to lure British artisans across the Channel, French agents copyng specifications in the Patent Office, and lamented that such openness made it almost impossible to confine innovations to Britain.[38] Though witnesses preferred a duty of 5% or less, the British as well as the French favoured a duty of 10%,which according to Board of Trade testimony would secure British commercial advantage but would not prevent the French from rivalling their manufacture later.[39] It was, the Foreign Secretary wrote, the most valuable concession sought.[40]

If the British enjoyed the lead in hardware manufacture, the French held the edge in plate glass. Producing half the world's plate glass by mid-century, France had introduced a process for casting that made it both larger and thicker than that made from blown glass.[41] The Royal Plate Glass Company, better known as Saint-Gobain after the site of one of its works, was the principal if not exclusive manufacturer as well as the second largest business in France.[42] During the 1770's, the British set up a rival firm at Ravenhead with the help of French artisans, a development that both the Foreign Ministry and the company followed with interest. In the 1780's, the British Cast Plate Glass Company struggled with managerial and technical problems in adapt-

[35] "Observations", PC 1/123: #15. Indeed, Calonne had evidence that prohibitions were being circumvented and the goods circulating "as before", see Grimoult to Calonne, 23 December 1785. MDA 74, fo. 39, with Rayneval's comments. BT 5/3, fo. 56vo.

[36] RAYNEVAL, "Lu". CPA 556, fo. 200, 206vo-07.

[37] "Observations/Notte", August 1786. CPA 557, fo. 248, 251vo, with Vergennes' marginalia.

[38] BT 5/3, fo. 112-13.

[39] *Ibid.*, fo 113-13vo.

[40] Carmarthen to Eden, 20 August 1786. Public Record Office, Foreign Office, France 27/19 (Eden correspondence), fo. 278.

[41] SCOVILLE, *op. cit.*, p. 11-14, 27-30, 156-58.

[42] PARKER, *op. cit.*, p. 140-41. Anzin was larger.

ing the French process to coal.[43] The secretary to the French ambassador observed that plate glass made at Lancaster was not as "clear" or as "uniform" as the French product.[44] It was in the French interest then that its privileged British rival continue to struggle or expire. The branch of French glass manufacture that converted to coal was bottlemaking where discoloration from fuel pollution was an advantage because wine and brandy merchants preferred dark bottles. As the century progressed, the number and productivity of bottlemakers increased, with several, such as the works at Sevres, manufacturing more than a million bottles a year. White glass works, most of which were small and traditional, produced a light crystal that was inferior to that of Germany or Great Britain. To remedy this, the French government favoured manufacturers promising to use coal and emulate foreign techniques.[45] Closely related to glass was the manufacture of earthenware, stoneware and porcelain. As in plate glass, French porcelain was dominated by a large firm with an international reputation and a privileged position at home. Sèvres had been the creation of the previous reign which had set out to rival German competition and succeeded in making France the dominant influence in fine porcelain between 1760 and 1780 with the help of "the best talent in France". During the 1780's, Sèvres was at the peak of productivity. While some observers acknowledged Sèvres superiority, but felt that exports would be restricted by price, doubt was beginning to intrude. One report stated that British porcelain, glassware, fayence and stoneware were "cherished because of their fineness, their brilliance, their solidity..."[46] The embassy secretary found "Queensware" more expensive than its French equivalent, but that disadvantage was balanced by Wedgwood's popularity abroad.[47] There was general agreement that British stoneware and earthenware were both cheaper and better. And if fayence made in such centres as Normandy, Provence and Alsace faced stiff competition from the British, French potters and the government had failed to meet domestic needs in stoneware, forcing scientists to import crucibles and retorts from Germany and Great Britain.[48] Reciprocal admission of glass and earthenware could both threaten and benefit French industry, and therein lay the seeds for compromise.

[43] J.R. HARRIS, "Saint-Gobain and Ravenhead", *Great Britain and her World* (Manchester, 1975), 27-70, *passim*.

[44] SIBELLE D'ARRAGON, "Vue Comparative des effets du Traité de Commerce...", 3 April 1787. MDA 136, fo. 316vo.

[45] SCOVILLE, *op. cit.*, pp. 13-14, 95-96, 161-62; PARKER, *op. cit.*, pp. 140-41, 144.

[46] BRIANCOURT, "Mémoire sur l'Angleterre", April 1784. MDA 74, fo. 28.

[47] ARRAGON, *op. cit.*, fo. 316vo.

[48] PARKER, *op. cit.*, p. 149-51; IRMA HOYT REED, "The European Hard Paste Porcelain Manufacture of the Eighteenth Century", *Journal of Modern History*, VIII (1936), 278, 283-84, 293-94.

The Foreign Ministry, in its presentation to the Conseil d'Etat, observed that British manufacture of plate glass was not "perfected" yet and pointed out that the duty on French glass, which was close to 90% *ad valorem*, was almost double that paid by most favoured nations.[49] Internal memoranda tended to stress French difficulties. In November 1785, Rayneval sent Calonne a draft that noted French efforts to "imitate" British glass-ware and crystal. The industry, he wrote, feared for its well-being if entry of the British product were not restricted, and he asked Calonne, who was giving massive support to the Verrerie de la Reine, what duty would favour France's infant industry or whether it would be "a great inconvenience" if France ceased "to rival the English" in such goods since they were luxury items that only the wealthy could afford anyway. As a rule, he wrote, trade "excites" emulation and would force French manufacturers to reduce prices.[50] A Control General summary, on the other hand, dealt only with that branch where France enjoyed a substantial technological lead — the manufacture of plate glass. Here France expected a considerable advantage, but that advantage was limited by the availability of fuel because plate glass manufacture consumed huge amounts of increasingly scarce wood.[51] A reciprocal duty of 10% was sought on glass and earthenware, about which little was said in the memoranda.[52]

Even though it enjoyed the advantage in fuel, the British glass industry was not enthusiastic about opening trade with France. Domestic manufacture was hampered by internal duties, especially the manner in which they were assessed. France could obtain most raw materials, including sand and red lead from England, at about the same price. Cut and flint glass makers testified that trade with France had dwindled, that glass-cutting was not a difficult skill to acquire, and that "some of our people" had set up two mills near Paris. The one under royal protection produced wares equal to British glass of medium quality. In plate glass, France had a 30 to 40% advantage in price. Since most witnesses appeared after negotiations on Article VI had begun, recommendation of a duty of 10 to 15% by some was more important as a sign of acquiescence than consultation.[53] Such was not the case with the powerful spokesman for the earthenware manufacturers, Josiah Wedgwood,[54] who tes-

[49] RAYNEVAL, "Lu", CPA 556, fo. 209vo.

[50] RAYNEVAL, "Note relative aux arrangements..." November 1785. PC 1/123: #18i. The section concerning rivalry and the rule of trade appears only in the copy sent to Calonne. HARRIS, "Attempts", p. 219.

[51] "Observations", PC 1/123: #15.

[52] RAYNEVAL, "Articles Principaux", PC 1/123: #35iv; "Monsieur le Controleur General demande de responses à differente questions joints à sa lettre du 20 mai", PC 1/123: #36ii.

[53] BT 5/3, fo. 109-10, 220-21, 224vo; 5/4, fo. 7vo, 10vo; BT 6/113.

[54] Wedgwood was a leader of the General Chamber of Manufactures which had given the Pitt administration more than a little trouble, see WITT BOWDEN, *Industrial*

tified well before Eden left for France. While he acknowledged some exchange of fine porcelain and expected Great Britain to have the advantage in stoneware and earthenware, Wedgwood was concerned that the French industry might concentrate on finishing and wanted to discourage export of plain wares through higher duties. Thus he recommended duties ranging from 8 to 12% depending on the article.[55] British ambivalence about glass and earthenware was reflected in their approach to the negotiations that began after Eden received fresh instructions in late July 1786.

In negotiations on glass and earthenware, the British sought to favour that part of trade where the domestic industry had the advantage while the Foreign Minister and Calonne were inclined to let the British "earn" admission of their goods through reciprocal treatment for the whole industry. At first, Eden tried to postpone discussion of glass indefinitely, but the French ignored his plea that the British had not completed inquiries. In the official response, Rayneval suggested a duty of 12% on "mirrors" where France had the preference and "crystal" where the British enjoyed the lead. British inquiries about a duty for earthenware were met by a proposal that British earthenware and stoneware be admitted for French porcelain and fayence.[56] The Foreign Secretary was pleased with the offer of a 12% duty on stoneware, but opposed fixing so low a duty on the whole "manufacture". The same applied to glass. A duty of 10 to 15% was acceptable for crown glass, but the British still had no information on plate glass.[57] Despite instructions, a draft completed in the last week of August called for reciprocal admission of porcelain, earthenware and stoneware on a duty of 12%, while the French continued to press for similar treatment of glass. The Foreign Secretary came forward with a two-tier approach: glassware would pay 12% but plate glass 15%.[58] With the French threatening to erase part of the concessions the British had obtained on their major products if millinery was not given similar treatment, the British negotiator ceded on glass. "The manufacture of glass is until now little extended in England", Eden confessed to Rayneval, "but I risk by the duty of 12 instead of 15% sacrificing the whole...".[59] Article VI

Society in England towards the End of the Eighteenth Century (London, 1965), pp. 176-83.

[55] BT 5/3, fo. 89-90, 194vo, 200, 202. Wedgwood testified that the French excelled at enamelling and gilding thanks to greater precision in execution.

[56] EDEN to RAYNEVAL, "Réplique", 23 July 1786, CPA 557, fo. 94; RAYNEVAL, "Observations", 12 August 1786. FO 27/19, fo. 220.

[57] CARMARTHEN to EDEN, 25 August 1786. British Museum, Additional Manuscripts 34422, fo. 142vo. Carmarthen's veracity here is questionable: the Board of Trade had heard testimony on plate glass on 10 and 11 August 1786, see BT 5/3, fo. 224; BT 6/113.

[58] Draft treaty, 27 August 1786. FO 27/20, fo 11 vo; CARMARTHEN to EDEN, 12 September 1786. *Ibid.*, fo. 65vo.

[59] EDEN to RAYNEVAL, 19 September 1786. CPA 557, fo. 296.

placed a duty of 12% on both earthenware and glass with the British retaining the right to impose a countervailing duty on the latter. With that, glass and earthenware ceased to be issues in the negotiations. Such was not the case with hardware and wine.

In late July 1786, the British negotiator called for the admission of hardware, as well as iron and steel works, on a moderate duty.[60] Despite memoranda suggesting 10%, the Foreign Ministry set the duty on hardware at 12% initially and sought to diminish the British advantage by adding haberdashery, cabinet-ware, ribbons and similar items.[61] Eden, who had to fight for 10% in the official response,[62] was soon caught between his own government which wanted hardware narrowly defined and ordered him to seek a duty so low it would wipe out French competition,[63] and French efforts to maintain the 10% duty and parlay their concession into better terms for other goods. When Eden argued for a 5% duty, the Foreign Minister called for 15%, giving the Controller General a chance to play arbiter.[64] Eden was reminded how difficult it was to keep the duty on hardware at 10%. Calonne told him he was "leading the life of a hunted hare among the manufacturers"; iron and steel workers held a well-publicized rally for continuation of the general prohibition on hardware in front of Eden's residence; the Council of Commerce recommended a duty of 15%.[65] The most Eden could secure was a duty *no* more than 10%, which for coarse works was less favourable than the terms other countries had enjoyed.[66] Early on, the British eliminated ribbons at the request of their manufacturers, but just as Eden was to sign the treaty, he discovered that the French included ribbons and other restricted silks in haberdashery and toys. He deleted both.[67] After signature, Eden gave the French a delineation of hardware exceeding his own government's

[60] Eden, "Réplique", 23 July 1786. FO 27/19, fo. 174.

[61] Eden, "Réplique", 23 July 1786. CPA 557, fo. 91vo. annotated.

[62] Rayneval, "Observations", 12 August 1786. FO 27/19, fo. 218vo; Eden to Pitt, 17 August 1786. Ad. Ms. 34422, fo. 70.

[63] Carmarthen to Eden, 20 August 1786. FO 27/19, fo. 273vo, 278.

[64] Eden to Pitt, 23 August 1786. Public Record Office, PRO 30/8/110, part I (Chatham papers), fo. 78.

[65] Eden to Pitt, 8 September 1786. Ad. Ms. 34422, fo. 207, Eden would have been more impressed if the demonstration had not been advertised in the *Journal de Paris* two days earlier or well guarded to keep things "respectable". Eden to Carmarthen, 27 August 1786. FO 27/20, fo. 4.

[66] Carmarthen to Eden, 12 September 1786. *Ibid.*, fo. 64.

[67] "Traité de Navigation et de Commerce", 26 September 1786. EMHL, Accession #368. The former curator of manuscripts, J.B. Riggs, believed this to be Eden's copy of the treaty. The cross-hatching through "mercerie", "haberdashery" and "toys" is in his hand and was done just before signature. Eden to Carmarthen, 27 September 1786. FO 27/20, fo. 122.

instruction.[68] Calonne was delighted, for it included goods classed as jewelry and plated ware, where France was thought to have the advantage in taste and talent.[69] Indeed, research indicated this trade would offset admission of buttons, which the British had requested. It was, the Foreign Secretary reported, "the most important branch" of the hardware industry.[70] If the British questioned French plated ware, Calonne was prepared to exclude their gilded and silvered wares such as buttons. Reciprocal admission of musical instruments promised some advantage on both sides of the Channel.[71] Hardware was fixed at 10%, but the British still hoped for lower duties on works of iron, steel, copper and brass under a certain value. While they got 5% on iron and steel, it was not extended to copper and brass which the Foreign office had deemed essential.[72] Finally, the British wanted France to suspend the right,

[68] Eden to Vergennes, 23 November 1786. CPA 558, fo. 174. The Foreign Secretary wanted buttons, plate ware and japanned goods admitted as hardware, but not gold and silverware (the type of plate ware the French thought they had the advantage in), watches, glass, and leather goods. Carmarthen to Eden, 17 October 1786. FO 27/20, fo. 262-63. Three weeks after Eden defined hardware, British clock-makers protested that the 10% duty on time pieces *would ruin them*, leading Eden to lament that "Our merchants and manufacturers are so open to the impression of partial interests that they have no uniform principle in their propositions...". Eden to Carmarthen, 30 December 1786. *Ibid.*, fo. 327. For the complaints of the watch and clockmakers, see BT 5/4, fo. 60, 61vo, 64. The French advantage in clocks and watches was in design and price, not quality.

[69] "Observations", PC 1/123: #15. The French wanted such goods admitted on a duty of 10%.

[70] Bureau of the Balance of Trade, "Mémoire sur le Commerce de la France avec l'Angleterre depuis le Traité, jusqu'au 31 Decembre 1787". April 1788. Archives Nationales. Fonds Marine, B^7 456, placed contraband in jewelry and plateware in 1784 at 3 million livres. H? "Observations". MDA 136, fo. 302vo, estimated the British button trade at 3 million livres per year. Carmarthen to Eden, 17 October 1786. FO 27/20, fo. 263.

[71] Calonne to Vergennes, 22 December 1786. CPA 558, fo. 308-09. The intendant of the department of the general farms also noticed the opportunity to introduce French plateware if the British demanded admission of gold and silver buttons which had been prohibited in 1749. Colonia to Rayneval, 28 October 1786. CPA 558, fo. 84-84vo. It was also understood that French button makers would need much help if they were to survive British competition. "Observations/Notte", August 1786. CPA 557, fo. 248.

[72] Carmarthen to Eden, 19 December 1786. Ad Ms. 34423, fo. 75vo; Carmarthen to Eden, 7 January 1787. FO 27/24, fo. 8-10; Eden to Carmarthen, 13-15 January 1787. FO 27/24, fo. 16vo. Duties on these goods were set in Article I of the Additional Convention signed 15 January 1787. Eden did not "insist" on copper and brass because it might delay conclusion of the agreement. Eden to Vergennes, 10 January 1787. CPA 559, fo. 27. Both sides were working against the deadline imposed by the opening of Parliamentary debates on the new arrangements. Moreover, Vergennes, who conducted these discussions in the absence of his negotiator then on a

reserved in Article VI, to impose countervailing duties on iron, but had to settle for the same right and a vague promise that "compensation" would not be sought if the *marque des fers*, which the French would not define, was not in general use.[73]

In return for admission of hardware and other goods, the British would reduce duties on wine in accordance with the Methuen Treaty and extend most favoured nation treatment to brandy and vinegar. The French derided the proposal. Duties were excessive. They pounced on British reluctance to specify the tax on brandy because of the rum trade. They stressed the role of brandy in smuggling: lower duties would enhance revenue by fostering legitimate trade.[74] In turn, the British cited opposition from distillers while the French embassy reported domestic liquor production was the source of "considerable" revenue.[75] Nevertheless, the duty on brandy edged downward to 7 shillings per gallon with promise of further reduction after the French agreed to admit beer under terms that were almost prohibitive.[76] With wine, the French emphasized consumption. British proposals were "impractical" because they would not increase sales of *vin ordinaire*. Rayneval, referring to the seventeenth century statistics Eden furnished, reminded the British negotiator that duties had once been 10 pounds sterling per ton. However, the Portuguese duty, which he set at 40 pounds sterling, would be

mission to the strife-torn Dutch Republic, was in a precarious state of health and would die less than a month after conclusion of the January convention. Vergennes' increasing exhaustion during the long conferences may also have affected Eden's conduct of the negotiations.

[73] CARMARTHEN to EDEN, 19 December 1786. Ad. Ms. 34423, fo. 76vo-78. The British feared France would use this reservation to burden British hardware with extra levies, thus reducing trade. Vergennes shared this concern vis-à-vis the British and suggested that France follow the British example in the use of additional duties. VERGENNES to LOUIS XVI, "Traité de Commerce avec l'Angleterre", October? 1786. CPA 558, fo. 102vo. VERGENNES to EDEN, 16 January 1787. Ad. Ms. 34423, fo. 304. This was repeated in VERGENNES to CALONNE, 19 January 1787. CPA 559, fo. 65-65vo. At the time, Calonne was putting the final touches on plans to reform the French customs system. This and other reforms were to be presented to the Assembly of Notables scheduled to meet at the end of January.

[74]. CARMARTHEN to EDEN, 18 July 1786. WILLIAM EDEN, FIRST BARON AUCKLAND, *The Journal and Correspondence of William, Lord Auckland* (London, 1861), I, p. 490; RAYNEVAL, "Observations", 12 August 1786. FO 27/19, fo. 218; RAYNEVAL to EDEN, 13 August 1786. *Ibid.*, fo. 227-27vo.

[75] EDEN to RAYNEVAL, 25 August 1786. CPA 557, fo. 209; BARTHELEMY to VERGENNES, 29 August 1786. *Ibid.*, fo. 224vo-25.

[76] The French draft of the treaty, 27 August 1786. FO 27/20, fo. 10, set the rate on brandy at 7 shillings per gallon. In response to the British request, Calonne admitted beer on a duty of 30% *ad valorem*. Both sides reserved the right (later used) to place a countervailing duty on beer. CARMARTHEN to EDEN, 4 September 1786. *Ibid.*, fo. 31vo.

acceptable.[77] Without significant increases in wine exports, the French warned trade would be so unequal it would destroy the treaty.[78] The British made the "ultimate concession", but reserved the right to make Portuguese duties consistent with the terms of the Methuen Treaty — a reservation that Eden reported "sticks much in our throats".[79] Later, Eden was ordered to tighten terms so duties on wine from other countries could be reduced without extending the same privilege to France. Rayneval was shown this despatch before signature.[80] Following collapse of trade talks with Portugal, the British sought to make proposals to Spain irresistible by "negotiating a preference for [her] wines with France".[81] In March 1787, Eden was instructed to secure written confirmation of the right to extend the Methuen reserve to Spain. As a sweetener, duties on brandy were reduced to 5 shillings per gallon. Coming when Calonne was embroiled with the Assembly of Notables and a new Foreign Minister was settling into office, this demand created "gratuitous mischief" aplenty. The French extracted a pledge that the reserve would not be extended to other states diminishing British freedom of action and ensuring German wines would not have undue advantage over those of Champagne in British markets.[82] Calonne made consent contingent on the French right to assess duties on British iron to countervail the *marque des fers* even if that duty were abolished internally; the size of this duty increased with each conference.[83] The message was clear: if the British restricted

[77] RAYNEVAL, "Observations", 12 August 1786. FO 27/19, fo. 216vo 17; EDEN to CARMARTHEN, 13 August 1786. *Ibid.*, fo. 209vo. The British were quick to note that 40 pounds sterling per ton was below the Portuguese duty, Carmarthen to EDEN, 20 August 1786. FO 27/19, fo. 270-71, places the Portuguese duty at between 41 and 46 pounds sterling with an additional duty on foreign ships.

[78] EDEN to CARMARTHEN, 13 August 1786. *Ibid.*, fo. 208vo.

[79] CARMARTHEN to EDEN, 20 August 1786. *Ibid.*, fo. 270-72; EDEN to PITT, 23 August 1786. PRO 30/8/110, part. 1, fo. 78.

[80] CARMARTHEN to EDEN, 4 September 1786. FO 27/20, fo. 24vo; EDEN to CARMARTHEN, 20 February 1787. FO 27/24, fo. 178.

[81] JOHN EHRMAN, *The Younger Pitt* (London, 1969), 1, p. 498. The Spanish were unimpressed and the negotiations got nowhere. Indeed, only the Anglo-French negotiations produced a treaty for the British before the French Revolution.

[82] CARMARTHEN to EDEN, 17 March 1787. FO 27/24, fo. 237vo-241vo; FLINT to EDEN, 21 March 1787. *Ibid.*, fo. 258. EDEN to PITT, 1 February 1787. Ad. Ms. 34424, fo. 4, warning of "gratuitous mischief". Eden later wondered if the scheme had been hatched by the leader of the Opposition, EDEN to PITT, 22 March 1787. *Ibid.*, fo. 206. Carmarthen to Eden, 4 April 1787. FO 27/24, fo. 306 Rhine wines were the issue though the British pledge was general. Dumas, pp. 136-38, does not connect the additional reduction on brandy and the Spanish concession, nor does he appear to know the background of that move or why the French were so anxious to keep that same concession from being extended to German wines.

[83] EDEN to CARMARTHEN, 25 March 1787. FO 27/24, fo. 265-65vo.

French wine imports, the French would do the same to hardware and made up iron. Eden later persuaded the new Foreign Minister that his late predecessor had agreed to mutual suspension of the iron reserve in Article VI.[84] Linkage of hardware and wine, which had persisted throughout the negotiations, ceased, but by then the two architects of the treaty were dead or dismissed. Nevertheless, internal duties on British metalware continued to be a problem in the ports and provinces of France. After French humiliation in the Dutch crisis robbed the new treaty of its political value and strict enforcement of regulations embittered relations further, France resolved the issue with an *arrêt* in 1788 making British iron subject to the *marque des fers.*[85] Correspondence suggests internal duties on hardware nearly equalled the cost of admission.[86]

Access to British "products of the soil" such as copper, lead, tin and coal had always been a consideration,[87] but did not form part of Article VI which dealt only with import duties. Coal, which forms a link of sorts between the other categories discussed above, was the most important raw material. Both sides acknowledged that French demand for British coal would grow each year.[88] Rayneval suggested why. Domestic coal was scarce, expensive, and poor in quality, and the British product was preferred by the forges of Normandy because coal from Littry was too sulphurous. Moreover, access to cheap British coal made an enormous difference in other manufactures as well. At Manchester, Rayneval observed, coal cost only 5 pence per quintal while Rouen manufacturers paid four times that for low grade coal from Littry.[89] While suggesting that domestic mines required some protection, the French negotiator argued that the flow of British coal "ought naturally to excite [French] emulation" of British industry.[90] The Foreign Ministry asked its embassy in late 1785 to inquire into the price of coal at British mines and

[84] MONTMORIN to EDEN, 17 April 1787. *Ibid.*, fo. 331vo.

[85] LAMBERT to MONTMORIN, 11 July 1788. CPA 565, fo. 269.

[86] L. LAMBERT to HAILES, 10 October 1788. FO 27/30 (unpaginated).

[87] VERGENNES to CALONNE, "Aperçu sur le Traité de Commerce...", 25 April 1784. MDA 46, fo. 211vo.

[88] RAYNEVAL, "Note relative aux arrangements...", - November 1785. CPA 554, fo. 361vo.; BT 6/111.

[89] RAYNEVAL, "Reflexions delacher", MDA 74, fo. 79. The Littry coalfield was in western Normandy. It was one of four mining companies, of which Anzin was the largest and best known, operating in northern France prior to the Revolution. REID GEIGER, *The Anzin Coal Company*, 1800-1833 (Newark, DE, 1974), p. 120. Finding domestic coal that would produce a satisfactory smelt was a major problem as far as the French were concerned. Harris, *Industry*, p. 13, suggests that part of the problem was technical: "the [French] workman inevitably related 'everything to the work he is accustomed to', tried to use coal like charcoal, and failed". Coal was also used in dyeing and finishing cloth, see p. 10-11.

[90] RAYNEVAL, "Note relative". CPA 554, fo. 361vo.

London as well as the cost of transportation to French ports in Normandy and Brittany.[91] Once the treaty was signed, there was some hope that British ports would be more accessible to French shipping enabling France to obtain "materials of primary necessity" cheaper than through the port of London.[92] The French also asked if the British would reduce duties on coal.[93] In an age when countries restricted the export of raw materials to potential competitors, such a request was a risky venture indeed.[94] Calonne's project for customs reform then being readied for the Assembly of Notables would take care of import duties on raw materials. But these plans were disrupted by the death of the Foreign Minister, the dismissal of Calonne and changes in personnel at the Control General. By the summer of 1787, the need for cheap British coal to fuel French industrial development had been obscured. Thus, British ships carrying coal into French ports were assessed for unreasonable duties, and soon Eden complained to the new Foreign Minister, who referred the matter to the new Controller General. Villedeuil found no mention of coal in the treaty, so he decided to admit it under the rule of most favoured nation on a duty of 12 livres per sea ton. Such a duty was necessary, he said, to encourage domestic mining.[95] Maybe so, but one historian found that the duties on coal, which was "indispensable" to French industry, were protested from all sides.[96]

If France planned to rely on "products of the soil" to balance trade with Great Britain, as the Chamber of Commerce of Normandy implied, the government miscalculated on a grand scale. Imports of raw materials,[97] which accounted for roughly 60% of British trade to France between 1787 and 1789, *exceeded* the annual average of *all* French exports to Great Britain by

[91] VERGENNES to BARTHÉLEMY, 18 December 1785. *Ibid.*, fo. 408.

[92] "Observations relatives aux suites du Traité de Commerce...", (1786). CPA 558, fo. 354-54vo.

[93] BT 6/112: "Points for Discussion in which it may be necessary to give some instructions". The French probably made this request in late October 1786.

[94] The French raised export duties on raw cotton, a move designed to force up the price of Manchester stuffs which used Tobago cotton imported from France. Thanks to free ports, the ploy failed. See DONAGHAY, "Textiles", pp. 216-17.

[95] VILLEDEUIL to MONTMORIN, August 1787. CPA 562, fo. 292-92vo. Copy transmitted to Eden, Ad. Ms. 34427, fo. 224.

[96] DUMAS, p. 150, assumes that Rayneval "systematically" excluded coal from the treaty because he wanted to protect French mines. Actually, coal fell under the most favoured nation clause in Article VII as did all goods not treated in Article VI. Coal was also included with other goods that could not be excluded from trade in Article XXIII.

[97] I include foodstuffs and bullion, which according to one account consisted of 8.8 million livres in "gold ingots" in 1787. [Pottier, Director of the Balance of Commerce], *Observations sur la Lettre à la Chambre de Commerce de Normandie* (1788), pp. 9-10, Tableau.

nearly 3 million livres tournois.[98] If, as internal memoranda suggest, the government had hoped to extend access to British "products of the soil" to encourage French industrial development — something not exactly in keeping with physiocratic doctrine, then the Commercial Treaty of 1786, which provided for the admission of most goods under the rule of most favoured nation, succeeded in unleashing a far greater "flood" of raw materials than of the few industrial and manufactured goods governed by the terms of Article VI. Compared with figures for 1783 and 1784,[99] average imports of coal rose by 1.5 million to 4.5 million livres per year. Imports of crude metals, bullion excepted, quadrupled, ranging from 4.5 to 8.2 million livres a year. In this trade, which was virtually onesided, Great Britain ranked with Sweden as the major supplier of metal. Together, they provided more than half of all French imports of such goods. But while iron was the largest component of the Swedish trade, copper, lead and tin were the most important British contributions. Most dramatic was the copper trade which soared from less than 50,000 livres in 1783 to 4.5 million in 1788. French imports of British lead doubled, reaching 1.5 million that same year, those of iron grew eight fold to 630,000 in 1789, and tin rose by 60% to 1.1 million livres in 1788. During the second half of 1787, roughly a quarter of British exports to Normandy, Brittany and Guyenne (Bordeaux) consisted of coal and crude metals, and in Provence they equalled 60%. The last was the leading importer of copper, lead and tin, while Bordeaux received the most coal and Normandy the most iron.[100] Trade in coal, crude metals and other raw materials slipped in 1789, while imports of British foodstuffs surged to 24.5 million livres and shifted from emphasis on butter and salted meat to grain, reflecting the growing impact of agricultural disaster.

Disappointment with trade under Article VI was mutual. But despite British reduction of the duty on Portuguese wine before implementation of the new arrangements in May 1787, French wine exports fared better than the Chamber of Commerce of Normandy claimed, but not as well as Bordeaux and other regions had hoped. Wine shipments to Britain which had averaged 2.4 or 2.5 million livres now equalled 4.4 million — trade within the range of projections made on both sides of the Channel.[101] The apparent beneficiary

[98] Imports of British "products of the soil" between 1787 and 1789 averaged 36.4 million livres tournois, French exports to Great Britain, 33.5 million. AN F^{12} 251. For the difficulties with French trade statistics, see DAVID S. LANDES, "Statistics as a Source for the History of Economic Development in Western Europe: the Protostatistical Era", *The Dimensions of the Past. Materials, Problems and Opportunities for Quantitative Work in History* (New Haven, CT, 1972), p. 61-64.

[99] AN F^{12} 251, 1835.

[100] *Ibid.*

[101] Statistics drawn from AN F^{12} 242-45, 251 and 1835. Figures for 1790, 1791 and 1792, after which the treaty was denounced are either non-existent or partial, as are fi-

of this increase was Bordeaux, where the new treaty was viewed as a wise measure according to one tourist.[102] During the first year, Bordeaux sent 5.6 million livres of wine to Great Britain, but the value of this trade tumbled towards pre-treaty levels in the next two years. Arthur Young's observation that "wine, owing to the present failure of the crop, has increased in price 50%" and a 6.8 million livre drop in overall wine exports from that region in 1788 suggest that the waning of the British trade, which accounted for nearly a quarter of the total, may have had less to do with changes in British tastes than with the state of the Bordeaux wine industry.[103] Wine shipments from other regions, which never reached 300,000 livres, did not live up to expectations. Major contributors to this other trade were Burgundy and Champagne, but exports of both were confined mostly to bottled wine in 1787.[104] Thus, the French had little to show for their efforts to shield Champagne from unfair competition with German wines in the British market. Unlike wine, many regions, especially Picardy, Flanders and Aunis-Saintonge (La Rochelle), participated in the brandy trade. Yet neither side had expected the treaty to do much more than sanction existing traffic in that liquor. But even as contraband, brandy had recorded growth, going from 2.1 million livres in 1777 to 5.8 million in 1784. A month after ports opened, the French embassy reported the arrival of huge quantities of brandy and warned of glut – a warning remarkably similar to French complaints about the deluge of British textiles and equally pointless as far as trade was concerned.[105] Brandy went from 7.5 to 10.5 million livres between 1787 and 1789. With 53% of all exports going to Great Britain, brandy became the largest item in French trade under the new arrangements and more than made up for the lacklustre performance of wine after 1787. Indeed, brandy may have been substituted for wine. Languedoc had sent 255,000 livres

gures for 1783, 1784, 1785 and 1786. The years compared here are 1775-1777, 1783-1784, and 1787-1789. British projections of French trade under the Portuguese duty convert to 4.7 million livres per year, BT 5/3, fo. 128. Rayneval's projections before the deal was cut suggest that he anticipated trade between 2000 and 3500 tons a year or 4 to 7 million livres, while a critical mémoire drafted after signature predicted tonnage of 1500 a year. England would pay 1.4 million livres more than she had paid before the treaty, an estimate of value that was about half a million livres shy of actual trade. H? "Observations", MDA 136, fo. 301vo. A recent authority found that the wine trade went from 475 tons per year to 2127 tons in 1787 and then hovered around 1000 tons. Francis, p. 246.

[102] Arthur Young, *Travels in France* (Garden City, NY, 1969), p. 59.

[103] *Ibid.*, p. 409; AN F^{12} 251.

[104] AN F^{12} 250, 1834[a], 252. In 1787, Burgundy sent 80% of her bottled wine to Great Britain, while Champagne sent 10%. Trade in unbottled wine was negligible. Figures for 1788 and 1792 suggest continued participation in British trade by both. It should be added that during the first year, many regions sent small amounts of wine to Great Britain to test the market, and when it did not sell immediately, drew back.

[105] Barthélemy to Montmorin, 12 June 1787. CPA 560, fo. 168vo-69.

of wine to Great Britain in 1776, raising some French expectations that maybe the British would develop a preference for it, but in 1787 that region sent little wine but 407,000 livres of brandy.[106] Together wine and brandy accounted for 39 to 43% of French exports across the Channel. Trade in vinegar, which as one mémoire noted was a commodity of limited usage, showed little change despite the reduction in duty.[107]

Unlike the unilateral concessions on wine, brandy and vinegar, the British side of the bargain was reciprocal. And trade in hardware, cutlery and cabinetware failed to meet expectations on both sides of the Channel. The Foreign Ministry, whose research had indicated illicit trade in excess of 8 million livres, anticipated a flood of British merchandise once ports were opened. French statistics suggest that was not the case. Hardware, over half of which entered through Picardy and Flanders in 1787, averaged only 2.1 million livres or 4% of British trade to France. Exports of haberdashery, which Eden had deleted because it might include French silk products, plunged from 1.5 million in 1787 to little over a quarter of a million livres in 1789. Made-up goods, which included items from other favoured categories such as saddlery, fell from less than half a million livres to about the same level. Trade in buttons proved negligible. Sources suggest that the reasons for the poor British showing were economic and political. Arthur Young noted from Bordeaux that British hardware was so expensive it could not compete in that market, and British manufacturers grumbled that trade was little changed except French buyers were not as creditworthy as their agents had been before the treaty. Boulton and Watt had contracted to sell steam engines for the Marly water project only to have orders cancelled and payments delayed.[108] And in the hostile atmosphere following French humiliation at British hands during the Dutch crisis (1787), British merchants not only found their hardware encumbered with additional duties, but sometimes had difficulty disposing of goods when local officials refused to co-operate because shopkeepers might object.[109] Despite hopes placed in jewelry, plateware and furniture, French shipments of hardware, clocks and related goods between 1787 and 1789 amounted to less than a quarter million livres.[110]

In terms of the balance of trade, the unilateral British concession on wine,

[106] AN, F[12] 243, 251, 1835.

[107] H? "Observations", MDA 136, fo. 301vo. Regional figures for 1787 suggest that Bordeaux was the source of most if not all the vinegar trade to Great Britain. AN F[12] 1835.

[108] YOUNG, *Travels*, pp. 409, 411-12; JENNIFER TANN, *et al.*, "The International Diffusion of the Watt Engine, 1775-1825", *Economic History Review*, 2nd s. XXXI (1978), 555.

[109] L. LAMBERT to HAILES, 10 October 1788. FO 27/30, concerning the experiences of British merchants at Lyons.

[110] ARRAGON, "Vue Comparative", MDA 136, fo. 312vo.-13; AN F[12] 251, 1834[a].

brandy and vinegar in return for reciprocal admission of hardware was the most successful bargain France made during the negotiations. Trade in such products favoured France by 11 million livres on average. Even the British conception of this deal which included some cloth favoured France by a large margin. Despite some trappings, it reflected not the triumph of Physiocratic doctrine but cold calculation of market potential in terms of the balance of trade, a play on British greed which recognized the need to placate powerful British economic interests,[111] and knowledge that in hardware, France was giving the British nothing they did not already possess through contraband.[112] Similar reasoning lurked behind British decisions, especially on brandy. The French realized that admission of British hardware would hurt their "English style" industry, but hoped, perhaps mistakenly, that greater government aid would help it survive. The secretary to the French ambassador was a little more optimistic in early 1787, expressing confidence in the capacity of an "active and industrious nation whose efforts are going to be aided more than ever by the government" to reduce the British advantage in hardware over time.[113] One wonders whether ministerial change and mounting fiscal and political problems following the revelations of the Assembly of Notables may not have been as much a factor in the subsequent difficulties of "English style" hardware manufacture as the problems inherent in the transfer of coal-fuel technology coupled with the trauma of opening ports to a "flood" of cheap British merchandise — real or imagined.[114] Similarly, the French understood the terms of the Methuen Treaty as well as what had happened when that agreement had been violated in 1713. They were well aware of the probability that the British government would strip the Opposition of its best argument in Parliamentary debates on the treaty by reducing the Portuguese duty, nor were they naive about use of the treaty in other negotiations which they followed closely.[115] If doctrine guided the French in the ex-

[111] See DONAGHAY, "Ghosts", pp. 111-18, *passim*.

[112] RAYNEVAL to BARTHÉLEMY, 29 Octobre 1786. CPA 558, fo. 86, refuses to predict the balance of trade under the new treaty, writing instead, "but what I do know is that in the actual state of things, English contraband floods France, that there exists no coercive means to stop it".

[113] ARRAGON, "Vue Comparative", MDA 136, fo. 314.

[114] HARRIS, *Industry and Technology*, pp. 10-14.

[115] RENÉ STOURM, *Les Finances de l'Ancien Régime et de la Revolution* (Paris, 1885), pp. 11, 22-24, charges the French with failing to understand the Methuen Treaty or that the British would abide by its terms after signature of the Eden Treaty. C.A. BUTENVAL, *Précis Historique et Economique du Traité de Commerce* (Paris, 1869), pp. 82, 115-16, suggests that the advantages afforded French wines in the new treaty were "annulled" by British concessions to Spain and Portugal. Since trade in wine fell within the projections of both sides, it is hard to see how the concession was "annulled". Concerning French knowledge and comment on British negotiations with

change of hardware for wine, brandy and vinegar, it was "most favoured nation". The duty on hardware was the same as that on the goods of most favoured nations before the general prohibition in 1785 — a prohibition the French planned to lift. The wine concession also represented a modified version of the most favoured nation clause in Article VII which governed entry of most goods under the treaty — a modification rendered necessary by the Methuen Treaty which made universal application of that principle unacceptable to the British.[116]

Reciprocal agreements on glass and earthenware were very different in two respects: they represented internal exchanges of similar products, and they involved special arrangements for certain categories of goods. In both, France sought and secured deals favourable to large manufacturers with international reputations for excellence, but apparently harmful to some of the less concentrated branches of each industry. A similar process took place in Great Britain where the interests of the Boultons and the Wedgwoods received the most attention.[117] Indeed, negotiations on plate glass suggest that the British were less well prepared than generally assumed. But because the French were *perceived* as being philosophically biased against industry, the complaints of the *glass-makers* of Bordeaux were given more emphasis than they deserved.[118] French wine had no British counterpart, but French porcelain and plate glass could compete with or threaten parts of the British industries, and therein lay a problem that would haunt these and similar negotiations on cloth. To overcome this complication, the French adopted an all or nothing stance, pressing for reciprocal treatment of the whole industry in each case while the British tried in vain to either restrict their concession or skew it in favour of those sectors where they enjoyed the edge. The course of negotiations on glass and earthenware suggest that the notion that France yielded to every British demand or that they did not know what they were doing is dangerously flawed.[119] In terms of the balance of trade as well as French economic interests, the glass deal was the more successful. Prior to the treaty, glass exports to Great Britain were small or non-existent. Between 1787 and 1789, France sent an average of 515,000 livres or 29 to 42% of all plate glass and furniture exports to Great Britain. Plate glass from Paris made up the bulk of this trade. Such volume was much better than expected for a product that was risky to transport and burdened by additional duties in

other states and the probable reduction on Portuguese wines, see the Vergennes/Barthélemy correspondence, October-December 1786. CPA 558, *passim*.

[116] With reference to consideration of the principle of most favored nation, see RAYNEVAL, "Effets que produira le Principe suivant établi à l'égard de l'Angre", 1785. MDA 74, fo. 85-85vo.

[117] EHRMAN, *Pitt*, p. 491.

[118] DUMAS, p. 150.

[119] *Ibid.*, pp. 44, 110, 112.

Great Britain.[120] And just as "English style" hardware wilted once ports opened, Ravenhead suffered hard times while the Commercial Treaty was in force.[121] Each was involved in the difficult process of adapting technology from the other side, each was aided by its government, and in the end, each was sacrificed for a more important objective — completion of new commercial arrangements acceptable to both sides. French exports of glass-ware averaged 5000 livres during the first two years but rose to 13,000 livres in 1789. Partial figures for 1792 suggest further growth. Though this trade was miniscule, it represented a respectable showing for a sector that Rayneval had written off as expendable in 1785. By contrast, British trade in glassware, where they possessed the clear advantage, averaged 111,000 livres in 1787 and 1788 by some accounts. Other figures suggest this trade may have been no more than 55,000 livres a year. Whichever are used, French statistics indicate trade favourable to France by more than 400,000 livres per annum. If the glass trade favoured France, earthenware with exports averaging 1.3 million livres a year favoured Great Britain by a huge margin. Fayence formed the bulk of these shipments and more than a third of it poured into Upper Normandy in 1787. Only the porcelain trade which ranged from 82,000 to 252,000 livres per year between 1787 and 1789 favoured France.[122] Neither glass nor earthenware ranked among the most important goods each side had to offer, and in both cases, extension of trade in one branch could only be had at the expense of another... Thus the interests of the bottle makers of Bordeaux ceded not to fuzzy-headed doctrine but to the larger interest of extending trade in plate glass — an extension that might well preserve the technological lead for France; and those of the fayence makers of Normandy,[123] to a privileged monopoly at Sèvres, whose wares were so expensive that trade would be limited.

In the commercial negotiations of 1786, the French sought concessions on those products where their leadership was acknowledged: wine, brandy, linens, silks, plate glass and porcelain. That several of these industries were deeply troubled or the French lead threatened by the British provided extra incentive to make new arrangements. Where France and Great Britain excelled in different branches of the same industry, be it textiles, glass or earthenware, an internal bargain was possible. Thus the French envisaged British admission of their silk stuffs in return for a concession on silk gauze, cambrics for Manchester stuffs, plate glass for glassware, porcelain for fayence... Where there was no hope of reciprocity, as in the case of hardware, the French tried to pair it with some other industry whose product promised to

[120] H? "Observations". MDA 136, fo. 306-06vo.

[121] Harris, "Saint-Gobain", pp. 43-45.

[122] AN, F^{12} 251, 252, 1834[a], 1835.

[123] Upper Normandy sent 15,000 livres of "porcelain" to Great Britain in 1787. AN, F^{12} 1835.

balance trade. In the case of products of major importance, such as wine, the French tried to establish some form of linkage that would guarantee British fair play once ports opened. Article VI, then, embodied a series of separate bargains, some of which proved more favourable to France than others — separate bargains which taken as a whole turned out to be more evenly balanced than Anglo-French trade in general.[124] Internal memoranda suggest that the French were as well informed about the state of industry as their British counterparts. Indeed, their projections of the wine trade as well as miscalculation of hardware imports under Article VI were remarkably similar to British estimates. That the French negotiator assumed increased competition would force French industry, drained of initiative by too sheltered an existence, to "emulate" superior British techniques and reduce prices, or that more government aid would enable such industries to survive the legalization of British trade as well as the realization that high tariffs and prohibitions produced massive fraud that corrupted society, was quite typical of the French bureaucracy during the mid and late eighteenth century.[125] At the same time, the Foreign Ministry was conscious of British as well as domestic uneasiness over arrangements that would expand Anglo-French trade and extend French political influence — the primary objective as far as the Foreign Ministry was concerned. This awareness gave the French side of the negotiations a depth not present on the other side of the Channel, as the French searched for explanations of their conduct that would not excite British suspicions. If the King appeared "enlightened" in the process, so much the better. Physiocratic doctrine would appeal to the influential Shelburne, whose free-trade proclivities were well known to the Foreign Ministry, and his "pupil", William Pitt.[126] It would provide the government with an able propagandist, Du Pont de Nemours, who could fend off domestic critics without arousing the British. For historians, then, the French side of the Commercial Treaty of 1786 remains a minefield of semi-public documents designed to persuade, internal memoranda long overlooked or dispersed by departing personnel, and charges made in the wake of diplomatic disaster amidst fiscal and political collapse — charges sometimes mistaken for fact. For the course of French history after 1786, the *perception* of neglect and betrayal among French manufacturers may have been more important than reality. The same might be said of the role of "free trade" doctrine.

[124] The annual deficit in over-all Anglo-French trade between 1787 and 1789 averaged 27.4 million livres whereas that falling under Article VI was between 1 and 5 million livres.

[125] See PARKER, *op. cit., passim.*

[126] DONAGHAY, "Ghosts", p. 112.