

## Part IV

### Monticello

## Chapter 8.

The Room where it happened: the conflict between two paragons of the American Enlightenment

### Jefferson and Hamilton on public finance

Aaron Burr's character sings in a well-known show that only "two Virginians and an immigrant" were in the room where it happened (Miranda 2016). 'It' was a meeting between the two dominant figures in George Washington's first administration, Thomas Jefferson and Alexander Hamilton. There were only three executive departments: Treasury, State, and War. Hamilton was appointed Secretary to the Treasury at the start of the administration. Jefferson was appointed Secretary of State (which then included home as well as foreign policy) when he arrived back from France hoping to return to Monticello. Although Monticello was his spiritual home (and architectural fantasy), he was away from 1790 to the end of 1793, and from 1797 to 1809 first as Vice-President then as President).

Jefferson was accompanied by James Madison, who was not only his soulmate, but the House leader in the First Congress. The only eyewitness accounts are from Jefferson, the fuller one written long after Hamilton's death. Writing in 1818 about politics in 1790, Jefferson says

a preference of kingly, over republican, government, was evidently the favorite sentiment. an apostate I could not be; nor yet a hypocrite: and I found myself, for the most part, the only advocate on the republican side of the question, unless, among the guests, there chanced to be some member of that party from the legislative houses.

Hamilton's financial system had then past. it had two objects. 1st as a puzzle, to exclude

popular understanding & enquiry. 2dly as a machine for the corruption of the legislature....

it is well known that, during the war, the greatest difficulty we encountered was the want of money or means, to pay our souldiers who fought, or our farmers, manufacturers & merchants who furnished the necessary supplies of food & clothing for them. after the expedient of paper money had exhausted itself, certificates of debt were given to the individual creditors, with assurance of payment, so soon as the US. should be able. but the distresses of these people often obliged them to part with these for the half, the fifth, and even a tenth of their value; and Speculators had made a trade of couzening them from the holders, by the most fraudulent practices and persuasions that they would never be paid. in the bill for funding & paying these, Hamilton made no difference between the original holders, & the fraudulent purchasers of this paper....

when the trial of strength on these several efforts had indicated the form in which the bill would finally pass, this being known within doors [i.e., in Congress – IM] sooner than without, and especially than to those who were in distant parts of the Union, the base scramble began. couriers & relay horses by land, and swift sailing pilot boats by sea, were flying in all directions. active partners & agents were associated & employed in every state, town and country neighborhood, and this paper was bought up at 5/ and even as low as 2/ in the pound, before the holder knew that Congress had already provided for it's redemption at par....

this fiscal manœuvre is well known by the name of the Assumption. independantly of the debts of Congress, the states had, during the war, contracted separate and heavy debts;... and the more debt Hamilton could rake up, the more plunder for his mercenaries. this money, whether wisely or foolishly spent, was pretended to have been spent for general purposes, and ought therefore to be paid from the general purse.

After explaining that so rancorous was the debate in the House of Representatives on Hamilton's financial plans that states were threatening to secede, Jefferson continues:

Hamilton was in despair. as I was going to the President's one day, I met him in the street. he walked me backwards & forwards before the President's door for half an hour. he painted pathetically the temper into which the legislature had been wrought, the disgust of those who were called the Creditor states, the danger of the secession of their members, and the separation of the states. he observed that the members of the administration ought to act in concert, that tho' this question was not of my department, yet a common duty should make it a common concern; that the President was the center on which all administrative questions ultimately rested, and that all of us should rally around him, and support with joint efforts measures approved by him; and that the question having been lost by a small majority only, it was probable that an appeal from me to the judgment and discretion of some of my friends might effect a change in the vote, and the machine of government, now suspended, might be again set into motion. I told him that I was really a stranger to the whole subject;... I proposed to him however to dine with me the next day, and I would invite another friend or two, bring them into

conference together, and I thought it impossible that reasonable men, consulting together coolly, could fail, by some mutual sacrifices, of opinion, to form a compromise which was to save the union.....

it was finally agreed that, whatever importance had been attached to the rejection of this proposition [viz., Hamilton's financial plan] , the preservation of the union, & of concord among the states was more important, and that therefore it would be better that the vote of rejection should be rescinded, to effect which some members should change their votes. but it was observed that this pill would be peculiarly bitter to the Southern states, and that some concomitant measure should be adopted to sweeten it a little to them.

The sweetener, Jefferson says, was that

there had before been propositions to fix the seat of government either at Philadelphia, or at George town on the Patomac [now spelt Potomac – IM] ; and it was thought that by giving it to Philadelphia for ten years, and to George town permanently afterwards, this might, as an anodyne, calm in some degree the ferment which might be excited by the other measure alone. so two of the Patomac members ... agreed to change their votes, & Hamilton undertook to carry the other point. (All quotations are from "Thomas Jefferson's Explanations of the Three Volumes Bound in Marbled Paper (the so-called "Anas")", Feb. 4 1818 in *PTJ: RS* 12: 417-428. An earlier account by TJ, in *PTJ* 17: 205-08, is very similar but specifies that Madison was the third person in the room where it happened. Madison, as House floor leader in the First Congress, was essential to getting

the deal through. The earlier account makes no mention of Hamilton's "preference of kingly ... government", of which TJ will have learnt when he first read a transcription of Madison's *Notes*, some time after the meeting in the room where it happened).

Which is why the capital of the United States is Washington DC. Jefferson's story inspired Lin-Manuel Miranda's, but it exaggerated his own role, and was colored by hatred of Hamilton which had not yet formed on the night of the dinner party (Cooke 1970; Bowling 1971). We need to hear Hamilton's side of the story as well.

Alexander Hamilton's life was at least as remarkable as Jefferson's. Born in the West Indies in 1755, or maybe 1757, he was the son of a Scots father who soon deserted his bigamous relationship with Alexander's Anglo-French Huguenot mother, who died in 1768 leaving him penniless. A probate court described him and his brother as "obscene children born after the deceased person's divorce" (cited by Chernow 2004:25; but the translation in *PAH* 1: 1-2 has 'illegitimate', not 'obscene'). He became a clerk in a firm trading with New York. His first strokes of luck arrived in 1772, when he came under the wing of a liberal Scots Presbyterian minister, Hugh Knox. Soon after, his island of St Croix was struck by a devastating hurricane. Hamilton's description of it, published in the local paper, was so vivid that local worthies, probably led by Knox, raised a subscription to send Hamilton to America. He arrived in New York and Knox's introductions to well-placed Presbyterians soon took him to a school in Elizabethtown, New Jersey, from which he proceeded to King's College (now Columbia University) in New York City. He soon became an accomplished speaker and pamphleteer in the American cause. His first major publication, *The Farmer Refuted* (Hamilton 1775) makes a very

similar argument to Jefferson's *Summary View*: that the king of England was king of the American colonies only by a federal relationship, and that therefore the British Parliament had no right to legislate for them still less to coerce them. Unlike Jefferson however, he was an admirer of Hume:

Political writers (say a celebrated author) have established it as a maxim, that, in contriving any system of government, and fixing the several checks and controuls of the constitution, every man ought to be supposed a knave; and to have no other end in all his actions, but private interest. (Hamilton 1775: 94-5, citing Hume 1753, Essay 'Of the Independency of Parliament').

However, he did not graduate because the British closed the college at the start of the Revolutionary War. Although at least twice he protected Loyalists from patriotic New York City mobs, Hamilton threw himself into the revolutionary cause, becoming a captain in an artillery company he raised, and first coming to the notice of George Washington, commander of the Continental Army, during Washington's forced retreat from New York to New Jersey and Pennsylvania in 1776-7 (Chernow 2004: 78-84). Washington appointed him to his staff in March 1777, advancing his rank to lieutenant-colonel. Jefferson usually refers to him as Colo. Hamilton. He remained Washington's right-hand man for four years, often drafting orders in Washington's name. Although he frequently asked to be transferred to a field command, this only happened at the siege of the British in Yorktown in 1781, which led to the British surrender. Another Washington aide-de-camp was Lafayette, who managed to be an intimate friend of both Hamilton and Jefferson, as did Angelica Schuyler Church, who was Hamilton's sister-in-law and

a flirtatious friend of Jefferson in Paris, where her daughter was a schoolmate of Polly Jefferson (see, e.g., ASC to TJ Mar. 9. 1788; Jul. 7. 1788; Nov. 19 1788; TJ to ASC Feb. 17 1788; Jul. 27 1788. *PTJ* 12: 656; 13: 391; 14: 210-11; 14: 515; 12: 600; 13: 422; Wayson 2012).

.Hamilton was elected to the Continental Congress from New York in 1782. This reinforced the conviction that he had already formed under Washington, that the arrangements under the Articles of Confederation were hopeless. States refused to offer either funds or troops to the Continental Army. And a Congress where one state could veto action gave veto power to the most recalcitrant (usually Rhode Island). In Congress, Hamilton first met James Madison, who had similar nationalist ideas. He was also asked to negotiate with two marches on Congress by mutinous soldiers demanding their back pay. The second of these forced Congress to retreat from Philadelphia to New Jersey (Chernow 2004: 176-83). This convinced Hamilton that the national capital must be in a federal district which would not be part of any state.

Shays' Rebellion, about which Jefferson in Paris had written so insouciantly, was one of the triggers for the Constitutional Convention in Philadelphia, which sat from May to September 1787. No national force was able to suppress the rebellion, and the Massachusetts state militia could only do so with the help of a private militia. Hamilton was a delegate to the Constitutional Convention from New York. James Madison noted down in enormous detail what happened for the next four months. (Farrand 1911 Vol. 1) but the successful embargo on its proceedings until it finished hid all the drama from Jefferson. As we have seen, he did not receive Madison's confirmation of the outcome until December 1787. Nevertheless, what happened in the



Convention was to become central to the great schism between Jefferson and Hamilton that created the USA's first party system.

The New York delegation was deliberately split. The Governor, George Clinton, was as opposed to a strong national government as Hamilton was for it. He persuaded the legislature to send only three delegates, aiming to counter Hamilton's influence by ensuring that the other two were Anti-Federalists, as opponents of strong national government were known (Chernow 2004: 227). The delegations voted by state: one state, one vote. When all three New York delegates were present, therefore, New York's vote would always go against the nationalists Hamilton and Madison. (At this date they were called Federalists, as was their manifesto *The Federalist*. But I prefer the label 'nationalists' to distinguish them from the later anti-Jefferson Federalist Party, which Hamilton supported and Madison opposed).

Nevertheless, he persisted. On June 18 he made an all-day speech to the Convention which his biographer characterizes as "brilliant, courageous, and, in retrospect, completely daft" (Chernow 2004: 231). His experiences in the army and the Continental Congress had made him the extreme pro-executive figure in the Convention. According to Madison's *Notes*, Hamilton said that

The States have constantly shewn a disposition rather to regain the powers delegated by them than to part with more, or to give effect to what they had parted with. The ambition of their demagogues is known to hate the controul of the Genl. Government..... The general power whatever be its form if it preserves itself, must swallow up the State powers. Otherwise it will be swallowed up by them. It is agst. all the principles of a good

Government to vest the requisite powers in such a body as Congress. Two Sovereignities can not co-exist within the same limits. Giving powers to Congress must eventuate in a bad Government or in no Government.... In his private opinion he had no scruple in declaring, supported as he was by the opinions of so many of the wise & good, that the British Government was the best in the world: and that he doubted much whether any thing short of it would do in America. He hoped Gentlemen of different opinions would bear with him in this, and begged them to recollect the change of opinion on this subject which had taken place and was still going on.... As to the Executive, it seemed to be admitted that no good one could be established on Republican principles. Was not this giving up the merits of the question: for can there be a good Government without a good Executive. The English model was the only good one on this subject. The Hereditary interest of the King was so interwoven with that of the Nation, and his personal emoluments so great, that he was placed above the danger of being corrupted from abroad-and at the same time was both sufficiently independent and sufficiently controuled, to answer the purpose of the institution at home.... Let one branch of the Legislature hold their places for life or at least during good behaviour. Let the Executive also be for life.... It will be objected probably, that such an Executive will be an elective Monarch, and will give birth to the tumults which characterize that form of Government. He would reply that Monarch is an indefinite term. It marks not either the degree or duration of power. (Madison *Notes*, June 18 1787, cited from [https://avalon.law.yale.edu/18th\\_century/debates\\_618.asp](https://avalon.law.yale.edu/18th_century/debates_618.asp), accessed Jan. 29 2024).

He went on to propose that the lower house of Congress should be popularly elected for a three-year term and that “the Governour or president of each State shall be appointed by the General Government and shall have a negative upon the laws about to be passed in the State of which he is Governour or President” (Madison, *Notes*, as above).

Jefferson did not see this until, at earliest, fall 1790, when his nephew John F. Eppes made a copy of Madison’s *Notes* for him (Rakove 2016). From then on Jefferson saw Hamilton as the champion of English executive-dominated centralized government while he favored much more state autonomy. This undoubtedly colors Jefferson’s accounts of the room where it happened, quoted above. At the time of the meeting, Madison opposed Hamilton’s financial plan; Jefferson had not yet come to a view on it. Jefferson’s explicit opposition to Hamilton’s financial plans dates to no later than November 1790, when they submitted dueling memoranda to Washington about the bank plan (Jefferson’s is in *PTJ* 19: 275-80; Hamilton’s in *PAH* 8: 97-134). Although the actual French government was as centralized as Hamilton’s model (the ‘one and indivisible French Republic’ in the language proposed in Condorcet’s draft constitution and still in the French Constitution today), Jefferson managed to combine his idealization of the French Revolution with strong states’-rights oratory. His practice as President was more Hamiltonian.

The draft constitution was promulgated in September 1787. It required at least nine out of the thirteen states to ratify it. Because we know how the story ended, it is easy to forget that ratification was remarkably unlikely, *ex ante*. The legislature of Rhode Island was so Antifederalist that it did not take part at all. Therefore, ratification needed nine out of 12, not nine out of 13. The best account of how the Constitution was ratified against all odds is William

Riker's brilliant posthumous publication *The Strategy of Rhetoric* (Riker 1996). Two large and dubious states were Madison's Virginia and Hamilton's New York. Both convened ratifying conventions, which the Antifederalists seemed more likely to win. Hamilton therefore proposed a series of articles in the New York papers, aimed at persuading Antifederalist delegates to switch their votes.

These *Federalist* papers (for pedants, the title is *The Federalist*, and there are 85 individual papers) are now (though not at the time – Riker 1996: 27) regarded as the authoritative statement of the nationalist case. They appeared in twice- or thrice-weekly instalments in 1787-1788 and were then published as a book. The author was named as 'Publius', who was in fact three people – Hamilton, his fellow New Yorker John Jay, and Madison. The pseudonym harked back to the Roman republic, as discussed above. Publius Valerius Poplicola was one of the Roman senators who overthrew the monarchy. In 1787-8 Jefferson did not suspect Hamilton of being a monarchist. Madison may have done, but that did not hold him back from joining Hamilton's project.

Madison was only Hamilton's third choice when it became clear that illness and busyness would limit Jay's participation. He first tried to bring in Gouverneur Morris, whose ideology was closer to his than was Madison's; then William Duer, before finally turning to Madison when the series had already reached #7 (McLean 2003). Therefore Madison only had time to rework some notes which he had prepared for the Virginia delegation into what has become his most famous number, #10. We have argued elsewhere (McLean 2003; McLean and Peterson 2010) that Madison's *Federalist* #10 is overwhelmingly a product of the Scottish Enlightenment. It adapts

an argument from Adam Smith against David Hume. Hume had argued, tongue in cheek, that church establishment was a good thing because it protected the church (while enabling the state to keep an eye on it). Madison and Jefferson both detested that idea. Smith argued against Hume that, on the contrary, a multiplicity of sects was good for religion because each pastor had an incentive to tailor his offering to the beliefs of his flock. *Federalist* #10 adapts this argument to its central point that, whereas one faction may be a tyrannical majority in one state (looking at you, Rhode Island), it cannot be the majority in thirteen. This was one argument that Jefferson endorsed, in its political as well as its religious form.

Hamilton wrote more than half of *the Federalist* at great speed. Jay contributed only four numbers, and Madison had to drop out after #63 to go back to Virginia and defend the Constitution at its ratifying convention. Of Hamilton's economic numbers, #11 points to the internal gains from trade of a free market among the thirteen states. #12, analogously, to the gains from trade between American farmers and American industry. Hamilton says that the only viable taxation for the proposed federal government is excise, and, citing Necker on the proliferation of smuggling in France with its numerous internal trade barriers, says that only one trade boundary needs to be protected in America, viz., "the ATLANTIC COAST", which is most efficiently patrolled by a single federal tax agency. In #34 he insists that the need for federal taxation derives from the prevention, preparation, and paying for wars:

In the kingdom of Great Britain, where all the ostentatious apparatus of monarchy is to be provided for, not above a fifteenth part of the annual income of the nation is appropriated to the class of expenses last mentioned; the other fourteen fifteenths are absorbed in the

payment of the interest of debts contracted for carrying on the wars in which that country has been engaged, and in the maintenance of fleets and armies.

Federalist #35 reveals Hamilton's sophisticated economic thinking. The state should not rely exclusively on import duties:

Exorbitant duties on imported articles would beget a general spirit of smuggling; which is always prejudicial to the fair trader, and eventually to the revenue itself: they tend to render other classes of the community tributary, in an improper degree, to the manufacturing classes, to whom they give a premature monopoly of the markets; they sometimes force industry out of its more natural channels into others in which it flows with less advantage; and in the last place, they oppress the merchant, who is often obliged to pay them himself without any retribution from the consumer. When the demand is equal to the quantity of goods at market, the consumer generally pays the duty; but when the markets happen to be overstocked, a great proportion falls upon the merchant, and sometimes not only exhausts his profits, but breaks in upon his capital.

This must have come from Hamilton's reading of Quesnay, or Turgot, or Condorcet, or Smith. Unlike with Jefferson, we do not have a catalogue of Hamilton's library, but *Federalist* ##35-36 show that he had absorbed some free-trade thinking, and was aware of some of the fallacies on which Necker's regime rested. Hamilton's taxation plan proposed customs and excise duties on spirits, not general tariffs, as the main source of government revenue.

The series continues with one of Madison's most insightful numbers, #37. However, this chapter concerns not the great collaboration of Jefferson and Madison, but the great struggle between Jefferson and Madison's co-author, so with regret I have to pass over the numbers that display Madison's genius (but see, e.g., Koch 1950; Kernell 2003; Rakove 2017). From #65 to the end, Hamilton wrote every number, covering the Articles of the Constitution on the Senate, the Presidency, and the judiciary.

One of his trickiest tasks was to justify the Electoral College, which had been the subject of constant back-and-forth in the final month of the Convention. Hamilton had retreated to New York after his day-long speech on the merits of the British system, and returned to Philadelphia only just in time for the discussion of the Electoral College, and then to cast New York's vote in favor of the constitution, his Antifederalist New York colleagues having abandoned the scene.

As finally drafted, and in relevant part still in force, Article II Section 1 of the US Constitution mandates that the President and Vice-President be elected by an electoral college, comprising for each state the same number as its representatives in Congress (i.e., two Senators plus as many Representatives as its apportionment to population requires). The electors meet in their respective states, choose their candidates for President and Vice-President, and transmit their choice to "the Seat of Government of the United States, directed to the President of the Senate", viz., the Vice President, who is to open them in a joint session of both houses of Congress. This process happened most recently (at the time of writing) on January 6 2021.

The wording reflected a struggle between democracy and authority, as Hamilton explains in *Federalist* # 68:

The process of election affords a *moral certainty*, that the office of President will never fall to the lot of any man who is not in an eminent degree endowed with the requisite qualifications. Talents for low intrigue, and the little arts of popularity, may alone suffice to elevate a man to the first honors in a single State; but it will require other talents, and a different kind of merit, to establish him in the esteem and confidence of the whole Union, or of so considerable a portion of it as would be necessary to make him a successful candidate for the distinguished office of President of the United States. It will not be too strong to say, that there will be a constant probability of seeing the station filled by characters pre-eminent for ability and virtue. (My emphasis)

This is a remarkable passage. Never mind how good or bad a prediction it has proven to be. It is purely Condorcetian. Wrestling with the same issues in France, Condorcet, in all his successive over-elaborate electoral schemes (McLean and Hewitt 1994), provided for the indirect election of representatives. His reasoning derived from his jury theorem. At the bottom level, where the people elect their electors, the average voter's  $v$  (probability of being correct – see above) may not be much above 0.5, but with a sufficient majority  $h - k$ , they probably will make the right choice of elector. The electors will be better educated and more dispassionate, therefore each with higher  $v$ . There will therefore be what Condorcet calls a *certitude morale* that they have chosen the right person or people.



Hamilton's *moral certainty* is precisely Condorcet's *certitude morale*! There are three possibilities, although nos 1 and 2 are not mutually exclusive.

1. Madison, and/or some other delegate(s) who were present for the discussion of Article II Section 1 in September 1787, understood and applied Condorcet's argument.
2. Hamilton discovered Condorcet's argument and used it as an *ex post facto* justification of the scheme the delegates finally landed on.
3. Hamilton independently came to the same conclusion as Condorcet, viz. that the Electoral College would (or, more cynically, could be justified as if it would) yield a moral certainty that the electors would choose the right President.

In previous work (especially McLean and Urken 1992), we have discounted hypothesis #1 in relation to Madison. Condorcet's *Essai* (Condorcet 1785) passed across his desk for only nine days, after the conclusion of the Convention, before he handed it on, as Jefferson had requested, to Governor Edmund Randolph. And Madison refused Mazzei's request to translate one of Condorcet's schemes for a unicameral French assembly (the *New Haven Letters*) because it reminded him of the ultra-democratic single-chamber legislature of Pennsylvania. When Randolph spoke, he was usually the mouthpiece of Madison. He did speak independently on the Electoral College debate, but not on the Condorcetian aspect. Hamilton spoke to denounce the whole scheme but to say he would vote for it because it was better than nothing. Another influential speaker, Gouverneur Morris, did not visit Paris until after the Convention, and seems then to have had only slight knowledge of Condorcet, whom he spelt wrongly in his diary.

So we are left with Hypotheses 2 and 3. There are only three references to Condorcet in Hamilton's papers, all of them post-1788. Two comprise letters from William Short, Jefferson's successor in Paris, forwarding documents associated with Condorcet. The third is one of Hamilton's violent denunciations of Jefferson in 1802. He says of the Philadelphia Constitution and the Washington Administration: "Their works are regarded as nothing better than empty bubbles destined to be blown away by the mere breath of a disciple of *Turgot*; a pupil of *Condorcet*" (*PAH* 25: 501; the Short letters are at *PAH* 8: 416 and 439). This seems to dispose of Hypothesis 2. It seems therefore that Hamilton, like Jefferson, was an intuitive mathematician, and he came upon Condorcet's exact phrase by accident.

The first elections under the new Constitution took place in December 1788 and January 1789. George Washington was unanimously elected President, with John Adams winning the plurality of electoral votes for Vice-President. In the House, Madison was elected from Virginia, and became the floor manager of the Bill of Rights – the 12 draft amendments that some states had demanded as their condition for ratifying the constitution. Jefferson was of course still in Paris, following the election and making suggestions over the long delays of transatlantic correspondence. Washington was inaugurated on April 30 1789. In his first administration, there were only three executive departments, named State (for foreign and interior affairs), Treasury, and War. Hamilton became Secretary of the Treasury, and John Jay, who had been acting in the role under the Articles of Confederation, continued as provisional Secretary of State until Jefferson returned from France. Washington decided that Jay could not continue because then two of his three cabinet members would have been from New York state (Ferling 2013: 206); the only other qualified candidate was Jefferson.

## Public credit and a national bank

Hamilton hit the ground running. During the war he had already realized that the new country must be creditworthy. In 1781 he wrote at enormous length to Robert Morris, the new financial supremo of the rickety regime under the Articles, with a plan for restoring the public credit:

Tis by introducing order into our finances—by restoreing public credit—not by gaining battles, that we are finally to gain our object.

There follows a fully-fledged plan, based on Hamilton's reading of Hume's Essay "Of the Balance of Trade" and of Postlethwayt (1766). Hume was much the better economist, but unfortunately, Hamilton relied more on Postlethwayt, who was a derivative translator, not an original thinker. Before the classical economists (especially Smith and David Ricardo) cleared up confused thoughts on the money supply, people thought that the quantity of coin in circulation determined the wealth of a country. To remedy the extreme shortage of currency in America, and to prevent the proliferation of worthless credit notes, Hamilton proposes a National Bank:

The longer it is delayed, the more difficult it becomes; our affairs grow every day more relaxed and more involved; public credit hastens to a more irretrievable catastrophe; the means for executing the plan are exhausted in partial and temporary efforts.

The National Bank would

have a right to contract with the French Government for the supply of its fleets and armies in America, and to contract with Congress for the supply of their armies....

and

become responsible for the redemption of all the paper now emitted—the old at forty for one in thirty years, the new at par with gold and silver according to the terms promised by Congress in their resolution of March, 80 (AH to Robert Morris, Apr. 30 1781, *PAH* 2: 604-635; Chernow 2004: 156).

Here, already, is the germ of Hamilton's scheme of 1790-1791: to re-establish the credit of the USA, and to support it by a national bank. Hamilton spent the fall and winter of 1789-90 working, entirely on his own but with Hume and Postlethwayt at his elbow, on the astonishing *Report on Public Credit* (Hamilton 1790).

He opens by stating some “plain and undeniable truths”:

That exigencies are to be expected to occur, in the affairs of nations, in which there will be a necessity for borrowing.

That loans in times of public danger, especially from foreign war, are found an indispensable resource, even to the wealthiest of them.

And that in a country, which, like this, is possessed of little active wealth, or in other words, little monied capital, the necessity for that resource, must, in such emergencies, be proportionably urgent.

And as on the one hand, the necessity for borrowing in particular emergencies cannot be doubted, so on the other, it is equally evident, that to be able to borrow upon good terms, it is essential that the credit of a nation should be well established.

What then would be needed to enable the USA to borrow upon good terms? Hamilton has two proposals, both painful: to repay Revolutionary War debt, at par, to its current holders, and to assume (take on) the debts of the states. As to the first painful point, Hamilton writes:

whether a discrimination ought not to be made between original holders of the public securities, and present possessors, by purchase[?]. Those who advocate a discrimination are for making a full provision for the securities of the former, at their nominal value; but contend, that the latter ought to receive no more than the cost to them, and the interest: And the idea is sometimes suggested of making good the difference to the primitive possessor.

In favor of this scheme, it is alledged, that it would be unreasonable to pay twenty shillings in the pound, to one who had not given more for it than three or four. And it is added, that it would be hard to aggravate the misfortune of the first owner, who, probably

through necessity, parted with his property at so great a loss, by obliging him to contribute to the profit of the person, who had speculated on his distresses.

The Secretary, after the most mature reflection on the force of this argument, is induced to reject the doctrine it contains, as equally unjust and impolitic, as highly injurious, even to the original holders of public securities; as ruinous to public credit.

And as to the second:

The Secretary, after mature reflection on this point, entertains a full conviction, that an assumption of the debts of the particular states by the union, and a like provision for them, as for those of the union, will be a measure of sound policy and substantial justice.

It would, in the opinion of the Secretary, contribute, in an eminent degree, to an orderly, stable and satisfactory arrangement of the national finances. (Hamilton 1790 in *PAH* 6 65-166, quoted at pp. 67, 73, 78).

The Report is clear and pugnacious. It tackles the most difficult issues head-on. And it shows that Hamilton's economic thought had advanced well beyond Postlethwayt and his own 1781 proposal: for instance in his new understanding that US Federal debt would itself circulate as a form of credit in private markets, if and only if it was credible.

But, as Jefferson reports, it provoked ferocious opposition in three overlapping camps: those who felt that it was unfair to original holders of paper who had sold it at a discount; those, including Jefferson, who saw it as an opportunity for blatant and corrupt insider dealing; and those from states which had paid their debts and objected to assuming the debts of more improvident states (see also Bowling 1971). To prevent the loss of the whole scheme, Hamilton did the deal in the room where it happened, to switch enough votes to get it through.

It is impossible to guess what Jefferson thought of the deal when he negotiated it. He had not yet taken office when the Report was published. It was the third man in the room where it happened, James Madison, who had up till then led the floor opposition to the Hamilton plan in the House of Representatives (Ferling 2013: 208). Jefferson's accounts are not contemporaneous, and are written after he had come to detest Hamilton. In June 1790, in the room where it happened, Jefferson had not yet seen Madison's *Notes*. In her careful account, Bilder (2015, 202-14) guesses that he started to read them in fall 1790. He then commissioned his nephew Francis Eppes to make an illicit copy (*PTJ* 17: 581 – 592). Eppes did so, slowly, incompletely, and illegibly. Jefferson had certainly read the section on the powers of Congress to incorporate a bank when he objected to Hamilton's follow-up proposal of a national bank in 1791.

Dangerously, his report to Washington saying that Congress had no power to incorporate a bank can only have come from reading the *Notes*, and Washington, who held the official record of the Convention over which he had presided, must have realized that (*PTJ* 19: 275-8; Bilder 2015: 207). Despite Jefferson, the Bank plan passed. His hatred of Hamilton became all-consuming as he compiled a series of anti-Hamilton anecdotes (later known as the 'Anas': *PTJ: RS* 12: 417-428). He must by then have read Madison's note of Hamilton's speech of June 18, and had

decided that Hamilton was an ‘Angloman’ (TJ’s coinage: *PTJ* 12: 351) and a monarchist, while he and his friends were true defenders of the American (and French) republican tradition. Jefferson resigned from Washington’s cabinet at the end of 1793, and for the next 20 years elections were fought on clear party lines between Federalists and Democratic-Republicans. Madison’s alliance with Hamilton had already ended, but he remained Jefferson’s right-hand man as he had been since the fight for the Virginia Declaration of Religious Freedom. .

The elections of 1796 and 1800 were to prove that the Electoral College did not work as planned. Hamilton’s denunciation of it at the Convention was truer to the outcome than was his Condorcetian defense of it in *Federalist* 68. In 1796 Jefferson was elected Vice-President to John Adams, who now represented the opposite party. The useful outcome of that was Jefferson’s *Manual of Parliamentary Practice*, discussed below. But as a practical arrangement it did not work.

In 1800 Jefferson was elected President by the House on the 36<sup>th</sup> ballot. He had tied in the Electoral College with his own running mate Aaron Burr, which threw the election into the House under Article II Section 1. Hamilton, who had come to loathe Adams and Burr as much as he loathed Jefferson, broke the ensuing deadlock by switching votes from Burr to Jefferson. In 1804 two things happened: Burr killed Hamilton in a duel, and the 12<sup>th</sup> Amendment was ratified, which prevents any repetition of the chaos of 1800.

To return to the big picture: the fascinating thing about the room where it happened is that Hamilton and Jefferson were both right. Hamilton had mastered public finance; Jefferson had



insights that are now called public choice. Hamilton knew that the British state could raise money at lower interest than the French because it had made a credible commitment not to default on state debt, and by Hamilton's time it had established a Sinking Fund (which Hamilton tried to replicate) to back up that credibility. (For 18<sup>th</sup>-century interest rates and state credibility see, e.g., Stasavage 2003). Jefferson's story that original holders of war debt were cheated by flagrant insider dealing is corroborated by other sources. He knew from Condorcet's denunciation of Necker (above) that insider trading and high finance went together. They are two sides of the same coin. There is no evidence that Hamilton himself was an inside trader: he is said to have owned no securities when appointed Secretary to the Treasury (Ferling 2013: 204). But the scope for fraud was immense.

Jefferson's final act as Secretary of State was to produce the final draft of a Report on Commerce which he had been drafting for more than two years. There he expresses his support for free trade in a way that echoes Smith and Turgot:

Instead of embarrassing Commerce under piles of regulating Laws, Duties, and Prohibitions, could it be relieved from all it's shackles in all parts of the world, could every Country be employed in producing that which Nature has best fitted it to produce, and each be free to exchange with others mutual surplusses, for mutual Wants, the greatest mass possible would then be produced of those Things which contribute to human life and human happiness; the numbers of mankind would be increased, and their condition bettered.

Would even a single Nation begin with the United States this System of free Commerce, it would be advisable to begin it with that nation; since it is one by one only, that it can be extended to all. (TJ, *Report on Commerce*, final version Dec. 1793, *PTJ* 27: 567-578, quoted at p. 574. For context see the introduction to these documents in *PTJ* 27: 532-535; Peterson 1965; Ben-Atar 1993; Elkins and McKittrick 1995).

It is fair to add that neither Jefferson nor Hamilton embraced the whole of Turgot, Condorcet, and Smith. Rather, they came to represent the economic interests of their parties' regions of the USA. In 1793, Jefferson's commercial policy was to seek free trade with France and shun British mercantilism. Hamilton's policy was more or less the opposite. The Hamiltonian Federalists' base was New England, which had poor farmland but was strong in trading and manufacturing. The Jeffersonian Republicans' base was in the South, which had better land for the primary production of tobacco, wheat, and slave children. Therefore, Federalist policy came to emphasize protection of American industry, while Republican policy emphasized free trade in agricultural products. Whether Jefferson was consistent, especially as the President responsible for the Louisiana Purchase and later for the Embargo of foreign produce in 1807-09 is beyond the scope of this book (but see, e.g., Malone 1974; Irwin 2005).

### Apportionment

One final episode from the first Washington administration is worth recording, because it confirms that Jefferson and Hamilton were both intuitive mathematicians. After the first national census of 1790, the administration had to apportion House seats to each state according to the rule given in the Constitution:

Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers.... The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative (US Constitution Art. I Section 2 Clause 3).

But how to calculate this apportionment? The two lions below Washington's throne both submitted a method. Hamilton wrote:

It is inferred from the provisions of the Act—That the following process has been pursued.

I The aggregate numbers of the United States are divided by 30000, which gives the total number of representatives, or 120.

II This number is apportioned among the several states by the following rule—As the aggregate numbers of the United States are to the total number of representatives found as above, so are the particular numbers of each state to the number of representatives of such state. But

III As this second process leaves a residue of Eight out of the 120 members unapportioned, these are distributed among those states which upon that second process have the largest fractions or remainders.

As a ratio of 30000 appears to have been adopted as a guide—The Question is whether this ratio ought to have been applied, in the first instance, to the aggregate numbers of the United States or to the particular numbers of each state.

I am of opinion that either of these courses might have been constitutionally pursued (AH to Washington Apr. 4 1792: *PAH* 11: 228)

The Hamilton (largest-remainder) method can be summarized as follows. First, given the size of the House and the vector of populations for each state  $i$ , establish the quota  $q_i$  for each state: that is, the exact number of seats it deserves under the rule. Where  $P$  is total population,  $p_i$  is the population of state  $i$ , and  $h$  is the size of the House, the Hamilton quota formula is given by:

$$q_i = (p_i / P)h = p_i / (P/h)$$

This quota will never in practice be a whole number. Hamilton's method first gives each state the whole-number part of its quota, then allocates the remaining seats to states in descending order of the fractional number after the decimal point in their quotas.

Jefferson insisted that the bill passed by Congress was unconstitutional:

The 1st member of the clause of the constitution above cited is express that representatives shall be apportioned among the several states according to their respective numbers. That is to say, they shall be apportioned by some common ratio. For proportion, and ratio, are equivalent words; and it is the definition of proportion among numbers, that they have a ratio common to all, or in other words a common divisor. Now, trial will shew that there is no common ratio, or divisor, which, applied to the numbers of each state, will give to them the number of representatives allotted in this bill.....

Another member of the clause of the constitution, which has been cited, says 'the number of representatives shall not exceed one for every 30,000, but each state shall have at least one representative.' This last phrase proves that it had in contemplation that all fractions, or numbers below the common ratio, were to be unrepresented; and it provides specially that in the case of a state whose whole number shall be below the common ratio, one representative shall be given to it. This is the single instance where it allows representation to any smaller number than the common ratio, and by providing specially for it in this, shews it was understood that, without special provision, the smaller number would, in this case, be involved in the general principle (TJ to Washington, Apr. 4 1792; *PTJ* 23: 370-376).

Jefferson was the first mathematician to propose a common *divisor* rather than a common *quota* for apportionment methods. Both the Hamilton and the Jefferson rule were reinvented independently by Europeans devising algorithms to allocate seats to parties in list systems of proportional representation. The Hamilton rule is the *largest-remainder* rule, and the Jefferson

rule is the d'Hondt rule. These identities were unknown until the brilliant work of Balinski and Young (2001; McLean and Mortimore 1992) and are still largely unknown to politicians and political scientists who work on proportional representation. In honor of intellectual priority, the name d'Hondt really ought to disappear from comparative political science.

The subsequent history of apportionment in the USA is a fascinating rabbit-hole. Those who wish to explore it need only read Balinski and Young 2001. The essentials for this book are:

- A property of the Jefferson rule is that, by ignoring all fractions after dividing the common divisor into each state population, it systematically biases the result towards large units, sometimes giving large states more seats than the upper bound of their quota.
- In 1792, Virginia was the largest state. For a house of size 105, its quota was 18.3, and the Hamilton method gave it 18 seats. The Jefferson method gave it 19 seats.
- President Washington (of Virginia), advised by Jefferson, Madison, and Randolph (all of Virginia), vetoed the bill and mandated the use of the Jefferson method. This goes against Jefferson's later belief that Washington had been completely captured by Hamilton.
- Other divisor methods are more neutral between large and small units. The best was devised by Daniel Webster (Balinski and Young 2001: 23-35) and, independently, for PR allocations, by André Sainte-Laguë in 1910. Again, for priority, the latter should be renamed the Webster rule.
- All quota methods are subject to the *Alabama paradox*, first discovered in 1881, whereby a state's apportionment may *drop* when house size *increases*. All quota methods

including Hamilton's are *non-monotonic*. (Balinski and Young 2001: 38 and Appendix A).

As with the Report on Public Credit, so with apportionment, the most intriguing fact is that Jefferson's and Hamilton's arguments, although incompatible, were both sound. They remain two paragons of the American Enlightenment.