

## The Forerunners: Franklin and Washington

The Revolutionary War and the Constitutional Convention were some of the most thorough processes of education and growth a nation has known in the epoch of the Consciousness Soul. For minds that solely evaluate results with the hindsight of more than two centuries, much could be felt wanting. They could bemoan all the injustices that were not addressed, or everything that was not achieved, as if a social change could achieve everything at once. If we truly look at the change undergone by the national consciousness, something enormous and unique will emerge.

In my previous work *Legends and Stories for a Compassionate America*, the symptomatic approach to history has brought the focus on two truly unique individualities and their collaboration in molding unique historical events and circumstances. We will review briefly some of the outstanding personality traits and historical circumstances before attempting to look at the deeper dimension of the two individuals.

### British Imperialism

The relationship of the American colonies to the crown was one of economic domination and extraction of resources. On the surface the American Revolution has been imputed to the Stamp Act, the Townsend Acts, and the Navigation Acts. However, these were merely the last straw of a systematic economic exploitation.

In effect the Council of Trade, later Board of Trade, had been established in 1660, with the goal of regulating most economic transactions. All American produce could only be exported to Britain, or through Britain, via established monopolies which made very large profits. Imports to the colonies were subject to duties. The balance of trade generated an estimated 30 million pounds in England's favor between 1770 and 1773 alone.<sup>1</sup> Much of English political elites depended on the largesse of the economic monopolies, which they supported.

In order to maintain this economic advantage, the Board of Trade repeatedly prohibited manufacturing activities, criminalized smuggling, and curtailed territorial expansion. Searches without warrant and trials without jury were commonplace.

In such a system of economic injustice slavery was a natural outgrowth. It entered full force with the cultivation of tobacco, for which the Virginia Company obtained monopoly rights of importation to England and Ireland. England extended its slave market after prevailing over the Dutch. The slave trade in the southern colonies was regulated by English laws.

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<sup>1</sup> Douglas Southall Freeman, *Washington: An Abridgment of the 7-Volume Opus*, 154.

Against this background stood two towering figures: Benjamin Franklin and George Washington.

### **Benjamin Franklin, the First American**

The eighteenth century was that of the growing separation between science and faith. Franklin (1706–1790) was an exception, not in the quality of a straggler, but in that of a trailblazer. When he spoke of philosophy, he meant what applied to understanding of external nature as well as human nature, moral and spiritual. And his commitment to knowledge ranged from the philosophical to the practical.

Much of the maturation of Franklin's mind occurred in his twenties. As an alert individual of his time he could not simply accept faith and disregard science. In fact this meant doubting the truth of the Bible from age fifteen to foregoing church attendance at twenty-four. Two years earlier he had written his *Articles of Belief and Acts of Religion*, shortly followed by a resolve to form a "United Party for Virtue."

Franklin purported to balance the role of reason, subordinating right action to right thinking, with that of a dispassionate self-analysis. He saw that reason could be led astray by passion, ambition, and pride, and that only a determined effort at self-knowledge could counter this danger. This is what he did in devising to follow thirteen virtues (temperance, order, silence, resolution, frugality, industry, sincerity, justice, moderation, cleanliness, tranquility, chastity, and humility) rigorously in weekly succession; each virtue was thus practiced four times a year. To these he added experiments in abstaining from meat and alcohol, a very unusual interest for an individual of the eighteenth century.

We could say that Franklin strove to be a scientist of inner development rather than relying on faith alone. He had devised a path that no longer rested on dogma, but rather on individual consciousness and effort. It was thus normal that Franklin found his home in the old, though quite diminished, esoteric path of Freemasonry, rather than in a church. He became the Grand Master of Philadelphia's Masonic Lodge in 1834.

Franklin's life came to a turning point when in London, in the company of radical free thinkers, he set out to prove "in a hundred axioms that he knew neither sin, nor liberty, nor personal immortality. God was only permitted to exist as a machine." He felt this had been his personal abyss, and soon after an attack of pleurisy brought him close to death. He gained a concrete experience of the spirit instead, about which he wrote: "I suffered a good deal, gave up the point in my mind, and was rather disappointed when I found myself recovering; regretting in some degree that I must now some time or other have all that disagreeable work to do over again." No doubt this pivotal experience allowed him to write shortly after his own epitaph, in which he said about his own body that "it will (as he believ'd) Appear once More in a New

and More Elegant Edition Revised and Corrected by the Author." All in all extraordinary

### Benjamin Franklin's 16 X 16 Magic Square

A very interesting 16x16 magic square created by Benjamin Franklin is the one you see below.

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 200 | 217 | 232 | 249 | 8   | 25  | 40  | 57  | 72  | 89  | 104 | 121 | 136 | 153 | 168 | 185 |
| 58  | 39  | 26  | 7   | 250 | 231 | 218 | 199 | 186 | 167 | 154 | 135 | 122 | 103 | 90  | 71  |
| 198 | 219 | 238 | 251 | 6   | 27  | 38  | 59  | 70  | 91  | 102 | 123 | 134 | 155 | 166 | 187 |
| 60  | 37  | 28  | 5   | 252 | 229 | 220 | 197 | 188 | 165 | 156 | 133 | 124 | 101 | 92  | 69  |
| 201 | 216 | 233 | 248 | 9   | 24  | 41  | 56  | 73  | 88  | 105 | 120 | 137 | 152 | 169 | 184 |
| 55  | 42  | 23  | 10  | 247 | 234 | 215 | 202 | 183 | 170 | 151 | 138 | 119 | 106 | 87  | 74  |
| 203 | 214 | 235 | 246 | 11  | 22  | 43  | 54  | 75  | 86  | 107 | 118 | 139 | 150 | 171 | 182 |
| 53  | 44  | 21  | 12  | 245 | 236 | 213 | 204 | 181 | 172 | 149 | 140 | 117 | 108 | 85  | 76  |
| 205 | 212 | 237 | 244 | 13  | 20  | 45  | 52  | 77  | 84  | 109 | 116 | 141 | 148 | 173 | 180 |
| 51  | 46  | 19  | 14  | 243 | 238 | 211 | 206 | 179 | 174 | 147 | 142 | 115 | 110 | 83  | 78  |
| 207 | 210 | 239 | 242 | 15  | 18  | 47  | 50  | 79  | 82  | 111 | 114 | 143 | 146 | 175 | 178 |
| 49  | 48  | 17  | 16  | 241 | 240 | 209 | 208 | 177 | 176 | 145 | 144 | 113 | 112 | 81  | 80  |
| 196 | 221 | 228 | 253 | 4   | 29  | 36  | 61  | 68  | 93  | 100 | 125 | 132 | 157 | 164 | 189 |
| 82  | 35  | 30  | 3   | 254 | 227 | 222 | 195 | 190 | 163 | 158 | 131 | 126 | 99  | 94  | 67  |
| 194 | 223 | 226 | 255 | 2   | 31  | 34  | 63  | 66  | 95  | 98  | 127 | 130 | 159 | 162 | 191 |
| 64  | 33  | 32  | 1   | 256 | 225 | 224 | 193 | 192 | 161 | 160 | 129 | 128 | 97  | 96  | 65  |

Although the diagonals of this square do not add up to 2056, there are many other constant properties:

- All the rows and columns sum to the number 2056
- Half rows and half columns sum to 1028.
- The sixteen entries in every 4x4 sub-square sum to 2056.
- the 9 bent diagonals (of 16 cells each) going from top to bottom, 9 from bottom to top, 9 from right to left, 9 from left to right sum to 2056. One example is given for each of the four directions in the square.

See <https://www.math.wichita.edu/~richardson/franklin.html> for more.

utterances for an eighteenth-century American, or rather soon to be American.

In quick succession Franklin's genius developed in one direction after another. In his youth he formed the Junto, or Leather Apron Club, an association in which participants debated questions of science, philosophy, politics, and business.

In the realm of science Franklin delivered insights in that which would be so important in America's future: electricity. To him we owe the terms positive and negative fields. At that time still in the purely speculative field, it may be astonishing to realize that Franklin did with ease what only trained mathematicians could: the so-called magic squares, series of seemingly random sequences of number in a grid of 8 rows by 8 columns. The sum of the numbers on each column, plus rows and even diagonals had to be constant. Not only was this done with ease by Franklin; he could also replicate the feat in 16 X 16 squares. Moreover in the technical/artistic field we owe Franklin the development of the harmonium, a bit unwieldy as an instrument maybe, but one still used for its unique sonority.

As much as he could have excelled in purely speculative pursuits, Franklin had a gift for anything of a practical and social nature as well.

Through the agency of the Junto, Franklin developed the Philadelphia Lending Library and the American Philosophical Society. Around the problem of fire alone he developed a series of innovations, such as the stove that bears his name and the lightning rod. On a social level these were followed by the Union Fire Company, and by the revolutionary idea of the Union Fire Insurance Company, through which he could reach an even larger population.

However, most of all Franklin excelled in the wit of his word and in the promotion of ideas through the printing press, his chosen vocation. It was through his *Poor Richard's Almanac* that Franklin's wisdom found a way into the colonists' hearts. Here was condensed wisdom, which regular doses of humor made easier to remember and assimilate. It was Franklin's declared intention to "leave a strong impression on the memory of young persons."<sup>2</sup>

In his early forties Franklin rose to national and international prominence, working patiently to sow seeds and wait for their time to sprout forth, relinquishing paternity of his ideas in the best of the spirit of Freemasonry.

After traveling to London and earnestly trying to see himself as a man of a larger empire, he gradually realized the obstacles and shackles laid by British imperialism upon its colonies. He became a "reluctant incendiary," protected as he was by a growing reputation, popularity, and the weapon of his humor.

From his pen emerged subtle but scathing criticisms of British imperialism. The first, timid attempt came through his 1751 *Observations Concerning the*

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<sup>2</sup> Esmond Wright, ed., *Benjamin Franklin: His Life as He Wrote It*, 102.

*Increase of Mankind, Peopling of the Countries.* Other, stronger criticism followed, at times under the disguise of a pen-name, such as in *An Edict of the King of Prussia*, and *Rules by Which A Great Empire May Be Reduced to a Small One*.

### **Franklin the Scientist**

Quite apart from Franklin's most well-known scientific contributions, here are some other useful or amusing ones:

#### **Bifocals**

Franklin suffered from presbyopia. In August of 1784 he wrote to his friend George Whatley, that he was "happy in the invention of double spectacles, which serving for distant objects as well as near ones, make my eyes as useful to me as ever they were."

#### **Mapping the Gulf Stream**

Franklin sailed eight times across the Atlantic Ocean. He was curious as to why the journey eastward was faster than the westward one. He interested himself in the matter and was the first to map the Gulf Stream.

#### **Swim Fins**

At age 11 Franklin devised a pair of swim fins that attached to one's hands. He wrote in March 1773: "When a youth, I made two oval pallets, each about ten inches long, and six broad, with a hole for the thumb, in order to retain it fast in the palm of my hand. They much resembled a painter's pallets. In swimming I pushed the edges of these forward, and I struck the water with their flat surfaces as I drew them back. I remember I swam faster by means of these pallets, but they fatigued my wrists."

#### **Flexible Urinary Catheter**

John, Franklin's older brother, suffered from kidney stones. Franklin helped ease some of the discomfort and pain caused by rigid catheters, by devising one with a flexible tube.

#### **Odometer**

The concept of the odometer was not new. Franklin, however, designed his own version. He attached a device near the wheels of a carriage. The device registered the distance traveled by calculating the circumference of the wheel and the number of revolutions required to travel a mile.

From: <https://www.ushistory.org/franklin//science/>

For the map see [https://www.ushistory.org/franklin//science/gulf\\_1.jpg](https://www.ushistory.org/franklin//science/gulf_1.jpg)

The second document, which listed in twenty points the complaints of the colonists against the mother country, has been considered a forerunner of the Declaration of Independence, in whose drafting Franklin played an important role. At this point Franklin had seen in spirit everything that would lead to American independence and had quietly sown the seeds in powerfully measured words.

When the Revolutionary War broke out, Franklin continued his message in France, supporting diplomatically with popular endorsement the campaign of education that Washington was waging on the battlefield. In the schooling of French diplomacy Franklin evolved a new style of international relations focused on economic reciprocity, thus prevailing against other prominent Americans still mired in the habits of delicate political alliances and balances of power.

### **George Washington**

Once the message of independence had been spread, it was George Washington, practically a generation younger than Franklin, who, more than anybody else, carried it further as the commander-in-chief. It was not just the conduct of war that fell into his hands, but also the embodiment of a new role.

If the idea of America was to have a chance, Washington had to be a new kind of general. This he did by molding a new identity among soldiers who saw themselves as belonging primarily to one of the colonies, and by taking directions and support from a weak and divided Continental Congress. In the process he had to accept inefficient and insufficient support to his military campaigns, consequent hardships, plus internal divisions. For a man of his stature this meant foregoing the temptation to use his personal charisma or imposing his will, all in service of an idea that had not been tested. At a time in which Napoleon would crown himself emperor, Washington was able to withstand the temptation offered to him to be crowned as king in 1782 by Colonel Lewis Nicola in the name of the army. The effort of education toward the embodiment of new cultural values had to be continuously repeated.

George Washington stood out in contrast with Franklin with an unusually strong physical constitution, inured to prolonged effort, which exposed him to brushes with illness and near confrontations with death. He too joined Freemasonry early on, and it provided him with a code of honor in all his deeds. This spiritual rooting was also echoed in an active life of prayer, and deep spiritual leanings.

Whereas Franklin had to overcome naivete, Washington's test was that of a very strong will and ambition, which he exerted in the life of a Southern planter and as an officer in the colonial army. Not surprisingly Washington's maturation came from the realization of the nature of imperial economics.

As a Southern planter he knew what it meant to be indebted through a captive tobacco market to the British monopolies. And as a member of the

Virginia House of Burgesses, twice dissolved during his tenure, he knew how precarious was the colonists' hold on power. In response he joined the colonies' non-importation agreements as a reaction to the Stamp Act, which imposed a tax on printed materials.

### **George Washington, Entrepreneur**

Washington was a forerunner of what we would call today organic farming and micro-enterprises:

#### Organic Farming

Washington's first step was to abandon tobacco, the most common cash crop in Virginia. He stopped because of taxes and duties leveraged on it, and because tobacco monoculture was hurting Mount Vernon's soil. He experimented with as many as sixty different grain crops before choosing wheat as his new mainstay.

Washington recognized the value of compost to enrich the soil. He also experimented with a seven-year crop rotation plan. The rotation, in tandem with the compost practices, greatly improved the long-term productivity of the farms.

Since the farms at Mount Vernon were not adequately prepared for the new grain-based system, Washington set about constructing three major new barn complexes, one to serve the Ferry and French's farms, a second at Dogue Run, and a third at River Farm.

#### Micro-enterprises

Mount Vernon ground the grain into flour in a newly minted automated grist mill. It was packaged and branded "G. Washington". It was sold throughout North America, the Caribbean, and Britain. And much of it sailed aboard his own oceangoing sailboats.

The wheat fields supported a profitable whiskey distillery enterprise, whose average 11,000 gallons annual production was one of the largest in America.

Mount Vernon's own textile industry wove the nets for its own fishing enterprise. During the annual spring breeding runs of shad and herring, Washington harvested a two-mile-wide river section on the Potomac for weeks with its own fishing fleet of small boats. In a good year it would catch about 1.5 million. The catch was gutted, salted, and packed into barrels. What could not be used of the fish was recycled as fertilizer for the crops.

In his lands at Mount Vernon, Washington gradually turned away from tobacco monoculture toward an integrated system of crops and rotations to which he

added micro-enterprises, showing that he knew political independence to be linked to a degree of economic self-sufficiency.

Learning to temper his will, Washington first led the Continental Army to success in the War of Independence, then continued to model the unprecedented role of a national president. Here he guarded the nation against the dangers coming from France in the form of its revolution and from England in the continuing reality of a world economy dominated by English economic and financial channels.

When the 1793 war erupted between France and England, Washington charted a course of strict neutrality that was crucial to the destiny of the new nation. On one hand he had to withstand the alluring appeal of the French Revolution upon the minds of the young nation; on the other he made necessary concessions to England in the Jay Treaty, which were unpopular but allowed the nation to preserve peace and disentangle itself from the European dynamics of power, which would have weakened it.

As he did with the nations, so did Washington find a middle ground between key individuals in his administration. A foremost example was that of the antagonism between Secretary of State Thomas Jefferson and Secretary of the Treasury Alexander Hamilton . The former was an idealist who succumbed to the appeal of French revolutionaries and a strong supporter of states' rights; the latter a sober and ambitious realist who supported a strong central government and an organization of finances along the British model. The first was able to secure the nation's recognition on the international stage, while the second chartered the nation's financial independence, even though not completely without risks. The president showed that he could mediate between strong personalities in his cabinet without caving in to their agendas.

Unique in his time, Washington was able to live by example his complete alignment of ideas and means, by exerting power during two terms and then relinquishing it. He embodied for all his successors the republican ideals that America wanted to model for the world, not a small departure for a world used to the lifelong power of kings. Through such renunciation the world first came to know what strength could reside in "government of the people, by the people."

The ways in which the two towering individuals collaborated is hidden from immediate scrutiny. It shows us that the elder could not have reached his aims without the younger one. In 1780 Washington could tell from the battlefield that American success hinged on financial support from France, if the colonies wanted to avoid being forced to peace with England. This he wrote to Franklin, and this is what Franklin secured through his diplomatic abilities and popularity among the French people.

It was Franklin who once again stepped in for a momentous decision in proposing Washington as president of the Constitutional Convention. Given Washington's proven integrity and the many links forged with an estimated



two thirds of the delegates, be it in politics or in war, his presence and role contributed to bringing out the best in each individual. Franklin's presence, on the other hand, was instrumental in defusing tensions at their incipience, offering alternatives in moments of impasse and appropriate injections of wisdom, levity, and humor. The two iconic figures set a tone for an unprecedented political process.