

The Medicine of Politics:
Ideology and the Human Body in Early America

Quinn Cook

Doctors have long played an important role in American society—their authority often has extended beyond the medical, and into the socio-political realm. In the modern world, scientific knowledge and progress are held as beacons of authority, thrusting the medical field, through its close relationship to modern empiricism, into a position of power, even compared to other scientific disciplines due to the personal, dependent nature of healing, and, as Tocqueville noted as early as the 1830s, the American obsession with health.¹ The medical profession's dominance, however, extends far beyond its rightful jurisdiction, turning medical and cultural authority into economic privilege and political sway, especially regarding matters within its traditional purview.² This socio-political power, or “professional sovereignty,” as Paul Starr coined it in 1982, has a long history, with its roots in the very formation of the United States, first systematized by the Revolutionary War.³ The manifestations of this connection between politics and medicine, however, were far different from those seen today; long before the medical profession and its constituents began to influence the makeup of the political world, politics made its equally pervasive entry into medicine. Revolutionary and Early Republic America were times of significant ideological and political turbulence, change, and debate. The American Revolution and the formation of a new nation asked crucial questions about politics and governance, even as the Enlightenment attempted to equip revolutionaries with answers to these questions. The resulting political theories, anxieties, and landscape engrained themselves into medicine and its practitioners, transforming clinical conceptions of the human body into a political playground for emerging ideologies, and American medicine into a mirror of national politics.

The medical field of early America was vastly different from that of the present. Medicine in the modern era is associated with empiricism and science, the result of a series of

internal changes and consolidation within the medical community in order to solidify its legitimacy as a community of professionals, validated in their competency.⁴ Behind this rhetoric of pure, empirical science, however, is a long and robust history of its supposed opposite: artistry and imagination. Just as Momus found the creations of Zeus at fault for having no “window into the heart,” doctors were (and still are) plagued by the impossibility of knowing the inner workings of a truly healthy human body.⁵ To bridge this gap in knowledge, revolutionary doctors turned to their own imagination, particularly in literature, to fashion themselves after an equally longstanding deity as Momus: Apollo. Both the god of medicine and poetry, he serves as a monument to the concept of the physician-poet, a professional combination exceptionally common at the time. Literature and poetry were important tools for early American doctors to uncover and discuss medical theories on scales, and to depths, that could not be achieved through the limiting scope of empiricism and experimentation. The use of these imaginative approaches continued for many years to come, practiced and championed by well-respected doctors such as Charles Caldwell and Montgomery Bird, as well as by famous authors such as Edgar Allen Poe in his seminal work on the fungal origins of febrile diseases, known commonly as “The Fall of the House of Usher.”⁶ Simultaneously fictional and didactic, Poe’s work instigated a decades-long and era-defining debate on the origins of disease, and was the closest many scientists of the era came to modern germ theory.⁷ The enduring history of “The Medical Imagination,” as Sari Altschuler coins it, is key to our understanding of how the political realm came to imbricate itself with medical theory.⁸ The deep roots of creativity and alternative origins of medicinal theory primed the healthcare community for the injection of political philosophy into clinical conceptions by blurring the line between science and imagination.

Background

The Enlightenment did not negate medical creativity; rather, it served to augment and adapt it to the shifting landscape of the Age of Revolution. Although the Enlightenment championed rationalism, scientific progress through reason, this did not invalidate the role of imagination in the theorization and treatment of disease and injury. Rationalism required only strong deductive reasoning and robust coherence as the sole proof of efficacy of a theory.⁹ Empirical testing was often deemed unnecessary to the verification of knowledge, so long as an argument could withstand rigorous logical examination.¹⁰ Although this method was subsequently replaced with a period of pluralism within the medical community after a series of disastrous yellow fever outbreaks between 1793 and 1805, which eventually reconstructed itself into the mode of empiricism of the present, rationalism provided a liberal framework for physicians and politicians alike to propose hypotheses on healing, further clouding the distinction between medicine and sociological theory and aiding in the flourishing of medicinally-manifested political thought.¹¹

Furthermore, the growth of Enlightenment-centric education exposed new generations of doctors to the popular, emerging political doctrines of the era. Hundreds of American doctors began travelling abroad to distinguished universities, such as that in Edinburgh, to further their education. A traditional training place for respected doctors, Americans nearly outnumbered Scots in some of their own universities in 1765.¹² This education taught American doctors Enlightenment ideals and doctrines, and also began to sow the seeds for the professional sovereignty seen today. European training translated into increased credibility to the general public (who, in reality, saw few improvements in care in comparison to the previous era of apprenticeship-trained doctors).¹³ This increased credibility, however, would expand

exponentially into fame for the few. Doctors became all but celebrities, especially to other members of the medical community. Benjamin Rush, educated in Edinburgh and trained under the tutelage of William Cullen, became the best-known medical practice to the general population, and nothing short of a hero to the medical community.¹⁴ His dominance in the medical field was so all-encompassing that it was commonplace for doctors to name their children after him.¹⁵ Rush, however, while certainly an extreme example, was no exception in his medical influence and following. The medical community orbited around a number of key figures, championing their theories and clinical practices, as compared to the modern medical system, which instead relies on an integrated, diverse range of doctors and academics who work in conjunction with one another. This oligarchical organization of the medical profession allows for the analysis of certain key actors and intellectual groups, such as that of Rush and those who subscribed to his “Jeffersonian” model of thinking, to be representative of a larger community of physicians, as well as of much of the broader population, whose clinical conceptions often stemmed solely from a combination of their own political subscriptions and the medical practice most familiar to them.¹⁶ It is through the examination of these key actors, and their application of rationalistic thinking, that the underlying political doctrine of medicine in early America can best be understood.

Medical Revolution

American doctors’ Enlightenment education heavily informed theories of human anatomy, and its relation to the political systems of its surroundings. Rush likened the functions of the body to that of the state, as exemplified by his thesis on the origins of animal life, stating

It is no uncommon thing for the simplicity of causes, to be lost in the magnitude of their effects. By contemplating the wonderful functions of life, we have strangely overlooked the numerous and obscure circumstances which produce it...the humble but true origin of power in the people, is often forgotten in the

splendor and pride of governments. It is not necessary to be acquainted with the precise nature of that form of matter, which is capable of producing life, from impressions made upon it...It is immaterial moreover whether this matter derive its power of being acted upon wholly from the brain, or whether it be in part inherent in animal fibres.¹⁷

Though Rush returns to the realm of the natural world, he, in no equivocal terms, compares the functions and causes of animal life to that of ruling methodology. Moreover, through his return to the natural sciences, he makes a political argument, stating that whether the government derives its power “wholly from the brain,” i.e., the monarchy delineated in Cullen’s system, or whether the power is intrinsic to “animal fibres,” i.e. the people as a whole in Rush’s model, there will be material effects on the health of the body, akin to the health of the nation. He adds that “The two agents differ only in their effects. The former produces the destruction of the bodies upon which it acts; while the latter excite the more gentle, and durable motions of life,” again offering a social and political commentary through the scientific analysis of the “principle elements” of life.¹⁸ He further demonstrates his point by likening European citizens’ physical state to that of the nation, calling them “poor and depressed subjects of the government,” and asserting they suffer from a “deficiency...of liberty,” a thinly veiled attack on the malignant effects of monarchical rule.¹⁹ Rush wrote further on the effects of “political slavery” in the modern world, which he explored through a comparative essay on the health of Native Americans, who were considered by Enlightenment thinkers to be the nearest example to a perfectly natural order, untainted by the accumulation of hierarchy and tyranny as Rush believed Americans and Europeans were, and whose health served as an example to the benefits of a society that has shed its own forms of “political slavery,” the principal cause of disease, in favor of liberty.²⁰

Rush was not alone in his likening of the body to the state, and vice versa; Enlightenment Deists maintained that God had created everything in perfection, however did not intervene in the day-to-day affairs of humans, and that it was up to philosophers and politicians to find the correct system of government. They extrapolated that this ideal system could be found within the human body, which was understood to be a perfect model built by the hands of God and ordained by Him as faultless. This was an idea that doctors such as William Cullen implemented in their own monarchical models of the body, resembling the “divine right of kings” and similarly used to justify the monarchies of Europe.²¹ The unique circumstances of the American colonies, however, propelled this trend to new proportions.

Just as the medical theories of the body justified political theories about government, so too did political theories affect the formulation of medical ideology. With new conceptions around what might constitute an ideal system of government, so grew novel clinical conceptions of the ideal model of the body in response. The best example of this is Benjamin Rush’s circulatory illustration of the body, based on the ne plus ultra of a republican state. Rousseau, along with many of his contemporaries, argued that hereditary aristocracies and monarchies were defective forms of government, and instead that democratic republics were ideal.²² Nowhere did this philosophy take stronger root than in the American colonies, where a growing split with the British crown began to reach a boiling point. The overhaul of political systems, however, necessitated a subsequent overhaul of anatomical systems as well. Though Rush’s mentor, Cullen, was a guidelight to many American doctors, his neurological theories, centering the brain as the figurehead of the body, too closely resembled the monarchical system at the focus of the Enlightenment’s critical opprobrium, and were not suited to the socio-political climate of the American colonies.²³ Rush returned to the circulatory ideas of William Harvey, however yet

again his theories proved too much a mirror to the monarchies of Europe, placing the heart at the center of the body, and describing it as the “ocean” to which “all blood flows to.”²⁴ Rush opted instead to place not only the heart, but the entirety of the circulatory system at the forefront of the body, saying that “All! All [of the body]! Work[s] for the benefit of the arteries.”²⁵ This system mirrored the growth in traction of the Enlightenment philosophy of popular sovereignty; it stated that the purpose of the government was to serve the people, from whom the power to govern was ultimately derived. Similarly, Rush’s model asserted that the organs, including the brain and heart, which according to Cullen and Harvey were the governing heads of the body, worked to serve the blood vessels, which similarly provided the “sustenance” necessary for said organs to function and “rule.”²⁶ Rush politicized his medical practice with colonists’ growing imperial resistance, making the necessary change from the hierarchical model, originating in the monarchical structure of Carolinian England, to an equilibrium better suited to his political surroundings in the colonies. Prominent revolutionaries such as Thomas Jefferson and Benjamin Franklin quickly adopted Rush’s theory, ostensibly as the “correct” model of the human body, but also understanding it as an important adoption of revolutionary doctrine into the medical world.²⁷ Rush’s creation of a new model was, more so than a differing medical opinion, a form of imperial resistance and political radicalism, aligning itself, consciously or not, with the Enlightenment and its concomitant revolution in the colonies.

Medicine at War

Though Rush and his counterparts had effectively aligned clinical guidelines around the body with revolutionary and Enlightenment theory, the American Revolution required medicine to go to war alongside the rest of the population. Doctors were not only among the ranks of the military, but were again forced to marshal their medicinal ideology in line with the needs of

revolutionary America. Military camps and the rise of medical police in America, coinciding with Friederich Von Steuben's counsel to Washington on the need for medical discipline, provided the ideal grounds not only for rigorous experiential training (which many physicians previously lacked), but also for significant medical observation, which manifested itself most notably in Rush's theories of revolutionary diseases.²⁸ Rush brought to attention the effects that the large-scale socio-political change of the American Revolution wrought upon the body. As a republican state was accepted by Rush and his revolutionary compeers as the nearly perfect system, it followed that those who strove towards it would have naturally healthier bodies and relations. The body, from which this republican system was supposedly derived, was meant, after all, to conduct itself in the same, or similar, manner, and as such those who aligned themselves—through participation in the revolution—in a manner more consistent with the operations of their bodies, by default, experienced improved mental and physical health. According to Rush, “friends of the revolution” were affected by “an uncommon cheerfulness,” and that their “marriages were more fruitful, and a considerable number of unfruitful marriages became fruitful during the war,” going so far as to say even those who had previously “been sickly were restored to perfect health.”²⁹ He further claimed that a combination of liberty, of which there was a supposed dearth under the British rule, victory, and passion for the ideal *res publica* “produced insensibility to all the usual remote causes of disease,” being “suspended by the superior action of the mind under the influence of the principles which governed...soldiers in the American army.”³⁰ Additionally, he asserted that “officers and soldiers who enjoyed good health during a campaign, were often affected by fevers and other disorders, as soon as they returned to their respective homes.”³¹ These claims were fanciful at best, but at worst stood in direct contrast to the reality of the war. The camps of the continental army were ridden with poor hygiene and

disease, and often more soldiers died from assorted illnesses, both in preparation for and in the aftermath of a battle, than those who died as a direct result of injuries sustained during fighting.³² Soldiers were seldom healthier than when returned home, as opposed to Rush's directly antipodal argument.³³ Rush's claims persisted, however, due to their strong politicization and alignment with revolutionary ideals and goals, which he himself considered to be salutary and preventative against disease. Though it was likely many doctors—as well as soldiers—saw the flaws of Rush's argument, it so strongly oriented itself to the revolution and further bolstered rather sanguine morale, that its conceptual disarticulation was disregarded in favor of its civic beneficence.

Medical theorization also applied to loyalists. Doctors in South Carolina observed that loyalists died nearly instantaneously after the British withdrew from Charleston.³⁴ The deaths were believed to be a result of perceived “neglect” on the behalf of the British, in combination with the victim's excessive concern for their own power and property, which the general population dubbed “Protection Fever” and Benjamin Rush entitled “Revolutiana.”³⁵ Though some recognized that the sudden increase in mortality rate was likely the result of the excessive drinking and self-imposed exile of its subjects, Patriots largely adopted the phenomenon as a natural occurrence peculiar to loyalists, and, as with Rush's claims over the benefits of being a member of the revolutionary army, championed it as proof of their own moral and political rectitude.³⁶ Medicine's affiliation with political ideals was so important in influencing underlying rationales and motivations during the revolution that medical reality was repudiated by scholars in favor of ideological continuity.

Medicine and Nation-Building

After the revolution, doctors continued to be the sine qua non of forming and interpreting American nationalism, political ideals, and identity, especially in confronting the affair of fashioning a new nation. The shaping of this new nation, however, proved especially difficult in the aftermath of the war, which doctors were forced to grapple with in medical terms. The end of the war with Britain did not signal the beginning of peace. Turmoil was afoot in the new nation, and social unrest, manifesting itself in movements such as the Whiskey Rebellion, Shay's Rebellion, and the Newburgh Conspiracy, wracked the nation.³⁷ Reflecting the frustrations of many citizens, George Washington remarked, "Have we fought for this? Was it with these expectations that we launched into a sea of trouble, and have bravely struggled through the most threatening dangers?"³⁸ Attempting to translate this tumultuous landscape into medical terms, Rush determined that the American population was affected by an "excess of the passion for liberty," after the elevated zeal of the war, whose "minds were wholly unprepared for their new situation," and named this disease "Anarchia."³⁹

This "excess of liberty," however, was soon determined to be a temporary illness, which disguised an underlying disease: that of a fractured American identity and culture. The American Revolution was not only a political revolution, but a cultural one as well, which necessitated the formation of a new, American identity. Each region, and, as was often the case, city, had its own unique cultural identity, and, with the split from Britain (the one unifying force between them), America was primed for disunion just as much as it was for consolidation.⁴⁰ To Rush, this amounted to a crisis, as the very nation was built on the premise that "All! All!" were meant to work together for the common good.⁴¹ In his medical lexicon of the organs and arteries, the fabric of the nation began to split into factions, as the severance from the socio-cultural bonds of the common identity offered by the British began to unravel a nationwide unity.⁴² As one

historian notes of the period, “Americans constituted not a body politic, but an association of body politic,” aptly describing the fractured state of the metaphorical, physical “body” of American politics.⁴³ Here, Rush encountered issues with his egalitarian circulatory model, as its premise removed the stabilization offered by a single, ruling organ (that of monarchy), and as such implemented an additional system: that of stimulation and sensibility. He determined that all animal and human life was in constant motion, and in continuous need of stimuli. Certain types of these stimuli, however, were detrimental to human wellbeing.⁴⁴ In order to maintain one’s health, it was thus necessary to regulate what stimuli one received, and how the body interpreted it through one’s “sensibility.”⁴⁵

While many, especially in Europe, believed sensibility to be the link between oneself and society, and as such that through self-improvement a nation may be improved, the peculiar American ethos in formation, and the extant shadow of the American Revolution, redirected this “sensibility” along a unique course. Noah Webster, a prominent American doctor, agreed the nation required cultural and political unity, and thought the U.S. might achieve this through ridding itself of foreign influence, stating that there was nothing “more ridiculous than a servile imitation of the manners, the language, and the vices of foreigners.”⁴⁶ Following the war, Americans were particularly wary of foreign influence, having been so since the beginning of the revolution, as the initial Treaty of Amity and Commerce, which deflected any obligations to France, demonstrated.⁴⁷ These political anxieties routed themselves once again through the world of medicine, initializing the spread and popularity of “sensibility” and its protective powers from the dangers of foreign sway.⁴⁸ As the Constitutional Convention began to draft a new constitution, the split between northern and southern states became ever more apparent, and the cultural schisms proved difficult to maneuver. Once again, however, this disunity was viewed by

many as the effect of external influences. Webster accused “southern states” of being too attached to “European fashion,” which he construed as an affinity for European monarchy and the transatlantic slave trade, a particularly divisive topic of the convention, of which he, along with Rush, opposed heavily.⁴⁹

This stimuli-based model of health and protection continued well into the formation of the Early Republic, and was key in addressing the new nation’s number one political and medical crisis, simultaneously a test of America’s public health capabilities and its stance on governance and foreign relations: the “bilious remitting fever,” better known as the yellow fever.⁵⁰ While yellow fever was a serious issue throughout the country, the disease proved especially calamitous in Philadelphia, a political hotbed of the revolution with a singular cultural influence over the nation, and, concurrently, the originator of broad scientific outpourings.⁵¹ The recurring outbreaks of yellow fever coincided with significant political upheaval as the founding fathers attempted to construct a new nation, and many medical professionals aligned their medical practices to reflect major lines of political thought. As the epidemic raged on, two schools of thought emerged: the localists and the contagionists. Contagionists believed that yellow fever had been imported to America via interaction with other nations, particularly through trade with the West Indies. Localists, in contrast, believed that the disease originated within the U.S. itself.⁵² These two mainstream philosophies may be directly mapped to their political parallels. The ranks of contagionists were made up largely of federalists, a pro-urban, statist, and strongly Francophobic party. Localists consisted of their more liberal counterparts—the Francophilic, anti-urban republicans.⁵³

The contagionists’ active demonization of trade with the West Indies, and, indeed, with most European contact, may be traced to their anxieties over the brewing French revolution, as

well as conflict over the use of slave labor. Having just emerged from a bloody revolution, Federalists feared the spread of further revolutionary passion through the open circuits of capitalistic exchange, which proved an unregulated and dangerous force of dispersion for political doctrine, just as they had previously observed their own revolutionary ideology disseminate throughout the Atlantic world and inspire the French.⁵⁴ Samuel Latham Mitchill, a contagionist and co-author of the *Medical Repository*, an early and influential medical journal, subtly critiqued these French revolutionary passions in his Independence Day address, warning of the dangers posed by their recirculation to the Americas.⁵⁵ Benjamin Rush further cautioned that these passions, which he determined as the root of the “Anarchia” which had previously plagued America and subsequently established itself in France, must be “expel[led]...from the world” entirely, rather than be allowed to reenter into circulation, as the system of global commerce was primed to facilitate.⁵⁶ Additionally, though an affiliation with Federalism was by no means an inherent indication of abolitionist tendencies, many abolitionists took ideological cues from Federalism, and as such constituted an additional population of contagionist thinkers.⁵⁷ Contagionists thus further condemned foreign interaction, with both the British and French, due to their use of enslaved labor, viewing these relations as morally corrosive and imperiling the virtues of the new republic.⁵⁸

Contagionist credo within the medical community derived much of its ideology from the Federalist makeup of its proponents, whereas localists, and their own medical theories, were informed by their own republican views and political affiliations. Jefferson-Republicans championed the yeoman national ideal, promoting the model of an agrarian society. Excoriating the moral corruption believed by republicans to be bred within urbanity, and simultaneously appealing to and drawing on his connection with the medical community, Jefferson asserted that

“The mobs of great cities add just so much to the support of pure government, as sores do to the strength of the human body.”⁵⁹ Localists comparably believed that the yellow fever originated from local miasmas and the sinful behavior of the cities’ residents, which posed an equivalent threat to the health of both the citizens and the nation itself, whose fragile ideology of republicanism was shaken by the classical republican fear of the masses run amok.⁶⁰ This political anxiety over the danger posed to the ideological foundation of the nation was translated into a critique of cities.⁶¹ These anti-urban sentiments were mirrored by localist doctors, who, similar to contagionists, founded their medical theories on fears and rhetoric from the realm of politics.⁶² While contagionists and localists differed greatly in their views on the origin of the yellow fever, both factions offered a politicized narrative of the transmission vector of disease in Early America through a reflection of the political ideologies of their constituents.

Ideology, however, played a crucial role not only in the formation of medical theories, but also in the subsequent adoption of said theories into clinical guidelines. While there are certain practical considerations that must be taken into account as well, the reception of medical rhetoric into Philadelphia’s socio-political climate may best explain how contagionist argumentation proved to be ineffective, and was subsequently replaced by localist rationale. Though localists published far more avidly, and occupied significantly more university positions than their contagionist counterparts, it is the contents of their publications and lectures, and their resonance with the American public, that offers a more significant insight into the early republican mode of knowledge production in the medical field.⁶³ Localists provided a significantly more religious perspective on the epidemic, important in gaining sympathies and aligning themselves with the correction of “moral corruption” in America at the time. The localists’ stance on economic policy, however, was far more pertinent to its subsequent adoption,

and therefore its influence over broader, ensuing political theory. Contagionists believed commerce, particularly with foreign nations and colonies, to be morally and physically detrimental. The commercially-minded citizens of Philadelphia and other port cities, who believed trade to be a God-ordained activity, however, could find no justification in these contagionist claims, particularly after the beginning of a trade boom in the 1790s.⁶⁴ Rush himself wrote a response to contagionist claims within his study of the “bilious remitting fever,” declaring that “Commerce can be no more endangered than Religion, by the publications of philosophical truth.”⁶⁵ Samuel Latham Mitchill, too, promoted the benefits of commerce and the ideal agrarian state, co-founding the Society for the Promotion of Agriculture and serving on the Committee on Commerce and Manufacture.⁶⁶ The pro-mercantile rhetoric of localists suited the needs of the port-city residents, whereas contagionist arguments rebuked trade, and, as opposed to localist thought, offered no forthcoming theological insights with which to ground their claims.⁶⁷ Furthermore, localist promotion of concepts around sensibility, revived earlier by Rush, appealed to the deist public, who believed that the yellow fever, through some means or another, was a form of divine wrath sent to punish sinful behaviors, and as such that the healing and protection methodology it offered, especially via the reform of the individual, was an effective method to combat personal vice, and by extension the epidemic.⁶⁸ Through these narratives, closely aligned and politicized with public interest, localist thinking won out, triggering massive public health and personal hygiene reform, akin to the medical police portended in the city-like camps of the American Revolution, and informing clinical guidelines for years to come.⁶⁹

Conclusion

Though localists won the debate on the origins of the bilious remitting fever, they had no more “facts” than their contagionist counterparts. In fact, the true cause of yellow fever would

not be uncovered for approximately one hundred more years.⁷⁰ Nevertheless, the outbreaks in Philadelphia ushered in the end of an era. Rush, the towering figure of American medicine, was discredited and made to resign from the College of Physicians of Philadelphia, his heroic measures of purging, derived from a modernized version of Aelius Galenus' humoral theory, having been vilified by his colleagues.⁷¹ Ideas around sensibility and Rush's theories of stimuli were similarly rejected, and so began the modernization from rationalism to empiricism. Through the industrial revolution, the medical profession continued to face even more growth, criticism, and change, constructing the identity of a scientific community that detailed an epic of progress.

The legacy of the medical imagination, and furthermore of politicized medicine, however, has not been buried alongside their instigating histories in the healthcare community. Even in the modern world, in which science is cast as impermeable to personal belief, it cannot be denied that the way in which we approach the world continues to be shaped by the very paradigms we bring to it. Throughout the Coronavirus outbreak, for example, President Trump repeatedly used pandemic response, and lack thereof, as a political platform upon which to cement his own election policy on immigration, personal liberty, and economic improvement. The Select Subcommittee of the House of Representatives called his use of press and social media to disseminate falsehoods, which exploited Americans' fears and anxieties, a "reckless politicization of the pandemic" and a "dangerous movement pushed by Republican...officials to permanently weaken public health...for political purposes."⁷² This "war on science," as former EPA head Christine Todd Whitman described it, is but one example of the pervasive politicization of medicine in the modern world through media.⁷³ The actions of Trump's second term, with the censorship of entire medical publications and the political nominations of

recklessly unqualified personas to public health positions, requires little introduction to make a similar connection in how the medical is marshaled in line with the political.

Our interpretation of science is shaped by the structures which we as individuals believe in and share familiarity with, and socio-political considerations are inescapable foundations in the structure of science. Even through the cold lens of empiricism, carefully crafted through years of rhetoric, medicine cannot circumvent the ways in which doctors, patients, and policy-makers alike infuse worldviews into their own interpretations, and bring their perspectives to bear on all topics, even those which claim infallibility to the imperfection of human subjectivity.

Works Cited

- Aesop, and B. E. Perry. *Aesopica: A Series of Texts Relating to Aesop or Ascribed to Him or Closely Connected with the Literal Tradition That Bears His Name*. Urbana, Illinois: University of Illinois Press, 1952.
- Allison, David K., Larrie D. Ferreiro, and Blanco Núñez José María. *The American Revolution: A World War*. Washington, DC: Smithsonian Books, 2018.
- Altschuler, Sari. "From Blood Vessels to Global Networks of Exchange: The Physiology of Benjamin Rush's Early Republic." *Journal of the Early Republic* 32, no. 2 (2012): 207–31. <https://doi.org/10.1353/jer.2012.0031>.
- Altschuler, Sari. "Health (and the) Humanities in Early America." *Early American Literature* 53, no. 1 (2018a): 169–184. <https://www.jstor.org/stable/90019136>.
- Altschuler, Sari. *The Medical Imagination: Literature and Health in the Early United States*. Philadelphia, Pennsylvania: University of Pennsylvania Press, 2018b.
- A More Perfect Union: American Independence and the Constitution*. Providence, Rhode Island: Choices Program, Watson Institute for International Studies, Brown University, 2005.
- Apel, Thomas. *Feverish Bodies, Enlightened Minds: Science and the Yellow Fever Controversy in the Early American Republic*. Stanford, California: Stanford University Press, 2020.
- Benjamin, Thomas. *The Atlantic World: Europeans, Africans, Indians and Their Shared History*. New York, New York: Cambridge University Press, 2009.
- Covart, Liz, and Sari Altschuler. Episode 263: Sari Altschuler, The Medical Imagination. Other. *Ben Franklin's World*. Omohundro Institute of Early American History and Culture, November 5, 2019. <https://benfranklinworld.com/episode-263-sari-altschuler-the-medical-imagination/>.
- Flexner, Abraham. Rep. *Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching*. New York City, New York: Carnegie Foundation for the Advancement of Teaching, 1910.
- Finger, Simon. "An Indissoluble Union: How The American War For Independence Transformed Philadelphia's Medical Community And Created A Public Health Establishment." *Pennsylvania History: A Journal of Mid-Atlantic Studies* 77, no. 1 (2010): 37–72. <https://doi.org/10.5325/pennhistory.77.1.0037>.
- Gilbert, W.S. "Iolanthe." Iolanthe by W. S. Gilbert and Arthur Sullivan. Accessed March 15, 2022. <https://gsarchive.net/iolanthe/iolib.pdf>.

- Harvey, William, and Robert Gregg Frank. *Exercitatio Anatomica De Motu Cordis Et Sanguinis in Animalibus: Frankfurt, 1628*. Palo Alto, California: Octavo, 1998.
- Hendrickson, David C. *Peace Pact: The Lost World of American Founding*. Lawrence, Kansas: University Press of Kansas, 2003.
- Jefferson, Thomas. *Writings. Project Gutenberg 2*. Vol. 2. 9 vols. New York, New York: Library of America, 2010. <https://www.gutenberg.org/ebooks/50046>.
- Kendall, Joshua C. *The Forgotten Founding Father: Noah Webster's Obsession and the Creation of an American Culture*. New York, New York: Berkley Pub Group, 2012.
- Knott, Sarah. *Sensibility and the American Revolution*. Chapel Hill, North Carolina: Published for the Omohundro Institute of Early American History and Culture, Williamsburg, Virginia, by the University of North Carolina Press, 2009.
- Mitchill, Samuel L. *An Address to the Citizens of New-York: Who Assembled in the Brick Presbyterian Church, to Celebrate the Twenty-Third Anniversary of American Independence*. New York, New York: Printed and sold by George F. Hopkins, at Washington's Head, 84 Maiden-Lane, 1800.
- Park, Benjamin. "The Bonds of Union: Benjamin Rush, Noah Webster, and Defining the Nation in the Early Republic." *Early American Studies* 15, no. 2 (2017): 382–408. <https://www.jstor.org/stable/90002044>.
- Rosen, George. "Political Order And Human Health In Jeffersonian Thought." *Bulletin of the History of Medicine* 26, no. 1 (1952): 32–44. <http://www.jstor.org/stable/44443672>.
- Rosen, George. "Benjamin Rush on Health and the American Revolution." *American Journal of Public Health* 66, no. 4 (1976): 397–98. <https://doi.org/10.2105/ajph.66.4.397>.
- Rush, Benjamin, Thomas Dobson, John Redman Coxe, and John Miller Keagy. *An Account of the Bilious Remitting Yellow Fever, as It Appeared in the City of Philadelphia, in the Year 1793 by Benjamin Rush, M.D. Professor of the Institutes, and of Clinical Medicine in the University of Pennsylvania. Second Edition*. 2nd ed. Philadelphia, Pennsylvania: Printed by Thomas Dobson, at the stone House, no 41, South Second-Street, 1794. <https://quod.lib.umich.edu/e/evans/N21058.0001.001?rgn=main;view=fulltext>.
- Rush, Benjamin, and Thomas Dobson. "Account of the Influence of the Military and Political Events of the American Revolution upon the Human Body." Essay. In *Medical Inquiries and Observations*. Philadelphia, Pennsylvania: Thomas Dobson, 1794. <https://quod.lib.umich.edu/e/evans/N17140.0001.001/1:21?rgn=div1;view=fulltext>.
- Rush, Benjamin, and Thomas Dobson. "An Inquiry into the Natural History of Medicine Among the Indians of North-America, and a Comparative View of Their Diseases and Remedies, With Those of Civilized Nations." Essay. In *Medical Inquiries and Observations*.

- Philadelphia, Pennsylvania: Thomas Dobson, 1794. <https://quod.lib.umich.edu/e/evans/N17140.0001.001/1:5?rgn=div1;view=fulltext>.
- Rush, Benjamin, Micajah Clark, and Samuel Cuskaden. *Notes on Physiology Taken from Lectures Delivered in the University of Pennsylvania*. Philadelphia, Pennsylvania, 1809.
- Rush, Benjamin. "The Subject of an American Navy Continued." *Pennsylvania Gazette*, July 31, 1782.
- Rush, Benjamin. "Three Lectures on Animal Life, Delivered in the University of Pennsylvania, by Benjamin Rush, M.D." National Center for Biotechnology Information. U.S. National Library of Medicine. Accessed February 16, 2022. <https://www.ncbi.nlm.nih.gov/nlmcatalog/184184>.
- Select Subcommittee on the Coronavirus Crisis, *More Effective More Efficient More Equitable: Overseeing an Improving and Ongoing Pandemic Response: Year End Report*. Washington, D.C.: House of Representatives, 2021. <https://coronavirus.house.gov/sites/democrats.coronavirus.house.gov/files/SSCCInterimReportDec2021V1.pdf>.
- Starr, Paul. *The Social Transformation of American Medicine: The Rise of a Sovereign Profession & the Making of a Vast Industry*. New York: Basic Books, 2017.
- Tocqueville, Alexis de, Henry Reeve, and John C. Spencer. "Chapter X: Of The Taste For Physical Well-Being In America." Essay. In *Democracy in America* 2, Vol. 2. New York: J. & H.G. Langley, 1840.
- Tollefson, Jeff. "How Trump Damaged Science - and Why It Could Take Decades to Recover." Nature News. Nature Publishing Group, October 5, 2020. <https://www.nature.com/articles/d41586-020-02800-9>.
- Watson, Robert P. *George Washington's Final Battle: The Epic Struggle To Build A Capital City And A Nation*. Washington, DC: Georgetown University Press, 2021.
- Zalta, Edward N. "Jean Jacques Rousseau." In *Stanford Encyclopedia of Philosophy*. Stanford, California: Stanford University, 2004.
- Zalta, Edward N. "Rationalism vs. Empiricism." In *Stanford Encyclopedia of Philosophy*. Stanford, California: Stanford University, 2004.

¹ Paul Starr, *The Social Transformation of American Medicine: The Rise of a Sovereign Profession & the Making of a Vast Industry* (New York: Basic Books, 2017); Alexis de Tocqueville, Henry Reeve, and John C. Spencer, "Chapter X: Of The Taste For Physical Well-Being In America," in *Democracy in America*, vol. 2 (New York: J. & H.G. Langley, 1840).

² Starr, *The Social Transformation of American Medicine*.

-
- ³ Starr, *The Social Transformation of American Medicine*; Benjamin Park, “The Bonds of Union: Benjamin Rush, Noah Webster, and Defining the Nation in the Early Republic,” *Early American Studies* 15, no. 2 (2017): 382–408. <https://www.jstor.org/stable/90002044>.
- ⁴ Starr, *The Social Transformation of American Medicine*; Abraham Flexner, “Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching” (New York City, New York: Carnegie Foundation for the Advancement of Teaching, 1910); Sari Altschuler, *The Medical Imagination: Literature and Health in the Early United States* (Philadelphia, Pennsylvania: University of Pennsylvania Press, 2018).
- ⁵ Aesop and B. E. Perry, *Aesopica: A Series of Texts Relating to Aesop or Ascribed to Him or Closely Connected with the Literal Tradition That Bears His Name* (Urbana, Illinois: University of Illinois Press, 1952). Ascribed the informal “Perry Index” of 100.
- ⁶ Covart, Liz, and Sari Altschuler. Episode 263: Sari Altschuler, The Medical Imagination. Other. *Ben Franklin's World*. Omohundro Institute of Early American History and Culture, November 5, 2019. <https://benfranklinworld.com/episode-263-sari-altschuler-the-medical-imagination/>; Altschuler, *The Medical Imagination*. It must be further noted that these distinctions in occupation between “doctor” and “author” were often minimal, or even nonexistent, such as in the notable cases of James Grainger, Samuel Garth, Richard Blackmore, John Armstrong, and John Keats.
- ⁷ Covart, Liz, and Sari Altschuler. Episode 263: Sari Altschuler, The Medical Imagination. Other. *Ben Franklin's World*. Omohundro Institute of Early American History and Culture, November 5, 2019. <https://benfranklinworld.com/episode-263-sari-altschuler-the-medical-imagination/>
- ⁸ Altschuler, *The Medical Imagination*
- ⁹ Thomas Apel, *Feverish Bodies, Enlightened Minds: Science and the Yellow Fever Controversy in the Early American Republic* (Stanford, California: Stanford University Press, 2020).
- ¹⁰ Edward N. Zalta, “Rationalism vs. Empiricism,” in *Stanford Encyclopedia of Philosophy* (Stanford, California: Stanford University, 2004).
- ¹¹ Apel, *Feverish Bodies, Enlightened Minds*; George Rosen, “Political Order And Human Health In Jeffersonian Thought.” *Bulletin of the History of Medicine* 26, no. 1 (1952): 32–44. <http://www.jstor.org/stable/44443672>;
- ¹² Simon Finger, “An Indissoluble Union: How The American War For Independence Transformed Philadelphia’s Medical Community And Created A Public Health Establishment.” In *Pennsylvania History: A Journal of Mid-Atlantic Studies* 77, no. 1 (2010): 37–72. <https://doi.org/10.5325/pennhistory.77.1.0037>.
- ¹³ Finger, *An Indissoluble Union*.
- ¹⁴ Sari Altschuler, “From Blood Vessels to Global Networks of Exchange: The Physiology of Benjamin Rush's Early Republic.” *Journal of the Early Republic* 32, no. 2 (2012): 207–31. <https://doi.org/10.1353/jer.2012.0031>.
- ¹⁵ Sari Altschuler, The Physiology of Benjamin Rush's Early Republic.
- ¹⁶ Rosen, *Human Health In Jeffersonian Thought*; George Rosen, “Benjamin Rush on Health and the American Revolution.” *American Journal of Public Health* 66, no. 4 (1976): 397–98. <https://doi.org/10.2105/ajph.66.4.397>.
- ¹⁷ Benjamin Rush, “Three Lectures on Animal Life, Delivered in the University of Pennsylvania, by Benjamin Rush, M.D.,” National Center for Biotechnology Information (U.S. National Library of Medicine), accessed February 16, 2022, <https://www.ncbi.nlm.nih.gov/nlmcatalog/184184>.
- ¹⁸ Rush, *Three Lectures on Animal Life*.
- ¹⁹ Rush, *Three Lectures on Animal Life*.
- ²⁰ Rush, *An Inquiry into the Natural History of Medicine Among the Indians of North-America*; Benjamin, *The Atlantic World: Europeans, Africans, Indians and Their Shared History*.
- ²¹ Thomas Benjamin, *The Atlantic World: Europeans, Africans, Indians and Their Shared History* (New York, New York: Cambridge University Press, 2009); Rush, *An Inquiry into the Natural History of Medicine of the Indians of North-America*; Covart, Liz, and Sari Altschuler. Episode 263: Sari Altschuler, The Medical Imagination. Other. *Ben Franklin's World*. Omohundro Institute of Early American History and Culture, November 5, 2019. <https://benfranklinworld.com/episode-263-sari-altschuler-the-medical-imagination/>; Apel, *Feverish Bodies, Enlightened Minds*.
- ²² Edward N. Zalta, “Jean Jacques Rousseau,” in *Stanford Encyclopedia of Philosophy* (Stanford, California: Stanford University, 2004).
- ²³ Rosen, *Human Health in Jeffersonian Thought*.
- ²⁴ William Harvey and Robert Gregg Frank, *Exercitatio Anatomica De Motu Cordis Et Sanguinis in Animalibus: Frankfurt, 1628* (Octavo, 1998).
- ²⁵ Benjamin Rush, Micajah Clark, and Samuel Cuskaden, *Notes on Physiology Taken from Lectures Delivered in the University of Pennsylvania* (Philadelphia, Pennsylvania, 1809).

-
- ²⁶ Rush, *Notes on Physiology*; Benjamin Rush and Thomas Dobson, “An Inquiry into the Natural History of Medicine Among the Indians of North-America, and a Comparative View of Their Diseases and Remedies, With Those of Civilized Nations,” in *Medical Inquiries and Observations* (Philadelphia, Pennsylvania: Thomas Dobson, 1794). <https://quod.lib.umich.edu/e/evans/N17140.0001.001/1:5?rgn=div1;view=fulltext>.
- ²⁷ Rosen, *Human Health in Jeffersonian Thought*; Finger, *An Indissoluble Union*.
- ²⁸ Finger, *An Indissoluble Union*; Rosen, *Benjamin Rush on Healthcare and the American Revolution*.
- ²⁹ Benjamin Rush and Thomas Dobson, “Account of the Influence of the Military and Political Events of the American Revolution upon the Human Body,” in *Medical Inquiries and Observations* (Philadelphia, Pennsylvania: Printed by Thomas Dobson ..., 1794). <https://quod.lib.umich.edu/e/evans/N17140.0001.001/1:21?rgn=div1;view=fulltext>.
- ³⁰ Rush, *Account of the Influence of Military and Political Events*.
- ³¹ Rush, *Account of the Influence of Military and Political Events*.
- ³² Finger, *An Indissoluble Union*.
- ³³ Finger, *An Indissoluble Union*.
- ³⁴ Rush, *Account of the Effect of Military and Political Events*.
- ³⁵ Rush, *Account of the Effect of Military and Political Events*.
- ³⁶ Rush, *Account of the Effect of Military and Political Events*; Finger, *An Indissoluble Union*.
- ³⁷ Altschuler, *The Physiology of Benjamin Rush’s Early Republic*.
- ³⁸ Robert P. Watson, *George Washington’s Final Battle: The Epic Struggle To Build A Capital City And A Nation* (Washington, DC: Georgetown University Press, 2021).
- ³⁹ Rush, *Account of the Effects of Military and Political Events*.
- ⁴⁰ Park, *The Bonds of Union*.
- ⁴¹ Rush, *Notes on Physiology*.
- ⁴² *A More Perfect Union: American Independence and the Constitution* (Providence, Rhode Island: Choices Program, Watson Institute for International Studies, Brown University, 2005).
- ⁴³ David C. Hendrickson, *Peace Pact: The Lost World of American Founding* (Lawrence, Kansas: University Press of Kansas, 2003).
- ⁴⁴ Rush, *Three Lectures on Animal Life*.
- ⁴⁵ Sarah Knott, *Sensibility and the American Revolution* (Chapel Hill, North Carolina: Published for the Omohundro Institute of Early American History and Culture, Williamsburg, Virginia, by the University of North Carolina Press, 2009).
- ⁴⁶ Joshua C. Kendall, *The Forgotten Founding Father: Noah Webster’s Obsession and the Creation of an American Culture* (New York, New York: Berkley Pub Group, 2012).
- ⁴⁷ David K. Allison, Larrie D. Ferreiro, and Blanco Núñez José María, *The American Revolution: A World War* (Washington, DC: Smithsonian Books, 2018), 16-31.
- ⁴⁸ It must be further noted that the spread of sensibility-based thinking was augmented by a pre-existing Quaker civic ethos for social harmony, and was not due to these political anxieties alone. See Knott, *Sensibility and the American Revolution*.
- ⁴⁹ Park, *The Bonds of Union*; Altschuler, *The Physiology of Benjamin Rush’s Early Republic*.
- ⁵⁰ Benjamin Rush et al., *An Account of the Bilious Remitting Yellow Fever, as It Appeared in the City of Philadelphia, in the Year 1793 by Benjamin Rush, M.D. Professor of the Institutes, and of Clinical Medicine in the University of Pennsylvania. Second Edition*, 2nd ed. (Philadelphia, Pennsylvania: Printed by Thomas Dobson, at the stone House, no 41, South Second-Street, 1794), <https://quod.lib.umich.edu/e/evans/N21058.0001.001?rgn=main;view=fulltext>.
- ⁵¹ Apel, *Feverish Bodies Enlightened Minds*.
- ⁵² Rosen, *Human Health in Jeffersonian Thought*; Altschuler, *The Physiology of Benjamin Rush’s Early Republic*.
- ⁵³ Apel, *Feverish Bodies Enlightened Minds*.
- ⁵⁴ Apel, *Feverish Bodies Enlightened Minds*.
- ⁵⁵ Samuel L. Mitchill, *An Address to the Citizens of New-York: Who Assembled in the Brick Presbyterian Church, to Celebrate the Twenty-Third Anniversary of American Independence* (New York, New York: Printed and sold by George F. Hopkins, at Washington’s Head, 84 Maiden-Lane, 1800).
- ⁵⁶ Benjamin Rush, “The Subject of an American Navy Continued,” *Pennsylvania Gazette*, July 31, 1782.
- ⁵⁷ Apel, *Feverish Bodies Enlightened Minds*.
- ⁵⁸ Altschuler, *The Physiology of Benjamin Rush’s Early Republic*.
- ⁵⁹ Thomas Jefferson, *Writings*, vol. 2 (New York, New York: Library of America, 2010), <https://www.gutenberg.org/ebooks/50046>.

-
- ⁶⁰ Apel, *Feverish Bodies Enlightened Minds*.
- ⁶¹ Apel, *Feverish Bodies Enlightened Minds*.
- ⁶² Finger, *An Indissoluble Union*.
- ⁶³ Apel, *Feverish Bodies Enlightened Minds*.
- ⁶⁴ Apel, *Feverish Bodies Enlightened Minds*.
- ⁶⁵ Rush, *An Account of the Bilious Remitting Fever*.
- ⁶⁶ Apel, *Feverish Bodies Enlightened Minds*.
- ⁶⁷ Apel, *Feverish Bodies Enlightened Minds*.
- ⁶⁸ Apel, *Feverish Bodies Enlightened Minds*; Knott, *Sensibility and the American Revolution*.
- ⁶⁹ Apel, *Feverish Bodies Enlightened Minds*; Finger, *An Indissoluble Union*.
- ⁷⁰ Apel, *Feverish Bodies Enlightened Minds*.
- ⁷¹ Atlschuler, *The Physiology of Benjamin Rush's Early Republic*; Apel, *Feverish Bodies Enlightened Minds*.
- ⁷² Select Subcommittee on the Coronavirus Crisis, *More Effective More Efficient More Equitable: Overseeing an Improving and Ongoing Pandemic Response: Year End Report* § (2021). Washington, D.C.: House of Representatives, 2021.
<https://coronavirus.house.gov/sites/democrats.coronavirus.house.gov/files/SSCCInterimReportDec2021V1.pdf>.
- ⁷³ Jeff Tollefson, "How Trump Damaged Science - and Why It Could Take Decades to Recover," *Nature News* (Nature Publishing Group, October 5, 2020), <https://www.nature.com/articles/d41586-020-02800-9>.