

Chapter Six -- Public Negotiation
(Negotiated Knowledge and Practice: Magic, God, Machine)

The letter in the *Maryland Gazette* of June 29, 1748 penned by "Quevedo" mocked the editor Jonas Green's editorial practice through the voices of guide and inquisitor:

. . . and plausible Subjects of Debate, to cover over something else that is meant, to wit, whether a Court-House shall be built in this Place or in that Place, agreeable to the Interest, no of the Public, but of either contending Party.

-- But why should the Public be annoy'd with this tedious Dispute, might it not have been better let alone?

-- I grant it, Sir, but they pay me for it, and I'll publish any Thing for Money, if it is not impious or treasonable.²⁶⁶

Three months earlier, in the 3/30/48 *Maryland Gazette*, Green had announced receiving a "handsome Gratuity" for publishing the essay "A Native of Maryland." To what extent this was a common practice is unknown. The fact that Green announced it and received criticism for it indicates it may have been an uncommon occurrence or at least held by some as a deplorable practice. In Quevedo's case, he may have found a place on the front page purely through the strength of his wit, but we cannot know that.

The colonial newspaper acted as a place for public presentation and the debate of issues. Through it, articles and advertisements of anything from grand issues of the day to petty rivalries might find a literary home. If you could write well enough, had some affiliation with or empathy from the editor or had the money to insert an advertisement, then you had a soapbox.

However, not all subjects received equal treatment. Public discussion that includes natural philosophy and explanations of nature differs according to time, subject, and the interests of writers and editors. Except for a few cases, such as small pox inoculation, few scientific debates, or direct criticism of natural philosophy --at least in the four middle colonial papers we are

²⁶⁶ Lemay, *Hamilton's Literary History*, p. 283. Lemay gives a fair amount of evidence to suggest that Quevedo was, in fact, Alexander Hamilton.

examining -- seem to occur in the mid-century colonial newspaper. Even the satires of science that occur frequently in the *Tatler* and the *Spectator*, the newspapers that inspired those of Franklin and Bradford, receive no placement in Franklin's paper and little in Bradford's. The newspapers most often implicitly and explicitly extol the virtues and authority of enlightenment thinking. In addition, some natural occurrences, such as atmospheric and health related ones, often served the needs of the newspaper to thrill its readers. Occasionally, natural phenomena acted as fodder for the arguments of superstition and Christian providence.

This chapter examines how and to what extent debate concerning natural philosophy occurred in the newspaper. I begin by giving evidence on how personal disagreements played out in the paper. I then show how disagreements could reflect much broader issues in religion, politics and economics.

Having established the broad scope of conflicts for which various proponents utilized the newspaper, we then show how ideas in natural philosophy fit within the contexts of those negotiations. Using various articles I show how an infrequent and mildly adversarial conflict existed between natural philosophy and religion and then show the numerous instances where the authority of natural philosophy and the rational empirical process served to counter other approaches to explaining nature. The numerous articles that deride "superstition" in the face of very little counter-argument shows how the newspaper acted as a promotional device for enlightened thought - a theme we return to in the next chapter.

I then reveal the few incidents where the public became privy to the heated discussions at the forefront of science. I show the promoted conflicts of societies - the prizes offered for various discoveries and then note, reiterating the conclusions of chapter 5, that few notions in natural philosophy became argued through the newspaper. However, there existed one striking categorical exception to this lack of philosophical debate: medicine. As we then see, debates in medicine (small pox inoculation, John Tennent's theories and some other assorted stories) did occur in the newspaper with proponents for various positions writing and responding to one another.²⁶⁷

²⁶⁷ I do not attempt to discover WHY medicine was an exception as a debated practice (an interesting topic) but only

Conflict and Negotiation

In addition to the literary presentation of both international and domestic debates in submitted or "borrowed" articles, colonial newspaper editors also marketed debating space in the newspaper as a commodity. Advertisements provided a forum for illustrations that might contradict the positions of the editors themselves. The editors might have chosen not to run these advertisements, print a disclaimer,²⁶⁸ or continually position the newspaper as an objective presenter of dissimilar viewpoints. The evidence suggests that, for business reasons, most of the time saw them follow the latter policy.

The paid space allowed for anyone with enough money -- a fairly large subset of society in mostly middle class colonial America -- to insert his or her philosophy into the public space. The prospect of this initially did not sit well with the upper class. In 1710 England, the editor of the *Tatler*, Joseph Addison, paraphrased the position of gentry:

Advertisements are of great use to the Vulgar: First of all, as they are Instruments of Ambition. A Man that is by no Means big enough for the *Gazette*, may easily creep into the Advertisements, by which means we often see an Apothecary in the same Paper of News with a Plenipotentiary, or a Running-Footman with an Ambassador....²⁶⁹

Importantly, Addison mentioned that half the advertisements are "purely Polemical" in some attempt to manage controversy. This speaks to the value placed on using the newspaper for disputes. It also speaks to the difficulty in sometimes differentiating between advertisements and articles.²⁷⁰ People would pay to be able to publicize their disagreements and could use advertisements masquerading as news.²⁷¹ Advertisements could be features, letters-to-the-editor, and editorials. Barrow notes that, very much like contemporary newspapers, "[v]irtually anything that happened to affect the lives of American colonists -- depression, disaster, political action, or

notes that it was.

²⁶⁸ Barrow (1967) cites several instances from the beginning of newspapers of editors disclaiming the paid inserts.

²⁶⁹ Barrow (1967), p.15.

²⁷⁰ Barrow adopted the 'Wallace criteria' for determining an advertisement. See chapter three.

²⁷¹ Barrow (1967), p.185.

Act of Parliament -- prompted a variety of notices ranging from official announcements to the paid outbursts of irate citizens.²⁷²

Not only does this weak boundary between advertisements and articles make the job of the historian sometimes difficult in determining what are advertisements, but it also paints an interesting picture of how people viewed advertisements and the contents of the paper. According to Robert Kany, David Hall was a fair editor who opened the *Pennsylvania Gazette* to all sides.²⁷³ At least, that is obvious from the large increase in advertisements after 1747. Interested in revenues, Hall, as editor, took on the mantle of objectivity for paid notices. And he did not attempt to alienate his readers by leaving large segments of his audience unattended in the non-paid section of the paper either. Yet, the *Pennsylvania Gazette* and the other middle colony newspapers did have editorial positions which the section on religion and the occult below makes obvious. From the debate that occurred in the newspapers, it seems likely that many readers must have been aware of those editorial positions.

Text played an important role in the everyday lives of the colonists. The original Puritans of New England valued reading for all believers had to read the Bible. When their religious intolerance encouraged separatists to spread throughout the region, creating Newport and Providence in Rhode Island and much of New Hampshire, and economic opportunities spread the Puritans far afield as well, the importance of reading and text in their culture followed. To Protestants in general, reading played a significant role in their belief and culture. Documents and charters encompassing society, both cherished and available to the citizens, had a cultural authority.

To an extent, anything presented in the paper had the associated authority of printed text and the individuals creating that text. At the same time, the tone of the advertisements seemed conversational, even colloquial. "It was as if the neighborhood had simply got too big for a man to be able to talk to everyone he wished and was forced to use printed advertising as a substitute."²⁷⁴ The non-advertisement sections also invited people into the conversation, even in the face of great conflict.

²⁷² Barrow (1967), p.190.

²⁷³ Kany (1963).

²⁷⁴ Wood (1958), p.66.

The newspaper allowed a place for contentious issues in matters of religion, business, politics, personal lives and, even, publishing itself. These categories tend to overlap. Personal attacks became directed at individuals with any affiliations with which the attacking writer took issue. Religious issues overlapped with politics and economics. Occasionally, even Natural Philosophy came into conflict with superstition and religious beliefs. The newspaper found a willing and paying audience for contentious issues. In what follows we see the economic, political, religious, philosophical and, even, personal conflicts which played out in the public printed forum.

Personalities and Print

The colonists certainly enjoined and witnessed numerous international and local disputes through the newspaper. Some could get quite personal, complex, and insulting. In a *Maryland Gazette* of March 30, 1748 an author wrote: "Mr. GREEN, I HAVE seen a Thing in one of your Papers, which I am at a Loss what to call, and I believe Adam himself would have been puzzled to find a Name for it; such a motley Piece of Patch Work as to be sure never appeared in the World before. . ."

The rules for slander and liable were ill defined. Even the well studied Zenger trial where Andrew Hamilton defended the right of a New York newspaper man to publish personal attacks did not necessarily set precedent or even garner as much attention at the time as it has as an historical incident.²⁷⁵ Many of the examples below appear signed with a real person's name. More often letters (although far less so advertisements) had a pseudonym as a signature. This did not stop people from trying to reveal the author of a piece. For example, a letter in the 3/4/56 *Maryland Gazette* from a Mr. SOMEBODY believes that a recent letter from A.B. is really a "Mr. HINT from the previous week".

An advertisement in the *Mercury* by Samuel Chew took issue with "a certain scurrilous abusive Paper [that] hath been lately Printed at *Philadelphia*; intituled, *Some Remarks upon a late Speech, said to be made by Samuel Chew to a Grand-Jury at New-Castle, though incongruously exhibited*;

²⁷⁵ See DeArmond.

which seems to be done by one who calls himself a *Quaker*. . .". Chew felt the publication slanderous and hoped that the "particular Meeting to which he belongs . . . will deal with him according to their own established Rules, for being the Author of base defamatory Libel against one of the Members of their own Religious Body."²⁷⁶ John Ryan, recently released from prison, submitted advertisements for nearly half a year to the *American Weekly Mercury* starting in February 1745 to defend his name and ask for help. He wrote "He most humbly hopeth, as well as prayeth, that the worthy Owners of, and others concerned in, the successful Privateer of said Province . . . will unanimously (charitably and generously) contribute towards re-establishing him in some way of Industry to begin the World *de novo*, for the Benefit of his said poor Family."²⁷⁷ In May he needed to expand the advertisement to include "BUT WHEREAS since inserting the above Advertisement, said Ryan finds, by hurtful Experience, that some false, as well as malicious underhand ill Offices have been attempted to his Prejudice". The 8/24/58 *Maryland Gazette* had an advertisement from Daniel Jenifer of St. Thomas claiming negative advertisements by objectionable gentlemen. Elias Smith wrote to publicly apologize for accusing Richard Edelen of stealing his Pocket-Book and Comb: "therefore [I] think it my Duty to give this Public Notice, That he is innocent of it, and desire you would advertise in the next *Gazette*".²⁷⁸

Franklin could find himself the subject of literary conflict as well. In 1764, Franklin had been appointed by the Pennsylvania house to embark for Great Britain. The *Maryland Gazette* of November 8 reported that with an excerpt from the *Pennsylvania Gazette*. It also printed an excerpt from the *Pennsylvania Journal*, a competing newspaper to the *Pennsylvania Gazette*:

Mr. Bradford,

The Subscribers, at the Close of the late Debate in Assembly; concerning the sending Mr. Franklin to England as an Assistant to our Agent there, having offered a PROTEST against that Measure, which was refused to be entered on the Minutes; it is now thought proper to take this Method, of laying before the Public the Reasons on which their Dissent was founded.

We whose Names are hereunto subscribed, do object and Protest against the Appointment of the Person proposed as an Agent of this Province, for the following Reasons. . .²⁷⁹

²⁷⁶ *American Weekly Mercury*, 3/4/42;p4

²⁷⁷ See *American Weekly Mercury*, 5/9/45;p4 for an example.

²⁷⁸ *Maryland Gazette*, 7/9/61;p3.

²⁷⁹ *Maryland Gazette*, 11/8/64;p1. The letter from the *Pennsylvania Journal* was signed by William Allen, Thomas Willing, George Bryan, Amos Strettel, Henry Keppele, John Dickinson, David McCaught, John Montgomery,

The 11/15/64 *Maryland Gazette* noted that Franklin had embarked on the *King of Prussia* and included a letter from Franklin himself. Franklin not only took issue with their complaints but with their public manner of complaint, indicating the inconvenience of publishing all of the discussions and justifications of the assembly in the minutes:

This Mode of Protesting by the Minority, with a String of Reasons against the Proceedings of the Majority of the House of Assembly, is quite new among us; the present is the second we have had of the kind and both within a few Months. It is unknown to the Practice of the House of Commons, or of any House of Representatives in America, that I have heard of; and seems an affected Imitation of the Lords in Parliament, which can by no Means become Assembly-men of America. Hence appears the Absurdity of the Complaint, that the House refused the Protest an Entry on their Minutes. The Protesters know that they are not, by any Custom or Usage, intitled to such an Entry, and that the Practice here is not only useless in itself, but would be highly inconvenient to the House, since it would probably be thought necessary for the Majority also to enter their Reasons, to justify themselves to their Constituents, whereby the Minutes would be incombered, and the Public Business obstructed. More especially will it be found inconvenient, if such Protests are made use of as a new Form of Libelling, as the Vehicles of personal Malice, and as Menas of giving to private Abuse the Appearance of a Sanction, as public Acts. Your Protest, Gentlemen, was therefore properly refused; and since it is no Part of the Proceedings of Assembly, one may with the more Freedom examine it.²⁸⁰

Competition between presses sometimes forced Franklin and others to instigate or find themselves in other disputes in the newspaper. An earlier chapter mentioned Franklin's use of the BUSY BODY letters in the *American Weekly Mercury* to secure the right to publish the *Pennsylvania Gazette*. In 1740 and 1741 another publishing controversy erupted over the printing of the first magazine in America. Apparently, Franklin had approached John Webbe to "*dispose the Materials, make Abstracts, and what shall be necessary for promoting the Thing*" according to a letter by Webbe in the 11/20/40 and 11/27/40 *American Weekly Mercury*. Franklin later took out an advertisement accusing Webbe of stealing the idea when he published it with Bradford. Webbe notes:

Isaac Saunders, George Taylor.

²⁸⁰ *Maryland Gazette*, 11/22/64. Franklin's letter also had a number of people who signed a audit of Franklins account with the state. The signers: John Morton, William Allen, John Ross, John Moor, Joseph Fox, John Hughes, Samuel Rhoads, John Wilkinson, Isaac Pearson.

THO' Nothing could be more imprudent in Mr. Franklin than to thrust me into his Advertisement, in any Shape whatsoever; yet he has not only thought fit to introduce me there, but has at the same Time accused me, of such Practices, which if I were guilty of, I should not deserve to breath in any Society. . .

As Mr. Franklin has now professedly applied his News Paper to the gratifying his own particular Malice by blackening the Reputation of a private Person; it is reasonable to believe that without a proper Animadversion on such a Proceedure, he will not stop at this single Instance of spitting his Malignity from his Press, but be encouraged to proceed in making use of it as an Engine to bespatter the Characters of every other Person he may happen to dislike. . .

...He says I advertised his Scheme, or as he calls it afterwards, his Plan, in the Mercury, without his Participation tho' it had ben communcated to me in Confidence. He indeed communicated to me his Desire of printing a Magazine or a monthly Pamphlet, if I would undertake to compose one. But surely his making the Proposal neither obliged me to the wirting of one for him to print, nor restrained me from the printing of it at any other Press without his Leave or Participation. If that were a Consequence, then Mr. Franklin has only to offer himself as a Printer of Books or Pamphlets to every Man that he thinks has a Talent for Writing, and they shall from thenceforth be restrained rom publishing any Thing without his Consent.

Bradford began proudly advertising the *American Magazine or a Monthly View of the British Colonies* at one Shilling a copy: "As the principal Part of this Magazine is not a Transcript from printed Copy, but is a Work that requires a continual Study and Application, it cannot be afforded for less Money than is mentioned . . . Care is also promised . . . to avoid reprinting any of the Rubbish or Sweeping's of Printing Houses."²⁸¹ The competition between papers obviously had more than ego at stake. One advertisement in the *American Weekly Mercury* accused subscribers in arrears simply foregoing payment and subscribing to the *Pennsylvania Gazette*.²⁸²

An argument over the trial of Dr. Jones erupted between the *Gazette* and the *Mercury* in 1738 and again put Franklin into the controversy. An *American Weekly Mercury* of 2/14/38 (continuing in 2/21/38) had a letter signed by C.D. where the writer takes issue with a recent letter in the *Pennsylvania Gazette* by an A.B. A.B. disagreed with the actions and evidence as presented in the trial of Dr. Jones who did not receive a guilty verdict and received mercy from the court. C.D. writes: "since the Offenders have been tried, and received the *Punishment* or *Mercy* the *Law* allows, nothing but envy and ill-nature could prompt this . . . to repeat and aggravate the Crimes beyond Measure, and impudently impeach the Justice of the *Court* and *Jury*". He continues: "For, as A.B.

²⁸¹ *American Weekly Mercury*, 2/19/41;p.3.

²⁸² *American Weekly Mercury* 1/6/36.

owns, he was present during the whole of these Trials, he must needs observe, what indefatigable Pains and uncommon Methods were used by the *Prosecutor's Council* to challenge and set aside near 100 Freeholders, before a Jury was fixed to his Mind; and now confidently to affirm, that the whole was proved beyond possibility of a Doubt."

Throughout the article, Franklin received some of this criticism as well as A.B. Almost sarcastically the author accuses Franklin of authorship "Since the Author of the Paper signed A.B. in Mr. Franklin's said *Gazette*" and "therefore shall give Mr. Franklin and his Correspondent the naked Truth of the whole," and "therefore Mr. Franklin's Correspondent takes more Freedom with the Attorney General than becomes him." The business rivalry between Franklin and Bradford Sr. could always be counted on for literary conflicts between the two presses.²⁸³

The society of Freemasons came under attack in the *American Weekly Mercury* during 1737 (which may also have been an indirect attack on Franklin given his affiliation with the organization). The *American Weekly Mercury* of 6/20/37 contained an advertisement (signed by four men including the physician Joseph Shippen) trying to clear the name of the Freemasons:

WHEREAS some ill-disposed Persons in this City, assuming the Names of FREE-MASONS, have for some Years past imposed upon several Well-meaning People, who were desirous of becoming true Brethren; persuading them after they had perform'd certain ridiculous Ceremonies, that they were really become Free-Masons: And have lately under the pretence of making a young Man a Mason caus'd his Death, as 'tis said, by Purging, Vomiting, Burning, and Terror of certain horrid and diabolical Rites. It is thought proper for preventing such Impositions for the future, and to avoid any unjust Aspersion that may be thrown on the ancient and honourable Fraternity on this Account, either in this City or any other part of the World, to publish this Advertisement, declaring the Abhorrence of all true Brethren to such Practices . . . And that the Persons concerned in this wicked Action are not of our Society, nor of any Society of Free and Accepted Masons to our Knowledge or Belief.

Two months later a reprint of an article from the London Magazine appeared in the *American Weekly Mercury* of 8/4/37 which not only put the actions of the Freemasons in question as an

²⁸³ For example, The postscript to the *American Weekly Mercury* of 12/18/1740 has another conflict between Franklin and Bradford, this time over the post.

international problem but as a direct threat to democracy. The article gave some details of the Freemason's rites:

At the request of several of our Customers, the following is inserted From the LONDON MAGAZINE for April, 1737.

AMONGST all the Instances, lately produced, of our Advantages over other Nations, in Point of Liberty, there is one that deserves your serious Consideration; I mean the Toleration of that mysterious Society, called FREE-MASONS, who have been lately suppress'd . . . in France and Holland as a dangerous Race of Men. . . . That impenetrable Secrecy, for which they are so famous, is likewise Matter of just Suspicion, and seems to indicate that there is something in their nocturnal Rites which they are afraid of having discover'd. . . they lock themselves into the Room, where they meet, . . . a Centinel is placed at the outside of the Door, with a drawn Sword in his Hand, to prevent all Discoveries. This is not the only Mark of their being a military Order . . . Upon the whole, this mysterious Society hath too much the Air of an Inquisition, where every Thing is transacted in the Dark.

An American Weekly Mercury 4/13/38 front page letter from the Craftsman of January 21 notes As "THE whimsical Society of FREE-Mason, having been often the Subject of Discourse in England, and of late in Holland, France, and other States, where they have been discouraged by the Civil Magistrate" the newspaper prints a letter from Paris which "not only to give their Secret, but the Ceremonies observ'd at the Reception of Members in to it." To the Society's credit, the description does not seem to include the "Vomiting, Burning, and Terror" defended by Shippen and the others in the 8/4/37 advertisement.

Not much more criticism of the Freemasons appears in the Mercury after this date. But, by 1743 they could still appear as martyrs in protecting their secrets despite many having been revealed in 4/13/38 article. The *American Weekly Mercury* of 7/7/43 reports that "Free Masons imprisoned in Lisbon and told to reveal secret of order. They refuse."

Business and Politics

The newspaper was frequently used as a venue for discussions over politics and business. This could cover broad issues such as the letters on 8/3/32 and 8/10/32 in the *American Weekly Mercury* about British and American shipping competition, or the letter on 8/17/32 that proposed the restriction of the manufacture, manufacturing instruction, and the exporting of American hats.

Sometimes local conflicts erupted on the pages of the newspaper, such as the controversy over the location of Tanneries in the *American Weekly Mercury* of 8/16/39 and 9/13/39, or the 10/26/38 article in which Quakers object to a recently advertised book on keeping slaves and the advertisement for a pamphlet arguing against slavery in 8/24/38. Sometimes the more individual business conflicts between a master and servant could find its way into the paper as well such as in the 10/11/53 *Maryland Gazette* when Sarah Ramsey inserted an advertisement asking that her servant "not be served when he comes to town for he comes home drunk."

The threatened stamp act of 1764 caused a number of discussions.²⁸⁴ The *Maryland Gazette* published a long letter in November of 1764 from John Huske to Boston merchants explaining why he supported a tax on the Northern colonies. The following issue of the paper had a letter from BRITANNUS AMERICANUS reprinted from the *Boston Gazette*:

The public has been favor'd with a printed ... letter from *John Huske*, esq, to the Merchants of this Town -- *Mr. Huske* complains of "an Impeachment of his Conduct, industriously publish'd in all the American News Papers." -- and -- "refers to a worthy Friend whose Name is not mentioned in this printed Copy for the Exculpation of his public Behaviour, who heard what passed in the House of Commons." This worthy Friend, to answer *Mr. Huske's* purpose, would do well to shew that he was not instrumental in making it believed that *the northern Colonies can afford to pay Five Hundred Thousand Pounds Sterling per Annum* to defray the national Expence for America²⁸⁵

The newspaper allowed for the controversies over how the colonists were to be governed. The January 6, 1736 *American Weekly Mercury* had a letter in response to a "Mr. F---" of the following week concerning an idea to restore some of the elements of the Quaker charter for Pennsylvania:

Mr. F--- is pleased to tell us, that all Governments tend to a Dissolution by several Changes, and very tru; but why then should he not rather avoid than promote the Causes productive of such ill Effects; when at the same time he owns our Constitution the most happy, and suffered fewer Changes than any other in America. Can any Reason then be assigned for his Thirst after such Innovations, but either his Fondness, Prejudice, or sinister Views. Actions best explain the Meaning of some Politicians; which shall be observed anon. In the mean time I cannot join with pious Mr. F---, if he thinks that the Plan of Government laid down for the first Settlers of

²⁸⁴ A number of works have addressed the stamp act issue. See Allen for how it affects newspaper content.

²⁸⁵ *Maryland Gazette*, 12/6/64;p1

this Colony is either Necessary or Convenient, respecting the Welfare thereof in general, to be continued, or as pious Mr. F--- would have it, restor'd at this Day.

The newspaper also acted as a public political exchange between different branches of government, usually between the governor and house or selectmen. In 1740, the governor expressed dismay that the Quaker controlled House of Representatives had voted in opposition to funding a militia:

January 22, 1740

From His Honour the Governor to the House of Representatives:
Gentlemen;

Your dutiful Expressions of His Majesty, your Gratitude for the many Blessings you enjoy under his Government, and the just Sense you entertain of my Concern for the Safety of the Province, notwithstanding our Difference of Opinion in other Matters, render your address very acceptable to me. I should have thought my self happy not to have been laid under a Necessity, by the Posture of Affairs in Europe, of pressing a Matter so disagreeable to the Religious Sentiments of many of the Inhabitants of this Province; but, as I think my self indispensibly obliged by the Duty I owe to his Majesty, . . . [I must] warn you of an impending Danger. . . as the World is now Circumstanced, no Purity of Heart, no Set of religious Principles will protect us from an Enemy.

A reader could find the response from the House of Representatives to the Governor in the same issue:

It is in some degree Satisfactory to us, . . . that any Thing remained which rendered our Address acceptable to the Governor; and we should in this respect have thought ourselves happy not to have been laid under the necessity of entering into a Dispute, the Consequences of which we think are full as much to be feared as the impending Dangers against which we are warned. . . . we beseech the Governour would judge favourably of our Words and Actions, and believe that whatever can be reasonably expected from loyal and faithful Subjects to the Crown, Lovers of their Liberties, their families, and their Country, as far as is agreeable, with our Religious Persuasions, he may expect from us; but if any thing inconsistent with these be required of us, we hold it our Duty *to obey GOD rather than man*.

One week later Governor Thomas wrote a more threatening letter, drawing on the authority of the crown:

January 29, 1740
Governor Thomas to House

I find myself disappointed by your Message of the 19th Instant. . . I could at this Time willingly decline giving you or myself any farther Trouble on that Head; but as that Message discovers an Acrimony which I little expected from Men of your Principles, and which should be carefully avoided in all publick Debates, and as I am resolved never to fail in the Regard due to the representative Body of the People, I think myself obliged, as far as I am capable of understanding the Reasons urged it, to enter into the Consideration of them; tho otherwise I might safely leave what has pass'd between us, to the Judgment of every judicious and impartial Person, but [here] particularly to that of His Majesty and His Ministers, therefore whom it is not improbable it must shortly be laid. . . It may not be decent in me, to enter into a Dispute about the Power of the Crown; but tho the Crown may have a Right to Services particularly reserved in the Grants of Lands in England, as no such Services are reserved in Grants here, the People seem not to be under the same Obligations. . .

The governor then puts the bill they have sent up to him in question as to its passing. The House responds on February 5:

We have so little Delight in Controversy, especially of this kind, . . . We are now become a numerous People, of different Religious Persuasions, many of whom are well arm'd and principled to defend their Possessions against an Enemy, and as such it became us to leave all Men to act freely in this respect, as from the Dictates of their own Hearts they should think was consistent with their Duty to God and themselves. . .

This whole controversy turns into a bit of publishing competition as well. In a postscript to the 2/12/40 *American Weekly Mercury*, a number of authors ask Mr. Bradford to enter the reasons that the Governor vetoed the bill; reasons which apparently accompanied the veto. At this point, as clerk for the House, Franklin had secured most of the work of publishing for the House and had failed to print the reasons. The writers accused him of not only doing so for his own questionable purposes, but also fabricating the excuse that he had lost it. Bradford published the Governor's reasons with the letter of the submitters. Amusingly, the authors also began their letter by pleading with Bradford to break with tradition to criticize a fellow printer:

Mr. Bradford,
By the help of your Mercury, many a young Fellow has found a Way to let his Mistress know his Passion, which he could never have done without it. By the same Means, many a Man has heard of his Failings, and if he has not reformed his Manners, he has been so careful as to conceal his Faults: Nay some, by your smart Reproofs, have been drove from the Tavern, and others shamed into going to

church. We should therefore entertain no Doubt of having your assistance to make our Complaints public, amongst others, were there not something particular in our Case. People generally say there's no such Thing as getting one Lawyer to prosecute another nor one Pickpocket to peach a Brother: For the same Reason, say they, you cannot find one Printer, who will Publish the Faults of another. But as we have known many Exceptions to this general Rule, we flatter ourselves you'll make one more, and publish the Inclosed directed to your Brother Franklin. And indeed, all Things considered, we think 'tis a very civil one, and if need be we can prove, by the solemn Affidavits, that it's very true too. . .

Mr. Franklin,

. . . while we were pleasing ourselves with seeing the Governor had rejected the Bill, . . . we were much surprized to find the Reasons assigned by the Governor for refusing his Assent to that Bill left wholly our of your Print. . . This Suppression you could not think would be agreeable to the Governor. . . Nor could you believe it would be any Compliment to the Mayor and Commonalty to conceal any Thing, . . . We considered your present Situation, the Caution with which you usually act in Matters where your Interest is concerned, and tho' we know you can, upon some Occasions, strike a bold Stroke, and then depend upon your Wit to bring you off, yet sure you will never have the Face to pretend any Directions from our Honourable Assembly to warrant, such a Piece of low Craft. On the contrary it ought not to be questioned but you'll receive your Reward from that Honourable Body, whose Wisdom and Justice and truth must dtest all such Tricking.

You have had fair warning, BEN, . . . but all in vain: For its said you are under a bad Influence; and it was observed of you too, that you're never at a Loss for something to say, nor for some Body to say it for you, when you don't care to appear yourself; and so we presume it was ordered in the present Case, when One of your Acquaintance allledged you had dropped the Reason in the ----- and some Body had picked it up. . .

Economics and trade often found fairly vocal oppositional writers. In the *Virginia Gazette* of 7/15/37 an argument is made by an Englishman that America should avoid increasing its production and sale of bar iron, as well as other manufactories, because it threatens English manufacturing despite the potential to avoid paying for these imports with cash from Russia and Sweden. He writes: "The colonies are increasingly taking over British manufacturing techniques," the writer continued, "As Britain needs more raw material than exists in the Islands, many of the trees having been cut down for example, and will have fewer locations for selling its goods with the rise of American manufacture, Britain might soon find itself paying for American bar iron with cash in any event."

In a dispute local to Philadelphia in 1734, a certain crew of a ship felt that it needed to use the newspaper to clarify that leaking sea water, and not the careless actions of the crew, had ruined a recent shipment of goods in the 6/20/34 *American Weekly Mercury*. An advertisement that repeats for several weeks in 1755 in the *Maryland Gazette* also acts to defend the actions of a ship's crew against a very dangerous accusation:

Pig-Point, August 8, 1755.

Mr. Green,

As many scandalous and malicious Lies have been invented, and industriously propagated, either to injur myself, or my Owner, in the Loading of my Ship; among others, that I had brought into the Country Warlike Stores for our declared Eniemies the French, and the Roman Catholics: In order to remove any Impressiions such base Lies may have made on any of my Freighters or others, I desire you will publish the inclosed Affidavit; and I further hereby promise a Reward of FIVE PISTOLES to any Person, who shall discover the Author or Authors of such scandalous Lies, so that he or they may be convicted of the same by a due Course of Law. I am, SIR, Your humble Servant, HENRY CARROLL. We, the Officers and Seamen, now under the Command of Capt. Henry Carroll, of the Ship Concord, bound to London, having to our great Surprize, frequently heard that our Commander was accused of lying with a fair Wind at the Mouth of Patuxent River, at our Arrival in this Province, during the Space of Six or Eight Days; and during that Time was landing Warlike Stores for our declared Enemies the French, or supposed to serve some wicked Designs of the Roman Catholics; we therefore think ourselves in Justice bound to declare his Innocence, and make it known by a public Affidavit on the Holy Evangels of ALMIGHTY GOD to the following Facts:

. . .

THE following Persons were sworn to the Truth of the foregoing, before DAVID ARNOLD. . .²⁸⁶

The postscript of the *American Weekly Mercury* of 3/7/38 saw the beginnings of another controversy concerning trade, this one over a proposal to secure a better price for Tobacco. In a letter signed by John Doe the author writes:

ANNAPOLIS, February 20. 1737,8

It is a very just Observation, that fair Traders have ever been distinguished by an Openness and Candor, which are the genuine Effects of real Honesty. On the contrary no Men are more dispicable than such as make use of Subtilty and Craft in their Dealings. . . The Author of the above Article, (lately printed in Mr. Franklins Gazette) appears to me to act upon these detestable Principles, and I make no doubt but it will be attnded with suitable Success. The End proposed was manifestly to

²⁸⁶ *Maryland Gazette*, 8/14/55;p2

intice Ships from Philadelphia, upon the Credit of the French Scheme, without the hazard of actual Chartering.

Another author, W. Huber, finds John Doe's argument false in an advertisement on the first page of an appendix to the 4/13/38 *American Weekly Mercury*. He declares that John Doe's arguments are false no matter what his identity: "For my own part, tho' John Doe's true name would undoubtedly increase the Indignation and the Contempt his Performance deserves, it is quite indifferent to me, if he unmasks or not. Notorious Falsities, expressed in a scurrilous manner, refute themselves and camp the due Blemish upon their Author". In another letter, a Mr. Darnall asserts that John Doe has created falsehoods.

The 5/25/38 *American Weekly Mercury* contained a response signed by *Richard Roe, John Doe's "brother-in-law"* that rejects the thinly veiled personal attack and attempts to recapture the rational and moral high ground:

He deeper sinks by floundering in the Mud. Dryden

The Facts asserted in the Advertisement, the truth of which is deny'd by Mr. Doe, are 1st. that an offer of Five Pounds Sterling here, for 900 lb. Dull Tobacco had been made on behalf of the French Farmers. 2dly. That it is a better Price than the Planters have had from their Merchants in London. And lastly, That the French Proposal had met with genuine Approbation. . . To the ad Point, Mr. Darnall asks, Who among the Planters have had more from the Merchants than the Price now offered? This is a very impertinent Question. I cou'd name Hundreds. . . John Doe affirms the Proposal is treated with CONTEMPT, and that no considerable Person in the Province favours it. This Mr. Darnall denies, and produces himself. I think a little more modesty would have become him upon this Occasion.

One of the most hotly contested issues in the *Maryland Gazette* concerned the means of increasing the return on tobacco. The April 14, 1746 *Maryland Gazette* had a letter written by an A.B. proposing a new Inspection Law for tobacco with the intent of raising the price of tobacco. This one letter engendered a host of responses. The topic monopolized the page space of the 1746 *Maryland Gazette* more than any other single subject did that year.

The first response came from Q.B. who agreed with the need to increase the price of tobacco but disagreed with the calculations of A.B. "because the Staple of Tobacco may be raised with much less Charge to the Country than by an Inspecting Law, which would rather impoverish". A.B.

"supposes 60 Warehouses will be sufficient; whereas any one, that will give himself but Time to think how many great Rivers there are in this Province, would judge no less than 100 to be sufficient," Q.B. continues. He also questions the estimated cost of building the warehouses at 3600 lbs. and ventures 8000 lbs. per warehouse instead. In general, all the prices come under question - the price of land, scales, weights, and inspectors - as well as some proposed levies: "And as to his Method of defraying the Charge of an Inspecting Law, I must also differ in Opinion with him, especially on Account of his laying a Duty on Rum (because I like a little of it now and then myself) . . ." Q.B. makes his own proposal: "to have a Burning Law; that every taxable Person, that are Makers of Tobacco within this Province, shall be obliged to burn the Quantity of 150 lb. Of Tobacco". In addition: "that there be a limited Time for shipping Tobacco; then the Merchants would know what Time to send their Ships here, and what Time to expect the Return of them back again; whereas at present they are at no Certainty, but their Ships kept here a long Time upon very great Expences, and some one or other going home all the Year round."

May 13, 1746 saw the first response to "a Gentleman who stiles himself Q.B." from A.B. The warehouses need not be as big as Q.B. makes them out, says A.B., and so will not cost so much, and by situating them close together do not require the number of inspectors proposed by Q.B. He then uses examples of current warehouses to show the storage capacity that exists and notes that "100 Warehouses, which are calculated to hold 70,000 Hogsheads of Tobacco" seems excessive since "he will not allow Maryland ever exported above 36000 Hogsheads in any one Year." A.B. then estimates that with Burning Law inspectors, the cost of labor for burning, the loss in potential income from the burned tobacco, and the lost time in doing other business, the cost of the Burning law comes out to 16,500 Pounds.

Q.B. responds on June 17, again questioning the cost of sheds. On August 12 a Z.Z weighs in, siding with A.B.: "I beg Leave to say, as I am acquainted with most of the Rivers and good Landings in the Province, that I readily agree with Mr. A.B. that 60 Warehouses of the Dimensions he proposes, built at proper Landings, would be sufficient to hold the Tobacco made in this Province." He then does his own calculations for the inspection law and estimates a 600 Pound per annum charge for the province that pays for itself in four years. Z.Z. expresses some

experience with a Burning law that destroyed large quantities of "trashy Tobacco", never brought tobacco to convenient Landings, secure it from damage during rolling, prevent "the Deceit in Steelyards," or "give Dispatch to the Shipping".

The following year, the debate began again. Apparently, Q.B. did not stand alone for on March 3, 1747 had another opponent to the Inspection law argue against it. May 5, 1747 saw a facetious reply to "*Q. in the Corner*" by "*P. on a Pinnacle*" as well as another argument from A.B., and on May 26, 1747, The MARYLAND PLANTER wondered how "those who are avow'd enemies to it [the Inspection Law] have loudly asserted that it would be ruinous to the country, that yet they have not even (if they are able) any better reasons in support of their assertion, than those of their late champion, the deceased *Q in the Corner* (peace to this man), which I think have been fully answered."²⁸⁷

Some writers never tired of this debate for it appeared in the newspaper every once in a while for years afterwards, especially 1753 where it again dominated the *Maryland Gazette*. The 4/25/50, 9/11/51, 4/5/53, 5/24/53, 5/31/53, 6/14/53, 6/28/53, 7/12/53, 2/14/54, 3/4/56, 3/9/58 issues of the *Maryland Gazette* all had lengthy letters to the editor with numerous cost figures concerning the potential for the inspection law to assist the growers of Maryland in getting a reasonable return on their main crop. The debate also got a sarcastic send-up by Alexander Hamilton in a 6/29/48 issue.

Religion

After arriving in America, distinct religious groups tended to cluster. Sally Schwartz indicates that the distinctions people made in referring to themselves and others tended to be primarily of a religious nature, not so much one of ethnicity (although within ethnic groups divisions occurred)²⁸⁸.

²⁸⁷ These characters all get a little ribbing in Alexander Hamilton's Don Fransisco dream essay of 6/29/48 *Maryland Gazette* according to Lemay. A.B. however, is described "if I understand Physiognomy, there is Honesty and Ingenuity in his Frontispiece". Lemay notes that A.B. is likely Daniel Dulany, the father of Hamilton's bride Margaret.

²⁸⁸ Schwartz, p.292.

Little mingling with other groups for purposes of family generation occurred but different religious groups did have economic interaction.

Religion, additionally, did not impede economic progress or emigration. Pennsylvania continued the heritage laid out by William Penn in continuing to aspire to the ideal of cultural and religious toleration. New Amsterdam, and later as New York, intent on its own economic progress, also became fairly welcoming to different groups. Although there could always be conflict and less organized intolerance, and underlying prejudices and tensions could be revealed in extreme situations such as threats of war, intensive missionary activity, or large influxes of immigration that challenged a status quo and suddenly thrust a particular group into prominence, Pennsylvania, unlike other states, had few institutional hindrances to freedom of conscience.

The individualist culture of colonial Pennsylvania (and less so the colonies in general) made it impossible for any group to mold colony-wide institutions to which individuals could be forced to conform. Indeed, the missionaries who came to the colony generally came to recognize that not only was there no possibility that the European system of state churches could be established, but that it was almost impossible to maintain stable congregations that could gather weekly for worship. Many individuals frequented whatever services were available. Additionally, ministerial attacks on other denominations were not well received.²⁸⁹

Quaker beliefs that truth had not been entirely revealed and that each person would understand it individually encouraged toleration of different systems of belief and practice as well as religious pluralism. The pluralism was not without economic considerations of course. For one thing, the desire to sell large tracts of land encouraged tolerance. Newcomers did not always expect or appreciate the religious and ethnic heterogeneity, nor emigrate because of it specifically. The economically liberal government and inexpensive and fertile land, interrelated with toleration, was incentive enough.²⁹⁰

²⁸⁹ Schwartz, p.295.

²⁹⁰ Schwartz, p.297.

Local Religious Politics - the Kinnersley Conflict

The possibilities for printing conflict over religious opinions did not escape any of the editors in our study. In the *Maryland Gazette* of 8/4/57, an article begins by apologizing for its presence in the paper "However uncustomary or unfashionable it may appear, to cram a Sermon into a News-Paper, we hope the Reprinting the following, which is wrote in a new Taste, will not be unacceptable to our Readers: It is taken from a late London Impression.". However, numerous individuals sermonized, protheletized or sold their sermons through the newspaper. In the *American Weekly Mercury* of 2/26/41 an advertisement promised "In Press - choice dialogs between godly-minister and an honest country man concerning election and predestination." Another advertisement had "A vindication of the reverend commission of the synod: In answers to some observations on their proceedings against to Reverend Mr. Hemphill (1 shilling)"²⁹¹ Another advertisement had "soon to be published: Remarks upon the defence of Rev. Mr. Hemphill's observations in a letter to a friend..."²⁹²

Franklin's later partner in staging electrical demonstrations, Ebenezer Kinnersley, had a major skirmish with his Parish in which the *Pennsylvania Gazette* played a major role. Through publishing the letters of his friend, Franklin published his own disposition on the clockwork universe as well.

Born a Baptist on November 30, 1711, Kinnersley came of age during the feuds, schisms, and realignments of the Great Awakening starting in the 1720s. During this time, William Tennent set up the Log College in central Pennsylvania from which came Blair, Davenport and Rowland, revivalists all. Many Presbyterian congregations were so alarmed as to enact rules requiring all candidates for ordination to have diplomas from New England or Europe.²⁹³ The rules barely stemmed the revivalist tide, however, for other ministers -- notably Jonathan Edwards in Massachusetts, and itinerant preacher George Whitefield, coming to America in 1739 -- gained many followers and started new congregations. By 1740, they had made large inroads to winning over the population.

²⁹¹ *American Weekly Mercury*, 9/4/35

²⁹² *American Weekly Mercury*, 12/23/35

The enthusiasts usually possessed excellent oratory skills and succeeded, in a culture which frowned on superfluous entertainment, in attracting great crowds. The 6/12/40 *Gazette* article estimated that close to 8000 people may have been at one Sunday evening sermon.

Kinnersley argued that these sermons were a threat to civility and rationality. In a 7/6/40 sermon at Philadelphia's Baptist Church he attacked their methods and effects: "I am not against preaching of terror, in order to convince profane, impenitent sinners of their awful and tremendous danger, provided it be prudently managed; but such preaching as we have lately been entertained with...."²⁹⁴ In the sermon Kinnersley shows a partiality for an orderly, clock like universe: "What spirit such enthusiastick ravings proceed from, I shall not attempt to determine; but this I am sure of, that they proceed not from the spirit of God, for our God is a God of Order, and not of such Confusion."

The sermon put Kinnersley's career in jeopardy, but helped Franklin make money. The church fathers, in the face of such overwhelming support from their congregations, did not back him. This prompted a series of letters and a little competition between Franklin and the Bradfords. Kinnersley's first letter attacked several individuals and Franklin initially refused to print it, considering it libelous. Eventually he did print it on 7/24/40 with a disclaimer. Kinnersley, wanting to move quickly, printed his letter with Bradford, an ad for which appeared in the *American Weekly Mercury* on 8/2/40. This apparently created quite a stir because both papers started advertising they would print Kinnersley's next letter. Advertisements criticizing Kinnersley appeared in both papers on 8/14/40 and 9/11/40. Finally, Kinnersley advertises his last pamphlet in the controversy in the *Mercury* three times in October 1740 (the 16th, 23rd and 30th). Throughout the debate, Franklin tried to keep an objective stance. However, on 1747, Franklin has few qualms in showing some affinity for Kinnersley's deist perspective by publishing "The Right of Private Judgement" on the front page of the 1/19/47 issue.²⁹⁵

²⁹³ Lemay (1961), p.18.

²⁹⁴ Lemay (1961), p.20.

²⁹⁵ See excerpts above and total in Lemay (1961), App. A.

Whitefield and the "Great Awakening"

In the American colonies a loosely defined group of evangelicals received a fairly complex representation in the newspaper. According to Franklin's autobiography, he conversed, dined, and corresponded with a number of these ministers. He claims a respect and "civil friendship" for the reverend Whitefield. Yet, one of the anecdotes of the autobiography seems a warning to other listeners: "Returning northward, he preach'd up this charity, and made large collections, for his eloquence had a wonderful power over the hearts and purses of his hearers, of which I myself was an instance." Franklin goes on to recount how he emptied his pockets for a project he disagreed with after a particularly sentimental sermon. Another member of the Junto, having left his purse at home, asked for a loan from his neighbor, "unfortunately to perhaps the only man in the company who had the firmness not to be affected by the preacher. His answer: 'At any other time, Friend Hopkinson, I would lend to thee freely; but not now, for thee seems to be out of thy right senses.'"²⁹⁶

Whitefield did not apparently attack the enlightenment projects that the likes of Franklin promoted. The newspaper also often does not seem to promote or side with the opposition to enthusiasm. It does occasionally present it as a curiosity. The June 12, 1740 article on the preaching of Whitefield and Tennent has a tone of open astonishment:

The alteration in the face of religion here is altogether surprising. Never did the people show so great a willingness to attend sermons, nor the Preachers greater zeal and diligence in performing the duties of their function. No books are in request but those of piety and devotion; and instead of idle songs and ballads, the people are everywhere entertaining themselves with psalms, hymns and spiritual songs. All which, under God, is owing to the successful labours of the Reverend Mr. Whitfield [sic].

Nevertheless, the *Pennsylvania Gazette* and other newspapers formulated revivalist and countering information into a religious controversy through which Franklin gained a profit. On 5/22/40 an ad announced the sale of Gilbert Tennent's "The Danger of an Unconverted Ministry" at Franklin's

²⁹⁶ Franklin (1955), p.131. Franklin would later recognize a similar group enthusiasm and individual swooning when his stay in Paris ran concurrent to the Mesmerism that swept through that city. Franklin worked to abolish the practice joining a commission from the Academy of Sciences. A painting of the time, *Le Magnétisme dévoilé*, shows Franklin holding up the report of the royal commission, the light of reason scaring the Mesmerists away. See Darnton (1968), p.63.

store. June saw two advertisements for rebuttal pamphlets, both on the 19th ("Just Published, SIR Matthew Hale's SUM of RELIGION, To which is added, a Poem on Zeal. Sold by B. Franklin, price 3d." and "Some Observations on the Rev. Mr. Whitefield, and his Opposers. Printed at Boston for the Benefit of the Orphan House in Georgia, and sold by B. Franklin in Philadelphia, price 6 d. Note, Great Numbers of these have been sold at Boston and New York, it being esteem'd the best written Thing of the Kind that has yet appeared.") The debate continued through the decade and into the pages of Franklin's attempt at a magazine, The General Magazine, which had an ad in the Mar 26, 1741 *Gazette*, one of the advertised highlights being a "Letter to Mr. Gilbert Tennent enquiring into motives of his Late conduct."

Articles attest to the debate running outside of the newspaper. A June, 11 1741 article in the *Pennsylvania Gazette* about the Presbyterian Synod notes: "a Protestation was entred into, on the first Instant, and signed by 12 Ministers and 8 Members then present, by which the Rev. Messrs. the Tennents, and their Adherents, are excluded the Synod, and declared to have forfeited their Right of sitting, and voting as Members thereof: The excluded Brethren immediately withdrew, and met by themselves in another Place. 'Tis said, that the Number of the Excluded was nearly equal to that of the Synod remaining."

No one elicited more response than the Reverend Whitefield did. In 1739 and 1740 a Mr. Arnold and a Mr. Smith exchanged words through the newspaper after Mr. Arnold allegedly verbally attacked Mr. Whitefield at a dinner party at Mr. Smith's home. The exchange soon had numerous participants. The discussion proved so popular that Bradford promised to publish it in a subscribed Octavo of writings by Magnus Falconer in a page four advertisement of the 2/12/40 *American Weekly Mercury*.²⁹⁷ Falconer had also answered Arnold's letter against Whitefield in the 11/29/39 *American Weekly Mercury*, pithily arguing that "I'm perswaded that even his best of Friends, if not altogether Blind, may easily enough perceive that he is blinded with Ignorance, for there's none so Ignorant as they who do not know it; and if the Blind lead the Blind, they'll both fall into the Ditch". The front page of the next week's *Mercury* had another letter "To all Christian People" by an IMPARTIAL JUSTICE who "cannot forebear making a few

²⁹⁷ Interestingly, both Bradford and Franklin are listed as printers for this octavo.

Observations on the Conduct of Jonathan Arnold, residing in a neighbouring Province." The issue included a poem from the New-York Weekly Journal:

*WHITEFIELD ! that great, that pleasing Name
Has all my Soul Pssesst:
For sure some Seraph from above
Inspires his Godlike Breast,*

*He comes commission'd from on High,
The Gospel to proclaim;
And thro' the wide extended World
To spread the Saviour's Name.²⁹⁸*

A week later an "EXTRACT of a Pamphlet intituled, *The Conduct and DOCTRINE of the Reverend Mr. Whitefield vindicated from the Aspersions, and malicious Invectives of his Enemies* appeared and continued the following week.²⁹⁹ The 12/20 issue also included a letter from William Smith adding fire "Tis true that I invited Mr. Arnold to come to my House, at the same Time that I invited the reverend Mr. Whitefield, and it is as true that I have heartily repented it since." The next two weeks devoted a third of the paper to more praise of Whitefield, and the third, January 15, 1740 had a continuation of Mr. Smith's response to Arnold. By 2/5/40 an odd mockery of "J--n Ar--ld" from the *New-York Gazette* appears, this one calling him an itinerant missionary similar to "Sancho Pancho" attendant to "Don Quixot" who warns of the imminent danger from an enemy that really does not exist, just as the windmills were not dragons but windmills afterall.

In an advertisement in the *American Weekly Mercury* of 1/15/40, Bradford promised four sermons as well as "The Rev. Mr. Whitefield's Answer to the Bishop of London's last Pastoral letter." Not to let any controversy lie, another advertisement in the *American Weekly Mercury* promised a pamphlet: *Stebbing's discourses against Whitefield*.³⁰⁰ The advertisements about Whitefield's sermons get longer during this period. The week of 4/17/40 includes "worldly

²⁹⁸ *American Weekly Mercury*, 12/6/39.

²⁹⁹ *American Weekly Mercury*, 12/13/39 and 12/20/39.

³⁰⁰ *American Weekly Mercury*, 9/23/42;4

business no plea for neglect of religion", "the heinous sin of drunkenness" and "directions how to hear a sermon."

Advertisement allowed for some criticism of Whitefield as well. From the 12/18/40 *American Weekly Mercury*:

Mr. Bradford,
As you have inserted several Things in your Mercury in praise of the Rev. Mr. Whitefield, and nothing on the Contrary, makes it believed you are Partial which is thought not according to the Custom of the Printer, "Your inserting the following EPIGRAM will highly oblige many of your Readers, and particulary, W.W.

To the Reverend Mr. Whitefield on his Preaching FAITH ALONE.

WHITEFIELD to what End do you preach,
Since you have no good Works to teach?
No Man e'er preach'd so much as you;
None e'er such Crowds of Hearers had,
And none so FEW, that were not MAD.

Even more potentially damaging, a year later in a postscript to the 9/10/41 *American Weekly Mercury* (which may have been paid for) an extensive letter accused Whitefield of using his "delusionary" charms to take advantage of a young girl. The girl, allegedly, later delivered Whitefield's child after only four months a marriage to another man who had been assured "she was blessed".

Another literary controversy over Whitefield erupted in Boston in 1744 and found publication in the *American Weekly Mercury*. This time, with Cornelia Bradford as editor, the *American Weekly Mercury* seems to have had a different editorial position. While three years earlier it had published numerous reports of Whitefield's travels and supportive letters, in 1744 and 1745 it published, in the non-paid section of the paper, several one to three page letters critical of Whitefield, none supportive, and none of his itinerary.³⁰¹ From the Boston Evening Post of November 19, 1744 a letter criticizing Whitefield accused him of "Errors in Doctrine" as well as

³⁰¹ Another example of their letters supportive of Whitefield and Enthusiasm in general: The July 16, 1741 front

creating divisions that had "broken up many of our Churches". As published in the 12/6/44 *American Weekly Mercury* it begins:

Sir, IN several of your late Papers, you have given the Publick a full and just Representation of the Manner in which Mr. *Whitefield* was formerly received in these Parts, and what Part he acted while among us: We have also had four Years Experience with the sad Effects of his former Operations; which being duly considered , it is wonderful indeed, that any should be so far under the Power of a deep Infatuation, as to *desire* and *pray* for his coming among us a second time.³⁰²

The letter asked for a public apology from Whitefield for his "vast Mischief" and his treatment of Boston ministers, that he retract his "slanderous and uncharitable speeches concerning some great and good Men, particularly Arch-Bishop Tillison" and that "he render a fair and just Account of the great Sums of Money, and Quantities of Goods collected by him, under Pretence of supporting his Orphan House at Georgia."³⁰³

Three weeks later another letter from the Boston paper appeared. This one had an extract from "an excellent SERMON lately preach'd at Plimouth, at the Instalment of the Rev. Mr. FRINK, by the Rev. Dr. CHANCY" wherein "the Doctor addresses a Solemn Warning to the Ministers present on that Occasion, that they in no wise encourage or countenance the teaching of the GRAND ITINERENT, who is come among us a second Time.". A third letter from the 1/14/45 *Evening-Post*, signed "Anti-Enthusiasticus" also warned that "Infidelity will over-run the land, if men of an enthusiastic Turn of Mind are not kept out of our pulpits".

Superstition, Enthusiasm and the Catholic Church

The term "superstition" plays an interesting role in the colonial newspaper. The newspaper not only contrasted superstition to natural knowledge, but sometimes as a component of Catholicism, enthusiasm and even atheism.

page letter from a Gentleman of East Lyme to Mr. Gilbert Tennent of NewBrunswick

³⁰² *American Weekly Mercury*, December 6, 1744.

³⁰³ Whitefield continually asked for funds to support a Negro school and orphan house in Georgia. An example of ad for donating to the cause can be found in the *American Weekly Mercury* 11/27/40 issue.

Geopolitics played a role in the presentation of natural history or natural philosophy. And, ironically, the Catholic French were sometimes positioned in opposition to this 'noble goal' despite the abundance of natural philosophers in Paris (who were perhaps not even Catholic) including Dalibard, who first performed Franklin's lightning experiment on May 10, 1752. Numerous other examples also point to the solidification of patriotic zeal by emphasizing the uniqueness and power of British natural philosophy with respect to the enemies of the British Empire.

For example, the *Pennsylvania Gazette* in the 1750s and 1760s makes references to Spanish and French ships being damaged by lightning far more often than British. British ships sail with both God's and Franklin's blessings. Another example filled with symbolic representation comes after the fall of Canada. The October 9, 1760 issue has a report from the celebration in Boston:

At the Illumination last Friday Evening, on Account of the Reduction of the City of Montreal, and with that the Reduction of all CANADA, in several Windows in Town were presented to View some ingenious Representations; and from the illuminated Scenery at the Balcony of the Court House, were exhibited the following Designs. . . . a Female Figure, representing France, prostrate, her Sword broken, and subjecting a Map of Canada at the Feet of Britannia. Behind France a Group of Figures representing Cruelty. Deceit, Craft, and Envy, blasted by a Flash of Lightning from Jupiter, who sits above, with the Scales of Justice suspended by one Hand, and on the other *his Thunder Bolt*.

In a 7/13/38 *Maryland Gazette* printing of an April 24, 1737 letter from Paris (by way of the March 1, 1738 *Jamaica Courant*) came a story of two old men, "found by the Jesuits to understand 30 languages, eat and drink nothing but bread and water, and are each aged 700 years." According to the article, these two roamed the streets of Paris and warned them to change their manner of life or risk the destruction of their cities in three months time. They made a number of prophesies, including the destruction of Constantinople in 1739, the sacking and burning of all of Africa in 1743, a great earthquake in 1744, and coming of Christ to Judge the World in 1738.

Given that the residents of Philadelphia did not read this letter until 15 months after the residents of Paris had been served their warning, its unlikely that anyone put much stock in the veracity of

this story. Paris, after all, as the colonists surely knew, had not been destroyed. The letter probably serves the wishful thoughts of the colonists for their enemies the French.

Numerous articles in the newspapers of the American colonies painted Catholics in pretty stark terms. An *American Weekly Mercury* of 1/28/29 contained a letter talking about Roman Catholics making life miserable for Protestants in an English town. Another letter had Catholics in Poland cutting off the hands of women and children. A *Maryland Gazette* article of 7/31/55;p13 had "Some thoughts upon America and upon the danger from Roman Catholics there from a late English paper." The article posits that "it is a fact most undoubtedly true, that great numbers of Irish and German papists have of late years, gone into our colonies . . . while we are at war already with one Roman Catholic power in America." The author "shall esteem myself very fortunate, if any hints which I have undigestedly offered, shall be wrought up by abler persons into the means of any safety or security for his majesty, and his protestant subjects and the country."

Articles mocked the potential superstition of Catholics as well. In the *American Weekly Mercury*, 7/13/39, an article reported that two grave diggers found a skull as they dug a new grave and set the skull down where they observed it moving and ran to the Parson claiming they had discovered the grave of a saint. The Parson ran to the place and "to his great Surpize found the Skull moving, upon which he cry'd out a Miracle! A Miracle!" He sent for his vestments and holy water, took the skull into the church now trailed by numerous followers who argued over who's relative was buried there. The priest began to sing Te Deum with the skull on the high altar when a mole darted out from the skull revealing "the Cause of its Motion; upon which the Cure broke off Te Deum, and the Congregation dispers'd".

Franklin also publishing these types of letters: finding a rhetorical junction between Catholic or enthusiast religiosity, evil, weakness of the individual spirit, poor government, and an unenlightened ontology. An article of May 25th in 1732 once again linked superstition to the Catholic Church. An article of October 3rd, 1734 tells of the public recanting of a Catholic priest in Bermuda. On May 27, 1735, a letter apparently written by Franklin himself used the notion of superstition to argue for rationality:

If truth is divine and eternal, tis the natural homage of a reasonable mind to yield to its powerful light, and embrace its lovely form wherever it appears; tis superstition to be fond of an old opinion not supported by it; it is idolatry to adore the image and false appearance of it.

Ebenezer Kinnersley's letter of January 19, 1748 titled "The Right of Private Judgement" declared that right "the basic support of the Reformation against all things Popish and unnatural."³⁰⁴ Kinnersley stated that "Man is by his original constitution, a moral and accountable being," and charted a middle course between the established churches and the vigorous oral enthusiasm of George Whitefield and others, to find rational inquiry the route to emancipation:

If freedom of thought and rational enquiry usually prevail'd, men could not be so easily practic'd upon by every insinuating, crafty, or bold impostor; but if their understandings are brib'd or terrified, and either of these ways brought to a tame and servile submission to imposed and popular opinions, to receive implicitly whatever the church has set her stamp upon, or has been transmitted from their forefathers; they must of necessity be exposed to endless delusions, to the most stupid, impious and hurtful superstitions and may easily be cajol'd or frightn'd out of their senses and the common principles of humanity.

Taking the editor's reins of the *Pennsylvania Gazette* in 1748, David Hall continued to link superstition with "giddy enthusiasm" and Catholicism until 1760 when the war in Canada ended.³⁰⁵ The 9/25/60 letter from New York celebrates the fact that British citizens were not made "slaves of arbitrary power, caprice, and superstition." However, after 1760 in the *Pennsylvania Gazette*, the label of "superstitious" becomes less used and derivations of the word no longer appear in the paper. One reason is that the colonists' relationship with France began to change. France no longer threatened the borders of the British colony. Meanwhile Great Britain began enforcing taxation and regulations upon a reluctant North America population. The Great Awakening of mid century also began to subside. The *Pennsylvania Gazette* abandoned the triple phantom of enthusiasm, Catholicism, and irrationality because it no longer needed to counter the incursions of French troops, Indian raiders, and itinerant preachers.

³⁰⁴ Leventhal (1976), p.43. The long quote is from the *Pennsylvania Gazette*.

³⁰⁵ Articles or letters on 3/19/51, 3/26/54, 8/29/54, 9/5/54, 5/1/55, 5/6/56, 5/27/56, 3/20/60, and 9/25/60.

Samuel Keimer published in the *Pennsylvania Gazette* a letter on September 18, 1729 by PUBLICOLA on the goodness of all God's handiwork and how superstition leads people astray from understanding that work. The letter began:

ON SUPERSTITION

To the People of England
Gentlemen,

As true Religion is the source and Fountain of the greatest good; so superstition is the most terrible evil that ever infested Mankind: We are resolved therefore, in the course of these papers, to view it in every shape; trace it to the bottom, shew you its nature, rise, progress, and extant; and then lay before you the only means of rooting it out of the minds of men, and destroying a monster which has introduced more misery into the world, than all our natural evils put together.³⁰⁶

The letter continued, "our noble faculties of the mind which if rightly used, would have led us into just notions of God and religion, have, by being neglected or imposed upon, betray'd us into most abject religious follies." The letter further critiqued organized religion's moral directives and social power: "and who dissented from this public faith were declared enemies of God and pernicious to civil society." Finally, the letter culminated in imputing remnant animist and pagan leanings to numerous religious practices that threaten the population with superstitions: "crowds are superstitious still and churches catholic and Protestant retain too much of an antichristian spirit."

In the *American Weekly Mercury* of 2/17/36 a reprint from the London Magazine entitled "A Wizard's Harangue in praise of Poverty" used superstition as mockery of itinerant preachers. What first appears as an article on a Wizard bothering the people of Norfolk turns into a creative rendition of an itinerant preacher giving a lecture. The included lecture by the wizard criticizes an over dependence on the trappings of wealth. But the article ends with the listeners learning that the wizard had had small children picking their pockets throughout the sermon. It begins: "...we are informe'd that a noted Wizard appeared and did very considerable Damage, not only in that Country, but quite thro' this Island. This Wizard has a great Number of Imps, which he can call together at a Minute's Warning, some in the Shape of Greyhounds, but many more resembling Lobsters, and with these he torments the poor People, who dare contradict him, or even mutter at the Cruelties he exercises over such as he thinks his Enemies."

³⁰⁶ *Pennsylvania Gazette*, Sep 18, 1729.

The transcription of the Harangue notes "Poverty, *my Friends, was the Founder of the Roman Empire, which was ruined by Riches*" and "If you but look among the Poets, both ancient and modern, you will find the best have been the poorest". "Poverty makes us industrious, skreens us from Envy, renders us healthy, and protects us from that torturing Disease the Gout," it continues, and proclaims "Oh! Cursed Gold, of what Evils art thou productive . . . Seneca says, that he is a great Man, who can use Earthen Vessels, as if they were Silver; but he is a much greater Man, who can use Silver as if it were Earth"

By the end of the essay, however, the true intent of the piece, to criticize the messenger, possibly even Whitefield himself, becomes clear. It concludes: "He [the Wizard] was going on, when some of his Disciples were discovered picking of Pockets, which put his Auditors into so great a Rage, that if he had not delivered himself and them, by *going off in a Fog*, they had certainly been torn to pieces."

The numerous articles and advertisements concerning religious conflict that the newspaper published reveals how *important* printed exchanges between conflicting parties were. The newspapers, along with printed pamphlets, played a critical role in this exchange. Occasionally, a writer tiring of the debates might even try to broker a literary truce. An unsigned essay in the *American Weekly Mercury* of 6/25/30, responding to an essay a week earlier, strikes a conciliatory tone and reasons that Christianity includes a tolerance of other religious opinions:

To SOCRATES

IN your Essay on Charity, which shews you have a Heart warm in the Cause of virtue, you have mentioned several Species of it; but one you have omitted, which is that Charity we ought to have for those who differ from us in Religious Opinions: The want of this Virtue has occasioned Persecution for Opinions, and brought numberless Evils on Mankind. . . Should I now go about to enumerate the Miseries and Calamities that the want of this Virtue, Charity, has brought upon the World . . . and tell how many Countries have been depopulated, and how many Millions of Mens Bodies destroyed, for the sake of their Souls; in all Attempts to bring People from one Belief to another by Persecution, there is equally a Mixture of Folly and Wickedness. . .

In Opposition to Reason

Unlike the debates between religious affiliations where the newspaper often gave equal play to different sides, elements essentially labeled as superstition such as witches, wizards, specters and, even, astrologers received no such courtesy. Few forms of superstition, at least of the domestic variety, appear in the Newspapers. So called "Cunning Men" do not reside within their pages except, as we saw above, as con artists who have skills in deception. Stories of outrageous witch trials always originate from Europe; serving to thrill, entertain and distinguish the colonists from the excesses across the Atlantic. Occasionally, you might see an advertisement for Hale on Witchcraft, Glanville on Witches, or Hutchinson on Witches³⁰⁷ but no articles.

Other elements of the occult world are even more elusive in the American newspaper. No mention is made of astrological prognostications, either natural or judicial, except one advertisement's reference to a Poor Richard's Almanac prediction. That Poor Richard's itself parodied fortune-telling almanacs of the day is completely obvious from the reference.³⁰⁸ The same holds for alchemy. For example, despite any affinity Franklin might have had with Boyle and his experimental method, or any contemporary colonists interested in alchemy with whom he corresponded such as Ezra Stiles, he apparently rejected both notions and, along with Hall and Keimer, disallowed their entry into the *Pennsylvania Gazette*. In his private papers, Franklin

³⁰⁷ Ads for books on witchcraft in the *Pennsylvania Gazette*: 12/25/40, 2/7/40, 4/5/48, 4/16/48, 5/12/48, 8/4/48, 9/22/48, 3/14/49, 6/22/49, 12/19/49, 2/6/50, 2/22/59, 3/25/63, 3//61, 7/18/54. Curious that many of the ads are clustered around 1748-1749. It may be that Hall had the books and could not sell them. The Hale book is fairly critical of witch trials.

³⁰⁸ A Nov 7 1734 advertisement for *Poor Richards* in the *Gazette* relates the contents:

Just Published, POOR RICHARD: An ALMANACK for the Year 1735; containing the Lunations, Eclipses, Planets Motions and Aspects, Weather, Sun and Moon's Rising and Setting, Highwater, &c. Besides many pleasant and witty Verses, Jests and notable Sayings, as usual. Proofs of Titan's Death, predicted in 1733. Titan's Ghost. Saturn, Mars, and Penn's People. Receipt how to make Cuckolds. Bad Commentators. Impudent Hibbam. Ignorant Politicians. Eyes and Priests. William's Wife. Well bred Sally. Cunning and Wisdom. The Miser. Lewis the Great prov'd to be little. Unlearned wise Men. Sam's Wife's Curse. Great Wits jump. Hal's Management. Abstinent Tim. Halfwitted Railers at all Women. The Orator. Habit of Lying. Sally's Teeth. The generous Sun. What makes Folks amiable. The Lawyer's Saint, &c. By RICHARD SAUNDERS, Philomat. Printed and Sold by B. Franklin. Price 5 s. 6 d. per Dozen. Note, Jerman's Almanacks are in the Press, and will speedily be published.

instead turned the philosopher's stone used in alchemical practice into a metaphor for knowledge: "Content is the Philosopher's Stone, that turns all it touches into Gold."³⁰⁹

While the occasional odd occurrence might appear, the newspapers seem remarkably free of any local influences of the occult world.³¹⁰ Even America's homegrown discovery of the charming or fascinating power of the rattlesnake (not to be confused with rattlesnake root) and its ability to paralyze its victims (including humans) by the look of its eye only receives one reference that I can find. This belief appears to be the intersection of western serpent revulsion, ocluarcentrism (in the guise of the "evil eye"), and Native American lore. However, the rattlesnake debate included numerous mixed reports of an experimental nature to Peter Collinson in England. Joseph Breintnall, John Bartram, Christopher Witt, and William Byrd all argued in favor of the effect. Others, such as John Kearsley and Randolph Isham disagreed.³¹¹ These debates could be found in the *Gentleman's Magazine* but not in the pages of the *Gazette*, not even in jest. The newspaper, instead, contain numerous articles both derisive of superstition and supportive of rationality.

The *Maryland Gazette* of 1/11/53 (reprint of Sept. 16 letter from London) gives a typical account from overseas of how "The Country People about . . . are still so full of Ignorance and Superstition, that they imagine there are several Witches and Wizards in the Neighbourhood; and that they have tied up two or three old People . . . and flung them into the Rivers, to see if they could save themselves". The people did save themselves which confirmed the townspeople's opinion but when they called for a trial by the Church Bible "the Clergy in that Neighbourhood [was] too wise to listen to them, or suffer such nonsensical Trials". The same issue had a story about a young girl in Scotland who was found dead in an open grave that had been dug the night before for another. No marks of violence were found on her and it was speculated that she had been heading home through the church yard when she fell in the grave "and the Terror which seized the young Creature, caused such a sudden stoppage of the Circulation of the blood, as Occasion'd her Death." The author continued that "The common People who are still superstitious, thought it little less than Sacrilege to remover her Body; and, as they thought

³⁰⁹ Leventhal (1976), p.128. Leventhal also notes that colonists William Gerard De Brahm and William Hooker Smith practiced alchemy, and that Robert Boyle was a supporter of natural astrology (p.61).

³¹⁰ For example, *American Weekly Mercury*, 2/12/32;21, weird ("remarkable") accident (drowning) where man had written where he lives on paper and put in pocket in case there was accident.

Providence had appointed her that Spot of Ground to be buried in, they kept it for her, and digg'd another Grave for the other Corpse."

In the 6/3/31 *American Weekly Mercury* a letter from Somersetshire again cast the "countryfolk" as backwards when odd occurrences where the "legs of cows were being cut off, children were having fits, and old women thrown in the water, bound, to test whether they floated and thus were witches" only stops when three ringleaders are charged with murder by authorities for carrying on these witch hunting activities. In Russia, the Czarina also warned her people against charlatans. In the 2/8/32 *American Weekly Mercury* a letter from Moscow told of how "conjuring, fortune-telling and pretending to an intercourse with spirits, has always been a successful fraud among the vulgar and ignorant, we find the empire of Russia not free from such vermin, but her Czari-Majesty being in every respect careful of such people, published a most severe case against such vagabonds". The British clergy, also, acted to eliminate superstition as in the 4/5/33 *American Weekly Mercury* print of a letter from London, 11/29 which told of a woman who haunted by an invisible man who knocks on tables in response to questions. Many people had gone to see this phenomenon "and returned very well pleased with the politeness and good breeding of this spirit..." The article then notes amusingly "a certain priest being asked to come and exorcise this spirit, made answer that he had a shrewd suspicion that this same spirit came to be exorcised by the flesh and desired the friends of the young woman to take care that her marriage was not spoiled."

In another insinuating article against Catholics, the 6/13/28 *American Weekly Mercury* had a story from Germany dated 2/11/28 where a curate played the devil to convert a Lutheran footman. He dressed himself up with horns and tail and appeared to the footman as he was cutting wood. "The poor Fellow, whose Hair stood on end, would have made a Cross if he had not been a Lutheran, but recovering his Spirits, and lifting up his Hatchet, he gave the Devil such a home Blow with it just between the two Horns, that he fell down dead upon the Spot." An 8/25 letter from Vienna in the 11/28/28 *American Weekly Mercury* gives an account of witches in Hungary that leads one to believe the rule of law had no force there. The letter:

³¹¹ Leventhal (1976), p.148.

. . . from Sogomin in Hungary of the 16th of July import, that several Persons of both Sexes convicted of Witchcraft have been condemned to be burnt alive, but before they were Executed they put them upon the following Tryals (according to the custom of the Country) . . . they were put into Scales, when it appeared, that a large Woman weighed but an Ounce, and her Husband but 5 Drams, and th other still lighter whereupon they were burnt alive the 23rd past. There was among 'em a Midwife who had baptized 2000 Children in the Name of the Devil, and a Man of 82 Years Old who was formerly a Judge of that Town.

In the *Pennsylvania Gazette* of October 22, 1730, what first appears as the only report of a domestic witch trial quickly and obviously becomes a fabricated mockery of one. Another story from the May 8, 1755 *Pennsylvania Gazette* places the colonial in stark contrast to the countryfolk in Europe. The story shows that even backcountry colonists, in comparison to their European counterparts, could be free of superstition while far more wary of city tricksters:

One Day last week, a strapping Country Fellow was leading his Horse with his Hands behind him, down the Long Wharff; and as he pass'd the T, an unlucky Sailor slipt the Bridle from the Horse's Head, and placed it on his own, leaving the Horse and two Panniards of Apples to his Mess Mate, to be properly taken Care of, who soon conceal'd them --- The Countryman, after leading the Tar some considerable Way, turn'd about, and, to his great Consternation, found in the Room of his Horse, the Appearance of a Man -- The Sailor observing the Confusion in the Countryman's Face, with a very serious compos'd Countenance, address'd him in the following Words, "My good Master, I would not have you be surpriz'd at this strange Appearance as Things now turn out exactly agreeable to the prediction of my Grand mother -- This Grand mother of mine was a Witch -- and taking Offence at me about seven Years ago, transmogrify'd me into a Horse; but for my Comfort, told me, that, in such a Time, I should be releas'd, and resume my old Form of Existence, which Time is out this Day, and accordingly I am now changed from an Horse to a Man." The Countryman finding himself jocky'd, and the People by this Time crowding round him, told the Sailor, if he would return him the Horse, he was welcome to his Load: The Horse presently appeared without the Panniards -- The Fellow mounted, and rode up the Wharff as fast as he could drive.

In one of the few overt editorial comments on a submission to a newspaper, the *Maryland Gazette* of 6/3/46 distances itself from a domestic report of a man walking on water; a type of writing in a domestic submission in itself so uncharacteristic as to warrant questioning whether to take the article at face value. As it appears on page three and column two of the *Maryland Gazette*:

The following Article having been transmitted, with a Desire to have it inserted in this Paper; it is therefore, without any Alteration, submitted to the Judgment of

the Reader. On Saturday, May 24, 1746, two Men of Repute fishing off Kent Island, about 4 o'Clock in the Afternoon, the Weather clear and calm, they saw, to their great Surprize, at a small Distance, a Man about five Feet high, walking by them on the Water, as if on dry Ground: He crossed over from Kent Island to Talbat County, about the Distance of 4 Miles.

The *Pennsylvania Gazette* also employed the term magic in mockery, linking ignorance and superstition to misunderstanding mechanical inventions. Numerous advertisements appeared for the "MAGICK LANTHORN, by which Friar Bacon, and other famous Men performed such wonderful Curiosities, as made the Ignorant believe were done by Magic, Conjuraton or Witchcraft, representing upwards of 30 humorous and curious Figures, larger than the Life."³¹² Later this 'Lanthorn' would be for sale³¹³ as well as used by Kinnersley for his electrical theater where countering ignorance no longer seems necessary:

December 19, 1765

For the ENTERTAINMENT of the CURIOUS,
MR. KINNERSLEY proposes to exhibit, at the COLLEGE in this City, on Monday and Tuesday, the 30th and 31st Instant, a COURSE of ELECTRICAL EXPERIMENTS, with explanatory Lectures; to begin precisely at Six o'Clock in the Evening. Those Gentlemen and Ladies who please to come the First Evening Half an Hour or more, before the Lecture begins, may have the Pleasure of seeing some curious Experiments made with the AIR PUMP. After the Lecture, some entertaining Representations will be exhibited with the MAGICK LANTHORN.

Superstition had such a powerful rhetorical force that one article in the 12/16/42 *American Weekly Mercury* recommended the practice of atheism over it. The article argues superstition as worse because "it draws Passions along with it; wheras the former does not. . . . Superstition as the Name imports, raises terrible Apprehensions about which much disturb the Mind . . . the Superstitious lives in a continual fear." Some 12 years earlier, one author apparently felt that not all would agree for an article stated: "those who endeavor to become more and more reasonable. IF you give out your dram and idle conceits for revelations and visions . . . you will be admired by some and supported by others; but when it appears that you rely on the light of reason, you will be accounted both horrible and scandalous."³¹⁴ But with articles such as the following,

³¹² *Pennsylvania Gazette*, Jan 27, 1743.

³¹³ *Pennsylvania Gazette*, June 13, 1754 and March 25, 1762.

³¹⁴ *American Weekly Mercury*, Part of an essay on 2/24/30, in critique of superstition.

detailing how to argue any point rationally, the newspaper both prodded its clientele into a means of rational discussion but promised a future supply of controversial letters. To wit:

A Censure on the usual Method of Disputes.

I Was no long since in Company, when a Dispute in Politicks arose, in which I observ'd, that Difference in Opinion often comes to personal Quarrels; that the sole End of all Disputations, the informing our Judgment, is generally out of the Question; that we are more intent upon contradicting our Antagonist than on convincing him by the Strength of Reason; that we grow warm about Trifles; and that very often long Disputes proceed from the Disputants being long before they rightly understand each other; that a sudden Silence is oftner the Consequence of Vanity than of Modesty; that some Men Judge of the Weight of their Arguments by the Number of their Words, and the Warmth with which they pronounce them; that the Difference of Sentiments does not offend so much as the assuming and contemptuous Manner in which we express ourselves; and that Men often Dispute upon Things, the Nature and Qualities of which they are Strangers to.

In all Controversies we are first nettled by the Arguments, which are alleg'd against our Opinion, and this shocking our Vanity, which cannot bear being thought weak or ignorant, and our Pride not being able to away with Contradiction, a secret Ill-will begins to kindle against the presumptuous Man, which soon discovers itself in our Eyes, our Voice and our Actions; and the Stregth of our Argument, when thus led away by Passion, lies in the Strength of our Lungs; we grow regardless of the Decency which both our own and the Character of our Antagonist requires; we begin to look upon him as a Man who has insulted us, and done an outrageous Injury to our Understanding, and are no longer upon our Guard, as to our Behaviour; we begin to contradict peremptorily, and assert dogmatically, and at length work ourselves into so mean an Opinion of the adverse Party, from an over-weening one of our Capacity, that we will not condescend to give any Reasons for what we are pleas'd to advance or contradict.

On the contrary, Disputes ought to be carried on with a Decency becoming Gentlemen and Scholars, with Temper and Attention; the Disputant shou'd never differ from the well-bred Man, Trifles should be never admitted as a Subject; Spleen, Passion and Prejudice ought to be banish'd, and Argument to be supported by Reason: A Man who has a Fund of good Nature and Modesty, will always argue with Calmness and be inform'd by Reason.³¹⁵

Interestingly, the pursuit of a rational metaphysics recognized the contributions of the masters but moved to improve upon them as well. The great philosophers of the enlightenment might still have made a few mistakes, including those of superstition. According to an essay on "Specters and Apparitions" in the *Virginia Gazette* of March 21, 1751, "Mr. Locke assures us, we have as clear an Idea of Spirit, as of Body. But it be ask'd, How a Spirit that never was

³¹⁵ *American Weekly Mercury*, 2/3/36;21

embodied, can form itself a Body . . . or how the Dead can counterfeit their own Bodies, and make to themselves an Image of themselves . . . and by what authority . . . the Divine and Philosopher together will find it very difficult to resolve". And further, "when we come to read of the Ghost of Sir George Villiers, of the Piper of Hammell, the Daemon of Moscow . . . and see the great Names of Clarendon, Boyle, &c. affixed to these Accounts, we begin to find Reasons for our Credulity." The author suggests that the readers have no need of "Messages from the other World" in the Christian era.

In concluding the essay the author tells of a believer in ghosts, a Bishop of Gloucester, and a skeptic, a court Justice. The Justice comes to the Bishop one day and excitedly says he has "met with no less Proof than ocular Demonstration to convince him of the real Existence of Ghosts.". The Bishop becomes excited as well upon hearing of his friend's conversion to believer. "I have preach'd, I have printed upon the Subject; but nothing will convince you Scepticks but ocular Demonstration," the Bishop says and asks the man to continue. The story continues with the Bishop becoming increasingly excited as the Justice give a description of a floating light coming into the his bedroom followed by the appearance of "a Surprising figure" to whom the Justice spoke. The Bishop asks "*And what Answer, Mr. Justice, I pray you, What Answer did it make you?*" The Justice replies, "*My Lord, the Answer was not without a Thump with the Staff, and a Shake of the Lanthorn, That he was a Watchman of the Night, and came to give me Notice, that he had found the Street Door open*".

Unlike superstition, religion did not usually get placed in opposition to the whole of natural philosophy and natural history or the pursuit of rationality. Instead science becomes entwined within a religiosity which precludes ignoring empirical evidence and rational definitions. Rather than critique religion, numerous articles (more of which are detailed in another chapter) actually mixed reason and religion. In the *Maryland Gazette* of 1/25/53, an author reasoned that not merely faith alone, but reason, proved the validity of Christianity:

REASON, a Proof of the CHRISTIAN RELIGION, and serious Thoughts on LIFE and DEATH.

Too many, it is to be feared, who call themselves Christians, receive their Religion only because it is the Custom of the Country, and the Fashion of the Place they live in; who, had they been born in Turkey, might have made full as

good Mahometans; and are Christians not by Choice, but by Chance; not by Reason, but by Form and Name alone. Christianity is certainly the Religion of right Reason;

. . . As in the fall of Man there is certainly some great Mystery. . . Yet of the State of such Spiritual Preexistence we have no Reminiscence. . . Our Reason being thus limited, teaches us to wonder at and adore the Almighty Power of our Creator: and to have all his Works in the Highest Admiration. As our Reason cannot soar so high as to know what even we ourselves are; how much less then can we be able to comprehend our Creator? Our Reason does, indeed, tell us it is impossible; it teaches us to rest ourselves on higher Knowledge and to rely upon Sacred Scripture, and Divine Revelation.

Another author in the *American Weekly Mercury* of 3/19/30 makes little distinction between contemplating the intricacies of nature and exploring religious conundrums:

But greater yet proceed from the Exercise of the superior Faculties of the Mind, the Understanding and Will; of which the first has Truth, the latter Goodness for its Object. The Philosopher, who is taken up in sublime Speculations, and in searching the Causes of Things, and thinks he has unravell'd some perplex'd Threads and brought to Light some mysterious Conduct of Nature; as well as the Divine, who by long Study believes he has at last found the right Description of some abstruse Point of Theology, are in Raptures of Joy for the happy Discovery. . .

A few direct criticisms of science as a whole do appear in the newspaper although these articles do not necessarily come from a stated religious perspective. They also appear to be written abroad and do not appear anywhere near as often as in England. The field of writing and publishing satirical pieces on science was well established in Britain. In fact, the two English newspapers that played such an important role in the formation of the American general periodical, the *Spectator* and *Tatler*, made frequent use of them.³¹⁶ For whatever reason, this practice did not cross the Atlantic to mid-America to any great extent. In one of the few articles of this type in the *American Weekly Mercury* of 5/3/33, a reprint of an essay on wisdom from the 1/20/33 London-Journal noted the value of understanding life beyond the particularities of natural philosophy and the pursuit of wealth:

Men are ever pursuing something which, they imagine will make them more happy; but never consider wherein Happiness consists; they make themselves Masters of several Arts and Sciences they furnish their Mind, they adorn their Bodies, they hunt after Wealth and Power, and drink large Draughts of all Kinds of Knowledge, but

³¹⁶ Anderson (1980).

that which is absolutely necessary to true Pleasure. . . The Science of Life lies totally neglected, while other Sciences are diligently cultivated

In another article in the 3/7/32 *Mercury*, which Bradford admitted as an old reprint "at a Time when News from beyond Sea is not to be had", a writer criticized those "whose Time is all bestow'd on *Trifles*," in other words, natural history. "Every Thing that Providence has form'd deserves our Observation, and is truly wonderful," the author writes, "But it is exceedingly ridiculous, to let some *Little minute Part*, take off our Attention from the Whole". The author creates a character named Mr. Flutterville who spends all of his time looking at insects. Mr. Flutterville does not look forward to the coming of Spring as others do "for the reviving Influence of the Sun, the Verdure of the Grass, the fragrant Blossoms, the rising Corn, or the Advantages it bring Mankind: but because his beloved Butterflies will be hatch'd and come abroad". The author writes of "another of these Triflers", a Mr. Plumage, who's "Passion is for Birds, of which he has such Numbers" that they live in every room of the house and that "even the Necessary-House is full of them". He continues, "[T]he Noise they make is shrill and troublesome, that you can't hear another speak, and may better hope for Quiet at a Paper-Mill."

I found one instance of science satire in the *Pennsylvania Gazette* during the period, and this occurred before Franklin took over the printing of the periodical. Keimer, who published the piece, also apparently did not agree with its perspective for he wrote a rare one sentence editorial stating the piece differed "from his own philosophy". The advertisement of March 29, 1729 by a one Henly, a clergyman of the Church of England, may have been a reprint from a London paper:

To vindicate Religion against the boasted pretences of Natural Knowledge.

In the ORATORY, At Newport-market, this Evening will be a Burlesque on a course of experiments, necessary for all that do not understand it; Nature a Cook; Conversations are Pumps and Levers; the Geometry of breaking your Nose by a Stumble, or knocking your head against a post; the Mathematicks of Hoops and Fashions; as well as Toasts, Sippets, etc by Hydraulicks; why Fiddling and Dancing are not encourag'd by Laws; Parties and Papers explain'd by Mechanicks; Sir Isaac Newton's Receipts for Slight of Hand, and Goblins in all Colours; Man prov'd a Plumb-Line, a Pair of Scales, an Organ, a Weather-Glass, an Air-Pump, a Pulley, a Wedge, and a Windmill; a subtle Note on Coaches; the Pressure of a Column of humty-dumpty on the Brain; Stocks, Fleets, etc lov'd by Hydrostaticks, a Vintner's Discovery of the Velocity of Wine from a Cask; with an Experiment on a Natural Philosopher put in his own Air-Pump.

While science as a whole received little direct criticism, some subjects that received scientific study also received more religiously oriented interpretations than others did. For example, in the case of electricity, providential interpretations, despite some evidence that a debate existed, barely get notice in the paper. In some other cases, such as reports of earthquakes in the *Maryland Gazette*, the role that earthquakes play in the paper seems more complicated by providential interpretations.

Lightning and Religion

Ebenezer Kinnersley has been recognized as the single most effective popularizer of electricity in the colonies.³¹⁷ Others came before him. William Claggett first advertised a lecture totally devoted to electricity in the *Boston Evening Post* on August 24, 1747. Isaac Greenwood in 1726 and others had shown some experiments. A Richard Brickell advertised in New York in 1748, as did a Samuel Domjen -- a follower of Franklin -- who advertised in South Carolina³¹⁸. However, compared to these lecturers, Kinnersley³¹⁹ traveled more broadly, for a longer period of time and advertised more heavily. He also integrated the experiments into his lectures on rhetoric during his service as master of English at Philadelphia College, and worked closely with Franklin on the theories of electricity and their potential demonstration for his "Course of Experiments on that new Branch of Natural Philosophy called Electricity."³²⁰ He also reportedly had an excellent oratorical style, practiced from his years as a minister.

Kinnersley's ministerial history gave him the framework through which his lectures reached the public, a distinct advantage in appeasing the individuals who opposed stealing the finger of fate from the hand of God. While enough of an appreciative audience existed to avoid constantly battling the evangelical critics he opposed, he carefully negotiated a religious and philosophical stance that appealed to conservatives, enlightened individuals, and even a few converts.

³¹⁷ Lemay (1961), p. 49.

³¹⁸ Lemay (1961), pp. 49-67.

³¹⁹ Sometimes spelled 'Kinnersly' in the *Pennsylvania Gazette*.

³²⁰ *Pennsylvania Gazette*, 3/26/54

Kinnersley's lectures on electricity positioned the relationship of science and religion as rationalistic and deistic.³²¹

His lecture advertisements gave both a secular and religious justification for experimenting with and protecting against lightning. The April 11, 1751 *Pennsylvania Gazette* noted, "as the knowledge of nature tends to enlarge the human mind, and give us more noble, more grand and exalted ideas of the Author of nature, and if well pursu'd seldom fails producing something useful to man, tis hoped these lectures may be thought worthy of regard and encouragement." The December 25, 1760 *Pennsylvania Gazette* ad repeated this and added, "The Works of the Lord are great, and fought out of all them that have Pleasure therein. Psalm xi. 2." From March 26, 1754, "And as some are apt to doubt the Lawfulness of endeavouring to guard against Lightning; it will be farther shewn, that the doing it, in the Manner proposed, cannot possibly be chargeable with Presumption, nor be inconsistent with any of the Principles either of Natural or Revealed Religion."

The opposition could be fierce in the eighteenth century to "denying God's providence, to mak[ing] Him, somehow, less powerful. Charges of atheistical presumption were leveled against those who tried to introduce lighting rods until well after the beginning of the nineteenth century."³²²

Kinnersley's efforts could prove successful, however, in defusing this opposition. A letter in the *New York Gazette* from June 1, 1752 (appearing before a Kinnersley advertisement) showed the sought-after effect. The writer displayed a rational and experimental posture: "It was, I confess, with no small Degree of Prejudice that I first attended these Lectures, but I was determin'd to see and judge for myself". Continuing, he compared the new philosophy to the old:

. . . the Truth of this Gentleman's Hypothesis, appear'd in so glaring a Light, and with such undeniable Evidence, that all my former pre-conceiv'd Notions of thunder and lightning, tho' borrow'd from the most sagacious Philosophers, together with my Prejudices, immediately vanish'd.

The author then linked that old philosophy to superstition and the new to patriotism: "the discovery of that wonderful phaenomenon, which has been a Mystery, wrapp'd up in Clouds and thick darkness ever since its first Appearance, to the present Age, and entirely to the improvements made

³²¹ Lemay (1961), p. 39.

³²² Lemay (1961), p.78. Also see Cohen (1952) on Prejudices. Lemay also notes opposition to Dr. John Lining in the

on the electric fire, by ingenious Americans." The Christian character of Kinnersley remained assured. The anonymous writer (serving Kinnersley so well as to be suspected as being Kinnersley himself) concluded by acknowledging that Christian character and admonishing the critics as possibly being atheistic themselves:

. . . he endeavors to make this new Branch of Natural Philosophy, subservient to the true intent of all Knowledge, both Natural and Reveal'd, viz. to lead us to the first cause by refining, enlarging and exalting our ideas of the great Author and God of nature; and who, therefore, but the Man that is Fool enough to say in his Heart, there is no God, wou'd think such lectures unworthy of his highest regard, or refuse to attend them.

From the *Maryland Gazette* we hear of the potential religious conflict in South Carolina over the installation of "points". The *Maryland Gazette* of 9/20/5 has a reprint from the 7/30/53 *South Carolina Gazette* of a letter from an assumed resident of Charles Town, South Carolina, named BENEVOLUS. The author writes that he lent the copy of Franklin's letter to Collinson describing the electrical kite to "a friend in the country" and that the friend was "convinced, by his Experiments, of the Truth and Ingenuity of his Hypothesis".³²³ Many "*Sharp Points*" have been raised in the town and the writer has seen no ill effects, "on the contrary, that altho', of late, the lowering Sky and heavy Clouds have threaten'd much . . . we have had no near, and consequently no dangerous, Effusion of *Lightning*". "With regard to that Flash which lately split the Mast of a Schooner at Mr. Mott's Wharff," the author argues that the cloud came from the N.E. which had no points, and that if the cloud had come from another direction, passing by "*Mr. Wragg's* or *Dr. Lining's* sharp Points", or a point had been erected on the mast and communicated with the water by iron or brass wire, the ship would have received no damage.

The remainder of this letter indicates that not all residents of Charles Town empathized with this writer or his friend in the country. After the author suggests the reason for the recent strike and concludes that "instead of furnishing an Argument against the Power and Efficacy of sharp Points, [the recent strike] is rather a demonstrative Proof that more are wanting, especially in the circumjacent Parts of the Town." However, many of his acquaintances "were strong Anti Electricians; and that some of them from a religious Principle; had censured the erecting of sharp

South Carolina Gazette, 7/30/53, 7/31/55.

³²³ The language of the letter seems very similar to that of the ones in New York. It may very well be Samuel

Points as a presumptuous meddling with Heaven's Artillery; and that instead of drawing down Safety, they wished it might not be a means of drawing down the divine Displeasure."

The author's friend then responds with an argument included that uses the concepts of self preservation, devotion, and Christian charity as a rationale to utilizing electrical points. The action of raising a point is not presumptuous unless its done with the intent to defy God. Raising points is as obvious a response to the wiles of nature as putting a coat on when its cold. Further, the lack of humility in realizing one's own ignorance of nature is judged worse by the almighty than the pursuit of truth.

The Author of my Being has been pleased to afford me a certain Portion of Reason and Intelligence, and has implanted in my Nature a strong and active Principle of *Self Love* or *Preservation*. Having now, by the Help of my Reason, so investiaged the Truth of this new Hypothesis of Mr. FRANKLIN, that I am satisfied of the Causes of *Thunder* and *Lightning*; how the flashing Clouds strike Terror and frequently pour Destruction upon us, and by what means (thro' the divine Blessing) we may be relieved from this awful Danger, can I hesitate a Moment, in gratifying my inherent desire of *Preservation*, by erecting the *salutary* Points? Presumptuous, it can never be, unless the Points are used in Defiance of Omnipotence; a Thought too big with Impiety to be harboured in the most abandoned Breast; a Thought which no one can entertain, who is not equally sunk in Ignorance and Depravity. I apply *sharp Points* as a Remedy, against a partial, a natural Evil, as I would apply an Antidote against Poison; and when, by a rational Enquiry, I become persuaded of the Virtues of both, that the one is no likely to prevent, as the other is to remove, the Evil: not to tear the Point, would be equally irrational and improvident, as not to apply the Antidote. Those *Anti Electricians*; which you speak of and who pretend to be actuated in their Censure by a religious Principle, would do well to consider, that the Fruit of Religion is Charity; *that* Charity, which inclines the Mind rather to suspect its own Lack of Penetration, to blame the Remissness of its won Researches after Truth, than judge unfavourable of the Conduct of others, especially in Matters doubtful or intricate: And I leave it to their own Reflection, wether a rational Enquirer after, and Embracer of the Truth, or he, who wilfully remains in Ignorance or obstinately resists Conviction, and breaks the Bounds of Charity, is most likely to incur the divine Displeasure. Let us, my Friend, raise our *Sharp Points*: Let us at the same Time bless God, for the new and wonderful Discovery, so beneficial to the Inhabitants of this and every warm Climate; and while Nature puts on her sable Dress, when Lightnings flash and Thunders roll, and Earth and Air is trembling with the Shock, let the renewed Goodness of God excite our highest Praise, and point our Souls in grateful Adoration to the great Preserver of Men.

Domjen, a supporter of Franklin's electrical experiments.

While this letter mentions the controversy with using lightning rods to diffuse electrical charge, it also moves to reposition the religious argument on its own religious terms and really acts as a promotional device. Further -- at least for the four newspapers in our study -- no letter or advertisement from the indicated suspect clergy appear at any time. Despite the potential controversy referred to in letters to the editor of the newspapers, no letter or advertisement in opposition to electrical points or study, in religious terms or otherwise, appears.

Earth and Sky

Reports of earthquakes present interesting perspectives on the world.³²⁴ They reaffirm the colonist's sense of being in the right -- geographically, politically, religiously, morally -- with their dramatic tales of thousands of people, troops, and structures being destroyed in far off Turkey, Italy, or Spain. Occasionally, the slight local tremors remind the colonists of the advantage of living in America, but, also, that they are not without sin. They also show some of the characteristics of Royal Society reports - control through acute observation (quantifying and historicizing time and intensity) mixed with a flair for the dramatic. The articles can appear both entertaining and shocking in their descriptions.

All of the newspapers in this study published articles that either appear fairly objective, detailing the earthquakes in fairly detached terms, make some reference to providence, or, at the most extreme, present the information in such dramatic terms as to anticipate the second coming. Some differences between the papers exist. Somewhere between one quarter and one third of reports of earthquakes in the *Virginia Gazette*, *Pennsylvania Gazette* and *American Weekly Mercury* described domestic shocks. In the *Maryland Gazette*, on the other hand, only one eighth of the reports originate domestically. Far more of these reports use dramatic and providential language by authors that include the governor of Maryland.

³²⁴ The 1993 UVA dept. of English dissertation by Kevin Lee Nevers devotes tens of pages to the character of a small number of these earthquake reports but I've seen little else exploring this subject.

One element of earthquake reports transcends newspaper and style: the link between atmospheric phenomenon and the movement of the earth. The Chambers article describing the causes of earthquakes makes an analogy between lightning in the atmosphere and lightning under ground because of the sulphurous smell that accompany both lightning and volcanic emulsions. From the most dramatic to the most detached retellings of earthquakes, weather often plays a part.

For example, the 9/28/32 *American Weekly Mercury* had a report from Boston, 9/11/32: "on Tuesday last about noon we were much surprized here by a shock of an earthquake, it was attended with hardly any noise, and some houses were perceived to tremble very much so that several things were shaken down from their places: the wind just then dy'd away." The 6/24/37 *Virginia Gazette* had a report of earthquakes in Connecticut and Boston dated 5/30: "we hear from the hither part of conn. that last monday was fe'nnight, being a clear sky, and pleasant warm weather, about one o'clock in the afternoon, they felt a considerable shock of an earthquake." In the *Maryland Gazette*, 6/13/54;23 a report from St. John's in Antigua tells of three minor shocks which caused no damage ends with an offhand comment connecting earthquakes and the weather: "We have been blessed with several plentiful Showers of Rain since the above Quakes, tho' it had been very dry Weather for some Time before."

Showing the extent that the newspaper articles might make a link between earth and atmosphere a *Maryland Gazette* of 4/16/52;21 invokes both some of the biblical paradigm and the connection to atmospheric phenomena in a report from Genoa of 11/30. It concludes: "--It is very remarkable, that about the time of these phaenomena at Genoa, prodigious Floods, preceded by Lightning and Thunder, happened in several parts of England." In a series of articles about a meteor in the 5/6/56;2 *Maryland Gazette*, the Parish of Echt makes direct reference to Judgement Day but still distinguishing that from an ordinary earthquake:

Edinburgh, Jan 31. On the 21st between 9 and 10 at Night, two People coming from the other Side of the River Tay to Perth, observed a very, unusual Phaenomenon. Whilst it was very dark, suddenly the Firmament appearing to open towards the East, and they discerned a Light clear as the Sun, which illuminated all around them. They were struck with Consternation, and gazing at this strange Appearance, they saw innumerable Sparks of Fire falling towards the Moon, which was but newly arisen.

From the Parish of Echt we hear, that on Monday Night last many of the Parish of Lumphanan and Kincarden were surprized with Thunder and Lightning, which were more frightful than any they had ever heard or seen, but especially the last. They imagined the Loch of Aucholossion all on Fire, as also some of the Hills around them, and that it was either an Earthquake or the Day of Judgment at Hand. On Tuesday the Wind tumbled over Stacks of Corn, and tore up from the Root more than 30 Trees in Capt. Grant's Wood. On Wednesday Night, a little after Twilight, a fiery Meteor was seen, apparently as big as a Full Moon, going from West to East, which enlightened the Ground like Mid-Day, when it past over their Heads.

Edinburcht, Feb. 7. By a Letter from Ruthven in Badenoch we are informed, that last Week as some People were watching Cattle in the Night on a sudden the whole Horizon was illuminated like Noonday. This strange Phaenomenon was a fiery Globe, as large as a Full Moon, moving from the Norhtern Part of the Horizon, and directing its Course due South. It was attended by a large fiery Train, resembling the Tail of a Comet, from which there incessantly issued large Sparks of Fire. When it had a little past the Place where they were, the Tail seemed to fall from it, upon which there ensued a Noise not inferior to the Report of a great Gun, and which waked several People in the Neighbourhood. It continued its Motion tillit disappeared at the Southern Part of the Horizon.

In even more dramatic terms the writer of this 4/28/52 letter from Norway in the *Maryland Gazette* of 9/28/52 gives a vivid (while suspect) description where weather, earthquake, floods, hail, and a strange celestial event occur all at once and terrorize the inhabitants of the town:

The 15th Instant, the Weather having been very fine from Sun Rise 'til Two in the Afternoon, a Cloud appeared in the West, which increased very sinsibly, and soon darkened the whole Horizon. At Four o'Clock so dreadful a Hurricane arose, and so violent Shocks of an Earthquake were felt, that all the Inhabitants of this Town forsook their Houses, which were shaken to the very Foundations, and fled into the Fields. A heavy Shower of Hail, attended with Lightning and dreadful Claps of Thunder, completed the Desolation. Abundance of Women and Children, who had hid themselves in Cellars and other Places under Ground, cry'd and shriek'd most dismally, expecting every Moment to be either blasted by the Lightning, or drowned by the Torrents that came down from the Mountains with inexpressible Rapidity. Many Farm Houses and other Country Habitations were swallowed up, and Abundance of Cattle carried away by the Floods. A vast number of Deer, Hares, Rabbits, and other Game, were either drowned or killed by the Hail. When the Storm was over, an Octangular Star appeared in the North all the following Night, with a fiery Sheaf darting from each Angle.

Judgement must have played a role in the descriptions of earthquakes from around the world. Even more than what one could expect from secondary or tertiary descriptions of distant places seem exaggerated. On 7/19/33 in the *American Weekly Mercury*, an extract of a letter from Naples, 3/27.N.S reads: "We had no Earthquake here the 20th of January, as mention'd in the London News-Papers, but on Saturday Night last a small Shock was felt here by many persons, and as it is said, that at the same time the stones at Mirabella were turned over again, for not a house remained there to be thrown down." Eight years later, in the 3/19/41 *American Weekly Mercury*, in a report from London, 12/16, a Vin Holland relates that the city of Naples again has been destroyed by earthquake "on 22nd past together with kings palace and 30,000 souls said to be buried in ruins."

Numerous reports of earthquakes in Papal States, Egypt, Turkey occurred in the paper in 1752. According to the 12/14/52 *Maryland Gazette*, an earthquake in Turkey destroyed 200 mosques. In the 1/31/51 *Virginia Gazette* (Oct 9 letter from Constantinople) are reports of earthquakes in Rumania where 3000 people die. A few years later in a letter from Constantinople in the 2/6/55 *Maryland Gazette*, "it is computed that upwards of 2000 persons have lost ther lives by the fall of buildings occasioned by the several shocks of earthquakes which happened here between the 2nd and 15 instant," and three quarters of the cities inhabitants have fled into the country.

A number of letters in the *Maryland Gazette* use the occasions of earthquakes to chastise local sinners. In the 6/13/50 and 6/20/50 issues a reprint of the Lord Bishop of London's "Letter to the Clergy and People of London and Westminster" used two full pages over two weeks "awaken" English sinners. "On you therefore, Fathers and Mothers, your Country, and the Church of God call for Assistance; your Endeavours may go a great Way towards saving us, and this wicked Generation . . .," he rails, "Let every Man reform himself . . . This is our only proper Remedy; for the dissolute Wickedness of the Age, is a more dreadful Sign and Prognostication of Divine Anger, then even the Trembling of the Earth under us."

The governor of Maryland, Horatio Sharpe, at least twice used the *Maryland Gazette* not only to bring the inhabitant's sins to their attention but contrast a providential explanation with a natural philosophical one. The people of Maryland received a similar admonition from a

"MEDITATION UPON EARTHQUAKES lately publish'd in England" which began "HOWEVER the natural Causes of Earthquake may be accounted for by the Learned in the Theory of Nature, no sober Man will suppose, that those Causes ever act in any remarkable Manner, without the immediate Direction of the FIRST GREAT CAUSE, the Creator of all Things, the Governor of Worlds". To think otherwise, the author continues, seems foolish "unless we take up with this glaring and monstrous Absurdity, that the Globe on which we dwell, the Orbs visible to our Sight, and those which are visible to ken, were all made by CHANCE, and owe their Existence, for thousands of Years, to CHANCE also."

The "SUPREME CREATIVE INTELLIGENCE" understands all his Works, continues the author, and nothing happens without this understanding and knowledge. Although the "design and Workings of Providence are inscrutable to Men," some general observations show "that Earthquakes generally happen in populous Places, in the richest Cities; and it is well known, that where there is most People and most Wealth, there Iniquity commonly most abounds". Lisbon having been almost destroyed by concussions, numerous slight shocks around Europe "all which may, without Superstition, be taken for loud Calls of the God of Nature, to awake Men to Repentance and Amendment." The inhabitants of England desperately need reform for "here True Christianity is daily losing Ground, and Infidelity and Superstition are springing up in the Room of it: Here Venality and Corruption are in their Zenith, and Patriotism and public Spirit in a fair Way of becoming as scarce as Righteous Men in Sodom."³²⁵

Two months later, in the 5/20/56 *Maryland Gazette*, the Governor of Maryland, added in a proclamation that "our Almighty CREATOR, in Order to awaken in us his sinful Creatures a due Sense of our Relation to and Dependency upon him, does often, from his tender Mercy towards us, give Warning of his Displeasure." The "inexpressible Calamities to the almost total Ruin of some powerful States and Kingdoms" as well as the recent local warnings should, he wrote, "excite in us a sincere Desire and hearty Endeavour to reform our Lives." He then appointed Wednesday the 16th of June as a day "for a general and Public Fast, Humiliation and Prayer to the Divine Majesty, to avert those Judgments we, from our Offences against him, [most justly deserve]".

³²⁵ *Maryland Gazette*, 3/11/56.

In contrast with the articles that spend considerable time linking the movements in earth and sky with providence, others seem muted in their presentation of observations. Note the difference between the previous descriptions in Scotland with the one below in the 11/1/49 *Maryland Gazette* that had numerous witnesses. Once again a reference to providence appears but with far less of the apocalyptic writing:

From London, July 28, 1749

We have the following account very well attested, by a gentleman from Milford haven; viz. That on Sunday the 2nd of this instant, about eleven o'clock, being near the time of low water, the sea exceeding smooth, and the weather serene and fair, the inhabitants of Dale, in the said haven, were alarmed by a sudden hideous murmuring of the water, and to the great amazement of a multitude of spectators, the tide was observed to run up, in the space of one minute, to high water mark, and with the same rapidity to retreat again: This phoeaomenon was repeated successively seven times in about three quarters of an hour, The violence of the torrent was so prodigious, that boats were forced from their mornings, and turned over and over, many people were in danger of being swallowed up, but providentially no lives were lost.

The same *Maryland Gazette* that brought the superlative descriptions from overseas and the letters from the governor also presented circumstantially detailed articles of domestic earthquakes. Secular theory also found its way into the paper. The *Maryland Gazette* of 5/30/50 on page two uses the same information for the explanation of earthquakes as found in the *Chamber's Cyclopaedia*. A letter from London from 2/13 noted that given the earthquake "which happen'd last Thursday in and about this metropolis" that the readers might not object to "a short account of the causes of this dreadful phenomenon". The writer argues that the earth "every where abounds in huge subterraneous caverns, veins and canals; some of which are full of water, others of exhalations, and some replete with nitre, sulphur, bitumen, vitriol, and the like igneous substances" and a number of events can occur that cause the tremor and movement of the earth. A "large mass, being wore away by a fluid underneath sinks and with its weight occasions a tremor". Water also causes earthquakes by cutting new courses or by turning to steam from subterraneous fires and moving the surrounding earth. Compressed air and the fire that heats air and water all work to make noise and movement. Linking earthquakes and volcanoes the author continues that underground fire combusts and creates "sulphur, bitumen,

and other flammable substances" and compressed by harder substances finally "bursting out into a greater compass, the adjoining parts are shaken, 'till having forced a passage, it spends itself in a Vulcano". Linking climate and geography, the author also states that earthquakes in England differ in "they are not attended here with the terrible appearances that they have in hotter climates."

A reader could find numerous details about domestic tremors that also avoided providential overtones and provided quantified observations and multiple witnessing. The *Maryland Gazette* of 12/18/55;² has reports of earthquakes in Massachusetts that fill almost half a page. The descriptions mostly concerned the damage with a number of houses in Boston, Scituate, Marblehead, and towards Worcester. It describes chimneys falling in and fences and walls cracking and falling. Ships coming into the harbours noted the great number of fish floating dead on the surface and so surmised an earthquake had occurred. The description of one dwelling area in Scituate got quite minutely detailed:

About 70 square Feet of a firm Cellar Wall burst from its former Position, and another considerable Part thrown to the Ground. This tremendous Shock, which proved so fatal to this Habitation, was undoubtedly enhanced by those seven Eruptions contiguous to it, in the Surface of the Earth, which were immediately discerned, and still remain abundantly perceptible. One of them is within 20 yards of the House, and the whole 7 within the Circumference of a few Rods. The Orifice of the largest measures 12 Inches by 3, and the rest are of smaller Dimensions. From these have issued large Quantities of water, and (according to the lowest Computations) ten Cart Loads of a strange sort of Earth, as compressible as flour, and of a white Complexion.

In their letters, authors do not necessarily present the information about earthquakes in terms of opposition to another perspective. At least one author, in the *Maryland Gazette* of 5/4/58, demonstrates the complexity of describing events far out of the control of the colonists. In a letter from Hanover, Virginia, March 28, 1758 a writer also draws on at least three standard approaches to writing on earthquakes and an interesting mix of an enlightenment clockwork universe and providence. The first part of the letter gives great details: "The rumbling Noise that attended it, which appeared to me like remote Thunder, or a foul Chimney on Fire, lasted perhaps Half a Minute; but the Shock itself was of very short Continuance" and "Its course

appeared to me to be from N. West to S. East". He then notes that having spoken to others has convinced him that it, instead, ran "from the North-East to the South-West".

The second part of the letter introduces Providence: "How prodigious is that Force of Nature, which can shake such a vast Extent of solid Continent" and "[God] have only given us a friendly warning! May we behave as those that believe themselves his Subjects, whom he will reward or punish according to our Works!". Yet he also calls God "the supreme Manager of this immense Machine of the Universe," code words for a Deist interpretation of God and nature.

Finally, he makes the dramatic link between weather and earthquakes as well. In a postscript dated eleven days later: "P.S. April 8 - The Morning after the Earthquake, we had the deepest Snow that has fallen last Winter; and ever since the Weather has been colder than has been known in the Memory of Man, at this Season of the Year." He ends by asking Philosophers to weigh into understanding this phenomenon for "whether the Earthquake had any influence to produce this Effect, I am not Philosopher enough to determine."

Science in Contest

Beyond the debates between rational empiricism and some other perspective, the newspaper could display some of the conflicts that existed between those engaged in natural philosophy. This often occurred in reports of contests promoted by philosophical organizations.

Colonial Americans could submit their own theories or inventions in response to the Royal Society's or the French Royal Academy's call for solving practical problems such as determining longitude on-board ship. While the colonial newspaper does not often make reference to Americans doing so, it does report some of the controversies and adventures of those who did attempt to claim prizes for such discoveries. The newspaper made the pursuit of discovery exciting and amusing by detailing the contests.

Numerous prizes existed. The *Virginia Gazette* of 2/24/38 includes a September 24 letter from Paris listing six different prizes awarded or available for the current year. The Duke de la Force of the Royal Academy gave notice of two prizes of a gold medal worth 300 L. "to all learned Persons throughout Europe" to the person who "who gives the most probable Account, *Of the Darkness and Transparency of Bodies*", and to whoever best explains "*The Cause of the Fertility of the Earth*". The academy also announced another two 1739 prizes for "*Whether the Air we breath in goes into the Blood*" and "*the Cause of Heat and Cold in Mineral Waters*". The Academy announced the winner of "upon the Muscular Motion" to Alexander Stuard, M.D. of Scotland and a memorial to Cardinal Fleury on "proposing a discovery to cure all Sorts of Gout, by drinking of Tea drawn from Simples" for which the writer believes he will receive a pension from the King.

Cardinal Fleury's cure begins to sound like an advertisement for a patent medicine when the letter describes "the Person who discover'd this Specifick, having cur'd himself, and many Persons of the first Rank, who labour'd under the Grievance". It continues that "no one, as yet, having discover'd the like. Nothing but this Tea is to be taken inwardly. It carries off the Gout by Urine; and so strengthen the weaken'd Part, a Balsam is applied, by which Means there remains not the least Complaint from the most inveterate Gout."

The *Virginia Gazette* of 2/13/52, in a letter from Paris, Nov. 6 notes another winner of a contest. The report states "Upon the favourable Report of the Royal Academy of Sciences concerning M. Pereyre's Method of bringing Persons born deaf to speak, and this being confirmed by many Experiments, his Majesty has settled a Premium on that deserving Gentleman."

Not to be outdone, the Royal Society, essentially mocking the French for rewarding Rousseau's critique of enlightenment, offered a prize for a Rousseau confutation. The *Virginia Gazette* of 11/7/51 reported "We hear that the Royal Society have come to a Resolution to give a Premium of twenty Guineas to the Person who shall write the best Answer to Mr. Rosseau's Discourse, lately published, against the Re-Establishment of Arts and Science; provided it be produced to the Society within two Months."³²⁶

³²⁶ Unfortunately, I found no article that detailed a winner for the contest.

Occasionally, the paper would print an article making it obvious that someone was seeking favor for a personal invention from one institution or another. The *Virginia Gazette* of 5/18/39 has a London, February 16 letter telling of a Mill-wright who believes he has a valuable invention for the British Admiralty:

We hear that one Mr. Williams a Mill- wright, of Pilton, near Barnstable, in the County of Devon, a Person of an extraordinary Genius, is lately come to Town, to lay before the Lords of the Admiralty, a Machine or Instrument, which by his own Study and Industry he hath invented, effectually to prevent a Ship from Making a Lee Way, in sailing close upon a Wind, or from running on a Lee Shore, without any Alteration in her Hull or Rigging; which will be of very great Advantage to the Navigation in general, and especially to his Majesty's navy.

One of the most international contests concerned the discovery of a northern sea passage between the Atlantic and the Pacific. Two articles make some reference to this. The *Virginia Gazette* of 9/9/37;41 prints a letter from London of 7/2:

By advices from muscovy we hear, that the gentlemen Viruosi's who about a year since were sent by the Czaria with a roper Guard to Siberia, in order to discover a North East passage to China, have sent letters to their friends there, signifying that they have made many useful discoveries in the Journey; but that they have at least another years work before they can accomplish their intended task.

A letter from Dublin (4/18/46) nine years later in the *Virginia Gazette* of 7/31/46;41 indicates the difficulty in finding northwest passage for it wrote "We hear that the Dobb's Galley, and California, are now out of the dock, and will be ready to sail the latter end of this month: and that the lords of the admiralty have granted protections for three years, as an encouragement to all seamen who shall enter on board these ships for the voyage through Hudson's straits, to find out the north west passage."

Another subject for scientific dispute revolved around a mechanical versus mathematical solution for finding longitude at sea. Despite the almost sure lock the mathematicians of the Royal Society had on the longitude contest put on by Parliament, and the 20,000 pound reward, this long-running search for a solution remained open to all for most of the 18th century.

According to Dava Sobel, the anti-mechanical orientation delayed the presentation of the reward far longer than it should have been. In 1772 the reward finally went to clockmaker John Harrison who had been working on the problem since 1720.³²⁷ However, the newspaper does not seem to differentiate between the potential approaches. In the *Virginia Gazette*, 2/6/52, letter from London, Oct 31: "We are informed that a Scheme for finding out the Longitude, from the different Variations of the Needle in different Parts of the Globe, has been laid before the Lords of the Admiralty by Mr. Zachary Williams, an old and experienced Mathematician; and their Lordships have referred it to the Consideration of Dr. Bradley, Regius Professor of Astronomy at Greenwich." In the *Virginia Gazette*, 9/16/37, letter from London, June 21 gives some evidence of Harrison's progress and promotion (although misspelling his name):

On Thursday the Right Hon. Arthur Onslow, Esq; Speaker of the House of Commons, the Right Hon, the Lords ..., and Lovel, Sir John Norris, Sir Charles Wager, and several Persons of Distinction, view'd a curious Instrument for finding out the Longitude, made by Mr. Harridon of 1 cather-lane, which he has been Six Years in the finishing. They all expressed the greatest Satisfaction at it, order'd him 250 l. and gave him Directions to make another, to be kept at the Admiralty, for which he is to have 250 l. more.

The pursuit of making seawater fresh in an economical manner (that is, the weight of the equipment and fuel could not weigh more than the amount of water it might create) also became reported as a contest in the colonial paper. The 2/6/52 *Virginia Gazette* had a October 31, 1751 letter from London that mentioned that two inventors had a potential means of making sea water "fresh, sweat and wholesome". The British Admiralty would reward such a process, but only if the inventors could demonstrate its effectiveness and so had set up a trial. Two months later a letter from London dated January 27 indicated that the College of Physicians had witnessed an extraction of 13 gallons of fresh from 16 gallons of salt water. However, the letter did not indicate who performed the experiment. In September, the *Virginia Gazette* reported from a May 19 letter from London that the experiment proposed in the 10/31/51 London letter had started auspiciously but resulted in the inventors receiving no reward.

The *Maryland Gazette* of 10/12/52 printed more of the details of the letter from London of May 19:

³²⁷ See Dava Sobel.

Some Months ago we mentioned in our Paper, a Method that was discovered by two Gentlemen for making Salt Water fresh. This Invention was laid before the Lords of the Admiralty, who were willing to give encouragement to such an Undertaking, provided the Projectors would exhibit a Specimen of their Performance. Their Lordships also enquired what Fuel would be necessary, because if a considerable Quantity was required, it was equally convenient to load Ships with Water as with Firing. To this Objection it was answered that a Shilling's worth of Fuel was sufficient to produce 36 Gallons of Fresh Water from Salt Water. The Undertakers then went to Work, got their Engine ready, and the Lords of the Admiralty ordered a sufficient Quantity of Salt Water from the Nore for the Use of the Inventors, who proceeded to the Experiment; and, according to their Proposal, they produced the Fresh Water. During the Time of the Operation the Water seemed to promise success, but before the Affair was to be decided it was ordered to be close calked up for a few Days. At the Time appointed the Barrels were broached, but the Water had then so nauseous, so uncommon, and so strong a Smell, that it diffused itself over the Neighbourhood, where every Body wondered what could be the Cause of it. This Affair terminated greatly to the Disappointment of the Projectors, who had agreed to ask for no Reward 'til they had executed their Design.

A seawater conversion story with a happier ending for the inventor appeared two years later. The admiralty not only rewarded the inventor but also published the technique. The newspaper explicated both:

Mr. Joshua Appleby of Durham, Chemist, having discover'd an easy and expeditious Method of rendering Sea Water fresh and wholesome at Sea; and the same, on a Reference from the Admiralty, having been thoroughly examined, and approved by the College of Physicians, and the Commissioners of the Victualling; the Lords Commissioners for executing the Office of Lord High Admiral of Great Britain and Ireland, have published the Process, used by the said Joshua Appleby, in the *London Gazette*, that to useful a Discovery may be universally known. It is as follows:

Put twenty Gallons of Sea Water into a Still, together with six Ounces of Lapis Infernalis, and six Ounces of Bones calcined to whiteness, and finely powdered. From this Quantity fifteen Gallons of fresh and wholesome Water may be extracted. In two Hours and a Half, at the Expence of little more than a Peck of Coals----This Proportion of Ingredients will answer very well in these Northern Seas; but in some Parts of the Mediterranean, or Indian Seas, where the Water is more salt and bituminous, the Quantity must be increased to nine Ounces of each.----The Ships boiler should not be used for this Process, what Remains being very noxious.³²⁸

³²⁸ *Maryland Gazette*, 4/25/54.

The success of Mr. Appleby secured him a place in the newspaper with his full name as discoverer, unlike the two unfortunate inventors of the article of 10/12/52. Secondly, he received an obituary, an event still reserved for fairly important people in 1754. He apparently died soon after the report of his discovery and received two notices in the *Maryland Gazette*, one on 6/13/54 and another on 8/22/54.

Medical Practice and Conflict in Print

Medical practice in the 18th century differed little from that practiced by the Greeks and Galen some 1700 years earlier. The notions of germs and bacteria did not exist and psychological attitudes, both towards life and towards the healer, played a large part in prescriptions. With some variation connected to iatrochemistry (illness due to imbalance in acidity and alkalinity of body fluids) and iatromechanism (illness in terms of nervous stimulation), medicine relied on an imbalance in the four humors -- blood, phlegm, yellow bile, black bile -- first hypothesized and systemitized by the Greek Hippocrates and Galen respectively. The medical practitioner almost exclusively reestablished balance through purging the body using vomiting, bleeding, blistering, and sweating and so drugs mostly worked as emetics, purgatives, diaphoretics, carthartics, sudorifics, and emmenagogues.³²⁹

Medicines also exhibited a number of other properties. The notion of "like cures like" (similia similibus curantur) or the "doctrine of signatures" guaranteed that kidney wort and liverwort could treat kidney and liver ailments respectively; walnuts, due to their resemblance to the brain, could treat head ailments; holding a burned limb in front of a fire to "draw out the fire" worked, and ginseng, with its general resemblance to the human body, worked as a general elixer. This notion also contributed to the idea of foul substances ridding the body of sickness, the rise of

³²⁹ Karst, p.122.

homeopathy, and the corollary idea that providence usually provides the anecdote wherever its target ailment exists.³³⁰

Medicines also became prepared chemically through distillation, extraction, concentration, or crystallization. These processes created ashes or salts, the "essential forms" of the original product; often things as simple as oatmeal or other herbs or spices that followed the galenical prescriptions. Interestingly, Boyle had demonstrated 100 years earlier that the reduction of any plant through burning left the same material (potassium carbonate) and thus rendered the original specific qualities of the organic matter moot. Thus, we see the lack of speed with which certain scientific principles filtered through medicine and its capacity to eliminate any benefit that the Galenical prescription may have had.³³¹

Practitioners and the public mixed metaphors and reasoning frequently. For example, writers in the newspaper often described the body as a machine following the mechanistic description of respiration and blood flow by Harvey, Boyle, and Hooke among others. However, this often led to fairly direct transitions between Newtonian physics and biological observations. In the 5/14/53 *South Carolina Gazette* a writer postulates that lightning kills by destroying "the coats of the internal blood vessels and nerves" stopping circulation and thus causing death. A writer in the 1/1/53 *Maryland Gazette* suggested that you could restart blood circulation by forcing air into the lungs and thus dilate them "so as to make no resistance to the blood when put in motion by the feeblest efforts of the heart."³³²

Numerous merchants sold medicines and druggists sold other products than drugs. Apothecaries typically sold wine and other spirituous liquors they produced in their own stills they used for creating fermented medicines. This put them into occasional economic conflict with other merchants selling rum, gin, beer and the like. Several articles from the *Virginia Gazette* in 1737

³³⁰ Karst, p.113-121. On p.170 she notes: "Simple folk more often, out of poverty, put a minute bit of the medicine in a large quantity of water." Later newspaper articles, such as *Virginia Gazette* 5/16/45, wrote that this accounted for the greater efficacy of folk preparations with the reason being that the greater ease with which diluted material was carried "into all the smallest Vessles of the Body." This precipitates the homeopathic dosing of Hahnemann.

³³¹ Karst, p.116.

³³² Of course, if a patient had stopped breathing, this artificial respiration could work. Just for different reasons.

and 1738 paint the apothecaries as organizing political and church wardens to defeat a "Gin Act" that would have prevented them from selling spirits to allegedly sick people.³³³

Economic necessity forced the medical practitioner to engage in selling either self-prepared or patent medicines such as Daffy's, Squire's, Stoughton's, etc. Little difference in terms of what ingredients made up the two existed.³³⁴ One relied on whatever authority and goodwill the local practitioner had established and the other on the international reputation from a brand name. No matter what the authority of the local practitioners however, it appears they could not thrive economically on practice alone. According to Karst, John Morgan of Philadelphia was probably the only physician in the colonies not also an apothecary. An Adam Cunningham of Virginia practiced for two years before he concluded that physicians made money by "merchandizing" medicines.³³⁵

A practitioner could go by many names. In Britain, some differentiation existed between physician, surgeon, and apothecary; with a physician university trained, a surgeon principally involved in the cutting of limbs, and an apothecary as a mixer of various nostrums. In addition some distinction existed between a druggist, as a seller of prepared medicines, and an apothecary or chymist who mixed the medicines. In colonial America, the geographic distance from urban centers, the necessity of self-sufficiency, the lack of established rules of practice, and the publication of much of the medical information probably made for less differentiation between physician, surgeon, and apothecary as well as less reliance on trained practitioners.³³⁶

Some animosity existed between the university trained and the self-taught or apprenticed practitioner. University trained practitioners engaged in labeling the others as hacks and quacks so some articles in the newspaper reflect that point of view. While the university trained practitioner did adhere to the galenic system more than the untrained practitioner, for the most

³³³ *Virginia Gazette*, 1/28/37, 2/4/37, 1/13/38.

³³⁴ Young, p.11-12.

³³⁵ Karst, p.107 and p.76. On p.90 Karst notes "It is easy to see how doctors were led to become "philophsics," or lovers of medication for its own sake." Karst also speculates that the ease with which one could give themselves the title of Dr. and practice physic led to a glut of practitioners which, in turn, lowered the price a practitioner could charge. This probably deserves more examination.

³³⁶ Karst, p.8, p.72, and p.131.

part, both types of practitioner relied on past knowledge and generalizing that knowledge rather than involving themselves in experimentation.

We know that these conflicts could get pretty nasty, perhaps no better exemplified, even if an unusual case, than the murders of Doctors Williams and Bennet by each other's swords in Jamaica in January of 1751. A letter in the April *Maryland Gazette* details some of the conflict:

You may, probably, e'er now, have heard of the unhappy Fate of the Doctors Williams and Bennet here: But as the Motives which induced the Quarrel, may not be known to you and others in Philadelphia (the constant Subject of Conversation amongst us) I send you the following Account, which may be depended on. Dr. Williams, about six Months ago, published An Essay on the Bilious Fever of this Island; which, tho indeed not so compleat a Performance as might have been expected from a Man of Learning and Experience, yet was full of just Reasoning and proposed a Method of Cure in general good, and supported with that strongest of Arguments, great Success in Practice. Dr. Bennet, a Gentleman born at Montserrat, had his Education in Great Britain, commenced Physician in France, and came to Jamaica, not above three Months before Dr. Williams Essay was printed: soon after the Pulication of which, Dr. Bennet gave us a Pamphlet, intituled, An Enquiry into the Essay, &c. It consisted chiefly of Ridicule, discover'd little of the learning of its Author, and (I need not say) was not founded on Experience.

The letter writer, GREOLIUS, goes on to explain the exchange of letters that then ensued in the local paper, the *Courant*. Apparently, Bennet became so incensed by some of the comments that he cornered Williams in a store and attempted to throw a box of snuff in Williams' eyes "upon which a Scuffle ensued." Williams then refused three offers to a duel but Bennet and two others later drew him out of his house and they "drew their Swords, and after some Passes, Williams entered Bennet on the right Side and came out of the left; whereupon Bennet fell". According to the writer, Williams then "immediately received a Wound, which entered at the upper Part of the left breast, and came out at the right Shoulder Blade of which he instantly died. But from whom he receiv'd this Wound is Matter of great Speculation and uncertain Conjecture.". Bennet died two hours later.

That God moved mysteriously probably accounted for the tendency for many colonists to believe that the cures for various diseases could come from old women, simpletons, and slaves.

Especially regarding difficult ailments. That providence provided a cure in the same place as the ailment probably contributed to the confidence colonists put in Native cures; and the attendant mythology of the "noble savage" pharmacopoeia.³³⁷ The colonists gave credit to the Indians for Peruvian bark, gayacum, Virginia snakeroot, ippacacuania, and Senega Rattlesnakeroot. The Indians were thought to know the secrets to surviving in the New World as well. For example, in an 8/9/49 *Maryland Gazette*, an article on page two noted that in Annapolis, one James Taylor stepped on a hare, "which in all probability the snake was charming" (showing a rare instance of the notion of the mythical power of snake eye) and the rattle-snake bit him on the ankle. A nearby Indian tried to cure the man, telling him not to drink water. Unfortunately, the article continues, Taylor did not follow the Indian's directions and thus died. A 12/10/45 *Maryland Gazette* had an article detailing how to make the "Indian salve".

Healing springs had considerable public favor in Europe and the colonies as well. A physician/merchant who felt his business threatened could pay for the privilege of educating the public as to the value of certain processes and objects, and the unimportance of others. A January 6, 1747 *Pennsylvania Gazette* letter questioning the curing properties of the water from newly discovered wells in Virginia shows a regard for the experimental method and the authority of those who practice it:

Hitherto the Inhabitants of this Part of the World have been without these valuable Resources, probably not so much from any Defect in Nature, as of Industry in those who ought to have searched for them; as we have the greatest Reason to believe from the Cures performed by the new discovered Wells in Virginia, several remarkable Accounts of which have lately come to our Hands from Gentlemen of unexceptionable Judgment and Probity. But not withstanding these Waters may be endued with very valuable medicinal Qualities, they cannot be a Remedy for the great Variety even of contrary Affections to which the human Machine³³⁸ is liable; so that many of those unhappy Persons, who, from the present Reputation of the Wells, may be induced to visit and try the, must necessarily be disappointed in their Expectations, whereby a very useful Discovery may be brought into Disrepute, and at length be intirely neglected. The Subscribers therefore propose to examine into the real Merit of these Springs In order therefore, we shall make those Experiments which have discovered the Principles, and distinguished the Characters of the different Springs in Europe . . . the Power of the greatest Medicines frequently lying concealed in Parts too subtile to come under the Observation of our Senses,

³³⁷ Kremers and Urdang, *History of Pharmacy*, pp. 158-178.

³³⁸ Perhaps the discoverers of those wells did not consider human beings as machines.

and only to be discovered by Facts, we are therefore obliged to desire of those Gentlemen, who, from Indisposition or Curiosity, have visited the Wells, that they would transmit to us an exact Account of the Effect of the Waters upon themselves, or others under their Observation.

The letter goes on to describe the experimental techniques and documentation required to establish matters of fact. It ends with a call for public spiritedness. In the rhetorical strategy of Thomas and Phineas Bond, who owned a successful apothecary in Philadelphia, it was the humane duty of the storytellers of the healing springs to validate their findings.

[L]et us know the Diseases for which they had Recourse to them; the Ages of the Patients; their Manner of living, both before and after the Use of the Waters; the Method of taking them, and their immediate and consequential Effects. This Exactness is absolutely necessary to assist us in distinguishing between those Cures which have been really performed by the Springs, and such as are only the Effects of Time, Exercise, a Change of Air, Diet, or some other Accident. We hope that those who have experienced the Wells, or have been cured of their Diseases by them, will think they owe so much Charity to their Fellow Creatures, as to comply freely with out Request, that the Benefit accruing from the Use of the Waters may be made publick, whereby others, in the like Circumstances, may be encouraged to repair thither, and become Partakers of their Advantages, which is the Intent of this Paper.
THOMAS BOND. PHINEAS BOND.

Through various methods, physicians attempted to eliminate what they termed quackery. The newspapers do have stories that paint "pretenders" in poor light. An 8/28/52 *Maryland Gazette* has a story of a woman posing as man and physician who then gets arrested. A 2/28/55 *Maryland Gazette* has a story of a man imitating a surgeon to rob a widow. An article in the *Virginia Gazette* of 4/7/38 warns that "from an ignorant Pretender in Physic, a Man may run the Hazard, nay and lose his Life." *Virginia Gazette* articles of 9/17/36 and 10/14/37 warned of "vagabond frauds" who claimed some medical expertise and the 9/17/36, 11/21/45, and 7/11/51 issues warned of specific charlatans; runaway servants and slaves who "talked pretty" and claimed extraordinary medical gifts. Even a successful cure gave some physicians reason for pause, and one in the 10/10/45 *Virginia Gazette* advocated punishment for "Whoever prescribes Physick, on the Consequences whereof he hath no Experience (even though) he effects a Cure." A 6/11/52 *Maryland Gazette* story from a London letter of 3/11 tells of a parent giving ratbane instead of physic to her children. The article intimates that the three children might have lived if someone with experience had administered the medicine.

However, despite negative depictions of "vagabond frauds," the school'd medical practitioner did not enjoy anywhere near universal acclaim. Although almost never advertised as a service in the newspaper, the traditional methods of midwives still contributed to a large number of colonial births. Many colonists also strove to care for themselves with an attendant popularity in the presence of health in the newspaper, almanac, and pamphlets and books such as *The Poor Man's Physician*. The questionable results from many of the ministrations of doctors probably did not help their image.³³⁹

A story in the 5/15/51 *Maryland Gazette* tells of how a physician declares a pastor dead but when he appears still alive two days later the physician bleeds the pastor but cannot stop the bleeding easily. Again they inter the body only for some someone to hear commotion and again they find he had been set to rest while still alive. In a 1/16/52 issue, a story from London speculates that administering Daffy's elixir in a particular case contributed to the death of the patient. A 6/4/52 article from London told of a Chymist telling a ship's mate he had the Pox [syphilis] and the mate then hanging himself. When a sailor saw this he ran for the doctor and the doctor came and bled the mate without ever cutting him down. The mate died.

In addition, stories in the newspaper also exhibited the capabilities of the laymen. In a June 30 letter from London in the 11/8/49 *Maryland Gazette*, a story of a man who, wanting to vomit by use of a feather, accidentally swallowed the feather. Using a bizarre retrieval method, a Mr. John Lyons "who had the presence of mind, as to order a pistol bullet to be immediately bored through, and put a string into the hole, which he made him swallow, and by rolling him round several times one ways," twisted the string around the quill and drew it out. A 1/24/54 *Maryland Gazette* article from a London 9/12 Daily Advertiser article tells of a girl successfully having both legs cut off by father who was "afraid of mortification after frostbite."³⁴⁰

The public persona of the Physician may have also suffered from the dual role they assigned themselves as occasional providers of a free public service and service providers expecting some

³³⁹ Karst, p.52. She notes "Luck, happenstance, and the natural strength of the victim's constitution had probably as much to do with recovery as any of the "recipes" tendered to the reading public."

³⁴⁰ One wonders if the father's fears were legitimate but the article makes no noises to the contrary.

monetary compensation.³⁴¹ Sometimes, when a public health crisis arose, practitioners would submit the recipes or practices to cure the affliction. A number of times all four newspapers provided the procedure for small pox inoculation for example. In addition to these gratis services, practitioners also advertised their medicines. A weak boundary existed between communal sharing and marketed treatments, making the newspaper a potential source for news of and even directions for up-to-date medicine.³⁴²

The public seemed to feel that administering health represented a public good. An article in the 1/24/51 *Virginia Gazette* telling the story of a London physician denying treatment to a little boy whose mother could not pay, labeled the doctor an "inhuman, mercenary Wretch." Several issues of the 1755 *South Carolina Gazette* had an exchange over the labor and right to "encouragement" for medical services. A FREEHOLDER insinuated that the physicians had not done anything to prevent the extreme mortality of Charles Town and likely were quacks. A number physicians responded, one using scriptural references to show the antiquity of charging for medical practice. Another used calculations that showed the actual annual mortality rate at 137 of 4611 inhabitants, or 1 in 34 (including new borns and the newly immigrated) which, the writer continued, seemed perfectly reasonable.³⁴³

Physicians worked to improve their image. In addition to occasionally offering free services - which worked as much as a "come on" as anything - some created fee schedules based on the ability to pay. They also benefited from articles that created images of miraculous medical restoration. A story in the 9/19/51 *Virginia Gazette* tells of how a French surgeon restored the site of a girl blind since birth. Mrs. Mapp, the famous bone setter of London, "cured Persons who have been above twenty years disabled," according to the 12/10/36 *Virginia Gazette*. A 1/4/39 *American Weekly Mercury* article told of a surgeon able to sew up a man's throat who had been sliced by a robber's knife. And the 1/5/31 *American Weekly Mercury* printed a letter from

³⁴¹ Karst, p.10.

³⁴² Young, *The Toadstool Millionaires...*, p.18.

³⁴³ Karst, p.95. The use of mathematical figures and tables may have truly set the trained physician apart from the layman for medicine was listed along with theology, ethics, logic, poetry, and rhetoric as non mathematical sciences and thus acceptably accessible to the educated layman. By rationalizing the practice, as occurred with the tables related to Small Pox *inoculation*, the relationship became modified.

Paris of 9/27/30, which told of "An extraordinary Operation in Surgery" and may have included enough of the details to assist a local surgeon to duplicate the procedure.

The right of examining some of the most horrific physical deformities and occurrences also fell upon the shoulders of the educated physician. These articles work to thrill the audience as much as educate, and many seem unbelievable today, but they still position the physician as an authority on physiological extremes. The 1/27/47 *Maryland Gazette* article that told of a man in Scotland who orally voided caterpillars noted that they had been taken by the Physicians of the Edinburgh society. There was the examination of a singing woman whose tongue had been destroyed by disease in the 3/30/48 *Maryland Gazette*. The 12/15/53 *Maryland Gazette* had this story from St. Kitts:

Extract of a Letter from St. Kitts, dated September 10, 1753. We have lately met with a surprizing Discovery here, on the Truth of which you may depend. About eight or ten Days ago, a Negro Woman, belonging to the Honourable Ichad Holmes, Esq; of this Island, died, who (fifteen Yers ago) appeared very big with Child, and, at the Expiration of nine Months, was taken in Labour, but never deliver'd. She has been opened by one of the skilfullest Surgeons we have here, and the Skeleton of a Child found, the Nails on the Fingers of which, are compleatly formed, and Hair is also visible on it. The Owner of the deceased Negro has the Skeleton still by him, which, I believe, is intended for Europe.

The physicians also received some support from the legislatures, although not much in the form of regulation. Until about 1770, representatives might give rewards to discoverers of certain cures. A black slave named Caesar in South Carolina even had his freedom granted and an annual gift of 100 Pounds for his discovery of a cure for snakebite. This recipe became published in the *South Carolina Gazette* where he also advertised his services for a number of years.³⁴⁴

The characterizations of physicians in both heroic and maladroit terms gives an indication of some of the conflict that existed between physicians, surgeons, druggists, apothecaries, at least in the marketplace, and the attitudes the public held towards them. It also indicates the power that these people may have in the face of a potential patient's torturous malady or imminent death.

³⁴⁴ Waring, Joesph Ioor, *A History of Medicine in South Carolina, 1670-1825* (Columbia, S.C., 1964), pp.28-36.

Franklin expressed skepticism for the numerous medicines available.³⁴⁵ His friend, physician John Pringle, had once told him that in his experience, "ninety-two fevers out of every hundred cured themselves."³⁴⁶ However, in the face of his painful gout, upon which he could do little but blame his "passions of youth," Franklin, at one time or other, tried many of the nostrums available.³⁴⁷

Many of the exploratory practices of physicians may have become accepted by the public over time. The bodies of Royalty, for example, essentially belonged to the public and newspapers gave detailed reports of the autopsies performed on them. The body of criminals also belonged to the state and numerous reports of executed prisoners (as well as suicide victims since suicide also made them criminals) ended by indicating that the doctors took the body to the medical theatre. Of course, not all felt comfortable with this set-up. A story in the 1/31/51 *Virginia Gazette* tells of one man sentenced to death who asked that his dead body get protection from the surgeons.

That there might exist some conflict between those practicing medicine seems evident from the Physicians regulated by Virginia General Assembly along with surveyors, people owing money, and others in "An Act for regulating the fees and accounts of the practicers in Physic." (*Virginia Gazette*, 9/24/36). However, this kind of regulation really amounted to a government tax more than a set of standards for medical practice. Debates in medical practice raged on and just as the Drs. Bennet and Williams began their tragic fight in the pages of the newspaper, so too did others.

Dr. John Tennent

No conflict appears more obvious between a single proponent of a medical approach and detractors than John Tennent's promotion of the use of the Seneca Rattlesnake root for Gout and

³⁴⁵ Van Doren, Benjamin Franklin, p.634.

³⁴⁶ Franklin related this to Benjamin Rush. See "Excerpts from the Papers of Dr. Benjamin Rush," *Pennsylvania Magazine of Historical Biography*, XIX (1905), 131-137.

³⁴⁷ See Benjamin S. Abeshouse, "A Medical History of Ben Franklin," *MD*, X (1966), 96.

a host of other maladies. Tennent first submitted a printing of his letter to Sir Richard Mead, M.D. in the October 8, 1736 *Virginia Gazette*. He used a fair amount of reasoning for his theory, gave results of an experiment with subjects, followed his contemporaries in holding that many diseases were due to intemperance and other indiscretions, and cited an authoritative figure in Boerhave to make his argument.

Just as the Peruvian Bark worked in reducing fever (along with *Mercury*) by "recovering a Lax Fibre" and "increasing the *Momentum* of the Blood" respectively, so too would the root used "by the Indians, to be effectual against *the Bite of the Rattle-Snake*" prove effective against Gout by the same mechanism. The letter noted that he had given the root to thirty-three patients "who all recovered, except One." It also noted that the primary causes of gout are "all Errors committed in the Non-naturals, viz. A sedentary Life, Immoderate Vecry, Hard Drinking of tartarous Wine, Sitting up late, the Use of Acids, Great Passions, the Use of fat and oily Substances in Food . . ." and further agreeing with Boerhave in the proximate cause "a vitiated Temper of the least, and consequently nervous Vessels of the Body; and also of the Liquid which waters those nervous Parts." He concludes logically and promising future experiments:

The best Remedies in the first Stage of the Disease, are agreed to be Aromatick Bitters, Anticorbuticks, Lixivial fixed Salts, cold Bathing, Exercise on Horseback in a pure Air, and Blood-letting; and in the second Stage, Volatile Salts, Sudorificks, Mercurials, Paregoricks, and in some Cases, Blood-letting.

Now it is certain, that the Sum of the Effect of these Methods, is, that the crude Gouty Matte is reduced to a Minuteness, sufficient to go off by the common Secretions in some Measure: But, since the Paroxysm returns after a while, the Particles of this tenacious Matter have been wandering up and down in the Blood, not being sufficiently divided, other-ways, there would have been no Return of the Paroxysm.

So that it appears, that if those Medicines had a greater Degree of Efficacy, the Gout might be cured, or at least the Fits shorter, and at greater Distances.

I think, Sir, That since the Cure of the Gout (if the Expression may be allowed) consists in hindering the Union of those Particles, which form a tenacious Matter, that stagnates in and about the Joints; or in dividing and reducing it to a fit Minuteness; for the common Secretions when formed or united, the Rattle-Snake Root is the most likely Thing to effect these Operations, because it dissolves the Frumes and Coagulation of the Blood caused by the Rattle-Snake's Venom, in the most surprising Manner: And since the Blood of a Pleuristick Patient, and of one in the Gout have been accurately observed, and found to be of

the same Colour, and Consistence; and as this Root has such good Effects in a Pleurisy, it appears to me also to be a Remedy in the Gout.

I propose to give it in the first Stage of the Disease with the Extract of Peruvian Bark; and in the Second with Camphire.

He sent along his "*An Essay on the Pleurisy*" -- which he also advertised on page four of this same issue of the *Virginia Gazette* -- along with two pounds of the rattlesnake root to Mead. He advertised the rattlesnake root itself "at *Mr. George Gilmer's*, Apothecary, in *Williamsburg*, and at *Mr. John Dixon's* Merchant, when, he wrote, "several Persons have provided *Rattle-Snake Root*, which is not of the genuine Kind."³⁴⁸

Apparently, Tennent had been attacked by "some Doctors of considerable Repute" who did "endeavour with notable and mean Ways, to perswade the World, that my [Tennent's] Reasoning and Proposal are absurd, and inconsistent with Reason, and consequently can be of no Use to the Country" because he wrote a response to them in the 3/4/36 *Virginia Gazette*. This letter gave even more details of his procedure along with his repeating that "It is allowed by the greatest Authority of the present Age, that there is an Analogy between the Coagulation of all Fluids; that the immediate Cause of a Pleurisy . . . is a coagulated Blood". To effect the cure one must "Let the Root be reduced to the gross Powder, and the Proportion Three Ounces to a Quart of Water; and let near Half be evaporated: Dose Three Spoonfuls every Six Hours." Bleeding also "must be repeated as often as the Symptoms return".

In the next couple months Tennent continued to advertise his essay.³⁴⁹ The first critique of Tennent that appeared in print occurred in the 6/10/37 *Virginia Gazette* under the name PHILOMATHESIS. The author questions his affiliations and reasons for argument: "he not only endeavours to impose false Suggestions, but likewise takes upon him to censure a Faculty (whereof he pretends to be a significant Member) for no other Reason, than their Dislike to his

³⁴⁸ In *Virginia Gazette* 10/1/36, 10/15/36, 11/5/36 and 9/29/38. Karst (p.165) indicates that he gave the root away "gratis" but the advertisements use the same terminology as others where products "are available" without indicating a price. I think its reasonable to assume they cost some money.

³⁴⁹ Interestingly, George Gilmore, who Tennent had arranged to sell the rattlesnake root, appeared to either have a little conflict of his own, or had hit upon an interesting way of advertising through controversy. At least two advertisements (on 5/27 and 6/3) appear in the *Virginia Gazette* retorting to "THERE being a Report industriously spread about the Country, of George Gilmer's Death, by some well-meaning People . . . To obviate such scandalous and groundless Reports, I take this Opportunity to acquaint all my Friends, that I can now, better than ever, supply

[essay]." The author continues that Tennent's reasoning is "obvious to every one that has a competent Knowledge of Letters, to discover its Absurdity..." He argues that by extension of Tennent's analogy, "there is an Analogy between the Coagulation of all Fluids" and further "that there is but One Sort of Fluid in the Universe, capable of being coagulated, and but One coagulating Matter."

The author does give Tennent the possibility that the root like other Emetics "has a pungent, constricting Quality, capable of giving a sufficient Restriction to the Solids, to break small Cohesions in the Blood, and perhaps squeeze the Poseon of the Rattle-Sanke back again thro'the Pores, before it has mix'd itself with the Blood." However, "that it is capable of Restoring a morify'd Member, or (as it is reported) make a seemingly dying Woman, in 4 Hourse after first taking of it, rise from her Bead, and be able to whip her Children, carries the same Probability, as if it was said, This Root will raise the Dead to Life."

The July 15, 1737 *Virginia Gazette* saw Tennent's response to this 6/10 criticism with Tennent defending his analogies between the "Coagulation of all Fluids" by attacking the others use of the Doctrine of Attraction between bodies and clarifying his analogy as not "absolute". To continue his defense Tennent then casts his analogies even wider, noting: "So that it appears from hence, that the Blood, after the Bite of a Rattle-Snake, or Viper, is of an uneven Texture; and appears very evidently to be so, by the Intermission of the Pulse, Convulsions, Fever, and Coughing; which last Symptom, the most clearly proves, that there is a very intimate Division of the more solid Parts of the Blood, from the more fluid" because it then lodges in the lungs."

On December 16, Tennent submits another letter, datelined London. This time he cries victory for "THE Success which has attended the Rattle-Snake Root in a Pleurisy," by claiming "it is plainly proved by Experience, that the Rattle-Sanke Root cures the Pleurisy". His next objective becomes clear: "I suppose the next Objection against it, is, that it can cure nothing else." He responds to his own created objection: "If this is objected, I say that is like all other Objections, nothing in it; which is most like themselves. This Root is certainly one of the best Medicines in the World, and adapted to most Diseases which Virginia is subject to."

them with all manner of Chymical and Galenical Medicines. . ." signed by George Gilmer.

Tennent continues to have his *Essay on Pleurisy* on sale at William Parks and advertised through the *Virginia Gazette* throughout the year.³⁵⁰ On the last page of the 6/16/38 issue, a Benjamin Walker gives a testimonial, in what may very well be an advertisement, to the effectiveness of the rattlesnake root saying that it has allowed him to return to an active life and cured some of his Negroes as well. Walker indicates that he offers this testimonial as a public service and hopes "People will not offer to run down and prevent the Use of so good a Medicine, to serve their own Ends, until they have fully experienced the good or bad Effects thereof. . . This I publish, to serve my afflicted Brethren."

In an unprecedented series of articles in four issues of the *Virginia Gazette* starting in September 22 of that year John Tennent offers his "MEMORIAL, *humbly addressed to the learned, impartial, and judicious World*".³⁵¹ In this series, Tennent plays the martyr and compares his philanthropic actions to those of antiquity. "WHILE the *Roman* Government was at its greatest Pitch of Dignity and Splendor, nothing was more rewarded and honoured than Acts of Benevolence to the Publick," he writes. He then notes that his own effort to bring "so valuable a discovery" to the world has stressed his fortune and brought great derision from parties so self-interested as to attempt to deny his generosity. He then spent a considerable amount of time defending his actions in the name of his own self-interest, explaining why he failed to receive a diploma from Edinburgh because "[they give them] mercenarily, to those who deserves them not," and reporting that he had been well received in England by men of stature despite what rumors have indicated. He also denied being a quack and then, ironically, to argue his point, he defined quacks as those who create closed systems and treat every disease with the same medicine. He also argued against those "who attempt to reduce Physick to mathematical Demonstration" which also seems counter-intuitive since he had originally argued his proof through numbers of patients treated.

News of Tennent continued for a couple more years in the *Gazette*. In 12/22/38 he received one hundred pounds from the Virginia Assembly for his work.³⁵² The 8/17/39 *Virginia Gazette*

³⁵⁰ *Virginia Gazette*, 2/17/38;42, 3/1738;4, more.

³⁵¹ *Virginia Gazette*, 9/22/38, 9/29/38, 10/6/38, 10/13/38.

³⁵² *Virginia Gazette*, 12/22/38.

published a letter from the July 26 *Pennsylvania Gazette* from Phineas Bond (relaying a letter from his brother Thomas Bond in London) to Benjamin Franklin that promised it would "in no small Measure confirm the Character of the *Seneca Snake-Root*, set forth by Dr. *Tennent*". The root had been tried by "Mr. Jessieu, Physician and Professor of Botany to the King, with a Recommendation and the Method of Use in a Pleurisy, and has been frequently tried by him and many others in that Disorder with surprizing success, and is in great Esteem...". However, Tennent's cure did not ever receive universal approval and still faced competition. The 9/7/39 issue of the *Virginia Gazette* had another article entitled "CURE for the GOUT". This article (perhaps paid for) detailing a cure from a Thomas Sandford and Edward Gent of Kilkenny, included specific directions as to its preparation. It did not include the Seneca root.

The *Pennsylvania Gazette* also gave room to Tennent's theories, although not to the same extent. His proposal to publish a pamphlet on the diseases of Virginia (which never saw print for lack of subscription) appeared in 8/3/38 a month after it appeared in the *Virginia Gazette* on 6/30/38. An advertisement for Poor Richard's almanac on 12/6/39 includes " Dr. Tennent's infallible Method of Cure in the Pleurisy by the Seneka Rattle Snake Root". The 9/9/42 issue had an advertisement which stated " Just Published, And to be sold by the Printer hereof, DR. JOHN TENNENT'S ESSAY ON THE PLEURISY". The original letter from Phineas Bond appeared on July 26, 1739. And the memorial begun on September 22 of 1738 in the *Virginia Gazette* gets published almost a year later in the 7/19/39, 7/26/39, 8/2/39 issues of the paper. The 8/10/38 issue had a short letter that only hints at the later qualities that Tennent claimed:

To the Printer of the Gazette.

Esteemed Friend,

I have given thee some Information a good while since, of that excellent Discovery, that hath been found out amongst us, for to cure the Bite of a Rattle-Snake: It hath now been practised by several Persons, and it never hath failed, but performed the Cure to Admiration. It would be well to publish it for the Good of Mankind. The Cure is thus: Take of common Salt, powder is fine, and rub it with your Fingers over and into the Wound; if you scarrify the Skin with the Edge or sharp Point of a Knife or Needle, near the Wound, 'twould do much good, & bind some Quantity of Salt to the Sore. It giveth speedy Ease, draweth the poysonous Matter away in large Quantities, and destroyeth the Nature and Effects of the Poyson. G.B

The 8/2/39 issue also reprinted the directions found in the July 26 letter from Phineas Bond:

THE Decoction of Seneka Rattlesnake Root is made by boiling three Ounces of it in a Quart of Water over a slow Fire, till near half is evaporated; then strain the Liquor through a Cloth. The Root must be reduced to a gross Powder, that the Water may fully draw its Efficacy.

This Plant grows plentifully in Virginia, Maryland, and Pennsylvania, in the Freshes and hilly Grounds, and affects a light and tolerable good Soil. The Root is of a light yellow Colour, resembling Ipecacuana in its Texture and Shape, but is larger, has a strong Pungency without Heat, but does not communicate that Property upon chewing it immediately. The Leaves are something like green Tom, and the Stalk is commonly from six to twelve Inches high, on the Top of which are white Flowers something like the Rattles of a Snake, while in Bud, which appear among the first Flowers in the Woods: And there are no Branches from the Stalks, but several Stalks arise from one Root generally, tho' only one Stalk from a Root may be seen sometimes.

The Indian Traders say, That it grows all the way from Canada to South Carolina, where in both it is very plenty.

In general, Tennent probably did not differ from his contemporaries so much in his generalized theories as he did in this extensive use of the general periodical to create a public argument. His later writings seem more an emotional defense from personal attacks than rational arguments, but he continued to appear in the newspaper. Given the amount of space in the *Virginia Gazette* allowed for Tennent's arguments, one wonders about Parks' apparent sponsorship of Tennent. Parks printed and sold Tennent's Essay on Pleurisy pamphlet. He also only published one instance of a criticism of Tennent in the *Virginia Gazette*. Unfortunately, little evidence exists to prove whether Parks had some confidence in Tennent's theories, some other potentially fiscal affiliation, or just printed what came his way. No critical articles appear in the *Pennsylvania Gazette* and these appear the only two papers of our sample which gave space to the issue.³⁵³

Smallpox

Smallpox received more attention than any other disease in colonial America. In England the disease was endemic, carrying off 1 of 5 who contracted it and manifesting itself in the physiognomy of 1 of 10 people who had survived it. Inoculation (viriolation in technical terms,

³⁵³ An examination of other newspapers would give a better picture of the extent of this conflict in the colonies since secondary literature seems lacking in this matter; except for Karst who does not find any articles pertaining to it in the South Carolina Gazette or Georgia Gazette.

Karst, p.206 also Duffy Epidemics, pp.24-26) in England began in earnest with the Lady Mary Wortley Montagu, the wife of the British ambassador to Turkey, who had her son in 1718, and daughter in 1721 inoculated.³⁵⁴

For a European country, England came late to the game of inoculation. Earlier than this, the documented practice had been practiced in Leipzig in 1670. Some references suggest it existed in Europe in some form as early as the tenth century. In the later part of the seventeenth century reports of the practice arrived in England.³⁵⁵ A Dr. Clopton Havers introduced it to the Royal Society in February 1700.³⁵⁶ It came under Royal Society consideration again with the British epidemic of 1713. With Lady Montagu's example the practice became championed by the Royal Society and spread to the rest of the upper class and royalty. However, it did not filter into the lower classes to any great extent. As such, the debate as to whether to inoculate or not largely occurred in upper class circles.

In colonial America, Smallpox occurred in rare and violent outbreaks, or epidemics, often bringing business in the city to a standstill with whole families retreating to the country side. Some cities, such as Boston and Charleston, S.C., became infected fairly early in the century, possibly through the importation of slaves or cargo. Some cities, such as Williamsburg, VA, did not face the crisis until 1760. Because the colonies did not have the same extent of social stratification as Britain, the issue as to whether to inoculate extended into the public and became debated through the general periodical. Since each city and state faced a Smallpox crisis at a different time, the public debate as found in the local newspaper mostly occurred at the time of local crisis.

The causes of Smallpox remained mysterious throughout the century. In America, the standard behavioral and environmental problems, such as sudden changes in the air as during spring time, or overheating the body by motion during the summer and ingesting overly cold foods and beverages, became blamed. The cure through inoculation - either inhaling or applying puss from

³⁵⁴ While contemporary spelling might be "innoculation", the term "inoculation" was consistently used in the eighteenth century and I will use that spelling here.

³⁵⁵ Blake, p.489.

³⁵⁶ Stearns, Raymond P. and George Pasti, Jr., "Remarks upon the Introducion of Inoculation for Smallpox in

a stricken person to a healthy one - must have seemed both counter-intuitive and revolting to the colonial citizen. However, in light of the ingredients of other medicines such as the boiled cow dung found in 'Pitcairn's Method of curing the Small-Pox,' and the notion of like cures like, inoculation may not have seemed that bad.

Nevertheless, the procedure did elicit some strong responses. In all cases, the argument related to the political, religious, economic, and personal affiliations and aspirations of the proposers as much as any objection to the procedure itself. A writer in the *South Carolina Gazette* even said as much in the 6/15/51 issue wondering whether "personal envy" played a greater role than adherence to scientific principles.³⁵⁷ The newspaper, along with pamphlets and other more ephemeral communication devices, played a critical role in these debates. Writers usually made aggressive attempts to argue for remedies for the epidemic in the newspaper, both doing the public a service, and using the crisis to secure their public reputation.

Smallpox in Boston

Given the arrival of the practice of inoculation in England in 1721 puts Boston's 1721 public conflict over inoculation in all the more of an interesting light. In the English speaking world, the colonial outpost proved fairly scientifically advanced, at least in this subject. Evidence suggests Boston Puritan minister Cotton Mather had heard of the inoculation as early as 1706, and had read and commented on it, wondering why it had not been tried in England, promising to introduce the practice in Boston if necessary, in 1716.

Mather soon had his chance. The April 22, 1721 arrival of a slave bearing ship brought the sickness to Boston for the first time. By June, the number of households taken sick had increased to the point where the Boston Selectman's initial response, quarantine by placing guards on infected households, became untenable. Mather approached the city's physicians, giving them a copy of the inoculation practice as described in the Timonius and Pylarinus accounts in the Royal Society Philosophical Transactions. Dr. Zabdiel Boylston immediately

England," *Bulletin of the History of Medicine*, XXIV (1950), 106-108.
³⁵⁷ Karst, p.81.

began an experiment with the practice, beginning with his own six year old son. By mid-July he had inoculated ten people.

Members of the public became aroused. Boylston needed to place an advertisement justifying his actions in the July 17 *Boston Gazette*. When the Selectmen and Justices met on July 21 they chose to instead accept a Dr. Lawrence Dalhonde's testimonial that inoculation had led to the further spreading of the disease and ordered Boylston to discontinue. The attack continued with a Dr. William Douglass writing in the July 24 *News-Letter* evoking providence. Mather and others replied in the July 31 *Boston Gazette* that a humble trust of God did not negate the use of the treatment. Meanwhile, Boylston ignored the order to discontinue and had inoculated hundreds more people by November. One inoculation critic, possibly frustrated with the lack of desired resolution afforded by newspaper attacks and debating Selectman, threw a grenade at Cotton Mather's house!

Hundreds died naturally. At its peak in October the epidemic had worsened to the point where the Selectmen limited the length of time church bells could toll for funerals. The February 26, 1722 and March 12, 1722 *News-Letter* reported that 5,889 people had had small pox of whom 844 had died. The March 5 *News-Letter* reported that Boylston had inoculated 242 persons of whom 6 had died.

Despite the publicly reported statistically better results from inoculation, and the lessening of the epidemic, the debate continued. The Selectmen ordered a family that Boylston had inoculated, the Sewalls, into quarantine on Spectacle Island for many months and again, according to the May 21 *Boston Gazette*, ordered Boylston to cease. Dr. William Douglass, this time writing in the *Boston Courant* of May 21, accused the "pious Dr. Mather" of falling prey to the same witchcraft that had swept through Salem 30 years earlier.

Arguments over inoculation frequently put the discussion in terms of religion. Opponents argued that making oneself sick was a sin. In addition, only atonement for the sins that brought the sickness on could properly cure it or, recognizing inoculation's apparent effectiveness, showed the proper amount of deference to God's will. Proponents for inoculation argued that making

one sick to avoid a greater sickness could not constitute a sin and reminded readers of the practices of purging which no one considered sinful. A William Cooper also argued that presumption, rather than faith, prevailed if a devout man thought he could walk immune among those infected. Cotton Mather's son Increase Mather evoked God and empiricism when he wrote that God's providence had supplied a wonderful remedy and that "the Safety and Usefulness of this Experiment is confirmed to us by Ocular Demonstration. . .".³⁵⁸

Underlying the religious rhetoric existed a medical controversy that reflects the personal livelihoods of physicians, the political opposition to Puritan rule at the colony level, and personal animosity and aspirations. Douglas accused Boylston of being a quack and Mather of playing the amateur physician in a very dangerous way by risking the health of the populace. In January of 1722 he admitted that inoculation showed promise but thought Boston had been lucky for not allowing a proper series of experiments to determine inoculation's effectiveness. He reminds us of the less than unilateral support held for the Royal Society when he argued that "no one should accept all the quaint things published in the Philosophical Transactions" and that Mather's sources of information from untutored Negroes were questionable.³⁵⁹ He had called their actions rash in an August 7, 1721 *Courant* article. The Mathers, both father and son, in turn wrote that Douglass had no "Grace in his heart" and had been senselessly jeering "the faithful Messengers of GOD".³⁶⁰

James Franklin also benefited from and encouraged the controversy with his new newspaper the Boston Courant. In the January 22 1722 Courant, Franklin positions himself firmly in the religious and political opposition to Puritan leaders "who have been Instruments of Mischief and Trouble both in Church and State, from the Witchcraft to Inoculation". He asks "Who is it that takes the Liberty to Vilify a whole Town . . . calling the Town a MOB."³⁶¹ The arguments only inflamed passions and likely sold his and other newspapers. Responses came from Increase Mather in both the January 15th and 29th *Boston Gazettes* calling the Courant impious, abominable, libelous, and deserving of censure. James Franklin's rise as both a newspaperman

³⁵⁸ Blake, p.500 quoting Increase Mather's pamphlet *Several Reasons*.

³⁵⁹ Blake, p.504 quoting William Douglass's pamphlet *Inoculation as Practised in Boston*.

³⁶⁰ Blake, p.503 quoting Increase Mather's pamphlet, *Some Further Account from London, of the Small-Pox Inoculated*.

and political opponent began in the Boston inoculation controversy of 1721 and 1722. In the years following, his conflicts with the Puritan leaders continued through other issues.

Smallpox in Pennsylvania

In May of 1731 the *Pennsylvania Gazette* reported that the "Pox has almost left Philadelphia". In July the *Gazette* gave an accounting of the city's first smallpox epidemic. The disease had killed 288 people. The *Gazette* put the losses in economic terms. With 64 of those people as Negroes worth 30 Pounds each, the colony had lost almost 2000 Pounds.³⁶²

Almost a year earlier the *Gazette* had begun printing a series of articles on small pox inoculation. The first, an extract from *Chamber's Cyclopaedia* in May 1730, ran for three weeks at the same time as reports of an epidemic in Boston.³⁶³ In the March 11th 1731 issue the *Gazette* printed the Royal Society report of Inoculation by Dr. Timonius, the same referred to by Mather and Boylston up in Boston. In contrast to the *Gazette*, that same March and April, the *American Weekly Mercury* ran a seven week series of an essay on distinct and irregular smallpox originally written in 1670 that made no mention of inoculation.³⁶⁴

Except for a few notices of smallpox in Boston, Montreal and Charles Town, and a few obituaries, not much news of smallpox found its way into either of the Philadelphia papers after 1731 until 1736. One interesting exception to this is the 1/25/32 *Pennsylvania Gazette* that contains a several line note concerning a suspicion of catching smallpox through exchanging dollar bills. A letter by Franklin in the 12/30/36 *Pennsylvania Gazette* concerning his son Francis who, apparently, never had a chance to receive inoculation and subsequently died of smallpox, reveals another potential conflict. Given Franklin's implicit support of the process he apparently felt the need to qualify his own son's death by the disease.

³⁶¹ Quoted in Blake, p.505.

³⁶² *Pennsylvania Gazette*, 5/27/31 and 7/8/31.

³⁶³ *Pennsylvania Gazette*, 5/28/30, 6/11/30 and 6/23/30. A smallpox report from Martha's Vineyard, an island off the Massachusetts coast, also appeared on 11/17/29.

³⁶⁴ *American Weekly Mercury*, 2/23/31, 3/2/31, 3/9/31, 3/18/31, 3/26/31, 4/1/31, 4/29/31.

On November 11, 1736, the *American Weekly Mercury* reprinted an article from the August 1736 *Gentleman's Magazine* which essentially argued for bleeding and a considerable intake of alcohol, specifically brandy, to "manage the small-pox" without mentioning inoculation. Apparently, the province had been experiencing an epidemic for some time. An advertisement in the *American Weekly Mercury* on 4/28/37 by the Justices of New Jersey declared the market fairs cancelled because of the "Mortality amongst the People inhabiting the said [Pennsylvania] province." By 7/7/37 the *American Weekly Mercury* declared that the "City is now so free from the Small-Pox, that we cannot learn of any one Person in the Place that has got that Distemper." However, unlike earlier reports of smallpox in the *Mercury*, this one also noted "we hope very shortly to give our Readers an account of the great Success which attended the Practice of *Inoculation*." The promised account of inoculation appeared in the 9/8/37 issue.

There were Inoculated,	
Whites {	Men and Women ----- 33
{	Under twelve Years of Age --- 64
Mulattoes -----	4
Negroes Young and Old -----	28
In all 129	

The article reports that all recovered and that the paper received the accounts from "Dr. KEARSLEY, Dr. ZACHARY, Dr. HOOPER, Dr. CADWALLADER, Dr. SHIPPEN, Dr. BOND, and Dr. SONMANS, who were the only Physicians (that we can hear of) who Inoculated." The *Mercury* apparently began supporting inoculation practices for no alternative appears for the remainder of the *Mercury's* run.

The *Gazette* continued publishing reports of inoculation practices from around the colonies. A 4/13/38 report from Barbados noted that "up to 3000 down with the small pox where inoculation is very much practiced and proves very successful".

The same year on November 9th the *Gazette* reprinted a report from Charles Town, S.C. which had given the following table:

Received pox natural way {		
Whites	647	deaths 157
Negroes	1028	deaths 138
Received inoculation {		
Whites	186	deaths 9
Negroes	251	deaths 9

A number of advertisements for inoculation cures for smallpox began to appear in the *Gazette* in 1748. Hall, now acting editor, advertised books on the subject for sale at his shop.³⁶⁵ On November 22 1750, the paper displayed an advertisement for "soon to be published by Franklin and Hall" an Adam Thompson's pamphlet on preparation of the body for small pox inoculation "as it was delivered to the academy's trustees" that advertisement continued for some time.³⁶⁶ Another run of advertisements for an inoculation instruction pamphlet by John Kearsley appeared on 3/5/51 and 3/12/51.

Some conflict evidently occurred over the inoculation practice of Thompson because the December 1750 *Gazette* printed a letter written to Hall which refuted Andrew Bradford's son William Bradford's claim that only a third of the trustees had met to approve Thompson and thus Franklin had misrepresented the trust put in Thompson's methods. However, this proved a means by William Bradford for creating controversy and potential sales of pamphlets over a preparation of the body for inoculation. Not controversy over inoculation itself, the letter really indicated a controversy between physicians. The advertisement indicates that several doctors had questioned Thompson's practice and Bradford now implicitly sided with Thompson by publishing his defense written by Alexander Hamilton:

Now in the Press, and speedily will be publish, by W.
Bradford, A DEFENCE of Doctor THOMSONs Discourse on the
Preparation of the Body for the SMALL POX, &c. Wherein every
Thing that has been yet advanced against it is fairly

³⁶⁵ See 5/12/48 and 8/4/48 issues of *Pennsylvania Gazette*. He actually advertised the books for sale at the Post Office which was synonomous with hs shop at that time.

³⁶⁶ *Pennsylvania Gazette*, 11/29/50, 12/6/50, 12/18/50.

examined; particularly Dr. MEADs Censure of Dr. BOERHAAVE
Opinion concerning a specific Antidote, and Mr. KEARSLEY
Remarks. In a Letter to a PHYSICIAN in Philadelphia. by
ALEXANDER HAMILTON, Physician, at Annapolis, in MARYLAND

Yet, no articles in the *Gazette* offer an alternative to or an argument against inoculation for the remainder of the period under examination. Instead, the newspaper continues printing reports from local and remote areas showing quantitatively better results from inoculation.³⁶⁷ And a 10/19/52 notice of a ship bringing families with smallpox noted that many families in Philadelphia have already had it and so would escape danger. Even an advertisement for "Doctor Godfrey's", an elixir typically asserting numerous healing properties, does not claim to cure small pox but only "the pain of small-pox" in a 7/19/53 issue. By the 12/2/62, an article could attribute the death of two small children during inoculation to human error in applying the wrong medicine for releasing the symptoms of Smallpox, not for the inoculation itself. And a fairly humorous report in the 4/26/64 issue told of a 59 year old woman in Newport, RI who decided to undergo the inoculation operation. She had decided that she no longer wanted to leave town every 10 to 12 years.

The commercialization of inoculation also continued in the *Gazette*. In the 6/26/60 issue an AMERICANUS wrote a thank you to Hall for supplying him with a pamphlet on inoculation. He writes "not only as it tends to promote the Practice of Inoculation in general, but as containing some of the best general Rules for the Preservation of our Fellow Creature from the dismal and fatal Effects of that frightful distemper." The remainder of the letter details the use of antimony for assisting the curative effects of inoculation and notes that "[it] appears, by the nearest Calculation I can make, that, under this Treatment, there has not died more than one Person in 700, and in general, the Distemper is very light". The letter ends by recommending the preparations of a Dr. Shippen: "I have lately had a Preparation for Dr. SHIPPEN, which he calls Sublimed Antimony, which operates, I think, with more Certainty, and more Safety, than any I have used before", assuring the value of physicians in practice of inoculation.

³⁶⁷ For more quantitative reports of inoculation in the *Pennsylvania Gazette*, see 4/23/52, a report from Boston; 4/30/52, a report from NY; 5/28/52, a report from Concord, MA; more reports from Boston on 7/16/52, 8/6/52, and 8/13/52 and again in 2/23/64, 4/19/64, 4/26/64. . Also, from Charles Town, 2/14/60, 3/20/60, 6/26/60, 7/3/60. Also, a report on the economic aspects of smallpox can be found in a 5/21/52 notice that Boston in financial trouble due to epidemic.

On July 3, 1760, another unnamed author gives a different recipe for assisting in the inoculation, not listing any particular physician or apothecary but definitely listing many of the ingredients one finds at the druggist:

Take of Calomel, finely levigated, two Parts; Sulphur Aurat, Antimonii, one Part; and with a strong Solution of Gum Arabic, or Tragacanth, made into a Mass of pills; which, for Distinction sake I will call the Mercurial or Antimonial Pill.
Take of Stib. Nitrat. or unwashed Diaphoretic Antimony, Cremor Tartar, Sal Polychrest, and Flor. Sulphur, of each equal Parts; mix and made a refrigerant Powder, of which 30 or 40 Grains is a Dose for an Adult.
Take the Powder of Jalap, Scammony, Stib. Nitrat. and Cremor Tartar of equal Parts, mix and make a purging Powder.

The Day before Inoculation give two Scruples of the purging Powder, with five Grains of Mercurius Dulcis, to Adults, and to others in Proportion to their Age. The Night after Inoculation give a Dose of the Mercurial Pill (which is ten Grains, or twelve, if robust, to an Adult, diminishing according to the Age, so as to give to one from nine to twelve Months two Grains) and repeat it three Nights successively. The Morning after the third Pill, give a second Purge; after which repeat the Pills two or three Nights, and then the Purge again.

Smallpox in the South Carolina Gazette

In South Carolina, the first evidence of the inoculation process occurs in April 22, 1732 when it had been reported that one person, a Joseph Haynes, had died and a Negro child had taken ill with the disease. The newspaper gave explicit instructions for *inoculation* but also warned that it should not be tried until "there is apparent Danger of the Distemper spreading among us."³⁶⁸ When the outbreak continued the governor declared a fast but no further articles on *inoculation* occurred and the crisis past. In 1738 the May 4 issue of the *Gazette* warned its readers that a ship which had already arrived and emptied its sailors into the town, had been found to have

³⁶⁸ Karst, p.203-6.

smallpox on board. May 25th had a reprint of the 1731 article in addition to another explicating "Pitcairn's Method". This time, however, *inoculation* got a great deal of support, and a fair amount of debate.

On June 1, an article speculated that perhaps *inoculation* had done more to spread the disease than protect against it. The next week had a response from a Mr. Timothy that labeled the previous week's attack against families who had inoculated uncharitable and incorrect. The writer used tables of deaths and *inoculations* from English experiences and Boston in 1721 to back his arguments. Opposition had decreased in these localities, the writer continued, because of the obvious benefit afforded by *inoculation*. Continuing the letter in the 6/15/38 issue, he invited fellow physicians to examine the evidence before criticizing the procedure.

The same June 15 issue had another critique of the practice. July and August saw more public fasting and humiliation, this time ordered by the commander-in-chief of South Carolina, William Bull. Two issues, 6/29/38 and 8/14/38, also carried a "Tar-Water Treatment" which, apparently, many found preferable to inoculation.³⁶⁹ Most of the July 6 issue devoted itself to a pro-inoculation letter that used both figures and an appeal to Christian charity to oneself. None of the 50 whites and only two of the 50 blacks so far inoculated had died while 20% for those getting the disease naturally had according to the article. In addition, the writer also found inoculation both moral and rational. A letter from the London Magazine in the next issue denounced inoculation for its connection to Turkey and Islam. Another pro letter appeared the following week, 7/20/38, which indicated that greater numbers than allowed by the 7/6 had been inoculated. Only 2 of 160 whites and 2 of more than 230 blacks had died. Despite these figures, a letter writer of 7/27 wondered at the practice. For the most part, physicians likely wrote these letters given the depth of knowledge displayed in the text.³⁷⁰

³⁶⁹ This same treatment appeared in the *Virginia Gazette* during that colonies first outbreak of smallpox.

³⁷⁰ Karst, p.214.

Smallpox in Georgia and Virginia

Other states had their first substantial experiences with a smallpox outbreak later. Georgia's governor, according to the *Georgia Gazette*, outlawed the practice of inoculation but then recanted in 1764 when Georgia began to go through a number of crises. Virginia did not really experience an outbreak until 1768 and so did not debate the issue vigorously until then. There did appear an account of the inoculation in Philadelphia in the 10/21/37 issue but it did not quantify deaths of those inoculated and those who received smallpox by the natural way. A 4/13/39 issue mentioned the South Carolina Assembly's prohibiting inoculation within two miles of the Charlestown. A 3/15/52 issue had a letter written by R.W. that gave an overview of *inoculation* in England in a fairly favorable way.

Smallpox in the Maryland Gazette

According to Karst, Maryland also had its first substantial outbreak around 1765. However a number of references to small outbreaks, and a number of discussions, mostly *pro-inoculation*, had occurred years earlier in the *Maryland Gazette*. The 1/4/49 issue warns that a "We hear from Cecil county, that a malignant kind of small-pox, and pleurisies, are very rife there, and carry of great numbers." In the 6/2/50 *Maryland Gazette*, PHILANTHROPUS corrected a misconception that the Queen of Denmark had died of smallpox after *inoculation*. Alexander Hamilton advertised a pamphlet on performing smallpox inoculation during 1750 and 1751 (at least 8/14/51, 8/21/51, 8/28/51, 9/4/51). A notice in the 1/16/52 issue announced that "Col. William Hammond of Baltimore Town has lately died of small pox," and another local, Col. Thomas Sheredine, died from the disease according to the 5/28/52 issue.

Other news of smallpox from around the colonies made the Maryland paper in 1752. A letter from New York of 4/20/52 via the Boston papers of 4/6/52 stated that in New York "50 persons had then recovered of the smallpox in the natural way in that town six more had died of it and forty more were the sick of it; and that upwards of twelve hundred had been inoculated and more daily adding." Another letter from New York in the 8/13/52 issue again indicated the value of inoculation, noting that far fewer deaths had occurred in Boston that year, 'tho' Boston is near

three Times as large as New York" than had occurred in New York's pre-inoculation epidemic year of 1731. The articles inferred a support for smallpox inoculation. A debate reprinted from the *Gentleman's Magazine* that took up two pages in a 3/26/52 issue represents the only evidence of conflict over inoculation for 1752

The 1/13/57 issue indicates that in Annapolis "[w]e have had the Small-Pox in this City ever since October last and it is now pretty rife and spreading." The same article describes the nature of the disease as an inborn trait of humans "which generally breaks out in every Person sooner or later; and the sooner the better" for it often proves fatal to the old and naturally infected while it usually spares infants or those procuring the disease "by art" [inoculation]. To establish its legitimacy for an American audience the article also implies an upended order where the procedure filtered upwards through the social hierarchy. The article notes that inoculation "was first encouraged in England, where it had so much Success, that his present Majesty had the Operation performed on all his Children."

Despite the promotion of inoculation and the description of the disease as "intermixed with the Blood from the very Day of Birth" not all took this as gospel and this, combined with a need to continue with business despite any epidemic, might lead to contrary descriptions of the disease. An advertisement in the same issue has John Anderson, Cabinet-Maker, keeping a tavern with good rooms and beds. "He begs Leave to acquaint his Customers, and Gentlemen Strangers, that he has not, nor has had, the *Small-Pox* in his Family, nor has not any one in his House liable to that Distemper." Editor Jonas Green also needed to assure the public that business could continue uninterrupted and in the following issue reports that his family "is free from the *small-pox*" although he does not delve into details.³⁷¹

The epidemic of 1757 in Annapolis must have been either substantial or viewed as such for an issue in March indicated that "the next Assembly will be a very important One" and that "the Members are determined to give their Attendance, notwithstanding the late Prevalence of the Small-Pox". Unfortunately, William Sligh, clerk of Annapolis, died of small pox at the age of 22

³⁷¹ *Maryland Gazette*, 1/20/57.

according to the following week's paper.³⁷² And by April 7th the newspaper reports that the Assembly had to meet in Baltimore Town because of the prevalence of the disease. The epidemic did not subside until July, according to the 7/21/57 issue, after "nine months in Annapolis" never sparking a debate on inoculation in the paper during the whole period. It appears that a common response to the problem during this period included simply removing oneself from the area. This practice continued. As minor outbreaks occurred, reports in the newspaper indicated that certain important personages had either left town or returned.³⁷³

An advertisement in the 10/4/64 issue puts the experience of getting smallpox through inoculation as a right of passage for young gentlemen. It also shows that isolation in concert with an artificial smallpox infection, a primary impetus for the development of hospitals, becomes important, even in the small town of Baltimore.

Baltimore-Town, sept. 18, 1764.

THE Subscriber gives this Notice to young Gentlemen that have not had the SMALL-POX, That he has provided good Lodgings, and that he now INOCULATES at Baltimore-Town, where they may depend on being well used. As he has been at some Trouble, he expects Two Pistoles, so that the Whole Expences attending it does not exceed Six Pounds Fourteen Shillings, including a Month's Lodging, &c.

HENRY STEVENSON

Another outbreak in 1765 caused the postponement of the Maryland court and isolation in conjunction with inoculation becomes legitimized through public policy with laws passed to allow citizens to secure sick people in their homes. In this epidemic, a number of physicians offered to inoculate the poor without payment. Further reports from the paper in March and April indicate the success of inoculation has been proven as "no One has died, tho' Hundreds have been inoculated".³⁷⁴

No further debates over inoculation appear in the *Maryland Gazette*. If a conflict existed in Maryland it mostly occurred outside of Maryland's sole newspaper. Occasionally, an advertisement for a patent medicine - such as the one for Sexton's Powder in the 9/30/62 issue -

³⁷² *Maryland Gazette*, 3/3/57 and 3/10/57 respectively.

³⁷³ The *Maryland Gazette* 5/17/59 issue reports that "smallpox bad in Bladensburg". A 3/20/60 article notes that Thors Harris of Queen Annes county dies of the disease. A 8/21/60 article has Governor Sharpe returning from a 3 month absence escaping the small pox.

³⁷⁴ *Maryland Gazette*, 3/14/65, 3/21/65, 3/28/65 and 4/4/65.

might claim the capacity for curing smallpox. However, the support for the procedure through advertising physicians, government decrees and general periodical articles appear overwhelming.

Freedom of the Press and Science

The colonial press allowed for the presentation of numerous perspectives, as has been evident from the examples in this chapter. The importance of this role for the press might also find debate within its own pages, but on the whole newspapers protected their created right to print any submissions that came their way. One writer in the 3/7/55 *Virginia Gazette* expressed the general inclinations of the press in the following way:

THAT an Extinction of the *Liberty of the Press*, would be productive of innumerable Mischiefs in Society, is as clearly evident, as are the inexpressible Benefits of the Art of Printing in general. If we take an ample Survey of past Ages, the tardy Progress of Knowledge, while the Use of this inestimable Art was unknown, and the vast Improvement of Science, since its Discovery, will furnish us with experimental Evidence of its abundant Utility.

. . . the Press is the most direct and easy Channel, of communicating our Sentiments to Mankind in general; and by establishing a kind of universal Correspondence, furnishes each Individual with the [Increments?], not only of the wisest Persons of the Community, but even of the Sages of the whole World. -- It gives him an Acquaintance with the Opinions of all Ages by immortalizing in their Writings, those great Geniuses whose Works are calculated for more extensive Utility; than that of one Generation of People.

From what I have observed, it is exceeding plain, that as a *Free Press* affords Men an Opportunity of promulging their Sentiments upon every Matter worthy of a rational Enquiry; so of Consequence, it must unavoidably tend to improve the General System of Knowledge. . . [I]f an Acquaintance with any Part of human Literature can be promotive of Man's Felicity, those particular Branches of Science, which are most immediately productive of that important End, deserve the readiest Admission to public Enquiry.

And for these Reasons *no* Man ought to be denied the Liberty of the Press, to communicate his Sentiments to his Fellow Creatures, on Matters so interesting as *Religion and Politics*.

The liberty of the press for the presentation of numerous perspectives on natural phenomena does not get a mention from the author but, as we have seen, discussions of nature often transgress the boundaries between religion, politics, economics and natural philosophy. The newspaper could act to air views in scientific disputes. The newspaper seldom allowed for a debate on the value of

natural philosophy as a whole or provided satiric views of science. However, not all subjects received the same treatment in general or received the same treatment between newspapers.

In the case of lightning and electricity the newspapers made some reference to a religious conflict but none of the newspapers aired the views of these oppositional forces. Nor did the newspapers air opposing theories of electrical charge. Concepts such as the ball lightning rod, the best means of creating a charge for electrical experiments, a single versus double (positive and negative) charge never made the pages of the American newspaper we have examined.

In the cases of medicine -- especially small pox inoculation -- the forces of politics, religion and the business needs and medical perspectives of individual doctors all get played out in the articles and advertisements of the newspapers. Unlike the newspaper's presentation of electricity where the reader can find little contest to Franklin's expositions, far more medical practitioners debated the types of medical practices available to the colonists. In addition, certain medical practices became debated more vigorously in different locals. For example, the practice of inoculation had numerous entries, both pro and con, in the newspapers of Boston and Charleston during the period under consideration. Articles in opposition did not really surface in the Maryland paper.

Observations of earth and sky -- especially earthquakes -- far outnumber other articles concerning natural phenomena and open themselves to almost universal speculation as well. Several distinctions make themselves clear however. While many of the foreign reports appear outrageous in their descriptions, most of the domestic reports seem less inclined to dramatic descriptions or providential imposition. However, one newspaper, the *Maryland Gazette*, presents far more foreign depictions and has the obvious blessing of the governor of the province for providential connection as well. Despite attempts to the contrary, perhaps with 18th century science less capable of isolating and controlling the elements of the movements of earth and sky, these phenomena better lent themselves to broader interpretations.

Other interests in the realm of naturalist philosophy and technique less examined in detail in this chapter also have their unique circumstances within the pages of the newspaper. However, most --

such as issues in astronomy, crop growing and bug killing methods, navigation, mechanical devices -- do not become debated in the newspaper. Even when noted as contested, such as the contest for finding longitude or creating fresh water at sea, the proponents of various theories or devices do not place their ideas in direct opposition to one another through the newspaper. In this way, the presentation of medicine in the newspaper appears different from other natural philosophies were presented in that some theoretical debates did occur.

The majority of the newspaper's presentations of natural philosophy and technology did not open the door to debating their validity. Instead, much of the language of the articles and advertisements related to science, medicine and technology either explicitly or implicitly promoted the value of an enlightenment view of the world. The various techniques of this promotion are the subject of the next chapter.