



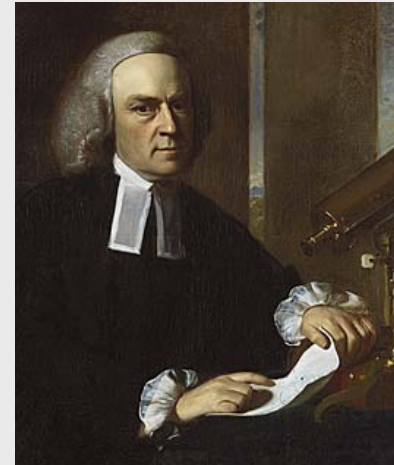
Two Boston Puritans
 on
 GOD,
 EARTHQUAKES,
 ELECTRICITY,
 and
 FAITH

1755-1756



"I went on to consider those material causes as acted upon & empowered & guided by that . . . almighty Being we call by the Name of GOD."

Rev. Thomas Prince



"And have not such inquiries, when properly conducted, a direct tendency to promote, and not to obstruct, Religion?"

Dr. John Winthrop

In 1727 and 1755, early-morning earthquakes (estimated today at 5.5 and 6.2 on the Richter scale)¹ brought severe damage, but no fatalities, to the Boston area. Why did they happen? Puritan ministers agreed that God caused the earthquakes but differed on his divine mechanism and motivation. After the 1755 earthquake, an issue that embroiled two Bostonians in an acerbic interchange was the role of electricity in earthquakes and whether man's use of lightning rods to direct the "electric substance" to the ground resisted God's will. Here we read excerpts from the exchange between clergyman Thomas Prince and Harvard professor John Winthrop, both professed Congregationalists (Puritans), who engaged in a "quarrel of four months," writes literary scholar Eleanor Tilton, that in the end had "little to do with 'isms,' and much to do with personalities, human pride, and, of course, lightning-rods."² Where does the science end and the name-calling begin? Why, and in what ways, does it matter?

D E C E M B E R 1 7 5 5

REV. THOMAS PRINCE

Pastor
 Old South Church, Boston

*Appendix Concerning the Operation
 of GOD in Earthquakes by Means
 of the Electrical Substance*

5 December 1755

SINCE my composing the foregoing Discourse [after the 1727 Boston earthquake], the sagacious Mr. Franklin, born and brought up in Boston, but now living in Philadelphia, has greatly surprised and obliged the World with his Discoveries of the Electrical Substance, as one great and main Instrument of Lightning and Thunder . . . it seems

PROF. JOHN WINTHROP

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*APPENDIX Concerning the Operation
 of Electrical Substance in EARTHQUAKES;
 and the Effects of Iron Points*

20 December 1755

A little tract having lately appeared among us, under a respectable name, hinting at a different cause of earthquakes, from that which is delivered in these papers; it is desired and expected, I find, by several worthy Persons, that I should here take some notice of it. . . Philosophy [i.e., science] like everything else, has had its fashions; and the

National Humanities Center, 2009: nationalhumanitiescenter.org/pds/. Portrait of John Winthrop (above) by John Singleton Copley, ca. 1773; reproduced by permission of the Harvard University Art Museum. Complete image credits at nationalhumanitiescenter.org/pds/becomingamer/imagecredits.htm.

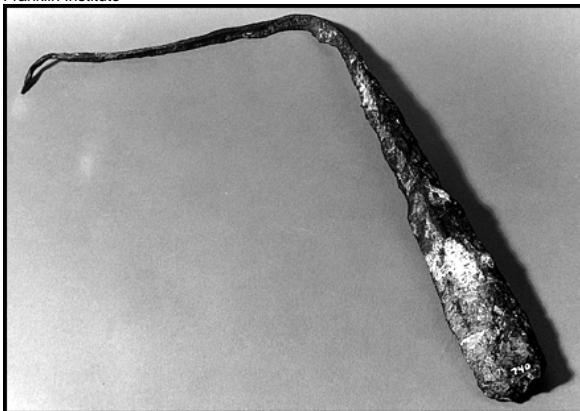
¹ The Boston Globe online / Boston.com, 27 February 2005; at www.boston.com/news/local/massachusetts/articles/2005/02/27/q__a/.

² Eleanor M. Tilton, "Lightning-Rods and the Earthquake of 1755," *The New England Quarterly* 13:1 (March 1940), p. 97.

very likely that this *Electrical Substance*, with the *Others* mentioned, is a *principal Instrument* in producing *Earthquakes*

P. S. [Postscript] The more *Points of Iron* [lightning rods] are erected round the *Earth*, to draw the *Electrical Substance* out of the *Air*; the more the *Earth* must needs be charged with it. And therefore it seems to be worthy of Consideration, whether *any Part* of the *Earth* being fuller of the *terrible Substance*, may not be more exposed to more shocking *Earthquakes*. In *Boston* are more erected than any where else in *New England*; and *Boston* seems to be more dreadfully shaken. O! there is no getting out of the mighty Hand of GOD! If we think to avoid it in the *Air*, we cannot in the *Earth*: Yea it may grow more fatal; and there is no Safety anywhere, but in *his Almighty Friendship* through CHRIST the *Mediator*, and by *heartily Repenting* of every *Sin* and *heartily embracing* the *Saviour* in *all his Offices*, and *uprightly Living* to HIM.

Franklin Institute



lightning rod designed by Benjamin Franklin, ca. 1750s

reigning mode of late has been, to explain everything by ELECTRICITY. . . Now, it seems, it is to be the cause of earthquakes. . . .

When I first read this Postscript, I was both surprised and concerned: — surprised, to find so many mistakes in so few lines ; and concerned, for the ill effects it would probably have. For I could see no other effects of it, but that it would fill with unnecessary terrors the minds of many persons, who were not well enough acquainted with the laws of electricity, to discover the mistakes: And that it would discourage the use of the *iron-points* [lightning rods], which were erecting in *Boston* and elsewhere; and which, by the blessing of GOD, might be a means of preventing many of those mischievous and sorrowful accidents, which we have so often seen to follow upon thunderstorms. . . .

I know no reason to think that “*Boston* was more dreadfully shaken than other towns.” Some of the effects of the earthquake may have been more considerable, for their number, there than elsewhere; but the reason of this is not that “in *Boston* are more points of iron erected than anywhere else in *New-England*,” but that there are more *brick houses* erected there. For the effect of a [electric] shock is more considerable upon brick-work than upon wood-work. The reasons of this are obvious; and that is so, in fact, plainly appeared by our chimneys being everywhere more shattered than anything else: Though this was in part owing to their being the highest parts of buildings.

I should think, though with the utmost deference to superior judgments, that the pathetic exclamation, which comes next, might well enough have been spared. “O! there is no getting out of the mighty Hand of GOD!” For I cannot believe, that in the whole town of *Boston*, where so many iron points are erected, there is so much as one person who is so weak, so ignorant, so foolish, or, to say all in one word, so atheistical, as ever to have entertained a single thought that it is possible, by the help of a few yards of wire, to “get out of the mighty hand of GOD.”

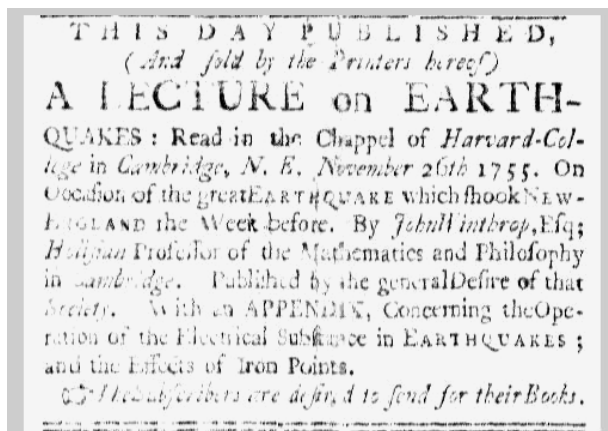
REV. THOMAS PRINCE

Letter to the *Boston Gazette*

26 January 1756

This is to return my public Thanks to the ingenious Mr. Professor *Winthrop* for his printed *Lecture on Earthquakes*. . . he considers them merely or chiefly in a *Philosophical* View, as the Powers and Operations of material substances: Whereas agreeable to my peculiar Office, as a student of *Divinity*, I went on to consider those material Causes as acted upon & empowered & guided by that omnipresent, perfectly intelligent, spontaneous and almighty Being we call by the Name of GOD . . .

In the meanwhile — As to my *Postscript* about the *Points* — As I never was against erecting them with a due *Submission* to the sovereign Will and Power and Government of GOD in Nature, in humble Hopes of greater Safety, and with a becoming Trust in Him, and not in *them*; I am of the same Mind still. And tho' for want of Time for further Consideration, I am yet uncertain about their Influence in Earthquakes, the great Thing I would *now* inculcate is — That everyone would consider seriously the mighty Power of GOD acting in this terrible Substance, and carefully guard against a vain and dangerous Security in them: Least, in some way or other . . . the offended Deity make *that* in which we trust for Safety to be the very Means of our Destruction in a Moment.



PROF. JOHN WINTHROP

**A Letter to . . . the Boston Gazette . . .
Containing an Answer to the Rev. Mr. Prince's Letter**

pamphlet published 28 January 1756

. . . I might offer it as a matter of complaint that this Rev. Gentleman represents me “to have considered, agreeable to my academical office, natural causes MERELY or chiefly in a *Philosophical* view, as the powers and operations of material substances”: Whereas agreeable to his peculiar office, as a student of *Divinity*, he went on . . . to consider those material causes as acted upon — by GOD,” etc. The word MERELY, here used does not convey a just idea either of the nature of my academical office, or of my conduct in it. The consideration of a DEITY is not peculiar to *Divinity*, but belongs also to *natural Philosophy*. And indeed the main business of natural Philosophy is to trace the chain of natural causes from one link to another till we come to the FIRST CAUSE, who, in Philosophy, is considered as presiding over and continually actuating this whole chain and every link of it . . . To “consider natural causes merely as the powers and operations of ‘material substances’” would be to consider them not in a *Philosophical*, but in an *atheistical*, view. . . . But as I find below that “by several passages” in my Lecture this Rev. Divine “doubts not my full concurrence with him in asserting the agency of GOD in “all the operations of nature.” . .

. . . Can there be a fitter reason for humble inquiry into the works of GOD than when the minds of people are under “awakened apprehensions and impressions” of His greatness, His majesty, His power, His goodness, as supreme GOVERNOR and “continual PRESERVER” of universal nature? And havenot such inquiries, when properly conducted, a direct tendency to promote, and not to obstruct, Religion?

Immediately below Rev. Prince's letter appeared an advertisement (left) for the publication of Winthrop's November lecture on earthquakes.

[*The Boston Gazette, or Country Journal*, 26 January 1756]

REV. THOMAS PRINCE

Letter to the *Boston Gazette*

23 February 1756

Instead of Replying to Mr. WINTHROP's Answers to what I published in your *Gazette* of *Jan. 26*, I shall only at present say — That I freely forgive his Treatment of me — That if ever I publish my further Enquiries after the *Probable Operations* of the *Electrical Substance* in the Affair of *Earthquakes*, I hope, I shall no Notice of his Reflections on me, nor return the like: for these hav eonly a Tendency to roil the Passions and hinder the Sight of Truth . . . I would calmly seek the *Truth* and *not* for *Victory*, or if I vie with Mr. WINTHROP, I would endeavor to equal Him in *those two Essential Characters* of true *Politeness* and true *Philosophy*, viz. *Modesty* and *Candor*.

In the meanwhile I account it very unhappy that by an innocent *Supposition* and a well meant *Query* in *Philosophy*, I am become the Object of the Displeasure of a *Gentleman* of one of the *first ancient families* for Dignity in all New England. . . .

[Prince reviews the contributions of the august Winthrop family from the first governor to the current mathematics and science professor, implying that Winthrop is less than worthy of his honored name. He then proposes Winthrop's appointment as examiner of surveyors, responsible for the tedious tasks of validating all land surveys and maps, and publishing regular notices of the "variations of the magnetic needle" [true north].

And if *these* now published *Notices* may be the Means of exciting *others* to bring about *these Proposals*, I shall greatly rejoice in serving both MY COUNTRY and the PROFESSOR; And in the meanwhile I think *this* to be one of the best Ways of coming up with Mr. WINTHROP for his Treatment of me.

T. PRINCE

PROF. JOHN WINTHROP

Letter to the *Boston Gazette*

1 March 1756

I look upon myself to be greatly indebted to the Rev. Mr. PRINCE for the Politeness expressed in several Parts of his last Letter. As nothing can be more disagreeable to me than to maintain an unnecessary Controversy, especially with a Gentleman of Mr. PRINCE's Distinction and Character: and as this Letter, if I mistake not, was not designed to enter into the Merits of the Case in Debate betwixt Him and Me; I may well excuse myself from adding anything upon that Head. And tho' I can by no Means think myself *fairly* treated, even in this last Letter, yet I willingly suppress at present the Remarks which naturally offer themselves upon it; and shall continue to do so, unless some new Occasion should call for them; being desirous to avoid everything that might tend to protract a Dispute, which, as it is now, by a Fate common to Disputes, become *personal*, and has lost Sight of its original Subject, cannot, I presume, but be as disagreeable to the Public, as, I am sure, it is to me. I shall therefore only say what I hope I may say without offense, that my Answer did not proceed from a Desire of *Victory*, but of *Truth* and *Justice*.

J. WINTHROP