

## *Chapter Eight - Conclusion*

In its role as a communication and archival device, the colonial newspaper between 1729 - 1765, both potentially shaped and reflected the numerous negotiations that existed in eighteenth-century colonial American society. As we saw in chapter six, the newspaper acted as a location for the display of sometimes conflicting philosophical, religious, political, economic, business and personal viewpoints. Often these viewpoints intersected each other and, and as we saw in chapters five, six and seven, intersected another important category in colonial America: natural philosophy or science - a category important enough to warrant a great deal of promotional language as we saw in chapter seven. In chapter five, we saw that the negotiation of science in the newspaper included the role the public would play in the creation of scientific facts - mostly representation by experts. However, as chapters five and six also show us, this role doesn't hold across all newspapers, at all times, for all situations, at every level and in all categories.

The colonial newspaper, as represented by the *Pennsylvania Gazette*, *Virginia Gazette*, *Maryland Gazette* and the *American Weekly Mercury*, acted as only a part of the information network through which information became exchanged, contentious issues resolved and perspectives promoted. We also see that many of the articles, at least, printed in the colonial newspaper came from the pens of a much smaller subset of the population. Subscribers, for example, had the advantage in having their letters printed.

However, each newspaper moved beyond its subscription base to have excerpts reprinted in other journals and its contents read aloud and passed on to a broad "readership." Through its fairly open editorial policy and advertisement space it also played a role larger than any other written source for the wide distribution of various interests' points of view.

The proponents of natural philosophy, natural history and medicine also had a number of mechanisms for the movement of information. Oral and personal written communication, or the republic of letters, acted as the primary mechanism for the fast exchange of potentially complex information intended for a small audience. The philosophers of the day also seemed to favor venues other than the newspaper, such as books, pamphlets and the *Philosophical Transactions*,

for legitimately publishing scientific information for broader dissemination. Specific examples abound. For instance, Franklin didn't publish his theories on electricity in America, nor import the English printing until long after the French tried the experiment. Most of Franklin's other letters of a scientific interest never got an American printing either.

Despite this bias, many philosophers, for various reasons, did publish in the colonial newspaper. The unnamed critic of Franklin noted in chapter five wrote that Franklin had shored up a fairly weak scientific position by making his philosophy public. Franklin had printed his letter to Collinson on testing the theory of the sameness of lightning and electricity with the kite almost immediately upon writing it. In the case of small pox, cures were offered through the newspaper both as a public good and as an issue of debate on the value of inoculation. Several other medical conflicts, where the public became privy to the forefront of medical controversy, also occurred - especially noticeable with John Tennent's cure for pleurisy. For the most part, these letters, or at least the positions they represented, had been printed elsewhere. Nevertheless, the public role of the newspaper potentially solidified those positions.

The newspaper did more than help solidify individual positions. Most of the authors contributing to the newspaper seemed empathetic with the whole enlightenment "project." It probably should come as no surprise that the editors of those newspapers might have been equally empathetic. They, after all, were involved in the fairly new activity of providing printed information as a consumer item to as broad a client base as possible. To make money, the newspaper needed to reach a large audience, justify the consumption of advertised items, and have written content, which required opening the press to almost all comers. In the process of selling shoes, medicine, clocks and slaves then, the newspaper sold representative democracy, empiricism, rationality and improvements. The market was open to all and the colonists were encouraged to compare and see for themselves a product's effectiveness. A rational choice would get you the superior product. And, always improving products and processes meant cheaper prices and better products in the future, and the need to always re-evaluate those products.

Since many of the authors of articles in the colonial newspaper made their livings selling products and services, the links between their philosophies and their wares sometimes seems obvious. Franklin both imported and sold books and pamphlets on natural philosophy and wrote articles about the value of natural philosophy. Thomas and Phineas Bond criticized the newly discovered healing springs of Virginia, claiming scientific expertise in determining their medical efficacy, while simultaneously selling drugs and patent medicines. And, as chapters six and seven demonstrated, a great deal of less specifically linked, but obviously promotional rhetoric, created a positive image of science.

The newspaper promoted science as economically viable, as beneficial to society and the individual. It painted science as the answer to numerous social, political and technical problems. More than utilitarian, however, science in the newspaper promised entertainment as well. It could create dramatic yet controlled representations of nature. It discovered exotic plant and animal life. It experienced yet quantified the trembling of the earth and the movement in the skies.

Newspaper science also offered room for contributions from the public - also largely controlled. Scientific societies opened their contests for medical, navigational and other technological improvements to all, solidifying their role as arbitrators in the process. Observations of earthquakes, lightning and meteors from many different individuals made their way into the paper, but seldom theories or experimental data. If we take the lesson of Kinnersley's short run as editor of the *Pennsylvania Gazette* seriously, then we can assume that the papers need to appeal to a broad audience probably limited its theoretical and experimental content and, ironically, public participation in science. The newspaper helped legitimize the division between those inside and outside of science.

Finally, I promised in the introduction to this work to bring the role of the newspaper in science up to the present, at least to link those things we have seen in the colonial newspaper to the contemporary newspaper's relationship with science. Returning to Dorothy Nelkin's observations on science in the modern American press we find all of her observations could have been made two hundred years earlier.

Nelkin observes the press appealing to perceived public interests. The colonial press did as well; for example, when it published theories and observations on earthquakes after local tremors. The modern press exhibits an emphasis on “real world” applicability. The sameness of lightning and electricity leading to the prevention of house fires seems an obvious example of this in colonial times. In today's press we see clear choices of words and metaphors to convey particular images of science. We see this not only in colonial newspaper articles directly related to science but in the scientific metaphors used in articles on politics or religion as well. Nelkin's observations of the scientific discovery described as a dramatic event and the use of the race metaphor between those attempting discovery both find examples in the observations of natural phenomena and the Royal Society's contests in the colonial press. Nelkin also noted that science was presented as the ultimate authority -- or rational thought as the ultimate philosophy and science as the embodiment of that philosophy. That certainly comes across in many articles. In today's press scientists seek favorable press coverage and that there are weak boundaries between promotional news and commercial advertising. In the colonial press we find those practicing science writing their own favorable articles as well as advertisements for their own wares. Finally, Nelkin casts the modern press in a fairly auxiliary role to science where there is little obvious appeal to any in-depth public understanding and little or no calls for public participation in experiment. As we have argued, this also holds mostly true for the colonial press. However, the direct participation of those doing science in the press, and the occasional call for and printing of observations, did occur.

It would appear, then, that many of the characteristics we find in today's American newspaper's presentation of science not only had their origins in colonial times, but may have been fairly well developed during that period. However, one glaring difference remains. Nelkin does not observe any link between contemporary newspaper science and religion. The colonial newspaper, in contrast, created a view of science that co-existed more closely with monotheist faith. True, it was a mostly deist faith which placed God in an inactive role as inventor of a clockwork universe and rejected providentialism. However, a number of articles made natural philosophy's role in discovering the intricacies of that universe, and honoring the glory of God through that discovery, very clear.

To explore fully the potential link between the colonial newspaper's treatment of science and today's requires far more effort than has been expended here. Any comparison between newspaper science in the colonial period as examined in this dissertation and science in the press in later periods up to contemporary times, deserves equally detailed study for those later periods.

The role of the colonial newspaper in presenting science, the main intent of this study, deserves more effort as well. I have only looked at handful of the newspapers in colonial America. Further research requires a similar examination of at least the other major cities in colonial America – Boston, New York and Charles Town - for all the categories we have utilized and the remaining secondary newspapers as well. In addition, many of the individual articles, their authors and surrounding events and people merit more penetrating exploration. Through secondary and primary sources I could hope to find the authors of numerous particular pieces and the micro-context for their writing and inclusion in the newspaper. Finally, more effort is needed to address the influence the press might have had on the colonists in general and the level of their acceptance of science.

The broad scope of this study has disallowed much detailed examination. However, the research for this dissertation has yielded thousands of categorized articles (most not explicated in the previous pages) of potential interest to historians of science and scholars of the history of communication, specifically newspapers. In addition, major themes in the field of Science and Technology Studies – public participation, negotiation and promotion of science and its status as a public institution – have been addressed with an eye towards informing the historical and contemporary relationship between science, the press and the public. My hope is that this work serves to assist further inquiries into all these areas.