5. The remedy. What students of history generally, and the history of science specifically, need is historiography. This is not a question of “historical methodology”; what they need to know about is the history of history, and it is crucial that they read outside their own “period.” They need to understand what was at issue before the twentieth-century professionalization of the subject, and this is true of the history of science even though it emerged only in the twentieth century. The history of science is not just a record of science: it is a form of engagement with a distinctive element of a culture that sets out to make sense of our relation to the natural world.

The Muse(um) Is Political by Thomas Söderqvist

In this brief comment I will restrict myself to a single aspect of The History Manifesto—namely, its failure to mention museums as important venues for historical research and public engagement with history, whether in the longue durée style or in terms of short-term microhistorical episodes. This is an omission that is a trifle ironic in light of the etymology of the word “manifesto” (“public declaration”), since museums are surely among the most important forums for giving substance to the public role of history.

Unfortunately, The History Manifesto’s neglect of museums and material history is further perpetuated in the comments by Karine Chemla and Daniel Kevles. It is especially surprising when Kevles, an accomplished historian of object-rich contemporary science and technology, discusses public engagement. Books, essays, reviews in popular magazines, radio, television, and film each have their place in his survey of popular genres that support engagement with history—but not museums and exhibitions.

In their reply to Jo Guldi and David Armitage, Deborah Cohen and Peter Mandler are among the few in the discussion surrounding the manifesto to mention museums at all, pointing out in passing that “historians in the last forty years have been reaching larger and ever more diverse publics in a wide array of public theaters,” including “the new museums devoted to history, such as the United States Holocaust Memorial Museum and the Lower East Side Tenement Museum in the U.S. and the wave of Heritage Lottery Fund foundations in the UK, and older history museums reinvigorated.”

The museums mentioned by Cohen and Mandler engage with social and cultural history, on both national and local levels. However, they could also have added museums of science, technology, and medicine as a significant segment of these new and reinvigorated “public theaters.” Museums like the National Museum of American History (Washington, D.C.), the Deutsches Museum (Munich), the Deutsches Hygiene-Museum (Dresden), the London Science Museum and the Wellcome Collection (London), the Powerhouse Museum (Sydney), the Museum Boerhaave (Leiden), the Canada Science and Technology Museum (Ottawa), and hundreds of other similar institutions around the world are devoted to public engagement.
with the history of science, technology, and medicine from the early modern period to the present. Many of the outreach activities at these museums are based on historical scholarship in close connection with curatorial work in the collections; and historical and theoretical research also drives new acquisitions. It is also worth noting that these venues boast visitor (read: citizen) numbers that would make publishers of science books jealous: for example, the medium-sized Norwegian Museum of Science and Technology (Oslo) has over 250,000 visitors per year.

This blind spot in the manifesto and among most of its commentators when it comes to museums is particularly problematic, since these are sites that carry unique possibilities for bridging micro-history and the *longue durée*, connecting short-term episodes with the larger cultural and societal context, and addressing pressing contemporary political issues. On the one hand, individual objects invite the visitor/viewer (and sometimes smeller, listener, and toucher) to ask specific questions about the material, cultural, and social circumstances behind their production and use. Museum researchers, curators, and docents excel in satisfying this curiosity by providing anecdotes and micro-historical details about the material constitution, making, and handling of scientific instruments, apparatuses, tools, and medical devices.

On the other hand, the spatial and architectural features of museums, in combination with innovative arrangements of text, sensory experience, and artifacts, support the visitor in switching, almost simultaneously, between paying attention to the details of material presence and experiencing larger patterns and contexts. A single text in a display case gives episodic context, a group of display cases offers the short-term perspective, while the exhibition or museum as a whole has the capacity to engage visitors in history over the centuries. In chronologically arranged shows, walking through a suite of galleries or looking around a big hall provides an immediate, almost intuitive, grasp of the *longue durée*, as in the “Making the Modern World” gallery in London’s Science Museum. So whereas individual objects commend themselves to curatorial nitty-gritty and micro-historical narratives, the three-dimensional architectonics of the museum space invites involvement with global dimensions and long stretches of time. Within a single exhibition one can move from the anecdotal features of singular objects to broader cultural and political themes and issues, accompanied by the visualization of digitalized historical data.

Finally, a growing number of museums, including some museums for the history of science, technology, and medicine, have recently begun to reformulate their identity, from being “merely” research institutions, material archives, and exhibition halls to also seeing themselves as public venues for critical discussions about contemporary politics. For example, in addition to whetting the visitors’ appetite for the history of medicine with a consciously aesthetic approach to displaying medical objects, the Wellcome Collection in London invites the audience to take part in events and critical debates about salient societal and political issues in contemporary medicine and health care. Another example that chimes with the manifesto’s idea is the University of Munich Rachel Carson Center for Environment and Society’s 15,000-square-foot “Anthropocene: The Earth in Our Hands” exhibit at the Deutsches Museum, which explores human civilization in the past, present, and future through topics such as evolution, migration, urbanization, and human–machine interaction.

The Latin word “museum” has its origin in the Greek word for a temple for the muses (μουσείον). As Adam J. Sorkin argued in *Politics and the Muse* (1989), the muse is not just “the handmaiden of beauty, inspirer of art and true knowledge, goddess of song and story, but is political.” In my view, museums make material this combination of qualities. As such, they

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are central for inspired and critical discussions about the pressing problems of our world today, without the anachronism and discursive abstraction of much political commentary. To paraphrase the concluding paragraph of *The History Manifesto*: we urgently need the wide-angle, long-range views only historical museums can provide.

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**Time, Impact, and the Need for Digital History and Philosophy of Science**

by Jane Maienschein

Thank you, Cambridge University Press, for giving us this book with a Creative Commons license. Thank you, Jo Guldi and David Armitage, for thinking big and provoking others to do so. Many responses to *The History Manifesto* embrace at least some of the messages offered in this extended essay.

The *Manifesto* is just that: a call to arms, for several different things. First, and for most readers foremost, the authors call for long-term thinking. They claim that historians have moved to short-termism, with loss of relevance outside the small-scale studies themselves. A number of historians have responded to this claim with the equivalent of “Historians have so too been doing long-term thinking. Such-and-such examples prove it. So nyah-nyah, you are wrong.” This largely misses the point—namely, that whether or not there has in fact been a change to shorter-term thinking, most dissertations in all fields do focus narrowly because students are encouraged to do so. Focus, focus, focus. And that’s not bad.

The second and related point seems more worrisome for the manifesto authors. They see historians’ short-termism as bad for the profession in part because the public and policy makers need long-term thinking. They feel that public actors don’t draw on historical scholarship—and that they should. This becomes an imperative: “Historians of the world, unite! There is a world to win—before it’s too late.” It seems that all historians should embrace the *longue durée*, take on the public roles that they will magically be invited to assume—and they can then inform political figures who need their long-term thinking.

In fact, there is something more going on in the book. It contains an unstated assumption that historical scholarship should be more applied, in the sense of being made more useful and therefore more used. Instead of urging everyone to “go long,” we might call for more clearly articulated “So what?” discussion about why a study matters. A meticulously documented short-term study might actually be quite valuable, with reflection about how it connects to the longer term and about implications of the results for public matters. Perhaps the authors would accept that history (and perhaps all humanities fields) should join the NSF, NIH, and other federal

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Jane Maienschein is University Professor, Regents’ Professor, President’s Professor, and Parents Association Professor at Arizona State University, where she is also Director of the Center for Biology and Society, and a Fellow at the Marine Biological Laboratory. Her main area of research is the history and philosophy of developmental biology. Her most recent book is *Embryos under the Microscope: The Diverging Meanings of Life* (Harvard University Press, 2014). Center for Biology and Society, School of Life Sciences, Arizona State University, Tempe, Arizona, and Marine Biological Laboratory, Woods Hole, Massachusetts; maienschein@asu.edu.