Evaluating knowledge, evaluating character: book reviewing by American historians and physicists (1900–1940)

Hagen, S.L. ten

Evaluating Knowledge, Evaluating Character: Book Reviewing by American Historians and Physicists (1900–1940)

Sjang ten Hagen, *Leiden University, Netherlands*

ABSTRACT

How have the evaluative norms and evaluative language of academics developed historically, and how have they varied between disciplines? Meaningful answers to these questions may be obtained from the historical-comparative study of book reviewing, a widely practiced yet historically understudied academic genre. My focus in this article is on book reviews written by American historians and physicists in the *American Historical Review*, *Physical Review*, and *Science* from 1900 until 1940. I show that book reviewers in these journals assessed not only results and methods of authors but also authors themselves. They would praise some authors—especially colleagues—for exhibiting virtues like "carefulness," "objectivity," or "thoroughness," while charging others—especially nonacademics—with vices such as "recklessness," "dogmatism," or "exaggeration." Remarkably, such virtue and vice language was applied not only to the character of authors, but also to their actions and outputs. Indeed, in early twentieth-century book reviews by historians and physicists, epistemic virtues and vices functioned as norms to evaluate both knowledge and character.

In 1937, the Austrian-American industrial chemist Otto Eisenschiml (1880–1963) published *Why Was Lincoln Murdered?* In this book, Eisenschiml claimed that the assassination of president Abraham Lincoln in 1865 had been plotted by his secretary of war, Edwin Stanton. This controversial thesis attracted a great deal of public attention and the book became a bestseller.[1]

This research was funded by the Dutch Research Council (NWO). I wish to thank my fellow members of the NWO "Scholarly Vices" project team, Edurne De Wilde, Kim Hajek, Herman Paul, Anne Por, Alexander Stöger, and Hidde Slotboom, for inspiring discussions and valuable feedback on previous versions of this article. Further, I am grateful for helpful comments provided by two reviewers.

1. On (the reception of) Eisenschiml's book, see Hanchett, "Historian as Gamesman."

History of Humanities, volume 7, number 2, fall 2022.
 https://doi.org/10.1086/721313

American historians, however, wrote scathing book reviews. One reviewer criticized Eisenschiml's historical research for being "rash" and for lacking "objectivity." He further stated, disdainfully: "If inference were history, *Why Was Lincoln Murdered?* would take its place as one of the most significant books in a generation."[2] Another reviewer portrayed the book as "four hundred and thirty-eight dreary pages of rambling and disconnected implication and innuendo."[3] Moreover, this reviewer emphasized that Eisenschiml was a chemist rather than a genuine historian.

Eisenschiml was utterly displeased with the criticism of America's professional historians. A few years after his book had appeared, in 1940, he openly responded to his critics by publishing *Reviewers Reviewed*. In this pamphlet, Eisenschiml not only rebutted the negative reviews of his own book but also challenged the reviewing practices of American historians in general. He contrasted historical book reviewing with scientific book reviewing, arguing that scientific book reviewers always considered the book itself more important than its author, "which is as it should be." He insisted that a book reviewer should criticize "nothing but the book itself. The personality of the author . . . should not be weighed in the balance."[4] Eisenschiml then noted that among "historical commentators . . . one vainly looks for such a detached attitude."[5] What is more, he characterized historical book reviewing as "author-hunting."[6]

Eisenschiml's challenge to historical reviewers was taken up by one of the leading American historians at the time, Carl Becker (1873–1945). In a book review of *Reviewers Reviewed* published in the *American Historical Review*, Becker weighed Eisenschiml's allegations against him and his colleagues. While Becker admitted that "historical critics are more often concerned than scientific critics need be with the author of the work in hand," he argued that this difference was entirely justified: "it is desirable to know who the author is and what political and social prepossessions and biases may have unconsciously influenced his selection and arrangement of the facts." Becker concluded by stating that even if historians who reviewed books indeed focused attention on the personal backgrounds of authors, they generally refrained from "author-hunting": "I think it may be said that the reviewing of historical books is as honest and competent as the reviewing of other works of scholarship."[7]

Eisenschiml and Becker agreed that book reviews written by historians were more concerned with the personal qualities and backgrounds of authors than were book reviews

2. Wilson, review of *Why Was Lincoln Murdered?*, 421.
3. de Roulhac Hamilton, review of *Why Was Lincoln Murdered?*, 402.
4. Eisenschiml, *Reviewers Reviewed*, 19–20.
5. Ibid., 9.
6. Ibid., 14.
7. Becker, review of *Reviewers Reviewed*, 88.

written by scientists; they only disagreed about whether or not this was a problem. But were Becker's and Eisenschiml's observations correct? How were books actually evaluated in Eisenschiml's and Becker's time? Were historical reviewers indeed more concerned with authors than their colleagues in science? Were there other demonstrable differences between how historians and scientists reviewed books? And were there also similarities in the evaluative norms and language employed by book reviewers across the disciplines?

In this article, I set out to answer above questions by examining and comparing book reviews written by American historians and scientists, particularly physicists. The focus lies on the decades between 1900 and 1940, a period during which American academic disciplines and their major journals were rapidly gaining in prestige. I examine book reviews published in three journals: the *American Historical Review* (*AHR*), *Physical Review* (*PR*), and *Science*. During the first decades of the twentieth century, several thousands of book reviews appeared in *AHR*. Here, I will draw especially from the book reviews written by three influential members of the American professional historical community: Carl Becker (the reviewer of Eisenschiml's *Reviewers Reviewed*), Edward P. Cheyney (1861–1947), and Sidney B. Fay (1876–1967). Becker, Cheyney, and Fay reviewed books for *AHR* for the major part of their careers. Together, they published 126 book reviews in *AHR* between 1900 and 1940.[8] With respect to physics, I will draw especially from the book reviews published in *PR* and *Science* by Percy W. Bridgman (1882–1961), Robert A. Millikan (1868–1953), and Leigh Page (1884–1952). Apart from being among America's leading physicists, Bridgman, Millikan, and Page were also among the regular contributors to the book review sections of *Science* and *PR*. Together, they published a total number of ninety-two book reviews during the prewar period.[9]

My analysis of the book reviews published in *AHR* will make clear that, in historical book reviews from the first decades of the twentieth century, there was indeed a lot of emphasis on the personal qualities, attitudes, and backgrounds of books' authors. This is in line with Eisenschiml and Becker's observations. However, in contrast to what both Eisenschiml and Becker thought, book reviewers in *PR* and *Science* also considered the personal qualities, attitudes, and backgrounds of authors to be a relevant issue.[10]

---

8. Becker published 26, Cheyney 25, and Fay no fewer than 75.

9. Bridgman published 25 book reviews in *PR* and 2 in *Science*; Millikan, 27 in *PR* and 12 in *Science*; and Page, 22 in *PR* and 4 in *Science*.

10. For the sake of coherence and to be able to cover a longer, continuous period of time, this article will draw (almost) exclusively from book reviews written by the six abovementioned authors. To check for representativity, however, I have close read additional material, namely, the book reviews published in the first issue of *AHR* from the years 1900, 1925, and 1933, as well as all book reviews published in *PR* between 1914 and 1933. This additional material (nearly thousand book reviews in total) suggests that Becker, Cheyney, and Fay's book reviewing was indeed representative; throughout said issues, historians used similar evaluative language. With regard to physics, the situation is a bit different: Bridgman's and

This becomes particularly apparent from the ways in which book reviewers in history and physics applied norms like "carefulness" and "objectivity." I demonstrate that American book reviewers in history and physics applied such "epistemic virtues" to assess the personal qualities attitudes of authors. Similarly, they applied "epistemic vices" like "dogmatism" and "prejudice" as norms to evaluate authors personally. Remarkably, reviewers used the very same norms to evaluate authors' methods and results. Indeed, in early twentieth-century book reviews, epistemic virtues and vices functioned as norms to evaluate both knowledge and character.[11]

I am not the first to establish a link between the cultivation of epistemic virtues and vices, on the one hand, and the practice of academic book reviewing, on the other. Recent historical studies have made clear that virtue and vice language figured prominently in book reviews written by eighteenth and nineteenth-century German scholars and scientists.[12] Indeed, book reviewing has generally involved the implementation of scholarly and scientific norms, including epistemic virtues and vices.[13] The historical inquiry of book reviewing can thus provide valuable insight into the roles of epistemic virtues and vices in context of day-to-day research activities.[14]

While book reviews have long been recognized as valuable sources by historians of humanities and science, there has been surprisingly little historical reflection on the book review as an academic genre, especially in the twentieth century.[15] This is unfortunate, since, as the academic genre of the book review has existed for centuries, the historical study of book reviewing provides an excellent opportunity to examine historical (dis)continuities in the evaluative standards of scholars and scientists.[16] Indeed, such study enables us to reflect on important historical questions such as: How have

---

Page's book reviews mirrored those written by their colleagues in terms of aim, length, and tone. Millikan's book reviews, however, especially the ones he wrote for *Science*, were more elaborate and evaluative in outlook than the average book review written by early twentieth-century physicists.

11. On the use and definition of epistemic virtues as historiographical concept, see, e.g., Gelhard et al., "Einleitung"; van Dongen and Paul, "Introduction"; Paul, "Performing History." Epistemic virtues and vices are defining characteristics of so-called scholarly and scientific personae, which are context-dependent models of how to be a scholar or scientist. See Paul, "Introduction," 3–6.

12. Stöger, "Constructing the Persona"; Engberts, "Scholarship, Community Formation." On book reviewing in the Enlightenment, see Habel, *Gelehrte Journale und Zeitungen*.

13. This is the main finding of a recently published special issue on the history of scholarly book reviewing: Pleshkov and Surman, "Book Reviews in the History of Knowledge."

14. Such inquiry complements recent studies into the role of virtues and vices in more idealized settings, such as Saarloos, "Virtue and Vice in Academic Memory"; Paul, "Weber, Wöhler, and Waitz."

15. But see Bilhartz, "In 500 Words or Less"; Wolf, "Rezensionen in der Historischen Zeitschrift"; Kremer and Maas, "Tale of Reviews."

16. As also noted in Kremer and Maas, "Tale of Reviews," 756.

criteria for good and bad research and researchers developed historically?[17] What evaluative norms and language have academics employed? How have these changed over time? And how have they compared across academic disciplines?

This study aims to provide an initial answer to these questions by examining what evaluative norms early twentieth-century American historians and physicists employed in their book reviews. The structure of the remaining part of this article is as follows: First, I discuss the general form and function of book reviews in the journals *AHR*, *PR*, and *Science*. Subsequently, I examine and compare how historians and physicists concretely evaluated the work of their colleagues in their book reviews. I particularly address their cultivation of epistemic virtues and vices. After that, I dwell upon some of the similarities encountered between the evaluative standards of book reviewers in history and physics. These similarities, I conclude, express a common ideal of "scientific method" among early twentieth-century American historians and physicists.

BOOK REVIEWING IN THREE JOURNALS

In 1914, in one of his many book reviews for *Science*, Robert Millikan announced that "the day of the monograph in physics" had arrived.[18] Millikan's observation indicates that, in the early twentieth century, the monograph was still an important means to share results of research, not only in the text-oriented humanities but also in a natural-scientific discipline like physics. Accordingly, book reviewing was a prominent academic activity in both areas of knowledge. What did early twentieth-century book reviews look like, especially in the journals *AHR*, *PR*, and *Science*? And what was their function within the communities by whom they were written and read?

BOOK REVIEWS IN THE *AMERICAN HISTORICAL REVIEW*

The *American Historical Review* was founded by a group of history professors from Cornell University and Harvard University in 1895. Most of them had pursued doctoral training in Germany—the country commonly seen as "the Mecca of the ambitious American historical student"[19]—and were active members of the recently founded American Historical Association (AHA). Their mission was to provide a medium that represented and would establish and maintain social cohesion within the community of professional American historians, which was quickly expanding and becoming increasingly

17. In recent years, another kind of reviewing, peer reviewing, has received ample attention from historians of science. See, for instance, Baldwin, "Scientific Autonomy"; Lalli, "'Dirty Work.'" On peer reviewing in the history of humanities, see Schulte Nordholt, "Africanising African History," 119–53.

18. Millikan, review of *Rays of Positive Electricity*, 174.

19. Jameson, "American Historical Review," 2.

specialized.[20] Thus they founded a quarterly journal, which was affiliated with the AHA and focused mainly on American and modern European history. The German-oriented founders of *AHR* took as their main model the *Historische Zeitschrift*.[21]

Since the early years of the journal, the "Reviews of Books" section has made up a large portion of *AHR*. A significant amount of editorial attention is paid to this part of the journal. On the occasion of the twenty-fifth anniversary of *AHR*, long-time editor J. Franklin Jameson recalled that of all the content in his journal, "it was perhaps the reviews of books on which the editors bestowed most thought and from which they derived most satisfaction."[22] *AHR*'s book review section covers monographs and textbooks from all historical subfields, including political, ecclesiastical, legal, military, economic, social, and cultural history, as well as the history of science and literature. The book review section plays a crucial role in keeping American professional historians informed about each other's work and up to date on what was happening in their discipline at large.[23]

The format of the book review in *AHR* has proved remarkably consistent ever since the foundation of the journal, although the average length of a book review published in *AHR* diminished over time, from around 1,200 words in 1900 to about 800 words in 2000. Meanwhile, the total number of book reviews has greatly increased. Today, *AHR* publishes approximately 1,000 book reviews annually.[24] In the journal's first decades of existence, it published only about 150 book reviews per year.[25] The portion of the journal's pages devoted to book reviews has fluctuated between 25 and 50 percent over the course of the twentieth century.

BOOK REVIEWS IN *PHYSICAL REVIEW*

Today, *Physical Review* ranks among the world's most prestigious scientific journals. At the turn of the twentieth century, however, the journal—which had been founded by three Cornell physicists in 1893 and was published by the American Physical Society beginning in 1913—occupied a marginal position internationally.[26] This changed in the 1930s, when increased governmental funding and the contributions of eminent European émigré scientists enhanced the status of American physics and, simultaneously, the status of their primary journal.[27]

---

20. Stieg, *Origin and Development of Scholarly Historical Periodicals*, 48.
21. Jameson, "American Historical Review," 2.
22. Ibid., 11.
23. Stieg, *Origin and Development of Scholarly Historical Periodicals*, 56.
24. See "About the American Historical Review," https://www.historians.org/about-the-ahr.
25. Jameson, "American Historical Review," 11.
26. Khelfaoui and Gingras, "Physical Review," 26.
27. Ibid., 31.

Articles presenting original research were by far the most prominent feature of *PR*. Yet, initially, there was also considerable space amounted to book reviews. In the first decades after its foundation, approximately 15 percent of the journal's pages were devoted to the book review section.[28] Remarkably, the book review section disappeared for a few years around 1910. But it soon returned, first intermittently, as "New Books," and then on a regular basis as "Book Reviews and Notices." Between 1914 and 1933, over 500 of pages of book reviews were published in *PR*, corresponding to about two and a half pages per monthly issue. Reviewed books varied in sort from monographs to textbooks and from edited volumes to reissues of major publications in physics.

The 1920s were the heyday of book reviewing in *PR*. But in 1933, the journal ceased publishing book reviews quite suddenly. This might have been due to the fact that it was becoming less and less common for physicists to publish their research in book form. Meanwhile, the number of research articles submitted to *PR* skyrocketed, and printing costs of the ever-expanding journal became increasingly difficult to bear.[29] Together, these circumstances explain the demise of book reviewing in *PR*. Meanwhile, physicists could publish book reviews in other scientific journals, including *Science*.

BOOK REVIEWS IN *SCIENCE*

The weekly journal *Science* was founded in 1880 and became the main publishing outlet of the American Association for the Advancement of Science (AAAS) twenty years later. While the specialized journals *AHR* and *PR* served as disciplinary media for the relatively small communities of American historians and physicists, *Science* had a broader, multidisciplinary scope. In a time of ongoing disciplinary specialization, *Science* aimed to provide American science with an "umbrella," as its managing editor explained: "When there are so many special journals, we need all the more a journal which will report on the progress of science as a whole."[30] To fulfill their transdisciplinary aims, the AAAS and its flagship journal stood "in a symbiotic relationship" with more specialized American societies, including the American Physical Society.[31] Leading American physicists Albert Michelson, Edward Morley, and Millikan actively contributed to the networks of the AAAS and made frequent contributions to its foremost journal by publishing their own latest research and reviewing their colleagues' books.[32]

---

28. Bazerman, *Shaping Written Knowledge*, 158; Hartman, *Memoir on the Physical Review*, 133.

29. Scheiding, "Paying for Knowledge."

30. As quoted in Sokal, "Promoting Science," 52–53. This long-time managing editor of *Science* was the American psychologist James McKeen Cattell (1860–1944).

31. Ibid., 61.

32. Ibid., 59.

During the period under discussion, the arrangement of book reviews in *Science* was far from a structured endeavor. The number of pages of book reviews published in *Science* fluctuated greatly, from a few dozen to over a hundred per half-year volume. The editor, who managed the book review section together with his wife and children, "published just about any item vouched for by members of his editorial committee or sent in by scientists employed by federal agencies or reputable universities."[33] As a consequence, the book review section in *Science* occurred infrequently (as "Scientific Books"). Sometimes, only a list of recently published books appeared in the journal (as "Books Received"). Moreover, readers of *Science* perceived the journal's book reviews to vary in quality. The American publisher Macmillan even wrote a letter of complaint about the book review section to the editor of *Science*, since he thought it did not do justice to the books they published.[34] Despite their perceived shortcomings, book reviews in *Science* were comprehensive, well-read, and written by leading American scientists, including physicists.

A FIRST COMPARISON

Book reviews by American physicists and historians differed in length and style: they were generally shorter and more descriptive in *Science* and *PR* than in *AHR*. Furthermore, book reviews were more numerous in *AHR* than in *Science* and *PR*. That said, the book reviews published in these three journals had similar functions: A primary function was to inform peers about recent developments in their field. Another purpose, which will be the main focus of this article, was evaluation. It will become clear that evaluation served yet a third and fourth aim: community building and, especially in the American historical discipline, gatekeeping, that is, the distinguishing between well-respected colleagues and unwelcome outsiders.[35]

How did evaluation take place in early twentieth-century American book reviews? What were recurring criteria applied by book reviewers in *AHR*, *PR*, and *Science*? First, book reviewers assessed if the book was sufficiently up to date, especially in physics, a discipline then characterized by profound theoretical transformations.[36] Other recurrent criteria were if the book was useful and affordable and if it looked attractive. The most extensively weighed criterion was if the book—and its author(s)—conformed to certain research norms. I demonstrate below that these norms were often expressed in terms of epistemic virtues and vices.

---

33. Ibid., 54.

34. Sokal, "Science and James McKeen Cattell," 44.

35. On the various functions of the academic genre of the book review, see also Hyland, *Disciplinary Discourse*; Lindholm-Romantschuk, *Scholarly Book Reviewing*.

36. See, e.g., Bridgman, review of *Lehrbuch der Physik*, review of *Lehrbuch der Thermostatik*.

But before doing that, it should be noted that some early twentieth-century book reviewers, especially in *PR* but also in *Science*, performed little evaluation at all. Their main purpose was to inform the reader about recently published literature and to signal to what audience it could be valuable, rather than to evaluate. Although physicists reviewing books in *PR* and *Science* nearly always expressed a value judgment, this was in many cases limited to a cursory "excellent" or "valuable." While historians in *AHR* also applied these terms, they usually went into greater detail than their colleagues in physics to substantiate their judgments.

That book reviewers in physics generally offered less evaluation can be linked to the fact that book reviews in scientific journals were generally more concise than book reviews in historical journals. At the beginning of a brief review published in *PR* in 1930, Percy Bridgman stated that "not much more can be attempted in a necessarily short review . . . than a summary of the nature of the contents."[37] Three years earlier, he had gone as far as to say that "it is impossible in a review of this character to do much more than indicate the contents," after which he literally reproduced the table of contents of the book he was reviewing.[38] Bridgman's comments indicate that there was an asymmetry in form and function between book reviews in history and physics: book reviewers in physics generally wrote shorter reviews and performed less evaluation than their colleagues in history.

Still, there remain numerous book reviews from the period under discussion in which physicists, including Bridgman, did express their opinion on the book and its author. Thus, keeping in mind that book reviews in physics were generally less evaluative than historical book reviews, and that they were shorter and fewer in number, I will now examine and then compare how physicists and historians evaluated their colleagues' books. I will focus in particular on how they invoked epistemic virtues and vices; these were applied as norms to assess not only the quality of published research but also the researchers themselves.

EVALUATION BY HISTORIANS

When searching for appropriate reviewers for recently published books, the editors of *AHR* considered the specific knowledge of candidates, as well as their scholarly character traits. As editor Jameson explained during his speech celebrating the twenty-five-year existence of the journal, he had always looked for reviewers who "qualified in respect to knowledge, judgment, and fairness of mind."[39] Apparently, personal qualities such as fairmindedness were considered to be of importance in the reviewing process.

37. Bridgman, review of *Handbuch der Experimental Physik*, 873.
38. Bridgman, review of *Lehrbuch der Physik*, 897.
39. Jameson, "American Historical Review," 13.

The importance of such character traits was also emphasized by Becker, Cheyney, and Fay in their book reviews. Becker, Cheyney, and Fay frequently referred to "fairness" and other personal qualities, including but not limited to "carefulness," "thoroughness," and "objectivity." In numerous instances, our three protagonists invoked such virtues to praise the character traits of the authors whose work they positively reviewed. For example, Fay praised one author for his "great fairness of mind."[40] Cheyney highlighted the "good judgment" and "thoroughness" of two of the historians whose books he discussed.[41] Becker, in turn, portrayed one author as "possess[ing] that rare combination of powers so essential to the biographer—the sympathetic imagination which enables her to think and feel as [her subject] thought and felt, and the objective curiosity which enables her to stand aloof and estimate the quality of that thought and feeling."[42] With statements like these, Fay, Cheyney, and Becker made clear that in order to produce sound historical knowledge, one needed to possess and cultivate the right character traits.

That the personal qualities of authors were considered relevant by historians who reviewed books for *AHR* becomes further clear from a series of reviews written by Fay in the aftermath of the First World War. These reviews revolved around the issue of which country should be held responsible for the war. Fay was very outspoken on this issue. He doubted that Germany was entirely to blame, insisting that the prehistory of the war should be examined from all possible sides, without national biases.[43] In his book reviews in *AHR*, he made clear that such unbiased research could be conducted only by historians who embodied "honesty" and "judiciousness." For example, he repeatedly praised the German historians who edited *Die Große Politik*—a multivolume collection of critically edited diplomatic documents from the prewar period published between 1922 and 1927—for their "honesty" in collecting and editing primary sources. By appealing to the virtue of "honesty," Fay gave scholarly credibility to their politically sensitive project and to the historical sources that it had unearthed.[44] He assessed the French counterpart of this German project, the *Documents Diplomatiques*, in similar fashion. Fay praised the project by putting emphasis on the solid reputation of its main editor, the French historian Pierre Renouvin: "It augurs well for the reliability of the

40. Fay, review of *Geschichte der Befreiungskriege*, 853.

41. Cheyney, review of *The Economic Organisation of England*, 143–44, review of *The Stannaries*, 843.

42. Becker, review of *Vie de Madame Roland*, 856.

43. Fay's studies resulted in an acclaimed book, *Origins of the First World War*. These studies are further discussed in Novick, *That Noble Dream*, 222–24.

44. Fay, 1923 review of *Die Grosse Politik*, vols. 1–6, 544, and 1924 review of *Die Grosse Politik*, vols. 7–12, 136–37.

work," he stated, "that such a sound scholar as M. Renouvin is taking a leading part in the selection of material."[45] In an earlier review for *AHR*, he had already praised Renouvin's scholarly character because of its "judiciousness."[46]

Fay left little doubt about what type of researcher he considered unsuitable for examining the antecedents of the First World War. In a 1927 review of a book by the Austrian journalist Heinrich Kanner, he characterized it as a mere "pamphlet." According to Fay, Kanner suffered from the vice of "bias" and a lack of the virtue of "accuracy"; his pamphlet symbolized "how many wrong-headed conclusions can be arrived at by a biassed journalist who lacks evidence of historical training and accuracy, and who is bent on twisting evidence."[47] Fay's criticisms of Kanner are illustrative of how American historians employed virtues and vices as character norms to demarcate members of their own professional circles from outsiders seeking to contribute to historiography, like dishonest, biased, and inaccurate journalists lacking historical training.

Thus, American historians sometimes reinforced their negative verdict of a book by charging its author with vice or by identifying a lack of virtue in their scholarly character. For instance, in a 1917 review, Becker argued that the American historian whose book he was reviewing, Clarence Walworth Halvord, "has not, I dare say, what some people would call the synthetic mind. He is so full of his subject that facts and ideas come crowding in, of their own accord as one may say, getting in each other's ways at times, so that in the reader's mind at least the main drift and trend of the story is a little obscured by the fullness of the narrative."[48] With this statement, Becker implied that Halvord's disorganized historical narrative had resulted from his poor personal qualities as a researcher, in particular from his lack of synthetic abilities.

In a 1909 review, Cheyney too made it crystal clear that personal qualities of historians mattered to the historical knowledge that they produced. At the beginning of his review of a book on the medieval history of Ireland by Alice Stopford Green, he observed that "among the many woes of unfortunate Ireland not the least has been the character of her historians." According to Cheyney, "the patient, moderate, judicious, learned historian has for the most part simply passed poor Ireland by."[49] Subsequently, he spent the rest of his review weighing if Stopford Green, a historian who was an Irish nationalist and aiming at a popular audience, fitted his ideal of the learned historian. Although Cheyney called Stopford Green's book "refreshing" compared to previous histories of Ireland, he judged that she lacked one of the historian's primary virtues:

45. Fay, review of *Documents Diplomatiques Français*, 863.
46. Fay, review of *The Immediate Origins of the War*, 878.
47. Fay, review of *Der Schlüssel zur Kriegsschuldfrage*, 318.
48. Becker, review of *The Mississippi Valley in British Politics*, 672.
49. Cheyney, review of *The Making of Ireland*, 341.

cautiousness. Cheyney stated that with regard to several issues "the cautious scholar will certainly not agree with the author."[50] Indeed, he complained that Stopford Green should have stated her conclusions "more moderately," in less "extreme" a manner.[51] By noting that she lacked the historian's primary virtues of moderation and caution, Cheyney positioned Stopford Green outside the realm of academic historiography.[52]

Among themselves, American professional historians, all of them men, were less keen to provide direct character criticism—or to go "author-hunting," as Eisenschiml would have called it. This lack of mutual personal criticism can well be understood by looking at how the American historical discipline functioned at the time. In American historiography, there was a code of "gentlemanly reviewing."[53] Reflecting on the first decades of existence of the journal in 1920, *AHR*'s editor Jameson stated that "probably our reviews have been on the average too lenient." He attributed this to the intimate character of the American historical community; practically everyone knew each other personally: "It is an uncomfortable thing to speak ill of a man's book when at the next Christmas season of peace on earth you are going to meet him at the meeting of the American Historical Association."[54] Book reviews in *AHR*—which were not published anonymously, unlike in some traditions of scholarly book reviewing—were instrumental in building and maintaining a close community of historical professionals.[55] With that in mind, one can comprehend why historical reviewers praised colleagues for their virtues while charging outsiders with vices.

In various book reviews published in *AHR* between 1900 and 1940, authors were also drawn in, yet in a more subtle manner. In those reviews, norms like "objectivity" and "carefulness" were applied to assess not the personal qualities or attitudes of authors but rather their scholarly conduct, especially their methods of research and writing. In a 1914 book review, to mention a first example, Becker praised a British historian for presenting his material "in judicial temper, and with scrupulous accuracy in matters of fact." According to Becker, this colleague's adherence to the virtues of judiciousness and accuracy ensured that "the soundness of his scholarship cannot be doubted."[56] He assessed the methods of another British historian, Hugh Egerton, in similar fashion:

---

50. Ibid., 341.

51. Ibid., 342.

52. Stopford Green herself was "impatient with the foibles of academic historians," as Sandra Holton ("Gender Difference," 124) has pointed out.

53. Novick, *That Noble Dream*, 202.

54. Jameson, "American Historical Review," 13.

55. The book review served similar aims in late nineteenth-century German academia (although German historians were generally much less polite toward one another). See Engberts, "Scholarship, Community Formation," 659.

56. Becker, review of *The Life of William Pitt*, 615.

"Mr. Egerton's method seems to be . . . to strike a judicious and common-sense balance between extreme theories."[57] Fay, in turn, praised a book about the history of European diplomacy mainly because of its "author's discriminating selection of subject-matter [and] his careful and conscientious preparation."[58]

Fay assigned virtues like carefulness, precision, and honesty to his colleagues' methods and behavior especially when he reviewed literature on the causes of the war. After British scholars had started a project similar to the *Documents Diplomatiques* and *Die Große Politik* of their French and German colleagues, he appraised the new project in *AHR* on the basis of the methods that had been used by its editors: "The documents are edited with admirable precision," he claimed, adding that he was particularly impressed "by the honesty and ability of the paraphrasing."[59] Fay also spoke very highly of the methods of Bernadotte E. Schmitt, a colleague whom he believed had written about the origins of the First World War with "maturity of thought and . . . objectivity." He judged that Schmitt "brings his evidence fairly" and "careful[ly]."[60] According to Fay, the fairness and carefulness of Schmitt's methods meant that his *England and Germany, 1740–1914* should be counted among "the best books on the causes of the war."[61] The above statements make clear that Fay believed that virtues such as honesty and fairness have epistemic implications.

Sometimes Becker, Cheyney, and Fay used language of virtue and vice to assess the constituents of a book rather than its author or their methods. They applied labels like "exaggeration" and "impartiality" either to the book as a whole or to specific interpretations, statements, and results. For example, in a review of a book on Prussian history by two prominent British historians, Fay remarked that "their account, on the whole, is admirably objective and unbiassed," despite some "exaggerate[d]" statements.[62] Cheyney as well used language of virtue and vice to evaluate the features of books themselves, for example, when he praised a monograph by the German economic historian Moritz Julius Bonn for its "thoroughness and impartiality."[63]

A 1922 book review by Cheyney of a book on English economic history by American historian Frederick C. Dietz shows that evaluations of book, methods, and authors could reinforce one another. Cheyney opened this review by praising Dietz's book for its "thoroughness." He then quickly moved on to praise Dietz's methods as, again, thorough: "no

57. Becker, review of *The Causes and Character of the American Revolution*, 344.
58. Fay, review of *A History of Diplomacy*, 401.
59. Fay, review of *British Documents on the Origins of the War*, 601.
60. Fay, review of *England and Germany, 1790–1914*, 147.
61. Ibid., 146.
62. Fay, review of *The Evolution of Prussia*, 800.
63. Cheyney, review of *Die Englische Kolonisation in Irland*, 123.

question arises without being thoroughly examined and clearly answered."[64] He concluded by praising the man responsible for all this thoroughness for yet another set of virtues, namely, his "industry [and] independence of judgment."[65] Cheyney's review of Dietz makes clear that the use of language of virtue and vice enabled American historians to swiftly move between evaluations of knowledge and character.

To summarize, I have shown that book reviewers in *AHR* invoked categories of virtue and vice to perform different sorts of evaluation. They applied criteria such as "fairness" and "objectivity" as epistemic as well as character norms, that is, as evaluative criteria for books and methods, as well as for authors.

EVALUATION BY PHYSICISTS

Like their colleagues in history, many early twentieth-century American physicists deemed personal virtue essential to research.[66] Millikan in particular strongly believed in the interdependence of virtuous character and sound knowledge making. If scientists wished to do science properly, he thought, they needed to cultivate "a belief in the reality of moral and spiritual values."[67] Concomitantly, he regarded science "as crucial to moral development."[68] Drawing inspiration from his Protestantism, he claimed that "well meaning men without poise or any sort of scientific discrimination, and highly trained and able men without conscience are about equally grave dangers to the wholesome development of human society."[69] Millikan stressed the need to cultivate what he called "scientific spirit"; he encouraged his fellow scientists to pursue the virtues of "honesty" and "objectiveness" in particular.[70] He contrasted these virtues with the vices of "prejudice" and "ignorance," which he regarded as threats to the scientific spirit and as potentially leading to moral decay.[71]

Millikan emphasized the importance of these virtues and vices also while reviewing the books of other physicists. And so, it turns out, did other American physicists publishing book reviews in *PR* and *Science*, including Bridgman and Page. In their book reviews, they evaluated whether their colleagues had adhered to virtues such as objectivity and honesty and had succeeded in avoiding vices such as prejudice and ignorance.

64. Cheyney, review of *English Government Finance*, 104.
65. Ibid., 105.
66. Shapin, *Scientific Life*, 57–64.
67. Millikan, "Address of Acceptance," 332.
68. Kevles, *Physicists*, 179.
69. Millikan, "Science and Society," 295.
70. Ibid., 298.
71. Ibid., 295, 298.

I have demonstrated that American historians, while reviewing a book critically, sometimes invoked epistemic vices to point out faults in the author's character, especially when the author in question was not part of their professional community. Such direct character criticism, as Eisenschiml and Becker both suspected, occurred less frequently in book reviews in *PR* and *Science*. I have found few examples of Bridgman, Millikan, or Page directly criticizing the personal qualities or attitude of an author or linking them to the negative features of a book. One exception concerns Millikan's otherwise positive review of Harry C. Jones's *Electrical Nature of Matter and Radioactivity*, in which he argued that "the author's attitude" lacked "judiciousness."[72]

The relative lack of character criticism in physical book reviews may be taken to suggest that Eisenschiml and Becker were right about the author being more in the background in natural-scientific than in historical book reviews. However, other book reviewers in *Science*, mostly from natural-scientific disciplines other than physics, did employ direct character criticism. In 1929, a geologist went so far as to interpret dogmatism as inherent in the character of all German researchers. He found the author of the book that he reviewed to be symbolic of the "Teutonic temperament of reaching conclusions on insufficient evidence and maintaining a dogmatic attitude thereafter."[73]

Moreover, even if Bridgman, Millikan, and Page were less critical than the above-cited reviewer in *Science*, they *did* regard the character traits of researchers a relevant factor in assessing the quality of research. This is particularly evident from positive reviews written by them. In various instances, these Bridgman, Millikan, and Page linked the personal qualities and attitudes of authors to a book's positive features. For example, Millikan called the author of a popular work covering recent developments in chemistry and physics "a man of wide reading, thorough scholarship, broad horizon and unmistakable literary talent."[74] The personal qualities of its author, Millikan explained, made the book stand out among works of other authors attempting to bring scientific discoveries to the attention of the public. In 1929, Page reviewed a book by British astronomer Arthur Eddington while emphasizing Eddington's personal qualities, particularly his "capacity to write entertainingly" and his balancing between "seriousness" and "humor."[75] Moreover, Page praised Dutch theoretical physicist H. A. Lorentz for his "deep penetration."[76] Another expression of the relevance of personal qualities to book reviewers in physics is provided by a 1930 review in *PR* by Bridgman, which discussed the experiments and theories of

72. Millikan, review of *Electrical Nature of Matter and Radioactivity*, 300.
73. Berry, review of *Geologie von Peru*, 101.
74. Millikan, "Recent Books on the Physics of the Electron," 788.
75. Page, review of *The Nature of the Physical World*, 624.
76. Page, review of *Problems of Modern Physics*, 90.

Swedish physicist Carl Benedicks regarding certain thermoelectric phenomena. Although Bridgman was unconvinced of the ideas defended by Benedicks, he noted with satisfaction that his colleague had described "his measurements and ideas [with an] undogmatic attitude."[77]

Bridgman, Millikan, and Page thus stressed the personal qualities and attitudes of authors in their book reviews and, on occasion, used categories of virtue and vice, such as "dogmatism" and "thoroughness," to perform this particular kind of evaluation. More often, however, they invoked such virtues and vices to evaluate authors' methods. This can be seen, for example, from the book reviews published by Millikan regarding two of his main research topics: radioactivity and the physics of the electron.[78] He was highly critical of the methods of the German physicist Johannes Stark's *Die Elektrizität in Gasen*, which he considered to be "dogmatic." In a 1905 review of several recent books on the physics of the electron, he called Stark's book a "decidedly dogmatic presentation of one man's interpretation of recent discoveries," which contained many "ex-cathedra statements." He regretted the "slovenly, unscientific and thoroughly un-German way in which references to original articles have been inserted." While he admitted that Stark's book "exhibit[s] immense reading and profound scholarship," he found that "facts are so badly mixed up with the author's inferences from them that it is in general quite impossible to tell what is fact and what is inference." Furthermore, Millikan regretted that Stark had not put "a little more labor" into preparing his book.[79]

In the same review in *Science*, Millikan discussed a recent monograph by Marie Curie on radioactivity. He characterized the book as "a plain, conservative record" and called Curie's research "uninspired." As he explained, he found it "unillumined by any deep insight into the real nature of the phenomenon under investigation."[80] In a book review published one year before, Millikan had evaluated Curie's approach to the then rapidly developing topic of radioactivity in more detail. Apart from informing the reader about the book's structure and main results, he charged Curie with the vice of "conservatism." He complained that, due to the author's "conservative" methods, Curie's book lacked coherence: the reader "will be likely to find himself confused by a mass of disconnected facts."[81] So, Millikan framed Curie's book as a flawed product of conservative method and attitude, which he regarded as inappropriate at a time when physical theories were transforming very quickly.

---

77. Bridgman, review of *Jetziger Stand*, 1302.

78. On Millikan's pivotal contributions to experimental research on the electron, see Holton, "Subelectrons, Presuppositions."

79. Millikan, "Recent Books on the Physics of the Electron," 786.

80. Ibid., 787.

81. Millikan, review of *Recherches sur les Substances Radioactives*, 720.

In his reviews of the books by Stark and Curie, Millikan charged the methods of his peers with dogmatism and conservatism. The methods evaluated in this way by Millikan included literary practices such as referencing the work of others, which he judged Stark had done insufficiently, or procedures such as the formulation of theories from experimental data, from which he felt Curie had abstained. Millikan *praised* the methods of his colleagues when he believed that these reflected qualities like carefulness or moderation. For example, in his otherwise critical review of Curie's book on radioactivity, Millikan praised her discussion of her own scientific discoveries, in gendered language, for being "charmingly modest."[82] He positively reviewed the aforementioned book on radioactivity by Jones in similar fashion, praising the author's literary and experimental methods for their "admirable moderation of statement" and "judicious balancing of arguments for and against rival hypotheses." Yet Millikan regretted that Jones, on a few occasions, had shown a "rather immoderate haste in arriving at positive conclusions."[83] Ernest Rutherford, in turn, was praised by Millikan for having prepared his book on the same topic "carefully and thoroughly" and for referring to the work of other investigators "fairly."[84]

Millikan was not the only American physicist who used language of virtue and vice to evaluate method. The most frequently invoked method-related virtues in *Science* and *PR* were "carefulness," "thoroughness" (or "penetration"), "objectivity," and "lucidity" (or "clarity"). These virtues were applied to methods covering the whole of the process of preparing a book, from doing experiments to deriving theoretical conclusions, and from writing to referring. In a review for *Science*, Page "congratulated" the authors of a recent textbook on theoretical physics "on the clearness and perspicuity of their development of the subject."[85] Another textbook, on electromagnetism, was recommended by Page because it gave "the evidence of the most careful and painstaking preparation."[86] Bridgman, in turn, praised one colleague for his "keenness of observation,"[87] while criticizing another for a lack of patience. According to Bridgman, this colleague had prepared his book in an "atmosphere of hurry," which had resulted in a lack of "differentiation of the important from the incidental."[88]

Book reviewers in physics invoked notions like "carefulness," "judiciousness," and "keenness" not only as character traits but also to evaluate the methods of their peers.

---

82. Millikan, "Recent Books on the Physics of the Electron," 787. On the gendered aspects of nineteenth- and twentieth-century scholarly personae, which are partly shaped by gendered virtues such as "modesty," see Niskanen and Barany, *Gender, Embodiment*.

83. Millikan, review of *Electrical Nature of Matter and Radioactivity*, 300.

84. Millikan, review of *Radioactive Substances and Their Radiations*, 30.

85. Page, review of *Introduction to Theoretical Physics*, 590.

86. Page, review of *The Electromagnetic Field*, 288.

87. Bridgman, review of *Critique of Physics*, 1024.

88. Bridgman, review of *Heat and Thermodynamics*, 262.

These epistemic virtues and vices primarily referred to literary, theoretical, and experimental knowledge practices, such as taking measurements, performing calculations, or referencing the work of others.

Books themselves were also regularly evaluated in terms of virtues. That virtues were applied not only to authors and their methods but also to books is explicitly shown in a review in *PR* by James Chadwick, a British colleague of Bridgman, Millikan, and Page, who wrote the following about a book on radioactivity: "the great virtue of the book is its remarkable thoroughness in the scrutiny of the literature, a thoroughness which can hardly be over-emphasized."[89] Bridgman and Page also maintained that published work could embody certain virtues, such as "thoroughness" or "carefulness." More specifically, they praised books for incorporating "thorough discussions" or "careful descriptions."[90] Millikan too applied language of virtue and vice to assess books rather than authors' qualities, for example, when he reviewed Arthur Llewelyn Hughes's *Photo-Electricity* of 1914. Millikan stated that "Hughes' book is remarkable for its combination of thoroughness with conciseness [and] for its scholarly fairness to all observers."[91]

Although, technically, Millikan's use of the labels of thoroughness and fairness in the above only concerned the knowledge product—that is, the book itself—it is not unreasonable to interpret his use of these criteria, especially of "fairness," also as an endorsement of Hughes' personal qualities as a researcher. That evaluations of research and researchers could intertwine and reinforce one another becomes further evident from how Page approached the work of Austrian-American physicist Arthur Haas: Page recommended Haas's work on thermodynamics because of "the author's customary clear and forceful style." "As usual with Professor Haas' works," he continued, "a high degree of scientific accuracy is maintained."[92] Here, Page implied that the virtues of Haas's research—in particular its clarity, forcefulness, and accuracy—were inherent to Haas's personal qualities as a researcher. Sometimes Page even interpreted virtues as inherent to whole nations of researchers.[93] For example, he recommended a book on relativity theory by French astronomer Jean Chazy for being written "with the clarity of exposition characteristic of the French."[94] In fact, expressions like "Teutonic dogmatism" and "French lucidity," which I have mentioned earlier, and "German thoroughness" and

89. Chadwick, review of *Radioactivity*, 352.

90. See, e.g., Page, review of *Lectures on Theoretical Physics*, 967; Bridgman, review of *Einführung in die Theorie der Wärme*.

91. Millikan, review of *Photo-Electricity*, 560.

92. Page, review of *Einführung in die Theoretische Physik*, 610.

93. On virtues and national stereotyping in American contexts circa 1900, see also Paul, "German Thoroughness in Baltimore."

94. Page, review of *La Théorie de la Relativité* , 706.

"French charm" were not at all uncommon in the three journals examined in this study.[95] Apparently, book reviewers in history and physics believed that there was a correlation between the (national) personal backgrounds of researchers and the quality of their methods and the knowledge they produced.

In some of Millikan's book reviews in *Science*, this perceived continuity between the personal qualities and backgrounds of authors and the quality of their methods and results surfaced particularly visibly. When he reviewed a book on electron theory by British physicist Owen W. Richardson, in 1915, he noted that "the present volume . . . exhibits . . . enormous industry and a commendable fairness and reasonableness of temper." By invoking epistemic virtues in this way, Millikan suggested that books reflected authors' personal qualities.[96] Furthermore, in a 1914 review in *Science* of a book by the German physicist Wilhelm Hallwachs, Millikan made explicit that the virtues of "fairness" and "objectiveness" reflected not only his methods, but also his character—or "spirit," as he called it. In this review, Millikan noted that Hallwachs had written his book "with an admirable objectiveness and freedom from bias of either a national or personal kind. All experimental work is reported fairly and fully, and all theories are presented from the points of view of their authors." Writing in 1914, just after the outbreak of the First World War, Millikan went as far as to claim that "if only the scholars and statesmen had carried over into political affairs the method and spirit which Hallwachs here exemplifies," by which he referred to Hallwachs's objectivity and freedom from bias, "there would have been no great war."[97]

SCIENTIFIC METHOD

I have shown that both historians and physicists made regular use of the language of virtue and vice in their book reviews for both character and knowledge evaluation. They applied virtues and vices as norms to highlight and assess the personal traits of authors themselves, as well as their methods and results. Attentive readers may have noted that there was a significant overlap between the specific virtues and vices that early twentieth-century American historians and physicists adhered to; virtues that were especially frequently invoked by book reviewers from both disciplines were "carefulness," "thoroughness," and "objectivity." How may we explain these similarities?

That some of the main epistemic virtues of historians and physicists overlapped becomes comprehensible in light of their similar epistemologies; the shared epistemic

95. The latter two examples are drawn from Fay, review of *Les Sources de l'Histoire de France*, 891; Du Bridge, review of *Lichtelektrische Zellen und ihre Anwendung*, 641.

96. Millikan, review of *The Electron Theory of Matter*, 383.

97. Millikan, review of *Die Lichtelektrizität*, 944.

virtues of American historians and physicists reflected similarly empirically oriented research practices, which corresponded to similar notions of "scientific method."[98] To be more precise, both professional groups were highly invested in empiricist ideals.[99] This is to say that they prioritized the gathering of factual knowledge over theorizing. American historians' favored "factual" research practice concerned source criticism, a method that they considered to be strictly "objective." Indeed, the generation who founded and largely filled the first volumes of the *AHR* "tended to a rigid factualism that emphasized the criticism of documents and accumulation of facts."[100] These scholars maintained that the essential task of historical professionals was the patient, thorough, and careful reconstruction of historical events on the basis of the empirical study of textual sources.[101]

Meanwhile, most of the articles published in *PR* as well were empirical in outlook. During the first decades of the twentieth century, a "fact-gathering type of research" filled most of the journal's pages.[102] Many authors, including Millikan, dealt with the electron and sought to experimentally examine its physical properties.[103] Millikan and colleagues described their preferred factual method of quantitative measurement in terms of the same virtues by which American historians referred to source criticism. In a 1913 article in *PR* in which he reported on his experimental investigations into the charge of the electron, Millikan alluded to the virtue of "carefulness" no fewer than thirteen times while describing his methods.[104] Three years later, he charged Einstein with the vice of "recklessness" after he had posited the existence of photons, arguing that this hypothesis "flies in the face of the thoroughly established facts of interference."[105]

Thus, early twentieth-century American historians and physicists upheld similar, empiricist research ideals.[106] They articulated these ideals by means of a set of shared virtues, of which "carefulness," "objectivity," and "thoroughness" were the most prominent ones. American historians even drew direct inspiration from physics. As Peter Novick has argued, the generations of American historians to which Becker, Cheyney,

98. For a broader historical perspective on changing notions of "scientific method" circa 1900, see Cowles, *Scientific Method*.

99. Novick, *That Noble Dream*, 36–39; Kevles, *Physicists*, 80–81.

100. Stieg, *Origin and Development of Scholarly Historical Periodicals*, 45.

101. Novick, *That Noble Dream*, 56.

102. Kevles, *Physicists*, 76.

103. Khelfaoui and Gingras, "Physical Review," 27.

104. Millikan, "On the Elementary Electrical Charge."

105. As cited in Holton, "Subelectrons, Presuppositions," 213.

106. In this they followed nineteenth-century German methodological ideals, which are reconstructed and compared in ten Hagen, "How 'Facts' Shaped Modern Disciplines."

and Fay belonged found in the natural sciences, and in physics in particular, their major model of "scientific method."[107] It is revealing that, in his 1904 presidential address at a meeting of the AHA, Henry Charles Lea praised "the adoption of scientific methods" by American historians, circumscribing their research as "thorough and earnest."[108] In an obituary of Lea dated 1911, Cheyney claimed that "scientific method is much the same to whatever department of knowledge it is applied." He explained this by comparing the methods of history to those of the natural sciences, and by arguing that both were different expressions of one and the same epistemic virtue: "objectivity."[109] A decade later, Cheyney even claimed that history was shaped by "natural laws," such as the laws of continuity and interdependence of historical events and the instability of nations, which he interpreted in analogy with the physical "laws of gravitation."[110] Lea's and Cheyney's remarks illustrate that virtues like "thoroughness" and "objectivity" enabled transdisciplinary exchanges about what counted as proper method and made a good researcher.[111]

Becker was more skeptical about the possibility of strictly objective historical research than Cheyney and Fay. He was among the first and main American proponents of "historical relativism." Historical relativists like Becker no longer adhered to strictly empiricist ideals of "objective method." Surprisingly, however, they continued to draw inspiration from physics, just like those historians who had embraced objectivity as a leading epistemic virtue and rejected subjectivity as a major epistemic vice. As Novick has argued, historical relativists in the 1920s and 1930s understood their notions of "scientific method" to be challenged by recent developments in relativity theory and quantum mechanics. They understood these theories to demonstrate the impossibility of describing nature objectively and applied these "lessons" to history.[112]

The evaluative norms and language of historians and physicists in early twentieth-century America were thus not just *similar* but even interconnected. Their notions of "scientific method" were linked through shared epistemic virtues and vices, such as objectivity, carefulness, and thoroughness. Historians and physicists regularly invoked these shared virtues and vices in their book reviews. Furthermore, they did so in similar ways, that is, to assess knowledge *and* character.

---

107. Novick, *That Noble Dream*, 27. On anglophone notions of "scientific history," see also Hesketh, *Science of History*.

108. Lea, "Ethical Values in History," 246.

109. Cheyney, "On the Life and Works of Henry Charles Lea," xv.

110. Cheyney, "Law in History," 245.

111. As is also noted by Paul in "German Thoroughness in Baltimore," 330.

112. Novick, *That Noble Dream*, 135–40.

CONCLUSION

Returning to the opening controversy of this article, we must conclude that Otto Eisenschiml was right in noting that American historians considered the personality of authors in their book reviews. From their regular application of virtues and vices as norms to evaluate personal character and attitude, we can infer that American historians believed that a good researcher had to meet certain personal qualities in order to produce sound knowledge. In their book reviews, they promoted the virtues of "carefulness," "thoroughness," and "objectivity" and criticized authors whom they deemed guilty of the vices of "dogmatism" or "prejudice." That said, both Eisenschiml and Becker seem to have overlooked that scientific book reviewers, as well, regarded authors' personalities as a relevant issue. As in history, book reviewers in physics used virtue language—more often than vice language—to judge authors themselves.

Apart from claiming, unjustifiably, that scientific book reviewers refrained from discussing the qualities and attitudes of authors, Eisenschiml further claimed that their "fault-finding" was "all with methods, not with men."[113] Again, Eisenschiml was partly right: he was just in observing that, during the first decades of the twentieth century, many a scientific book reviewer paid close attention to method. However, as we have seen, physicists, like historians, regularly evaluated method in terms of virtues such as "honesty" and "carefulness" and vices like "haste" and "conservatism." It is difficult to interpret such evaluations in strictly epistemic terms; they implied a judgment of personal character and attitude, since both historians and physicists considered personal virtue to be of fundamental importance to sound knowledge making.

In sum, historians and physicists reviewing books in the *American Historical Review*, *Physical Review*, and *Science* during the first decades of the twentieth century applied norms like "objectivity" and "dogmatism" to evaluate the process of knowledge making and its results, as well as the character traits and attitudes of the person engaging in that process. Their reinforcement of these norms—which I have framed as epistemic virtues and vices—related to the practical as well as the personal aspects of knowledge making. Indeed, American historians and physicists applied language of virtue and vice to evaluate both knowledge and character.

It is worth asking whether knowledge and character continued to be evaluated similarly and interchangeably in postwar America. Did scholars and scientists assessing the work of colleagues, including book reviewers, still consider their colleagues' personal qualities and attitudes a relevant issue? Or did the personal aspects of knowledge making emphasized by early twentieth-century book reviewers gradually disappear into the background during the second half of the twentieth century? And to what extent did

113. Eisenschiml, *Reviewers Reviewed*, 18.

this differ between the humanities and the sciences? Answering these questions could provide a further substantiation, or nuance, of recent claims that "people and their virtues," to put it in the words of Steven Shapin, have mattered to the making of knowledge in postwar America.[114]

WORKS CITED

Baldwin, Melinda. 2018. "Scientific Autonomy, Public Accountability, and the Rise of 'Peer Review' in the Cold War United States." *Isis* 109 (3): 538–58.

Bazerman, Charles. 1988. *Shaping Written Knowledge: The Genre and Activity of the Experimental Article in Science*. Madison: University of Wisconsin Press.

Becker, Carl. 1914. Review of *The Life of William Pitt, Earl of Chatham*, by Basil Williams. *American Historical Review* 19 (3): 615–16.

———. 1917. Review of *The Mississippi Valley in British Politics: A Study of the Trade, Land Speculation, and Experiments in Imperialism Culminating in the American Revolution*, by Clarence Walworth Halvord. *American Historical Review* 22 (3): 671–74.

———. 1924. Review of *The Causes and Character of the American Revolution*, by H. E. Egerton. *American Historical Review* 29 (2): 344–45.

———. 1930. Review of *Vie de Madame Roland*, by Madeleine Clemenceau-Jacque-Maire. *American Historical Review* 35 (4): 854–56.

———. 1940. Review of *Reviewers Reviewed: A Challenge to Historical Critics*, by Otto Eisenschiml. *American Historical Review* 46 (1): 87–88.

Berry, Edward W. 1929. Review of *Geologie von Peru*, by G. Steinmann. *Science* 70 (1804): 100–101.

Bilhartz, Terry D. 1984. "In 500 Words or Less: Academic Book Reviewing in American History." *History Teacher* 17 (4): 525–36.

Bridgman, Percy W. 1927. Review of *Lehrbuch der Physik*, by Müller-Pouillets. *Physical Review* 29 (6): 897–98.

———. 1928. Review of *Lehrbuch der Thermostatik*, by J. D. Van der Waals and P. Kohnstamm. *Physical Review* 31 (3): 488–89.

———. 1929. Review of *Heat and Thermodynamics*, by J. K. Roberts. *Physical Review* 33 (2): 261–62.

———. 1930. Review of *Handbuch der Experimental Physik. Band VIII. 2. Teil. Physical Review* 35 (7): 873–74.

———. 1930*a*. Review of *Einführung in die Theorie der Wärme*, by Max Planck. *Physical Review* 36 (4): 781.

———. 1930*b*. Review of *Jetziger Stand der grundlegenden Kenntnisse der Thermoelektrizität*, by C. B. Benedicks. *Physical Review* 35 (10): 1301–2.

———. 1932. Review of *Critique of Physics*, by L. L. Whyte. *Physical Review* 39 (6): 1023–24.

Chadwick, J. 1926. Review of *Radioactivity*, by A. F. Kovarik and L. W. McKeehan. *Physical Review* 27 (3): 351–52.

Cheyney, Edward P. 1906. Review of *Die Englische Kolonisation in Irland*, by Moritz Julius Bonn. *American Historical Review* 12 (1): 123–25.

114. Shapin, *Scientific Life*, 1. On the lasting relevance of personal virtue in postwar American physics, see Wang, "Physics, Emotion, and the Scientific Self"; van Dongen, "String Theory." Some indications of the lasting relevance of personal virtue in academic historiography can be found in Paul, "Performing History," 7.

———. 1908. Review of *The Stannaries: A Study of the English Tin Miner*, by George Randall Lewis. *American Historical Review* 13 (4): 841–43.

———. 1909. Review of *The Making of Ireland and Its Undoing, 1200–1600*, by Alice Stopford Green. *American Historical Review* 14 (2): 341–42.

———. 1911. "On the Life and Works of Henry Charles Lea." *Proceedings of the American Philosophical Society* 50 (202): v–xli.

———. 1915. Review of *The Economic Organisation of England: An Outline History*, by William James Ashley. *American Historical Review* 21 (1): 142–44.

———. 1922. Review of *English Government Finance, 1485–1558*, by Frederick C. Dietz. *American Historical Review* 28 (1): 104–6.

———. 1924. "Law in History." *American Historical Review* 29 (2): 231–48.

Cowles, Henry M. 2020. *The Scientific Method: An Evolution of Thinking from Darwin to Dewey*. Cambridge, MA: Harvard University Press.

Dongen, Jeroen van. 2021. "String Theory, Einstein, and the Identity of Physics: Theory Assessment in Absence of the Empirical." *Studies in History and Philosophy of Science* 89:164–76.

Dongen, Jeroen van, and Herman Paul. 2017. "Introduction: Epistemic Virtues in the Sciences and the Humanities." In *Epistemic Virtues in the Sciences and the Humanities*, edited by Jeroen van Dongen and Herman Paul, 1–10. Cham: Springer.

Du Bridge, Lee A. 1932. Review of *Lichtelektrische Zellen und ihre Anwendung*, by H. Simon and R. Suhrmann. *Physical Review* 40 (4): 641.

Eisenschiml, Otto. 1940. *Reviewers Reviewed: A Challenge to Historical Critics*. Ann Arbor, MI: William L. Clements Library.

Engberts, Christiaan. 2021. "Scholarship, Community Formation and Book Reviews: The Literarisches Centralblatt as Arena and Meeting Place." *Studia Historiae Scientiarum* 20:651–79.

Fay, Sidney B. 1914. Review of *Les Sources de l'Histoire de France, XVII Siècle (1610–1715)*, by Émile Bourgeois and Louis André. *American Historical Review* 19 (4): 890–91.

———. 1915*a*. Review of *A History of Diplomacy in the International Development of Europe*, by David Jaune Hill. *American Historical Review* 20 (2): 401–3.

———. 1915*b*. Review of *Geschichte der Befreiungskriege, 1813 u. 1814*, by Heinrich Ulmann. *American Historical Review* 20 (4): 853–54.

———. 1916*a*. Review of *England and Germany, 1790–1914*, by Bernadotte Everly Schmitt. *American Historical Review* 22 (1): 146–48.

———. 1916*b*. Review of *The Evolution of Prussia: The Making of an Empire*, by J. A. R. Marriott and C. Grant Robertson. *American Historical Review* 21 (4): 799–800.

———. 1923. Review of *Die Grosse Politik der Europäischen Kabinette, 1871–1914: Sammlung der Diplomatischen Akten des Auswärtigen Amtes*, vols. 1–6, by Johannes Lepsius, Albrecht Mendelssohn-Bartholdy, and Friedrich Thimme. *American Historical Review* 28 (3): 543–48.

———. 1924. Review of *Die Grosse Politik der Europäischen Kabinette, 1871–1914: Sammlung der Diplomatischen Akten des Auswärtigen Amtes*, vols. 7–12, by Johannes Lepsius, Albrecht Mendelssohn-Bartholdy, and Friedrich Thimme. *American Historical Review* 30 (1): 136–41.

———. 1927*a*. Review of *British Documents on the Origins of the War, 1898–1914*, by G. P. Gooch, Harold Temperley, and J. W. Headlam-Morley. *American Historical Review* 32 (3): 600–603.

———. 1927*b*. Review of *Der Schlüssel zur Kriegsschuldfrage*, by Heinrich Kanner. *American Historical Review* 32 (2): 317–19.

———. 1928. Review of *The Immediate Origins of the War*, by Pierre Renouvin. *American Historical Review* 33 (4): 877–78.

———. 1928. *The Origins of the First World War*. 2 vols. New York: MacMillan.

———. 1930. Review of *Documents Diplomatiques Français, 1871–1914*, by Commission de Publication des Documents relatifs aux Origines de la Guerre de 1914. *American Historical Review* 35 (4): 863–65.

Gelhard, Andreas, Ruben Hackler, and Sandro Zanetti. 2019. "Einleitung." In *Epistemische Tugenden: Zur Geschichte und Gegenwart eines Konzepts*, edited by Andreas Gelhard, Ruben Hackler, and Sandro Zanetti, 1–8. Tübingen: Mohr Siebeck.

Habel, Thomas. 2007. *Gelehrte Journale und Zeitungen der Aufklärung. Zur Entstehung, Entwicklung und Erschließung deutschsprachiger Rezensionszeitschriften des 18. Jahrhunderts*. Bremen: Edition Lumière.

Hagen, Sjang L. ten. 2019. "How 'Facts' Shaped Modern Disciplines: The Fluid Concept of Fact and the Common Origins of German Physics and Historiography." *Historical Studies in the Natural Sciences* 49 (3): 300–337.

Hanchett, William. 1990. "The Historian as Gamesman: Otto Eisenschiml, 1880–1963." *Civil War History* 36 (1): 5–16.

Hartman, Paul. 1994. *A Memoir on The Physical Review: A History of the First Hundred Years*. New York: AIP Press.

Hesketh, Ian. 2016. *The Science of History in Victorian Britain*. London: Routledge.

Holton, Gerald. 1978. "Subelectrons, Presuppositions, and the Millikan-Ehrenhaft Dispute." *Historical Studies in the Physical Sciences* 9:161–224.

Holton, Sandra. 2002. "Gender Difference, National Identity and Professing History: The Case of Alice Stopford Green." *History Workshop Journal* 53 (1): 118–27.

Hyland, Ken. 2004. *Disciplinary Discourse: Social Interactions in Academic Writing*. Ann Arbor: University of Michigan Press.

Jameson, J. Franklin. 1920. "The American Historical Review, 1895–1920." *American Historical Review* 26 (1): 1–17.

Kevles, Daniel J. 1971. *The Physicists: The History of a Scientific Community in Modern America*. Cambridge, MA: Harvard University Press.

Khelfaoui, Mahdi, and Yves Gingras. 2019. "Physical Review: From the Periphery to the Center of Physics." *Physics in Perspective* 21 (1): 23–42.

Kremer, Richard L., and Ad Maas. 2021. "A Tale of Reviews in Two History of Science Journals." *Studia Historiae Scientiarum* 20:755–85.

Lalli, Roberto. 2016. "'Dirty Work,' but Someone Has to Do It: Howard P. Robertson and the Refereeing Practices of Physical Review in the 1930s." *Notes and Records: The Royal Society Journal of the History of Science* 70 (2): 151–74.

Lea, Henry Charles. 1904. "Ethical Values in History." *American Historical Review* 9 (2): 233–46.

Lindholm-Romantschuk, Ylva. 1998. *Scholarly Book Reviewing in the Social Sciences and Humanities: The Flow of Ideas within and among Disciplines*. Westport, CT: Greenwood.

Millikan, Robert A. 1904. Review of *Recherches sur les Substances Radioactives*, by Marie Curie. *Science* 20 (517): 719–21.

———. 1905. "Recent Books on the Physics of the Electron." *Science* 22 (572): 785–90.

———. 1907. Review of *Electrical Nature of Matter and Radioactivity*, by Harry C. Jones. *Science* 25 (634): 300–301.

———. 1913*a*. "On the Elementary Electrical Charge and the Avogadro Constant." *Physical Review* 2 (2): 109–43.

———. 1913*b*. Review of *Radioactive Substances and Their Radiations*, by Ernest Rutherford. *Science* 38 (966): 29–30.

———. 1914*a*. Review of *Photo-Electricity*, by Arthur Llewelyn Hughes. *Physical Review* 4 (6): 560.

———. 1914*b*. Review of *Rays of Positive Electricity and Their Application to Chemical Analysis*, by J. J. Thomson. *Science* 60 (1022): 174.

———. 1915*a*. Review of *Die Lichtelektrizität*, by Wilhelm Hallwachs. *Science* 41 (1069): 943–44.

———. 1915*b*. Review of *The Electron Theory of Matter*, by O. W. Richardson. *Science* 42 (1081): 383.

———. 1922. "Address of Acceptance to the Norman Bridge Laboratory of Physics." *Science* 55 (1422): 330–32.

———. 1923. "Science and Society." *Science* 58 (1503): 293–98.

Niskanen, Kirsti, and Michael J. Barany, eds. 2021. *Gender, Embodiment, and the History of the Scholarly Persona: Incarnations and Contestations*. Cham: Springer Nature.

Novick, Peter. 1988. *That Noble Dream: The "Objectivity" Question and the American Historical Profession*. Cambridge: Cambridge University Press.

Page, Leigh. 1927*a*. Review of *Lectures on Theoretical Physics, Volume I*, by H. A. Lorentz. *Physical Review* 30 (6): 966–67.

———. 1927*b*. Review of *Problems of Modern Physics*, by H. A. Lorentz. *Physical Review* 30 (1): 89–90.

———. 1928. Review of *La Théorie de la Relativité et la Méchanique Céleste*, by Jean Chazy. *Physical Review* 32 (4): 706.

———. 1929. Review of *The Nature of the Physical World*, by A. S. Eddington. *Science* 69 (1798): 624–26.

———. 1930*a*. Review of *Einführung in die Theoretische Physik*, by A. Haas. *Physical Review* 36 (4): 610.

———. 1930*b*. Review of *The Electromagnetic Field*, by Max Mason and Warren Weaver. *Physical Review* 35 (3): 287–88.

———. 1934. Review of *Introduction to Theoretical Physics*, by N. H. Frank and J. C. Salter. *Science* 80 (2086): 590.

Paul, Herman. 2011. "Performing History: How Historical Scholarship Is Shaped by Epistemic Virtues." *History and Theory* 50 (1): 1–19.

———. 2017. "Weber, Wöhler, and Waitz: Virtue Language in Late Nineteenth-Century Physics, Chemistry, and History." In *Epistemic Virtues in the Sciences and the Humanities*, edited by Jeroen van Dongen and Herman Paul, 91–107. Cham: Springer.

———. 2018. "German Thoroughness in Baltimore: Epistemic Virtues and National Stereotypes." *History of Humanities* 3 (2): 327–50.

———. 2019. "Introduction: Scholarly Personae; What They Are and Why They Matter." In *How to Be a Historian: Scholarly Personae in Historical Studies, 1800–2000*, edited by Herman Paul, 1–14. Manchester: Manchester University Press.

Pleshkov, Aleksei, and Jan Surman, eds. 2021. "Book Reviews in the History of Knowledge." *Studia Historiae Scientiarum* 20:629–785.

Roulhac Hamilton, J. G. de. 1937. Review of *Why Was Lincoln Murdered?*, by Otto Eisenschiml. *North Carolina Historical Review* 14 (4): 402–3.

Saarloos, Lejón. 2016. "Virtue and Vice in Academic Memory: Lord Acton and Charles Oman." *History of Humanities* 1 (2): 339–54.

Scheiding, Tom. 2009. "Paying for Knowledge One Page at a Time: The Author Fee in Physics in Twentieth-Century America." *Historical Studies in the Natural Sciences* 39 (2): 219–47.

Schulte Nordholt, Larissa. 2021. "Africanising African History: Decolonisation of Knowledge in UNESCO's General History of Africa (1964–1980)." PhD thesis, Leiden University.

Shapin, Steven. 2008. *The Scientific Life: A Moral History of a Late Modern Vocation*. Chicago: University of Chicago Press.

Sokal, Michael M. 1980. "Science and James McKeen Cattell, 1894 to 1945." *Science* 209 (4452): 43–52.

———. 1999. "Promoting Science in a New Century: The Middle Years of the AAAS." In *The Establishment of Science in America: 150 Years of the American Association for the Advancement of Science*, by Sally Gregory Kohlstedt, Michael M. Sokal, and Bruce V. Lewenstein, 50–102. New Brunswick, NJ: Rutgers University Press.

Stieg, Margaret F. 1986. *The Origin and Development of Scholarly Historical Periodicals*. Tuscaloosa: University of Alabama Press.

Stöger, Alexander. 2021. "Constructing the Persona of the Naturwissenschaftler—German Book Reviews on Galvanism." *Studia Historiae Scientiarum* 20:681–709.

Wang, Jessica. 2012. "Physics, Emotion, and the Scientific Self: Merle Tuve's Cold War." *Historical Studies in the Natural Sciences* 42 (5): 341–88.

Wilson, Charles R. 1938. Review of *Why Was Lincoln Murdered?*, by Otto Eisenschiml. *American Historical Review* 43 (2): 421–22.

Wolf, Ursula. 2001. "Rezensionen in der Historischen Zeitschrift, im Gnomon und in der American Historical Review von 1930 bis 1943/44." In *Antike und Altertumswissenschaft in der Zeit von Faschismus und Nationalsozialismus*, edited by Beat Näf and Tim Kammasch, 419–38. Mandelbachtal: Cicero.