THIRSTING FOR THE FRAY: THE CAMBRIDGE DUNNING OF MR. MACLEOD

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In 1883 Henry Sidgwick complained that, with the recent undermining of the authority of political economy, "utterances of dissent from economic orthodoxy" could obtain a ready hearing. This was of particular concern to those writing and teaching on political economy at Cambridge University. As Henry Dunning Macleod was one of the dissenters named by Sidgwick, it appears odd that Macleod was also recognized as a lecturer in political economy at Cambridge between the late 1870s and mid-1880s. This article examines that peculiar occurrence, showing how Macleod exploited the struggle between reformers and conservatives over teaching reform in the university.

I invariably find that men of the highest intellect are the most easy to convince.

Henry Dunning Macleod

Intellectuals cannot live without pathos.

Richard Rorty

I. INTRODUCTION

The introductory chapter to Henry Sidgwick's *Principles of Political Economy*, published in 1883, was written in an unforgiving mood. In the early 1860s, it had become fashionable "to point to Political Economy as unique among Moral Sciences for the clearness and certainty of its method and the admitted trustworthiness of its conclusions.... In 1871, however, these halcyon days . . . had passed away" (Sidgwick 1883, pp. 2, 4). The rot had set in following the publication in 1869 of *On Labour*, where William Thornton set out his critique of the explanation(s) given for "the laws

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of supply and demand" and wage rates. While Sidgwick did not think much of Thornton's arguments, John Stuart Mill's review of that text had shocked his audience because he had "resigned" the use of the "old" wage fund theory. The "second shock" occurred in 1871 with the publication of W. Stanley Jevons' Theory of Political Economy (TPE), Jevons' declaration of an insurgency against the "noxious authority" of the "Ricardo-Mill school" of political economy exhibited "an attitude almost similar to that which every new metaphysical system has hitherto adopted towards its predecessors" (Sidgwick 1883, pp. 2, 4, 5). In 1877 Francis Galton had attempted to purge Section F (Economic Science and Statistics) from the British Association for the Advancement of Science on the ground that almost all the papers presented to the section were "unscientific" (Henderson 1994). While that maneuver failed, it was instrumental in setting off another round of debate regarding the status of political economy, including J.K. Ingram's 1878 Address as President of Section F, to which Jevons responded in the second edition of TPE published in 1879. Sidgwick did not mention that matter, preferring to cite the criticism of political economy for its "a priori method" by Ingram's friend, T.E. Cliffe Leslie, whose work was also discussed by Jevons in the second edition of TPE (Ingram 1878; Jevons 1879, pp. xv-xviii).1

While Sidgwick acknowledged that there had been some positive theoretical results from the turmoil, he insisted that the critics had exaggerated the "relative importance" of their arguments. Indeed, the criticism "has been carried too far, so that the waves of disputation are in danger of submerging the really sound and valuable results of previous thought" (Sidgwick 1883, p. 7). The principal danger in that regard was that the collapse had occurred in the context of increasing "strife between Labour and Capital," so that there was no secure explanation for the determination of wage rates and, therefore, the distribution of income and wealth. Indeed, important sections of the working classes had moved "somewhat from a sullen distrust to a tone of more confident contempt" for political economy (Sidgwick 1883, pp. 5, 6). Of all the critics responsible for this situation, Jevons was the most to blame for his "rhetoric" in undermining the authority of the discourse. His criticism of David Ricardo was "exaggerated and violent," while his conclusions regarding J.S. Mill were "entirely false or misleading," even "perverse" (Sidgwick 1883, pp. 9–11).

If workers might now be susceptible to notions of exploitation, if not class struggle, there had been a further development with disturbing implications at a more local level. Sidgwick explained that, in the halcyon days, "comparatively little notice" was taken of critics with "loud voices." So, for example, "the elaborate attacks made by Mr [Henry Dunning] Macleod on the received doctrines, [did not] succeed in attracting public attention; his books were bought and read, but were valued almost exclusively for their information on the special subject of Banking." The danger now, however, was that "utterances of dissent from economic orthodoxy"

¹Sidgwick was dismissive, if not contemptuous, of Ingram's approach, as he made clear in his own Address as President of Section F (Sidgwick 1885, pp. 611–616). On Jevons and Ingram, see also Moore 2000, pp. 434–439.

²Even J.E. Cairnes came in for strong criticism as a critic of Mill (Sidgwick 1883, p. 5).

³Sidgwick referred to Macleod's *Theory of Banking* (1855–56) and *Dictionary of Political Economy* (1863). For biographical details of Macleod (1821–1902), see Fryer and Maloney 2004.

could obtain a ready hearing (Sidgwick 1883, pp. 4, 5). This was of particular concern to those writing and teaching on political economy at Cambridge University, such as Sidgwick, Henry Fawcett, Herbert Somerton Foxwell, John Neville Keynes, and Alfred Marshall. With political economy part of the Moral Sciences Tripos, the lecturers were subject to the decisions of the Board of Moral Sciences Studies. If the authority of the discourse was under attack, the position of the lecturers was weakened. Indeed, as will be shown below, given the reforms that had followed debates over lecturing at the university, it was even possible that the board could appoint one of the unorthodox to a teaching position.⁴

In 1879 Jevons had given the question of authority a particular twist for Cambridge by providing in the second edition of TPE some support for the work of Macleod, who was a fierce critic of the "Ricardo-Mill school." The twist was that the Cambridge political economists had just ensured that Macleod was no longer recognized as a lecturer at the university, while fending off his persistent demands for his work to be set as recommended reading for the Moral Sciences Tripos. If Jevons' rhetoric was regarded as irresponsible, his specific analytical contributions, such as the marginal utility theory, were to be taken seriously. In the Preface to his Principles where he discussed his intellectual debts, Sidgwick first mentioned Mill and then TPE, noting that its "leading ideas ... have been continually in my thoughts—though I have had occasion to dissent from Mr Jevons' particular opinions." Those "leading ideas" could ultimately be absorbed, if not subsumed, in that Cambridge would write the dominant perspective on Jevons' work, Macleod, however, was beyond the pale, Sidgwick noting in his Preface that he was "obliged to dissent most strongly from [Macleod's] general treatment of the science" (Sidgwick 1883, pp. v-vi). As Sidgwick was not alone in that regard, it appears odd that Macleod was recognized as a lecturer in political economy at Cambridge between the late 1870s and mid-1880s. This paper explains that peculiar occurrence, setting the story in the context of the responses evoked at Cambridge by Jevons' attack on authority in political economy.

II. JEVONS AND CAMBRIDGE

Although it has been suggested that there was a "general animosity of Cambridge academia towards Jevons's work, as exemplified by Sidgwick and Marshall in particular" (Maas 2005, p. 32n), the response to Jevons was more complicated than this statement indicates.⁵ It is difficult to square, for example, with Jevons' employment as an examiner for the Moral Sciences Tripos in the 1870s. Nor were all the economists hostile, as the cases of John Neville Keynes and Foxwell attest (see below). Even Sidgwick was by no means an unqualified critic. While, as noted above,

⁴On the teaching of political economy in Cambridge at this time, see Groenewegen 1995, pp. 267–270, 302–303; Kadish 1993.

⁵Maas includes the philosopher John Venn in the hostile group. There are some grounds to suspect that the hostile review of *TPE* that was published by the *Saturday Review* in 1871 was, in part, a response to Jevons' criticism of the teaching of mathematics at Cambridge (Black 1973–81, 7, pp. 152–157; White 2001, p. 219n). For discussion of the mathematical issues raised by the review, see Grattan-Guinness 2009.

he was unsparing in his denunciation of the rhetoric Jevons had used when characterizing the work of Ricardo and Mill, Sidgwick also informed Foxwell that

I accept Jevons' doctrine of "final utility" as in the main true, and as an important addition to the older theory: but I am not prepared to say that the modification thus introduced into the theory of value as explained (e.g.) by Mill is enough to make me regard Jevons' doctrine as a new basis. But I am quite content to be described in general terms as a follower of Jevons.⁶

That statement was consistent with the analysis in his *Principles* where Sidgwick argued that Jevons' "doctrine" had made an important analytical contribution by providing a "clearer and completer view" of demand than had Mill (Sidgwick 1883, pp. 74–77, 187–188). This was the basis of what became the dominant Cambridge view of *TPE*: while Jevons' doctrine of final utility was important, it was only an addition to, rather than a theoretical break with, the existing corpus of theory. It is difficult, however, to characterize someone who was publicly "quite content to be described in general terms as a follower of Jevons" as driven by an animus towards his work.⁷

The same cannot be said of Alfred Marshall, whose *Principles of Economics* provided a more negative variant, so far as Jevons was concerned, of the Cambridge view of analytical continuity. In a discussion of nineteenth-century British value theory, Marshall portrayed Jevons as a critic who had reacted against his predecessors' emphasis on cost of production—and hence supply—by exaggerating the importance of demand as explained by a marginal utility theory (Marshall 1961, pp. 817–821). The import of that sketch was not simply that a necessary analytical balance had been restored. As Langford Price explained in the newly established *Economic Journal*, the authority accorded Marshall's text would serve to construct the image of economics as an authoritative discourse. If the situation had remained as it was after the publication of Jevons' attacks on the authority of the "orthodox" school in the 1870s.

the charge of suspense and uncertainty, of confusion and discord, which has sometimes been brought against economics, would have seemed impossible of refutation. It is due to the constructive ability of Professor Marshall that so serious a reproach has now been removed ... In restoring unity to the theory of value, Professor Marshall has also imparted unity to the whole of economic science (Price 1892, pp. 30, 31).

Relying on the authority of the great helmsman to write an assessment of Jevons' contributions could, however, be tricky at Cambridge. In early 1901 John Neville

⁶H. Sidgwick to H.S. Foxwell, 21 November 1886, Richard D. Freeman Collection (RDF). "Final utility" can be read here as "marginal utility." Further complicating the Cambridge responses to *TPE*, an unsigned, highly favorable, review, which cited Jevons' criticism of the noxious influence of authority with approval, was published by the *Athenaeum* in 1871. The editor's marked copy of the journal, held at the library of City University London, indicates that it was written by Millicent Garrett Fawcett (Fawcett 1871).

⁷Foxwell cited Sidgwick's phrase in a letter of 26 November 1886 to Leon Walras, writing that Sidgwick had "authorized" the citation (Jaffe 1965, p. 160).

Keynes completed a draft of an entry on Jevons for the *Encyclopaedia Britannica*. The published version argued that

In his reaction from the prevailing view [Jevons] sometimes expressed himself without due qualification: the declaration, for instance, made at the commencement of the *Theory of Political Economy*, that "value depends entirely upon utility," lent itself to misinterpretation. But a certain exaggeration of emphasis may be pardoned in a writer seeking to attract the attention of an indifferent public (Keynes 1911, p. 361).⁸

While Keynes was clearly following Marshall's reading of TPE, he received a sharp response when he sent a draft of the entry to his colleague Foxwell, who had met Jevons at Cambridge in the mid-1870s when they were both examiners in the Moral Sciences Tripos. Foxwell had probably been Jevons' closest friend in the last years of his life and had also edited his Investigations in Currency and Finance (Jevons 1884). Responding to Keynes, Foxwell began by noting that he had rejected an offer to write the entry because he considered that it was "out of the question to attempt to give an adequate notice of such an important & original man ... in two columns of the Encyclopaedia." Nevertheless, the entry was "as good an estimate as was possible within the absurd limits of space assigned." Foxwell's "only important point of difference ... is where, agreeing with Marshall, you say that Jevons' principle of marginal utility is only of coordinate importance with the principle of cost of production. Many persons were astonished at Marshall's position on this point when his *Principles* appeared." For Foxwell, Jevons' principle was the "universal" rule of value that was crucial for explaining the prices of irreproducible commodities, which were "of enormous importance in practice." Indeed, Marshall's "typical case of strict mutual determination [is] much more rarely reached than he assumes."9

Foxwell's claim that "many persons were astonished at Marshall's position" on Jevons was not evident in the early published reviews of, and responses to, the *Principles*. On the contrary, commentators such as Price (see above) fully endorsed the analysis. While Foxwell's evident irritation was expressed at a time of tension with Marshall regarding his teaching, ¹⁰ it reflected a markedly different assessment of the relative merits of Ricardo and Mill as compared with Jevons. In that regard, Marshall displayed a consistent pattern in his published comments. While he was willing to praise Jevons' statistical work, the marginalist theory of value and distribution published as *TPE* was a very different matter. Here, Marshall's approach was one of denigration, a pattern set in his "rather peevish and condescending" review of *TPE* in 1872, where Jevons was "damned with faint praise" (Whitaker

⁸For the comments that Keynes was referring to, see Jevons 1879, pp. 1–2, 174–180.

⁹H.S. Foxwell to J.N. Keynes, 24 January 1901 (J.N. Keynes papers, 1/49, Marshall Library of Economics, University of Cambridge). Keynes responded that he would attempt to "tone down the statement to which you particularly objected" (Keynes to Foxwell, 24 January 1901 (RDF)), although he had sent the article to the *Encyclopaedia Britannica* in the previous week (J.N. Keynes diary, Cambridge University Library, 17 January 1901).

¹⁰Groenewegen 1995, pp. 674–675; Whitaker 1996, 2, pp. 317–321. For an overview of the changes in the relationship between Foxwell and Marshall, see Freeman 2006a.

2006, p. 574).¹¹ An unsigned commentary published in 1874 also undermined the originality of Jevons' analysis (Whitaker 1995), although the most detailed critique of Jevons' value theory appeared in the *Principles*. Accepted from the first by many economists, that depiction of *TPE* was, and remains, highly influential.

Marshall's hostility can be traced, in part, to a series of analytical concerns. Patronizing references to Jevons' mathematical ability were reinforced by Marshall's inference that Jevons did not understand the twin roles of demand and supply in explaining prices. While there was alarm at Jevons' erasure of equity considerations in *TPE* and elsewhere, Marshall was also incensed by Jevons' attacks on Ricardo and Mill. This produced a marked personal edge to the commentary, as did Marshall's claims that he had independently discovered the analytical approach that Jevons took to wages and, more importantly, that he had produced a marginal utility theory before reading *TPE*. Even if the available evidence does not support the latter claim, Marshall's criticism was unrelenting. In an introduction to an appeal for a Jevons Memorial in 1883, he again praised Jevons' statistical work while harping on the perceived negative aspects of *TPE* (Whitaker 1996, 1, p. 164). With important analytical matters at stake, Marshall's commentary was carping in tone and misleading in content.

By contrast, Jevons' comments on Marshall's work were consistently favorable. In the second edition of TPE published in 1879, he referred to Marshall's "ingenious [analysis of] mathematico-economic problems, expounded more geometrico" in The Pure Theory of Foreign Trade. The Pure Theory of Domestic Values, which had been privately printed by Sidgwick (Jevons 1879, p. xlv). F.Y. Edgeworth recorded that Jevons had "highly praised the then recently published *Economics of Industry*" by Alfred and Mary Paley Marshall when it appeared in the same year (Pigou 1925, p. 66). A letter from Alfred Marshall to Jevons, written in early December 1879, also indicates that Jevons had praised the book and informed Marshall that he had set the Economics as the "first textbook" for examinations at the Institute of Bankers in London (Whitaker 1996, 1, p. 122). That Jevons was unfazed by Marshall's critical review of TPE was consistent with his making no recorded response when (although he was not named directly) his formulation of value theory was criticized in the Economics of Industry (Marshall and Marshall 1879, pp. 145, 148). Indeed, in The State in Relation to Labor, Jevons referred to the "ingenious" analysis of trades unions in the Marshalls' text (Jevons 1882, p. 108; cf. Marshall and Marshall 1879, pp. 206–207).

While the written record indicates a consistently favorable response, particularly with regard to the *Economics of Industry*, John Whitaker has suggested that Jevons was not completely honest with Marshall about the adoption of the book at the institute. Another letter, written to Foxwell, had indicated that Jevons was "less than flattering" on the matter (Whitaker 1996, 1, p. 122n). If that was the case, Jevons' recorded responses to the book exhibited a marked degree of disingenuity. I suggest in section V, however, that was not the case and that his comments were concerned instead with the difficult figure of Henry Dunning Macleod.

¹¹The review has been reprinted in a number of places. Pigou 1925, pp. 93–100, is particularly useful as it contains some subsequent remarks by Marshall.

¹²Groenewegen 1995, pp. 158–162, 665; White 1990 and 1996.

III. CAMBRIDGE WISEACRES

Jevons' comment, to which Whitaker refers, appeared in an exchange of letters with Foxwell in November 1879. Before considering that comment directly, it will be useful to explain the context of the letters that followed the publication of the second edition of *TPE*. This had produced some consternation at Cambridge for two reasons. The first was Jevons' perceived claim for analytical priority in formulating a new theory of wages (Jevons 1879, pp. xlvii–lvi; Black 1973–81, 5, p. 78). The second was that Jevons had added a series of remarks to *TPE* regarding the work of Macleod. The remarks were both cryptic and puzzling, reflecting Jevons' difficulty in publicly commenting on Macleod's work. On the one hand, he thought that Macleod deserved praise for some aspects of his work that had often been treated in a disparaging manner by other commentators. On the other hand, he strongly disagreed with a number of Macleod's arguments. Jevons' solution was to (guardedly) praise Macleod and to hint at some disagreement, thereby avoiding any direct criticism (White 2003; 2004).

Although Jevons' attacks on authority were a source of continuing concern to Foxwell, Jevons appears to have been unmoved. In 1875, for example, he told Foxwell that "I have heard several other men connected with the London University speak like you as if the recognition of the Moral Sciences hung by a thread, so that they might be thrown over altogether in consequence of the least indiscretion. But I trust that the authorities of the universities are not quite so narrow minded" (Black 1973-81, 4, p. 116). 13 Foxwell, however, continued to urge caution in matters of "controversy." Following the publication of Jevons' Logic primer in the following year, he wrote, "I might perhaps object to the slightly controversial tone of certain paragraphs e.g. 100, 103, 104, 111. It seems to me a child ought not to be introduced to difference of opinion in an elementary book." ¹⁴ If the passages to which Foxwell referred now appear innocuous, he was deeply alarmed following the publication of the second edition of TPE. Acting as mediator between Jevons and Cambridge. Foxwell urged Jevons to avoid using language that gave "much irritation ... to many men here. Very likely vou don't care; but I feel that the science suffers whenever there are unnecessary antagonisms and heated feelings braising the chief writers and teachers: and if I could do anything to reconcile them, I should feel it was perhaps worth while living to do so" (Black 1973–81, 5, p. 78). He thus attempted to smooth the ruffled Cambridge feathers and explained to Jevons how his remarks about

¹³Although he did not explain that comment, Jevons might have been referring, in part, to the proposed exclusion of political economy from the newly established Faculty of Science at University College London in 1870. Following a strong letter by J.E. Cairnes, where he complained that the proposal would undermine the authority of the discourse and, therefore, his own teaching, it was decided that "the Professor of Political Economy [would] be included in the new Faculty" (*University of London. Council Minutes*, Vol. 6, 1865–76, 7 May, 4 June, and 2 July 1870; Cairnes to John Robson, 1 June 1870, University College London Archive).

¹⁴Jevons Archive, John Rylands University Library of Manchester, JA 6/2/141a. (Cf. Jevons 1876, pp. 71, 73–74, 77–78). Jevons was somewhat irritated by Foxwell's conservatism regarding the primer (Jevons to Foxwell, 25 June 1876. Special Collections, University College London, Ms. Misc.3J).

analytical priority had generated the "irritation." ¹⁵ Macleod, however, was a different matter

As a graduate of Trinity College, Macleod had a longstanding interest in the possibility of teaching of political economy at the university. In January 1861 he wrote to his friend, the sometime political economist John Hill Burton, that Cambridge

has recently taken the laudable step of doing something to promote the Science of Political Economy, and has instituted a "Moral Sciences Tripos" [...] that is it will in future grant degrees in a group of subjects of which Political Economy is one.

In order to aid in this commendable step, I am going to give a Lecture at the Philosophical Society there on the 11th of February—"On the present State of the Science of Political Economy"—at which authorities of the University or a good many of them, will be present.¹⁶

Although it has not been possible to trace the lecture and any responses to it, Macleod had some basis for thinking that his analysis of credit and money was gaining ground at the time. In January 1860 he had written to J.E. Cairnes requesting some brief biographical information for his projected *Dictionary of Political Economy* (1863). Cairnes' Character and Logical Method of Political Economy had included an angry appendix that attacked Macleod's critique of J.S. Mill's value theory (Cairnes 1857. pp.173–177). Macleod informed Cairnes that he had just become aware of the critique and he enclosed a letter from Michel Chevalier, professor of political economy at the College de France, which announced that, as a result of Macleod's work, the French economist "has found it necessary to modify his own opinions." Cairnes' response was brusque in refusing to supply any biographical details: "such services as I have rendered to political economy not being, as I believe of a kind that the public can be supposed to have the slightest interest in any information concerning me." Moreover, he still considered that the "disrespectful tone" he had adopted in the Character with regard to Macleod was justified because of the "unwarrantable language which you had adopted towards present writers." Nevertheless, Cairnes agreed with "much" of what Chevalier had said in his letter regarding Macleod's Elements of Political Economy (1858): "I read that work with much instruction and, for the most part, also with pleasure. The analytical power of dealing with monetary phenomena, and the acquaintance with the history and mechanism of our monetary system, which it displays, are such as I think have seldom been equalled."17

¹⁵Although Marshall was in Bristol at the time, Foxwell's remarks suggest that he was an aggrieved party. Others were also irritated (Black 1873–81, 5, p. 78).

¹⁶H.D. Macleod to J.H. Burton, 19 January 1861, National Library of Scotland, MS9396, 137–37. For the establishment of the Moral Sciences Tripos and the teaching of political economy at Cambridge before 1860, see Rashid 1980; Palfrey 2002.

¹⁷The letter from Chevalier to Macleod is not included with the letters from Macleod to Cairnes (3 January 1860) and Cairnes to Macleod (5 January 1860), which are in Section 3, Volume 4, of the "Letter Collection," British Library of Political and Economic Science, London School of Economics. Cairnes also drew Macleod's attention to an unsigned article published in 1858 where he had praised Macleod's *Elements* (Cairnes 1858, p. 215n).

It might well be suspected that Macleod's use of "unwarrantable language" governed the reception of the paper he gave to Section F of the British Association for the Advancement of Science meeting at Cambridge in 1862. The paper summarized Macleod's credit theory of money, arguing that political economy should be presented in a mathematical form and that, in general, it should be made more like physics (Macleod 1862). The *Cambridge Chronicle* reported that the paper had "excited some attention, because it had been publicly stated that M. Chevalier had expressed his entire concurrence with the views of Mr. Macleod." This was a reference to a pamphlet, presumably the work of Macleod, which reprinted an article by Chevalier from the August issue of the *Journal des Economistes*. The pamphlet had particular pertinence for Cambridge as Chevalier's *Cours d'Economie Politique* (1842–50) had been listed as recommended reading by the Board of Moral Sciences in 1860. 19

Given Cairnes' remarks and "armed with M. Chevalier's authority" (De Morgan 1862), Macleod might have thought he would receive a favorable reception at Cambridge. If that was the case, he was deeply mistaken. Following the presentation of the paper, a

short discussion followed, in which general astonishment was expressed that any political economist of eminence could concur in the opinions so ambiguously expressed as those of Mr. Macleod. The President of the section brought discussion to a close after several speakers had pointed out the unintelligibility of the author's views.²¹

Henry Fawcett had apparently been vocal in that regard as Macleod subsequently told Foxwell that Fawcett had "jeered down" his paper "in the most insolent manner." The scorn was undiminished when Macleod's understanding of mathematics was subsequently criticized and mocked in anonymous articles by Augustus de Morgan (Jevons' mathematics lecturer at University College London) and Leslie Stephen. 23

Thirteen years later, in 1875, Macleod wrote to Foxwell from the Oxford and Cambridge Club in Pall Mall. He asked Foxwell, as a member of the Board of Moral Sciences Studies, to support the placing of the two volumes of his *Principles of Economical Philosophy* on the board's list of recommended reading in political

¹⁸An abstract of Macleod's paper was published in *The Parthenon* 1, 27 (1 November 1862): 851–852. For discussion of Macleod's credit theory of money, see Skaggs 1997 and 2003.

¹⁹Cambridge Chronicle and University Journal (4 October 1862): 6. For the pamphlet, see De Morgan 1862 and *The Parthenon* 25 (18 October 1862): 778. For the Tripos listing of Chevalier's text, see Minutes, Board of Moral Sciences Studies (BMSS), University of Cambridge Archives, Min. V. 10, May 1860.

²⁰A summary of Jevons' marginalist economics project was also read to the meeting. Although he did not go to Cambridge, Jevons concluded that his paper was received with indifference (Black and Konekamp 1972, p. 188; Grattan-Guinness 2002, pp. 701–703).

²¹Cambridge Chronicle and University Journal (4 October 1862): 6. The report in the Chronicle was reprinted in *The Times*, 7 October 1862, p. 7.

²²H.D. Macleod to H.S. Foxwell, 17 February 1875 (RDF).

²³De Morgan 1862; Stephen 1863. For the attribution of those articles, see White 2004. Stephen's unsigned article appeared when he was the chief organizer for the campaign to elect Fawcett to the Cambridge political economy chair.

economy (Macleod 1872; 1875). Two years before, "after considerable discussion," the board had listed four texts as recommended reading: Fawcett's *Manual of Political Economy* (1863); Cairnes' *Character and Logical Method*; J.S. Mill's *Principles of Political Economy* (Books I–III); and Adam Smith's *Wealth of Nations* (Books III–IV).²⁴ It is relevant for what follows to note that Macleod had been an unsuccessful candidate when Fawcett was elected professor of political economy at the university in 1863, and, as was mentioned above, Cairnes' book contained an angry attack on Macleod.

Foxwell's reply to the 1875 request was, apparently, not encouraging. Macleod's next letter recalled the treatment he had received at Cambridge in 1862. As far as Macleod was concerned, however, he had been vindicated because his analysis of credit and money had been endorsed by "the most eminent men in every country." He referred Foxwell to the many testimonials to his work that were reprinted in his *Principles*, so that "you will see better on which side the weight of authority rests." The Cambridge economists were "wonderful wiseacres" in that they "may as well run their heads against King's College Chapel as against me." 26

Foxwell then informed Macleod that Fawcett was not his only problem at Cambridge. Marshall and Sidgwick were also disturbed by Macleod's attack on Ricardo's rent theory. Macleod had devoted a chapter in the first volume of his Principles of Economical Philosophy to restating his longstanding critique, characterizing Ricardo's theory, in typically restrained fashion, as a "purely arbitrary and futile" analysis that could not be "received by any sane man." Macleod had also discussed at some length in the *Principles* how his particular supply-and-demand analysis was based on his experiences in Scotland. That would explain his dismissive comment to Foxwell that the criticisms of Marshall and Sidgwick were irrelevant because they could not "ever possibly have had the practical experience of the subject I have had." Foxwell had also apparently mentioned the critique of Macleod's work in Cairnes' Character and Logical Method. Here, Macleod retreated to the moral high ground: it was "little creditable to the University that such a book should be recommended containing as it does such a coarse attack on me."²⁸ Of course, it was all to no avail. Two years later, however, Macleod was a "recognized" lecturer, having successfully exploited the struggle between the reformers and conservatives in the university.

²⁴H.D. Macleod to H.S. Foxwell, 15 February 1875 (RDF); BMSS, 31 May 1873.

²⁵ "Apparently" because only Macleod's side of the correspondence seems to be extant; see Fryer and Maloney 2004.

²⁶H.D. Macleod to H.S. Foxwell, 17 February 1875 (RDF). For the testimonials, see Macleod 1872, pp. xiii–xix.

²⁷Macleod 1872, ch. x, esp. pp. 662, 675, 677. Characteristically, the criticism, including a strong attack on J.S. Mill, was reiterated at the beginning of Volume 2 (Macleod 1875, pp. 20–23). For further evidence of Marshall's hostility to Macleod at this time, see Whitaker 1996, 1, pp. 82, 93. Marshall was, however, sometimes prepared to be more generous. In lectures delivered c. 1871, he approvingly referred to Macleod's critique of Adam Smith on productive labor and capital (Cook forthcoming, Ch.5). Marshall also noted subsequently that his own theory of quasi-rent had been stimulated, c. 1868, by Macleod's criticisms of Ricardo and Mill regarding the relation between rent and cost of production (Whitaker 1996, 2, pp. 412–413; idem. 1975, pp. 261–262).

²⁸H.D. Macleod to H.S. Foxwell, 21 February 1875 (RDF).

IV. RECOGNITION OF SORTS

Macleod's recognition occurred in the context of the extensive debates, Royal Commissions, and government legislation regarding the reform of Oxford and Cambridge during the 1870s.²⁹ In 1873 the third report of the Royal Commission on Scientific Instruction had "commented on the inadequacy of the stipends of many of the Professors of science, the need of developing the system of intercollegiate lectures, and the very large number of fellowships held by non-residents." As this suggests, much of the debates at Cambridge concerned the relative power and financial relations between the university and the colleges. In early 1875 the Vice-Chancellor moved in the Senate for the appointment of a Syndicate that would enable the university to "enlarge and improve its system of education," in part by extending the provision of intercollegiate lectures. The proposal met considerable opposition as it was considered to be the "thin end of the wedge" in the Syndicate's "desire to subordinate the Colleges to the University" (Winstanley 1947, pp. 265, 278, 284). Nevertheless, the reformers succeeded, and, in May 1877, the Senate agreed, *inter alia*, that

Any College Lecturer who with the concurrence of his College throws open all or any of his Lectures to the whole University or any graduate of the University who proposes to give Lectures open to the whole University might apply to the Board of Studies connected with the department to which the lectures belong.³⁰

As a graduate of Trinity College, Macleod seized the moment and applied to the Moral Sciences board for recognition. At the board meeting that considered the issue, only five members were present so that, although Fawcett was absent, Sidgwick, Marshall, and Foxwell were in the majority. Making the best of the situation, the board resolved that, "without pledging themselves to any general principle of recognition," all current applications, including Macleod's, would be accepted. A fortnight later, Marshall was absent when Macleod attended a meeting of the board where it was confirmed that he would lecture three times a week on the "History of Economic Science" in the 1877 Michaelmas term.³¹

²⁹Winstanley 1947, chapter 7; Deane 2001, pp. 44–51.

³⁰Cambridge University Reporter (24 April 1877): 384; (8 May 1877): 411.

³¹BMSS, 2 and 15 June 1877; *Cambridge University Reporter* (12 June 1877): 512. Marshall took up his position as Principal and professor of political economy at Bristol University College in July, beginning a period of "exile" from Cambridge that was to last until 1884. A referee has suggested it seems "very odd" that Macleod was appointed to lecture on "History of Economic Science" because "it was his view of the history of economics to which Cambridge above all objected. If they had the power to turn him down, they must also have had the power to tell him to teach something else or not teach at all." It should be noted, however, that Cambridge objected to Macleod's work on a number of topics (see above) and the available evidence suggests that the Moral Sciences board had little control over the contents of a "recognized" lecturer's teaching. Moreover, an advertisement for Macleod's lectures indicated that, consistent with his general approach, the historical component would form an introduction to an examination of "the fundamental conceptions of the science which are necessary for the exposition of the Mathematical and Juridical Theory of Credit" ("Mr. H.D. Macleod's Lectures on Political Economy," *Cambridge University Reporter* 212, 23 (October 1877): 59). Macleod subsequently lectured under the general heading of "Economics."

Given the hostility to Macleod by the economists, it seems odd that the board recognized him as a lecturer. Three possible factors, however, can help explain the decision. The first is that no one was particularly clear as to the implications of the Senate decision and, hence, as to whether it could be, in effect, ignored. The second is that, because the board had no responsibility for the lecturer other than recognition, it might have been thought that Macleod would have difficulty in obtaining lecturing facilities. The third factor is that Macleod had an important ally on the Moral Sciences board. All three factors are suggested in correspondence between Macleod and the university Vice-Chancellor, Edward Atkinson, Shortly after his recognition. Macleod wrote to Atkinson, reminding him that when, with the help of Professor Birks, he had previously contacted the Vice-Chancellor because of "difficulties in the way of my having one of the public lecture rooms, you kindly interested yourself & obtained the permission of the Master & fellows of Trinity College for me to lecture in the College."³² The reference here was to Thomas Rawson Birks, Knightbridge professor of moral philosophy from 1872. president of the Moral Sciences board, who was sympathetic to Macleod and a thorn in the side of the political economists.³³ If Macleod had an ally against the economists on the board, the Vice-Chancellor's response suggested the confusion at the time from which Macleod had benefited. Atkinson noted that there was no significance in his helping to obtain the Trinity lecture room. He had only done so "under a mistaken notion of what I was bound to do." Having now consulted the Council of the Senate, he had concluded that he had been under no obligation to provide a room, "it was not desirable for me to do so," and the episode would not be repeated.³⁴

If Macleod had some luck with the confusion at the time, Fawcett was furious at the decision of the Moral Sciences board. In September, J.N. Keynes reported that "Fawcett is very much annoyed at the recognition of Macleod by the Moral Sciences Board, & even talks of resigning his seat on the Board; but I hope he will think better of that. His influence and vote are I suppose generally on the right side contra Birks." The minutes of a subsequent meeting indicate that Fawcett blamed Birks for his absence at the meeting where Macleod had been recognized. When Macleod's appointment was discussed again at Fawcett's initiative, it was resolved that, "for the future, important subjects for discussion were always . . . [to appear] on the notices of meetings." ³⁶

Remarkably, albeit characteristically, Macleod then provided further ammunition for his enemies by failing to complete his lectures. Again, however, he was able to exploit the new regulations and the divisions on the Moral Sciences board. The university Syndicate had recommended that recognition of lecturers "shall continue

³²Macleod to Atkinson, 27 June 1877, Atkinson Correspondence, University of Cambridge Library, Add.6582 (384).

³³Cf. Groenewegen 1995, p. 665; Macleod 1884, p. 11. John Neville Keynes recorded in December 1877 that "Foxwell tells me that the Tripos Political Economy papers are scandalous. They must have been set chiefly by Birks." John Neville Keynes diary, 6 December 1877, Cambridge University Library.

³⁴Atkinson to Macleod, 2 July 1877, Atkinson Correspondence, University of Cambridge Library, Add.6584 (774).

³⁵J.N. Keynes to H.S. Foxwell, 13 September 1877 (RDF).

³⁶BMSS, 8 October 1877.

in force until withdrawn by the Board, provided that the Lecturer deliver in each year at least one course of open Lectures approved by the Board. If this condition be not fulfilled the recognition shall become void, but again may be given on a fresh application."³⁷ When the Moral Sciences board met in May 1878, Birks was absent, due to illness. The minutes recorded that "a letter was read from Mr. Macleod" and a "provisional scheme of lectures" was drawn up for 1878–79. In a letter to Birks, written shortly after, Macleod apologized for not attending a meeting of lecturers recognized by the board and assured Birks that he would, in the following term, complete the course of lectures "I should have finished . . . only I was requested by some Banks to give a course of lectures on Credit & Banking" (cf. Macleod 1884, pp. 11–12). Birks forwarded the letter to Foxwell³⁸ and Macleod remained as a lecturer for the 1878 Michaelmas term.³⁹

Although his name was then erased from the list of recognized lecturers for the 1879–80 academic year, 40 Macleod was not finished with the board. In May,

Mr. Levin presented a letter from Mr. Macleod of Trinity College, urging the Board to place certain of his works upon their lists and enclosing testimonials in support of his application.

It was agreed to defer the consideration of Mr. Macleod's communication until a suitable opportunity should arise for reconsidering the list of books in Political Economy.⁴¹

This was not simply a stalling tactic, as the board confirmed in early June that the recommended texts would remain those of Cairnes, Fawcett, Mill, and Smith.⁴² Macleod and his works had apparently been banished from economics at Cambridge. From Bristol, Marshall recorded his approval (Whitaker 1996, 1, p. 109).

It was in that context that the second edition of Jevons' *TPE* was published, with its carefully ambiguous praise for Macleod and the addition, in the concluding section on "The Noxious Influence of Authority," of Macleod's name to the list of heretics whose work had been unjustly neglected by the dominant "orthodox Ricardian school," which included Mill and Fawcett (Jevons 1879, pp. 298–300). Moreover, eager to debate his absolute and relative merits, Macleod was making forays to the Fens, where the list of recommended reading for the special examinations in political economy had not been settled at the Moral Sciences board. Foxwell, who had either chosen or been delegated to deal with Macleod, was far from pleased.

³⁷Cambridge University Reporter (24 April 1877): 385; (8 May 1877): 411.

³⁸BMSS, 29 May, 1878. H.D. Macleod to T.R. Birks, 10 June 1878; Birks to Foxwell, 17 June 1878 (RDF).

³⁹Cambridge University Reporter (18 June 1878): 623.

⁴⁰Cambridge University Reporter (10 June 1879): 697.

⁴¹BMSS, 14 May 1879. T.W. Levin was a lecturer in moral sciences at St. Catherine's College and stood against Marshall for the Cambridge political economy chair in 1884.

⁴²Cambridge University Reporter (3 June 1879): 662. Foxwell was now the board's secretary.

⁴³A decision on the matter was deferred at the board's December meeting (BMSS, 10 December 1879).

V. BANKING ON THE MARSHALLS

It has been suggested that Macleod's failure to obtain a chair in political economy. despite repeated applications to a number of institutions, was due to the opprobrium that followed his being jailed as one of the directors of the Royal British Bank, which failed in 1856 (Taylor 2005, p. 248n). While it would not be surprising if that factor was important, the marked hostility that often greeted Macleod was also due to his dogmatic and repetitive writing style, vitriolic attacks on other economists such as Ricardo and Mill, abrasive personality, and vanity.⁴⁴ It was the latter two matters that were foremost in a letter from Foxwell to Jevons, written in November 1879. Macleod had again been pressing his case in Cambridge and he was unimpressed after Foxwell recommended that he read the second edition of TPE. In a letter written from Trinity College on November 6, he told Foxwell that "I have looked over Mr. Jevons' book, and I find that he is exactly following in the path I struck out 24 years ago."45 Six days later, Foxwell sarcastically reported to Jevons that Macleod "says your theory is substantially what he published 25 years ago, except that *you carry* mathematics too far, beyond the point at which it can be practically used !!! (This means beyond the point at which H.D.M. can follow you)." Foxwell also complained that the irascible Scotsman

has been at me again: three hours in three days. If you will excuse my speaking frankly, I think you have conveyed a rather false impression to him and others of the way in which you speak of him in your preface, and in the new edition of the Theory. . . . I ought to say that Macleod is by no means satisfied with your notice. He says you cast a vague slur on him without mentioning what are the points in which you disagree with him. *He is thirsting for the fray*. I sincerely trust he won't begin to bore you with a personal exposition of his discoveries and other claims to personal recognition, as he does us up here (Black 1973–81, 5, pp. 77, 78).⁴⁶

Foxwell also referred to his own lecturing on the Marshalls' *Economics of Industry* and noted that he "should very much like to know how far you would be satisfied to use it as a text-book" (*ibid.* p. 78). In his response, written two days later, Jevons noted that

As regards Macleod I do not wish to enter into any dispute. I have said the most civil things I can of his books, and I see no need to dwell upon his errors because they are not likely to do any harm.... I have of course got Marshall's book but have not really been able to read it with care [due to the pressure of marking examination papers].... From what I gathered in a cursory reading of the "Economics," together with reliance on Marshall's scientific powers & the careful revision it had undergone, I welcomed the book as getting me out of a difficulty in regard to the Bankers' Institute Examinations for which I have proposed it as the first text book. I hope however the

⁴⁴"I represent in my person the whole body of Mercantile Lawyers in the world—the whole body of practical men of business—all qualified mathematicians—the whole body of the founders of Economics, and the most distinguished modern ones ..." (Macleod 1892, p. 9).

⁴⁵H.D. Macleod to H.S. Foxwell, 6 November 1879 (RDF).

⁴⁶All emphases in quotations appear in the original material.

Athenaeum is not right in claiming the book as written *on the lines of Mill* exclusively. I thought there was much divergence (Black 1973–81, 5, pp. 79–80).⁴⁷

It was Jevons' reference to having "welcomed the book as getting me out of a difficulty in regard to the Bankers' Institute Examinations" that, John Whitaker suggested, indicated he was "less than flattering" about the *Economics of Industry* (Whitaker 1996, 1, p. 122n). That conclusion seems doubtful for three reasons. First, Jevons' references to Marshall's "scientific powers" and "careful revision" were far from disparaging. Second, the note of doubt in the letter was because Jevons had set the book on a "cursory reading" and was now concerned, following the remark in the *Athenaeum*, that the analysis was too similar to that of his *bete noir*, J.S. Mill. The worry, in other words, was due to his not having read the text "with due care" at that point. The third reason is that, while Jevons did not explain the basis of his "difficulty" at the institution, it is possible to identify a reason for it that was related to Macleod, rather than to any criticism of the Marshalls' text.

When Macleod visited Foxwell at Cambridge, there had evidently been a disagreement, expressed in strong terms, as to Macleod's analytical merits. Referring to that discussion in a letter to Foxwell written on November 17, Macleod defended his work. Responding to Foxwell's report that mathematicians at St. Johns College were dismissive about his mathematical ability, Macleod retorted that, after he had sent a copy of his *Economics for Beginners* (1878) to James Clerk Maxwell, the physicist had informed Macleod that "so far as regarded my method of treating the subject we were 'both in the same boat' and that instead of treating Economics in the manner of Physics (as I have done) he treats Physics on the principle of bookkeeping (Economics)." Although it has not been possible to trace Maxwell's letter, Macleod's report is consistent with a number of remarks in *Matter and Motion* (1877), Maxwell's introductory account of energy physics. Explaining his treatment of dynamics, Maxwell wrote:

In commercial affairs the same transaction between two parties is called Buying when we consider one party, Selling when we consider the other, and Trade when we take both parties under consideration.

The accountant who examines the records of the transaction finds that the two parties have entered it on opposite sides of their respective ledgers, and in comparing the books he must in every case bear in mind in whose interest each book is made up.

⁴⁷Jevons was referring to an unsigned notice published in the *Athenaeum* that remarked that the *Economics of Industry* "is based on the lines laid down in Mill's 'Principles of Political Economy." This referred to the Marshalls' Preface, which stated that the object of the text was "to construct on the lines laid down in Mill's *Political Economy* a theory of Value, Wages, and Profits, which shall include the chief results of the work of the present generation of Economists" (Marshall and Marshall 1879, unpaginated preface). The editor's marked copy of the *Athenaeum*, held at the library of City University London, indicates that the notice was written by Millicent Garrett Fawcett (Fawcett 1879). For discussion of the extent to which the *Economics of Industry* broke with Mill's analytical framework, see Becattini and Dardi 2006.

⁴⁸H.D. Macleod to H.S. Foxwell, 17 November 1879 (RDF). Macleod subsequently cited Maxwell's letter in his application for the Cambridge chair of political economy (Macleod 1884, p. 12). Foxwell had also commented to Jevons about the Cambridge dismissal of Macleod's mathematics, where he mentioned the views of Marshall and Sidgwick (Black 1973–81, 5, p. 77).

For similar reasons in dynamical investigations we must always remember which of the two bodies we are dealing with, so that we may state the forces in the interest of that body, and not set down any of the forces on the wrong side of the account.

Discussing energy, Maxwell also suggested that

The transactions of the material universe appear to be conducted, as it were, on a system of credit.* Each transaction consists of the transfer of so much credit of energy from one body to another. This act of transfer or payment is called work. The energy so transferred does not retain any character by which it can be identified when it passes from one form to another.

* Except perhaps that credit can be artificially increased, or inflated (Maxwell [1877] 1952 pp. 27, 90).

Economic metaphors were not unusual in introductions to energy physics published in the 1870s, and Maxwell's energy framework bore no relation to Macleod's understanding of physics. Nevertheless, taken out of context, Maxwell's comments could appear to gell with the analytical focus on exchange and the credit theory of money in Macleod's work. The letter from Maxwell then provided Macleod with a neat counter to Foxwell's argument from authority, as Maxwell held the chair of experimental physics, was director of experimental research at the Cavendish laboratory, and offered public lectures to students in the Mathematical Tripos at Cambridge. Although Macleod's report does not indicate that Maxwell had commented on his mathematical ability, Macleod could triumphantly declare to Foxwell that Maxwell's comments "may make some of your Johnian mathematicians rub their eyes." Moreover, another endorsement was in the offing.

In late 1878 there was a crisis of confidence in the British banking system as deposits and the prices of bank shares fell following the collapse of the City of Glasgow bank. This was a catalyst, following years of negotiations, for the successful formation of the Institute of Bankers in early 1879. A key function of the institute was to conduct examinations, which would provide formal qualifications for the employment and promotion of bank employees. After an extended debate regarding the content of the examinations, Jevons was appointed as examiner in political economy with his reading list to be finalized in mid-November (Green 1979, pp. 54–57). Macleod evidently thought, once more, that his time had arrived. On 17 November, he told Foxwell "matters will soon come to a crisis" and that the institute would "shortly" recommend "my works" for use in examinations. This suggests that the basis for Jevons' "difficulty", to which he referred in his letter to Foxwell, can be traced to the attempts by Macleod to have his books set for the institute

⁴⁹Macleod to Foxwell, 17 November 1879. An earlier letter from Macleod to Foxwell suggested that "Pendlebury" was one of Macleod's critics (6 November 1879 [RDF]). This was, presumably, R. Pendlebury of St. Johns, who was senior wrangler in 1870 (Warwick 2003, p. 513).

⁵⁰Although Jevons was the examiner in political economy, there were separate papers on "practical banking," which were "examined by members of the [Institute] Council, as it was felt that technical questions should be set and marked by experienced bankers" (Green 1979, p. 57; Institute of Bankers 1879, pp. 162–163).

⁵¹Macleod to Foxwell, 17 November 1879 (RDF).

examinations. As with *TPE*, Jevons faced something of a dilemma. Although he did not wish to set Macleod's work as the "first textbook," he also wanted to avoid any direct conflict with Macleod by, for example, setting his own book on *Money*. Setting the Marshalls' text would enable him to circumvent that difficulty.⁵² It would also be consistent with his praise, recorded elsewhere, for the *Economics of Industry*.

VI DENOUEMENT

Macleod's absence from teaching in the Moral Sciences at Cambridge in 1879–80 was only a temporary one. He was back for the next academic year, and, while not listed for every term, was a recognized lecturer, a position for which he evidently had to reapply on a number of occasions, until 1883–84. ⁵³ As might be expected, it was not a period without incident as Macleod tested the boundaries of the authority of the Moral Sciences board. One matter was of persistent concern, the background to which was that Macleod "had suffered severely from bank failures and afterwards was often in straitened circumstances" (Fryer and Maloney 2004). He was thus dependent, in part, on income from his publications, and Macleod evidently thought he would have a wider and more receptive audience if he was declared a lecturer at the university. Soon after his recognition at Cambridge in 1877, Macleod wrote to the Vice-Chancellor. As his publisher was to release a new edition of one of his books. Macleod asked if he could identify himself on the title page as "Lecturer on Political Economy in the University of Cambridge": "It has been a very disadvantageous thing to me that the Board of Moral Studies has long refused to recognize my work. though often ... requested to do so; and of course it will be an advantage to me to let it be known that I am at least recognized by the University." On this matter, however, Macleod's luck had run out. Atkinson responded that, having consulted with "some members of the University in whose judgement I had confidence," he had rejected Macleod's application on the basis that it would be likely to "convey the impression" that Macleod had a "permanent office in the University to which you had been formally elected, which is not the case."54

Macleod was prepared to wait. In 1879, a full-page advertisement for his works was printed in the *Cambridge Reporter*, which described MacLeod as "Lecturer on Political Economy in the University of Cambridge" (Figure 1). ⁵⁵

⁵²For the "preliminary examinations," Jevons set the *Economics of Industry*, J.S. Mill's *Principles of Political Economy*, and his *Money and the Mechanism of Exchange* (1875). Macleod was not entirely neglected. The second volume of his *Theory and Practice of Banking* (presumably the third edition of 1875) was included as the last reference for the "final examination" (Institute of Bankers 1879, p. 161). ⁵³Macleod's lecturing can be tracked through the teaching announcements in the *Cambridge University Reporter*.

⁵⁴Macleod to Atkinson, 27 June 1877; Atkinson to Macleod, 2 July 1877. Atkinson Correspondence, University of Cambridge Library, Add.6582 (384); Add.6584 (774). In 1879, to be classified as a "University lecturer" required that a lecturer be paid a "stipend" of "at least £200" per annum by a College (*Cambridge University Reporter* (17 December 1879): 211).

⁵⁵A smaller advertisement had been published two weeks earlier (*Cambridge University Reporter* [6 May 1879]: 588).

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FIGURE 1. Advertisement for H.D. Macleod's publications. Source: Cambridge University Reporter (20 May 1879): 619. There is no information available as to whether this episode had anything to do with Macleod's departure from lecturing at Cambridge for the 1879–80 year. In 1883, however, the issue re-emerged and this time there was a recorded reaction from the Moral Sciences board. The minutes for a November 1883 meeting recorded the board had resolved that

to prevent confusion with the new class of University Lecturers about to be created, any recognized lecturer having occasion to refer to his connexion with the University be requested to describe himself as "one of the lecturers on - recognised by the Special Board for Moral Sciences in the University of Cambridge."

The target, however, was undeterred. The minutes of the first board meeting for 1884 were both exasperated and threatening:

The attention of the Board was called to the fact that not withstanding the resolution in minute 6 of Nov. 28, 1883, which was communicated to him, M^r. Macleod continues to describe himself as "Lecturer on Political Economy in the University of Cambridge"; & the Secretary was requested to inform him that unless he complied with this resolution, the Board would be compelled to withdraw their recognition of his lectures in the future ⁵⁶

Macleod was now vulnerable, particularly as he no longer had the protection of Birks.⁵⁷ At the board meeting of 23 November 1883, it was recorded that, although Macleod had applied again for renewal of his recognition, "It was agreed to defer the consideration of it for the present." Sidgwick, seconded by J.N. Keynes, then moved: "That the General Board [of Studies] be asked to consider whether it is desirable that the removal of the recognition of a lecturer by a Special Board should be refused on the ground that he has not given & is not likely to give any assistance in the teaching of the subject."⁵⁸

The "Special Board" here was evidently that for the Moral Sciences and it is clear why Macleod's recognition had been stalled. Only five days later, however, the minutes of the next meeting of the Moral Sciences board reported, with almost palpable disappointment, that the General Board had declined to "lay down a definite rule on the matter" and Macleod was back as a recognized lecturer "during the current academical year." While Macleod was subsequently threatened over publicly describing himself as a "Lecturer in the University of Cambridge" (see above), the board had another string to its bow. In May 1884, the minutes, signed by Sidgwick, noted that, "M^{r.} Macleod having applied to the Board for the renewal of his recognition as a lecturer, the Secretary was directed to ask him if any students had attended his lectures during the present academical year." Less than a week later, the board met again: "Understanding that no students had attended M^{r.} Macleod's lectures on Economics during the present academical year, the Board declined to

⁵⁶BMSS, 28 November 1883; 31 January 1884.

⁵⁷Birks had died in early 1883 ("Professor Birks," *Cambridge Review* 5, 103 (17 February 1883): 3).

⁵⁸The board had been renamed the Special Board of the Moral Sciences, while the General Board of Studies had been constituted in 1882 to coordinate the activities of the special boards.

⁵⁹BMSS, 23 November 1883; 28 November 1883.

renew their recognition of his lectures for the ensuing year." ⁶⁰ In removing the burr under the Cambridge economics saddle, it is possible that the board held Macleod to a standard from which others were exempt. In November 1879, a letter to the *Cambridge Review* had complained that, at Professor Fawcett's previous Saturday lecture, the audience had "consisted of two undergraduates, two gentlemen apparently not members of the University, and a lady." ⁶¹ Nevertheless, Macleod's lack of a student audience was hardly a successful strike rate and it is difficult to escape the impression that his obtaining a lecturing position at Cambridge was driven in large part by the imprimatur that he thereby hoped to obtain for his publications.

VII. CONCLUSION

In 1896 Macleod was depicted in the Economic Journal as "outside the pale" of the profession, a pathetic figure who could be safely ignored (Cannan 1896). That had not been the case twenty years earlier when he had faced a wall of hostility in the literary reviews. One notable exception was the early Statist, edited by Robert Giffen, which printed two remarkably favorable reviews in October 1878.⁶² Another generally favorable review appeared in 1881, but the Statist was now tiring of Macleod's polemics: "he evidently holds, with Mr. Stanley Jevons, that John Stuart Mill was a much overrated thinker, and he therefore sees nothing hazardous in accusing him of holding 'fantastic notions' on the law of value. Mill's notions were not fantastic at all, though in some particulars they require modification."⁶³ If that was consistent with Alfred Marshall's position, it also needs to be emphasized that, while the Cambridge economists were disparaging about Macleod's analytical abilities, it was his vitriolic attacks on economists such as Ricardo and Mill that would have damned him as far as Fawcett, Keynes, Marshall, and Sidgwick were concerned. Foxwell also appears to have played a major role in driving Macleod and his works from Cambridge. The remains of their extended correspondence suggest a cat toying with a mouse.

While Macleod was able, for an extended period of time, to "wrong-foot" the economists on his lecturing, the hostility to him should be placed in the context of the undermining of the authority of political economy during the 1870s. With the question of who was qualified to speak as a political economist a matter of widespread disagreement, the economists on the Moral Sciences board were vulnerable. Even when they did have the numbers, they could be hamstrung by the new regulations that followed the reform of teaching within the university. It is not difficult to envision that they reacted with something close to horror when faced with the prospect of a lecturer who presented himself as the font of all wisdom in the discourse while making a speciality of attacking its founding fathers (Adam Smith usually excepted).

⁶⁰BMSS, 16 May 1884; 22 May 1884.

⁶¹"Professor Fawcett's Lectures," *Cambridge Review* 1, 5 (12 November 1879): 70. The letter was signed "Two of the Undergraduates Present."

⁶²"Mr. Macleod's Elements of Banking," *Statist* 2, 33 (12 October 1878): 131; "Elementary Economics," *Statist* 2, 35 (26 October 1878,): 171–172.

⁶³"Mr. Macleod's 'Elements of Economics,'" Statist 7, 174 (25 June 1881): 704.

The situation was aggravated by Jevons' persistent attacks on the Ricardo-Mill school and the addition, in the second edition of TPE, of Macleod's name to the list of those who had been unreasonably neglected by the orthodox. Nevertheless, while he felt no compunction in gibing at the "noxious influence of authority," Jevons was ambivalent about Macleod's work, preventing it being set as the key reference for the examinations at the Institute of Bankers in 1879. Macleod made no mention of that matter when he told Foxwell in 1881 that the councils of the Institute of Bankers in both Scotland and India had recommended his work for reading. He was, however, presumably being sarcastic when he also wrote that "I trust therefore that you will aid me in introducing them into the [Cambridge] University course."⁶⁴ Sarcasm was also presumably evident in 1883 when, after Foxwell had sent him a circular requesting support for the proposed Jevons Memorial, Macleod replied: "My name would not be of the least use to you for your purpose. I am not in any way known. I have no influence and I never put myself forward."65 After years of importuning the Cambridge economist, he might have had the last word. Being Macleod, however, he could not help himself, and the next year applied for the Cambridge political economy chair (Macleod 1884). Of course, he was unsuccessful, but it was typically bizarre behavior from Macleod. It was as if he simply could not resist running his head against King's College Chapel.⁶⁶

REFERENCES

Manuscripts

Edward Atkinson correspondence, University of Cambridge Library.

Editor's marked copy of The Athenaeum, City University London Library.

Board of Moral Science Studies, Minutes, Archives, Min.V.10, University of Cambridge.

Council Minutes, University of London Archive, University of London.

Herbert Somerton Foxwell Papers, Richard D. Freeman Collection [Freeman 2006b].

Letter Collection, British Library of Political and Economic Science, London School of Economics.

John Neville Keynes papers, Marshall Library of Economics, University of Cambridge.

John Neville Keynes Diaries, University of Cambridge Library, Add.7831.

Henry Dunning Macleod letters to John Hill Burton, 1860-1862, National Library of Scotland.

Published

Aslanbeigui, Nahid. 1992. "Foxwell's Aims and Pigou's Military Service: A Malicious Episode?" Journal of the History of Economic Thought 14 (March): 96–109.

⁶⁴H.D. Macleod to H.S. Foxwell, 17 October 1881 (RDF).

⁶⁵H.D. Macleod to H.S. Foxwell, 31 January 1883 (RDF).

⁶⁶There must have been a sense of *deja vu* for some at Cambridge when Macleod's son, Roderick Henry Macleod, was instrumental in creating difficulties after the Economics board sought exemption from conscription for A.C. Pigou in 1916. In the ensuing newspaper correspondence, the economic historian and Marshallian critic William Cunningham identified himself as an "old friend" of H.D. Macleod. It has been suggested that Foxwell acted in concert with Cunningham and Macleod *fils*, although there is no direct evidence in that regard (Aslanbeigui 1992; Deane 2001, pp. 253–261). Macleod's undermining of Pigou can, in part, be explained by his having been made secretary of the National Service League, a lobby group advocating conscription, in 1914. An intriguer with close ties to the Unionist party leadership, Macleod had also been pivotal in securing secret Tory funding for the successful candidate in the Methyr Boroughs by-election of 1915 (Doyle 1994).

- Becattini, Giacomo and Marco Dardi. 2006. "The Economics of Industry." In Tiziano Raffaelli, Giacomo Becattini, and Marco Dardi, eds., The Elgar Companion to Alfred Marshall. Cheltenham: Edward Elgar, pp. 50–58.
- Black, R. D. Collison and Rosamond Konekamp. 1972. Papers and Correspondence of William Stanley Jevons. Volume 1. London: Macmillan.
- Black, R. D. Collison. 1973–81. *Papers and Correspondence of William Stanley Jevons*. Volumes 2–7. London: Macmillan.
- Cairnes, J. E. 1857. The Character and Logical Method of Political Economy, London: Macmillan.
- Cairnes, J. E. 1858. "Capital and Currency." North British Review 28 (February): 191-230.
- Cannan, Edwin. 1896. Untitled review of Henry Dunning Macleod, The History of Economics (1896). Economic Journal 6 (24): 606–607.
- Chevalier, Michel. 1842–50. Cours d'Economie Politique, Fait au Colleége de France. 3 Volumes. Paris: Capelle.
- Cook, Simon. Forthcoming. A Rounded Globe of Knowledge: The Intellectual Foundations of Alfred Marshall's Economic Science. Cambridge: Cambridge University Press.
- Deane, Phyllis. 2001. The Life and Times of J. Neville Keynes. Cheltenham: Edward Elgar.
- [De Morgan, Augustus]. 1862. "Science." Athenaeum 35 (1829): 632.
- Doyle, Barry M. 1994. "Who Paid the Price of Patriotism? The Funding of Charles Stanton during the Methyr Boroughs By-Election of 1915." *English Historical Review* 109 (434): 1215–1222.
- Fawcett, Henry. 1863. Manual of Political Economy. London: Macmillan.
- [Fawcett, Millicent Garrett]. 1871. Review of W. Stanley Jevons, *Theory of Political Economy* (1871) and John Macdonnell, *A Survey of Political Economy. The Athenaeum* (2297): 589–590.
- [Fawcett, Millicent Garrett]. 1879. Notice of Alfred and Mary Paley Marshall, *Economics of Industry. The Athenaeum* (2715): 595.
- Freeman, R. D. 2006a. "Herbert Somerton Foxwell." In Tiziano Raffaelli, Giacomo Becattini, and Marco Dardi, eds., *The Elgar Companion to Alfred Marshall*. Cheltenham: Edward Elgar, pp. 583–585.
- Freeman, R. D. 2006b. "The R.D. Freeman Collection of Foxwell's Papers—Its Rescue." *Journal of the History of Economic Thought* 28 (December): 489–495.
- Fryer, S. E. and John Maloney. 2004. "Macleod, Henry Dunning (1821–1902)." In Oxford Dictionary of National Biography, Oxford University Press [http://www.oxforddnb.com/view/article/34787, accessed 10 August 2007].
- Grattan-Guinness, I. 2002. "In Some Parts Rather Rough: A Recently Discovered Manuscript Version of Stanley Jevons's 'General Mathematical Theory of Political Economy." History of Political Economy 34 (Winter): 685–726.
- Grattan-Guinness, I. 2007. "On Jevons's Handling of Differential Equations in the Context of his Principle of Exchange, and the Early Reactions." *History of Political Economy* 41 (Summer): 297–309.
- Green, Edward. 1979. Debtors to their Profession. A History of the Institute of Bankers 1879–1979. London: Methuen.
- Groenewegen, Peter. 1995. A Soaring Eagle. Alfred Marshall 1842-1924. Aldershot: Edward Elgar.
- Henderson, James P. 1994. "The Place of Economics in the Hierarchy of the Sciences: Section F from Whewell to Edgeworth." In Philip Mirowski, ed., *Natural Images in Economic Thought*. New York: Cambridge University Press, pp. 484–535.
- Ingram, J. E. K. 1878. "Address of the President of Section F of the British Association, at the Forty-Eighth Meeting, held at Dublin, in August, 1878." *Journal of the Statistical Society of London* 41 (December): 602–629.
- Institute of Bankers. 1879. "Syllabus. Session 1879–80." *Journal of the Institute of Bankers* 1 (November): 158–163.
- Jaffe, William. 1965. Correspondence of Leon Walras and Related Papers. Volume 2. Amsterdam: North Holland.
- Jevons, W. Stanley. 1871. The Theory of Political Economy. London: Macmillan.

- Jevons, W. Stanley. 1875. Money and the Mechanism of Exchange. London: King.
- Jevons, W. Stanley. 1876. Logic. London: Macmillan.
- Jevons, W. Stanley. 1879. The Theory of Political Economy. Second edition. London: Macmillan.
- Jevons, W. Stanley. 1882. The State in Relation to Labour. London: Macmillan.
- Jevons, W. Stanley. 1884. Investigations in Currency and Finance. Ed. H. S. Foxwell. London: Macmillan.
- Kadish, Alon. 1993. "Marshall and the Cambridge Economics Tripos." In Alon Kadish and Keith Tribe, eds., The Market for Political Economy. The Advent of Economics in British University Culture, 1850 –1905. London: Routledge, pp. 137–161.
- Keynes, John Neville. 1911. "William Stanley Jevons (1835–1882)." *Encyclopaedia Britannica*. Eleventh edition. Cambridge. University Press. 15: 361–362.
- Maas, Harro. 2005. William Stanley Jevons and the Making of Modern Economics. New York: Cambridge University Press.
- Macleod, Henry Dunning. 1862. On the Definition and Nature of the Science of Political Economy: A Paper Read at the Meeting of the British Association, Held at Cambridge, 1862. Cambridge: Macmillan.
- Macleod, Henry Dunning. 1872. *The Principles of Economical Philosophy*. Second edition. Volume 1. London: Longmans, Green, Reader and Dyer.
- Macleod, Henry Dunning. 1875. *The Principles of Economical Philosophy*. Second edition. Volume 2, part I. London: Longmans, Green, Reader and Dyer.
- Macleod, Henry Dunning. 1884. An Address to the Board of Electors to the Professorship of Political Economy in the University of Cambridge. London: Blundell.
- Macleod, Henry Dunning. 1892. An Address to the Civil Service Commissioners, on the Teaching of Economics in the Public Service. London: np.
- Marshall, Alfred. 1961. *The Principles of Economics*. Nineth variorum edition. Volume 1. Ed. C. W. Guillebaud. London: Macmillan.
- Marshall, Alfred and Mary Paley Marshall. 1879. The Economics of Industry. London: Macmillan.
- Maxwell, James Clerk. [1877] 1952. Matter and Motion. New York: Dover.
- Moore, Gregory. 2000. "Nicholson Versus Ingram on the History of Political Economy and a Charge of Plagiarism." *Journal of the History of Economic Thought* 22 (December): 433–460.
- Palfrey, David Spike. 2002. "The Moral Sciences Tripos at Cambridge University, 1848–1860."

 Dissertation submitted for the degree of Doctor of Philosophy. Cambridge University.
- Pigou, A. C. 1925. Memorials of Alfred Marshall. London: Macmillan.
- Price, L. L. 1892. "Notes on a Recent Economic Treatise." Economic Journal 2 (5): 17-34.
- Rashid, Salim. 1980. "The Growth of Economic Studies at Cambridge, 1776–1860." *History of Education Quarterly* 20 (3): 281–294.
- Sidgwick, Henry. 1883. The Principles of Political Economy. London: Macmillan.
- Sidgwick, Henry. 1885. "Economic Science and Statistics. The Address of the President of Section F of the British Association, at the Fifty-Fifth Meeting, held at Aberdeen, in September 1885." *Journal of the Statistical Society of London* 48 (December): 595–616.
- Skaggs, Neil T. 1997. "Henry Dunning Macleod and the Credit Theory of Money." In Avi J. Cohen, Harold Hagemann, and John Smithin, eds., Money, Financial Institutions and Macroeconomics. Boston: Kluwer, pp. 109–124.
- Skaggs, Neil T. 2003. "H.D. Macleod and the Origins of the Theory of Finance in Economic Development." *History of Political Economy* 35 (Fall): 361–384.
- [Stephen, Leslie]. 1863. "Mr. Chevalier and Mr. Macleod on Political Economy." *London Review of Politics, Society, Literature, Art, and Science* 6 (144): 365–366.
- Taylor, James. 2005. "Commercial Fraud and Public Men in Victorian Britain." Historical Research 78 (200): 230–252.
- Warwick, Andrew. 2003. Masters of Theory. Cambridge and the Rise of Mathematical Physics. Chicago: University of Chicago Press.

- Whitaker, John K. 1975. *The Early Economic Writings of Alfred Marshall, 186–1890.* 2 volumes. Basingstoke: Macmillan.
- Whitaker, John K. 1995. "Marshall's Third Review." Marshall Studies Bulletin 4: 3-8.
- Whitaker, John K. 1996. *The Correspondence of Alfred Marshall, Economist*. 3 volumes. Cambridge: Cambridge University Press.
- Whitaker, John K. 2006. "William Stanley Jevons." In Tiziano Raffaelli, Giacomo Becattini, and Marco Dardi, eds., *The Elgar Companion to Alfred Marshall*. Cheltenham: Edward Elgar, pp. 573–577.
- White, Michael V. 1990. "Invention in the Face of Necessity: Marshallian Rhetoric and the Giffen Good(s)." *Economic Record* 66 (192): 1–11.
- White, Michael V. 1996. "No Matter of Regret: The Cambridge Critique of Jevons' Hedonics." In Peter Groenewegen, ed., *Economics and Ethics?* London: Routledge, pp. 103–120.
- White, Michael V. 2003. "Some Difficulties with Sunspots and Mr. Macleod: Adding to the Bibliography of W.S. Jevons." *History of Economics Review* (38): 33–52.
- White, Michael V. 2004. "Sympathy for the Devil: H.D. Macleod and W.S. Jevons' *Theory of Political Economy*," *Journal of the History of Economic Thought* 26 (September): 311–329.
- Winstanley, D. A. 1947. Later Victorian Cambridge. Cambridge: Cambridge University Press.