

**Marshall, Ashley on Education of Businessman
and ‘Science of Business’ ?**

—Marshall’s School of Economics in the Making—

Tamotsu Nishizawa

**Marshall, Ashley on Education of Businessman and
‘Science of Business’ ?
—Marshall’s School of Economics in the Making—**

Tamotsu Nishizawa

(Institute of Economic Research, Hitotsubashi University)

Contents

1. Organization of Economic and Business Education around 1900	1
<p>A Boom of Business Schools 100 Years Ago: Warning of Chamberlain and Faculty of Commerce in Birmingham Marshall and Professionalization of Economics in the Late 19th Century Institutional Backwardness in Britain: <i>Needs</i> of the University: Marshall's and Ashley's Recognition London School of Economics: 'Alternative to Marshall' ?</p>	
2. Marshall's Economics Tripos in the Making: <i>Plea</i> for the Creation of Cambridge School of Economics	12
<p><i>Liberation of Economics from the Incubus of Moral Sciences:</i> Marshall vs J. N. Keynes Economics and Political Science: With Lowes Dickinson <i>The Many is the Ground of Study</i>: Method of Economics Recent Economic History, 19th Century: Marshall against Cunningham Collaboration with Foxwell in the Economics Syndicate Cambridge Tripos – Oxford Diploma</p>	
3. Marshall on Economics for Businessman	30
<p>Oxbridge vs New Civic Universities Marshall vs <i>The Times</i> on Accountancy Cunningham's Opposition to Marshall</p>	
4. Ashley and Faculty of Commerce in the University of Birmingham: 'Antithesis' to Economics Tripos ?	34
<p>Organizing Professor for Faculty of Commerce Accounting and <i>Business Policy</i>: University and Business <i>Enlargement of Economics: Business Economics</i> in the Making ?</p>	

5. Education of <i>Non-Specialized</i> Business Faculty:	
Marshall on Education of Businessman and Economist	44
<i>Curriculum Regarded as Affording Liberal Education:</i>	
<i>Imagination and Sympathy</i> both for Businessman and Economist	
6. Selection of Pigou as Successor: Contraction of Economics ?	46
Marshall, Foxwell, Pigou	
Election of Pigou and Afterwards	
Epilogue	54
Appendices	56
References	59

Every University must consider from time to time whether its scheme of study and teaching is adequate to present needs. [A. Marshall, *A Plea for the Creation of a Curriculum in Economics and Associated Branches of Political Science*, 1902: 1]

In all this weary & oppressive work for the liberation of economics from the incubus by which I believe it to be oppressed, nothing has given me so much pain as the thought that I must necessarily go against your wishes. [Marshall to J. N. Keynes, 30 January 1902 (II: 350)]

A wave of enthusiasm for education is evidently passing over the business world.... We are convinced that a rare opportunity is offered to Economics, and that it may gain a position of great influence, if it can succeed in demonstrating that it is *the* 'science of business'. [L. L. Price in *Economic Journal*, 1902: 227-8]

1. Organization of Economic and Business Education around 1900

As shown in L. L. Price's phrase above¹, a wave of enthusiasm for business education was passing over just after the turn of the century (19th and 20th): and it had been 'dinned into the ears of the business world'. [Ashley 1902-3: 267] The multitude of publications on 'commercial education' or 'education of businessmen' were really noteworthy of the 'signs' of the times. Commercial education was in the air. Not only Ashley's Faculty of Commerce at Birmingham but also Marshall's Economics Tripos at Cambridge were certainly in this movement. Webb-Hewins' London School of Economics had already been in existence. A major problem in the background was 'Britain's industrial leadership under strong challenge' [Marshall 1919: 86] or 'business leadership at stake', and to indicate 'the new conditions of industrial leadership'. In a new 'illustrated magazine of national efficiency and social progress', (*The World's Work*, started in 1902), Ashley reminded 'how vitally the nation is concerned in the efficiency of its business leadership' [Ashley 1902-3: 267]. It was the time of 'the Quest for National Efficiency'.

The organization and institutionalization of both economic and business studies and teaching

I am very grateful to Peter Clarke, Martin Daunton, Phillis Deane, John Maloney, Keith Tribe, Frank Wilkinson, Donald Winch, and Olive Checkland for their helpful comments and useful information. I am also very grateful to the archivists and librarians of Cambridge University Library, Marshall Library, King's College Library, Trinity College Library, St. John's College Library, Birmingham University Library, and British Library of Political and Economic Science, for allowing me to use and make some quotations from valuable documents they hold. The research for this paper was carried out with the support of the JSPS's Grant-in-Aid for Scientific Research C (2), and the Grant-in-Aid for Scientific Research on Priority Areas B.

I have greatly benefited from *The Correspondence of Alfred Marshall* edited by John Whitaker in three volumes, and extensively quoted from them, only indicating volume number and pages.

¹ L. L. Price reviewed *The King's Weigh House Lectures to Business Men* (London: Macmillan, 1901) in *Economic Journal*, 1902: 227-28. See below f.n. 32.

were the worldwide phenomenon around the turn of the century. These international movements were initiated and preceded by the United States and Germany. Though England had long held 'the undisputed leadership in economics', she suffered recently from the lack of adequate provisions for economics and business studies and teaching, as various reports had revealed. A well-known report of the British Association for the Advancement of Science, "The Methods of Economic Training adopted in This and Other Countries" (1894), exposed Britain's backwardness in economic training compared with the Continental countries and the United States. Against these backgrounds London School of Economics and Political Science was founded and opened its door in October 1895. Yet the institutional backwardness and the relative delay in public recognition of the organization of economics and business studies increasingly enhanced contrast. The urgent needs had been strongly felt and in April 1902 Marshall's *A Plea for the Creation of Curriculum in Economics and Associated Branches of Political Economy* came out and widely circulated; and the Economics Tripos was instituted in June 1903. Whereas Ashley drew out around the same time *The Faculty of Commerce in the University of Birmingham: Its Purpose and Programme*, which opened its door in October 1902.

As will be shown below, Marshall's economics tripos in Cambridge had originally a lot of common basic ideas of wide scope with Hewins' school of economics in London and Ashley's faculty of commerce in Birmingham. However, Marshall's school of economics in Cambridge was to grow as a very distinctive school of economics of its own, barely anything to do with the 'science of business', or business economics, which were growing and taking shape then in Germany and the United States, and perhaps in Japan.

A Boom of Business Schools 100 Years Ago:

Warning of Chamberlain and Faculty of Commerce in Birmingham

The idea of 'higher commercial education' was taking shape. Founding a Faculty of Commerce was a new but urgent experiment, as Joseph Chamberlain wrote to the President of Mason College (11 December 1899), which was just being reconstituted into the University of Birmingham. Chamberlain wrote that beyond the older learning and the general culture 'we desire to systematize & develop the special training which is required by men in business & those who, either as principals or as managers & foremen, will be called upon to conduct the great industrial undertakings in the midst of which our work will be done'.² It was 'the statesmanlike imagination of Mr Chamberlain which gave a name to this vaguely felt want' when, in the charter of the new University of Birmingham, he provided for the future establishment of a 'Faculty of Commerce', side by side with the older faculties of Arts, Science, and Medicine.

Since then the new civic universities of Manchester and Leeds also established faculties of commerce; and the cause was no longer left in the hands of the 'new' provincial Universities. Ashley supposed that 'in the course of the next twenty years, we shall see Faculties of Commerce, or something like them, in every considerable University in the Empire'. The an-

² Chamberlain Papers, JC/12/1, Birmingham University Library.

cient University of Cambridge, though it clung to its old nomenclature and called its new degree course the 'Economics Tripos', meant the same thing by it. [Ashley 1906: 2; Ashley c1921: 1]

The institutionalization or organization of economic and business (commercial) studies and teaching were in fact a worldwide phenomenon around the turn of the century (19th and 20th). Towards the end of 1900, addressing the American Economic Association on "Relation of our Colleges and Universities to Higher Commercial Education", E. J. James, former professor at the Wharton School, said: 'I believe the American university ought to take the same attitude toward the higher training of the future merchant, railway or insurance manager, as it has so long taken toward the professional education of the future lawyer, physician or engineer'. [James 1900: 15-16] Similarly in Britain, celebrating the foundation of the Faculty of Commerce in the new University of Birmingham in 1901, W. J. Ashley, who had just returned from Harvard University to become the first professor of commerce in Britain, stated that the training of businessmen should be as important for the community as the training of lawyers and doctors and that the arts of commerce needed to have their adequate and organized education in the college or university just as much as law or medicine. And he commented that the creation of a Faculty of Commerce was 'one of the most striking manifestations of a new and most significant movement in university circles by no means confined to Great Britain'. [Ashley 1903: 31]

Until quite recently English trade got on well enough generally without business training. In the past some of the most successful men begun their careers with sweeping out the office. The experiment of sending business men's sons to the Universities had not always been a success in the past, there was some foundation for the impression in business circles that 'to send a fellow to college unfits him for business'. However Ashley repetitively wrote the articles like "The Value of University Training for Business Men", stressing 'the law and medicine are not "picked up" nowadays; why expect the business man to "pick up" commerce?'. [Ashley 1908: 188]

The mission of the University to-day is to put, somehow, the University idea into the heads of that great majority of the commercial community which at present does not send its sons to the University at all, and will only send them if it can expect to receive most of them back again into commercial life. We shall do an immense service to the country if we can succeed in inducing them to send their sons to the University instead of taking them straight from school into the works or counting-house. [Ashley c1921: 3]

Facing the competition of the highly organized industries of Germany and the United States, Chamberlain warned that Britain should fall behind in the race, unless prepared to avail themselves of all the latest discoveries of science and to enable all who, either as principals or as managers and foremen, were entrusted with the conduct of business to acquire both a theoretical and a practical knowledge of their trades. He held that 'the great and distinctive work of the new University will be to provide this training', in belief that they were going to try a great

experiment in the 'distinctive application of knowledge to the advantage of science and of commerce.'³

Referring to the 'Crisis in British Industry', Chamberlain warned:

In order that we may keep the trade that we have got, ...Employers have to bring to bear more scientific intelligence to the management of their business. The old rule-of-thumb methods will not last for ever, and, in the presence of the development of science abroad, it is perfectly certain that we shall suffer seriously unless our manufacturers take advantage of the opportunities that are afforded to them to bring the highest theoretical knowledge into combination with practical experience, and that ... the claims of the new University of Birmingham, a University of which the main object and business will be to introduce into all the trades of the district, not for Birmingham alone, a higher knowledge, a greater acquaintance with the theories upon which our practice is based, so that all persons who are in positions of authority, whether as employers or managers or otherwise as controllers of business, shall have this great scientific acquirement to bring to the aid of their commercial industry. (*The Times*: January 7, 1902)⁴

The growing difficulty of finding men capable of the higher work of management was strongly felt. A statement issued by the Advisory Board of the Faculty of Commerce in the University of Birmingham, (the Board came into being in 1906 and was made up of men of actual management of large firms), drawn up by two of its members, W. E. Hipkins, the managing director of Avery's, and A. H. Gibson, an accountant, reported as follows. There was seldom any lack of suitable heads of executive departments or of purely technical experts. But 'the training of the departmental expert is often found to unfit him for general management', and the strict discipline in the subordinate grades tended not to develop the sound and quick judgment required in positions of control. [Quoted in Ashley: 1909]

Yet this country has hitherto neglected the training of general managers, who not only engage and superintend these experts, advance them for proved competency, or dismiss them for inefficiency, but, at the same time, have the responsibility of buying materials to the best advantage, deciding as to the extension or replacement of plant, assuring the disposal of the output, and planning financial policy. [Quoted in Ashley 1908a: 191]

³ He also held that 'it was on the University of Birmingham that the responsibility fell of sustaining the commercial and industrial position of that district'. ("Mr. Chamberlain and Birmingham University", *The Times*, January 19, 1900). See also "The Birmingham University", *The Times*, 7 May 1900.

⁴ Chamberlain spoke for the court of governors, Mason University College, Birmingham, on January 13th, 1898, for the multiplication of universities: 'They looked to Germany for an example and a model and progress. Education was made in Germany, and they were not ashamed to take the lesson to heart'. Germany, with 46 millions of people, had 21 Universities. Their own sister kingdom, Scotland, with four million people, had four Universities; in England and Wales, with nearly 30 millions of people, they had six Universities. "Mr. Chamberlain on Mason College", *The Times*, January 14, 1898.

Addressing the shareholders of Avery's (July 12, 1906), Hipkins called attention to the lack of men with the ability and initiative requisite in the higher service of great businesses, and went on to say that 'he was thoroughly convinced that the commercial section of the Birmingham University was offering a solution of a problem which was puzzling the managers of all large concerns'.⁵

The movement for the organization of economic and business education had been preceded by the United States and Germany, with the concurrent rise of the corporate economy and the growing professionalization of the managers of large industrial enterprises, or with the age of 'visible hand' coming.

It was apparently in the United States that by far the largest effort and most progress were being made in this movement of providing in the universities and colleges a suitable training for business life. University of Pennsylvania led the way for business training by the establishment of the Wharton School of Finance and Economy in 1881. The movement was spurred by the American Bankers Association: in 1898 University of Chicago and California set up the Colleges of Commerce. These were followed in 1900 by Dartmouth College and the University of Vermont, Wisconsin and New York, and in the following decade some twelve more institutions were added to the list, including in 1908, the Graduate School of Business Administration at Harvard University. The new century began with collegiate education for business at 7 institutions. The next decade saw some 12 more institutions added to the list; the next five years, some 21; and during the next nine years 'such a veritable craze for business education swept over the country that some 143 more were added'; so that at the opening of the year 1925, 183 (probably more) American colleges and universities had 'departments' or 'schools' or 'courses' or some other formally organized unit of instruction in 'business' or 'commerce' or 'business administration' or other appropriate title. [L.C. Marshall 1928; 4]⁶

Marshall and Professionalization of Economics in the Late 19th Century

When Alfred Marshall came back to Cambridge in 1885, political economy was taught and examined within the Moral Sciences Tripos and History Tripos, and as a minor part of the Indian Civil Service course. Even in the late 1890s when Pigou was an undergraduate there was in the History Tripos one paper out of nine on Political Economy. The subject could only be studied seriously as an optional special subject in Part II of the Moral Sciences Tripos, for which there were very few candidates. [Pigou 1952: 5] Marshall disliked a singular position of economics as 'the only subject of which the unsystematic study in the University exceeds the systematic'. He wanted a curriculum and examination to help 'to steady and systematize this unsystematic

⁵ Ashley 1902a: 6. See also "The Degree of Bachelor of Commerce" I, in *The Accountant*, June 7, 1902: 584.

⁶ For the movement in Germany and 'the Age of Handelshochschule', see "Recent Developments in Higher Commercial Education in Germany", in Board of Education, *Special Reports on Educational Subjects*, vol. 9, *Education in Germany*, London, 1902: 489-94. A. W. Fehling, "Collegiate Education for Business in Germany", in L. C. Marshall 1928: 315-17.

study'. [*Cambridge University Reporter* (abbreviated as *CUR* below), 1885-86: 579] His inaugural lecture constituted a demand that economics should have a new status; and the declaration there was of some historical importance as 'almost the first blow in the struggle for the independent status which Economics has now won almost everywhere', as Keynes wrote. [Keynes 1924: 56]

There is wanted wider and more scientific knowledge of facts: an organon stronger and more complete, more able to analyse and help in the solution of the economic problems of the age. To develop and apply the organon rightly is our most urgent need: and this requires all the faculties of a trained scientific mind. ... what is most wanted now is the power of keeping the head cool and clear in tracing and analyzing the combined action of many combined causes. ... Cambridge has more such men than any other University in the world. But, alas ! few of them turn to the task. ... Many of those who are fitted for the highest and hardest economic work are not attracted by the metaphysical studies that lie at the threshold of [the Moral Sciences] Tripos.

Marshall also refers to 'man in his business life':

If more University men looked upon their life here as preparing them for the higher posts of business, what a change they might make in the tone of business ! Just and noble sentiments might be introduced into counting-house and factory and workshop, without the dangers which weak benevolence runs of turning sentiment into sentimentality, of courting ruin and increasing the common prejudice that a pleasant looking house of business is likely to be financially unsound. [Marshall 1885: 171, 173]

It took him eighteen years to achieve his objective, and as we shall see, the progress was so painfully slow. The creation of the Economics Tripos in 1903, an autonomous three-year course of economics and associated branches of political science, complemented Marshall's related efforts in discipline-building—the formation of the British Economic Association, the foundation of the *Economic Journal*, the publication of *Principles of Economics* in 1890. Keynes wrote: 'This claim of Marshall's corresponded to the conception of the subjects which dominated his own work. Marshall was the first great economist *pur sang* that there ever was; the first who devoted his life to building up the subject as a separate science, standing on its own foundations, with as high standards of scientific accuracy as the physical or biological sciences'. [Keynes 1924: 56] The creation of the new Tripos was not only the climax to Marshall's academic career at Cambridge, but it was the formal starting point of the Cambridge School of Economics which dominated the subject in the decades up to the end of the Second World War. As we shall see, the campaigns Marshall had to carefully wage in the Boards of Moral Science and History for a separate faculty and tripos, would provide further insight into 'Marshall the academic politician fighting for the growth of his discipline'. The years and strenuous efforts he devoted to this task, first in creating, and then in nurturing, the new Tripos in its formative years, 'almost parallel the long haul of his *Principles* in terms of concentrated effort and devo-

tion'. [Greonewegen 1995: 531]

The centenary of the foundation of the Royal Economic Society was commemorated by a book *A Century of Economics*. [Hey & Winch 1990] The year 1890 saw not only the foundation of the British Economic Association, but the publication of Marshall's *Principles* and the completion of the *Dictionary of Political Economy*, which began to appear in the following year at the same as the first issue of the *Economic Journal* and the *Economic Review*. 'The modern age of British economics', therefore wrote J. M. Keynes, 'can be dated from that year'. [Keynes 1940: 409] In a similar tone Ashley, surveying the history and position of political economy, wrote that 'Economics is beginning to furnish a career' around that time, and that 'the first phase of English economics as a system of thought is now well over' and 'it has become a closed chapter in intellectual history'. [Ashley 1907: 468, 486]⁷

It was the last hundred years that witnessed 'most of the crucial developments in the history of economics considered as a professional pursuit'. [Hey & Winch: 3] Economics in particular and the social sciences in general as a group of specialized academic disciplines emerged in the later nineteenth century in all the leading industrial countries. The universities which accommodated these fledgling disciplines were responding to society's demand for knowledge and expertise, and the concomitant intellectual and occupational specialization consequent upon the growth of industrial science and technology, the rise of large scale organizations and the bureaucratization in both government and business.

Institutional Backwardness in Britain:

Needs of the University: Marshall's and Ashley's Recognition

'England, which long held the undisputed leadership in Economics, has suffered in recent years from the lack of adequate provision for the study of that subject at the Universities', stated the "Report of the Economics and Political Science Syndicate" (dated 4 March 1903), which was the founding stone of the Economics Tripos at Cambridge. [CUR, March 10, 1903: 528] Urgent needs were well noticed by Marshall, who asserted in the *Statement of the Needs of the University* (edited by Cambridge University Association, 1900) under the heading "Political Economy": 'The urgency and all-pervading character of economic problems is shown by the fact that the legislatures and diplomatic officers of all countries of the modern world are now chiefly occupied with economic issues'. The successful handling of such issues was dependent on the concurrent development of economic science, and the universities were called

⁷ Yet the British economic community was rather behind the times, compared with some foreign countries. The American Economic Association had been founded in 1885 with the presidency of F. A. Walker. Both the *Quarterly Journal Economics* from Harvard and the *Political Science Quarterly* from Columbia started in 1886. In the second volume of the *QJE*, Foxwell contributed "The Economic Movement in England" and made public the prospectus for an 'economic society' in emulation of the American Economic Association. In Germany there was already the Verein für Sozialpolitik in existence since 1872, which had coordinated the work of academic professionals on the role of government in social and economic policy.

upon to take an important role.

As he argued, the responsibility of universities had been more fully recognized abroad than in Britain. In the United States and in Germany, the subjects of Economics and Political Science were commonly represented by a strong and numerous staff, and afforded the main route by which large numbers of students obtained university degrees. However, there were not more than forty or fifty undergraduates, who did any work at economics in Cambridge. There was only one University chair for it. There was no scope for a young man to earn a livelihood in Cambridge by preparing himself to deal with the economic problems of coming generation. 'This is our most urgent need', stressed Marshall. In order to deal with the subject adequately, it needed one additional Professorship or Readership in Economics, and at least one University Lectureship. Even so, Cambridge would be much less equipped not only than Harvard and Yale, but also than younger university like Columbia. The Faculty of Political Science there consisted of nineteen Professors and Lectures; and of these seven belonged to the department of Economics and Social Science.⁸

Marshall then wrote on 'the national interest in the supply of trained economists' in his *Plea for the Creation of a Curriculum in Economics and Associated Branches of Political Science*. In the earlier nineteenth century English economics were in the forefront, and the sustained unity of England's industrial development gave her economic history a leading interest for the economists of all nations. But so sternly her universities restricted the study of economics that the English economist was largely dependent on the work of foreigners for many urgent and practical problems. 'In the United States, in Germany and elsewhere, great numbers of business men and Government officials have studied economics at the universities, and have thus learnt to consider particulars in relation to general principles. But such men are rare in England'. [Marshall 1902: 2]

Ashley, who had taught at Harvard for nine years, noted that as a subject of undergraduate study economics attracted but a scanty band at Cambridge, and at Oxford it was practically dead. Whereas at Harvard, for instance, the general introductory course was taken every year

⁸ A. Marshall, "Political Economy" (dated March 24, 1899), in Cambridge University Association, *Statement of the Needs of the University*. Part I. "Library, Departments of Divinity, Law, Literature, Philosophy and Art": (Part II. "Scientific Departments") (Cambridge: University Press, 1900), pp. 26-28. U. A. Min. IX. 9, Cambridge University Library. See also Whitaker II: 248-50, To George Howard Darwin (Plumian Professor of Astronomy and Experimental Philosophy), 24 March 1899.

The Cambridge University Association originated at a meeting on 31 January 1899. Its object was to make known the claims of the University to financial support, the wants of such departments as were hampered by lack of funds, and the need of new departments. *A Short History of Cambridge University Association* (March 1926), Cambridge: University Press, 1926. U. A. Min. IX. 9.

Marshall wrote to Neville Keynes, 10 June 1894: 'The most astonishing feature of contemporary economic history is the fact that England, where no more [than] a tenth or a twentieth part as many special students of economics are found as in Germany, I believe the reason of this is that those very few students of economics whom we get at our English Universities are taught to use the inductive method in a scientific way'. [II: 116]

by some four hundred and fifty men. [Ashley, 1903: 33-4]

Ashley described the situation in a very similar tone with Marshall:

However highly we may think of the orthodox political economy of the half century from, say, 1825 to 1875, and great as was undoubtedly its influence upon legislation and the general current of public thought, it cannot be said that it was 'a flourishing study' at the university. ...It might be of use to the publicist and the statesman, but this prospect was hardly definite enough for the ordinary man. Its study was felt to be a luxury; and it is not luxuries, but bread-and-butter studies, which produce crowded class-rooms. [Ashley 1908b: 183]

According to Ashley, 'until a surprisingly recent date there was no real working professorship of political economy in Great Britain' comparable to the ordinary professorships in any German university. The remuneration was in most cases absurdly inadequate; the appointment at Oxford and Cambridge was the sport of election; and it was commonly regarded either as a stepping-stone to a Government appointment or as an appendage and assistance to a political career. 'Professors' lectures were considered to be mainly ornamental, and they scarcely formed a part of the real educational system. [Ashley 1907: 485]

The development of science in Britain took place largely without benefit of academic or other forms of public recognition. In contrast to Malthus' Chair of Political Economy at Haileybury, the chairs created at University College, London, and at Oxford, offered employment to their holders for a few years only, requiring merely an annual lecture series that was not integrated within the general curriculum. At Cambridge George Pryme and Henry Fawcett held the Chair of Political Economy for nearly sixty years after 1828, but their part-time professional duties were incidental to their professional and political careers. Throughout much of the nineteenth century, academic recognition did not match social significance or authority. As Cairnes complained in 1871:

In this vast London, so energetic, so enterprising, so enlightened; in this great center of the world's commerce; in this metropolis of the country which has produced Adam Smith, Ricardo, Malthus, Mill; which has produced, again, Pitt and Huskisson, Peel, Cobden and Gladstone; in this focus of economic activity and power; the systematic study of economic science is almost without practical recognition. [Cairnes 1871: 233]

An authoritative committee report of the British Association for the Advancement of Science in 1894, "The Methods of Economic Training adopted in this and other Countries" (largely provided by E. C. K. Gonner), exposed Britain's backwardness in economic training compared with Continental countries of Austria, Hungary, Germany, France, Holland, Belgium, Italy, and Russia. There Economics occupied a place more or less prominent in the course of training and in the examinations for the legal profession or the higher civil service; in particular in Austria, Hungary, and the three southern states of Germany the connection was very real and the nature of study was very thorough: therefore the direct and positive recognition was given. In America a strong public sentiment and interest in favour of careful study supplied the

needful impetus by making Economics an indirect and tacit requisite for those exercising particular callings. [British Association 1894: 366-67]⁹

The Report stressed the urgent need to improve the facilities for teaching and examining economics in British universities and colleges, saying that 'As contrasted with Continental countries and also the United States, the United Kingdom possess no regular system'. [ibid: 365] With the possible exception of Oxford and Cambridge, 'it is difficult to imagine a more complete indifference to the scientific study of Economics than that displayed at the present time'. C. F. Bastable, in his presidential address to the British Association in the same year, complained about the insularity of British economics and the failure, compared with 'German economic investigation', to study economic phenomena as part of a wider grouping of social and historical subjects, including 'political science, jurisprudence and the scientific principles of administration'. [Bastable 1894: 128, 136-37]

London School of Economics: 'Alternative to Marshall' ?

'Educate, educate, educate, is the burthen of the lesson from Germany', declared *The Spectator* for June 26, 1886, in an article "The Depression of Trade Abroad", referring the just issued *Reports of the Royal Commission appointed to inquire into the Depression of Trade and Industry*. The editorial of the *Chamber of Commerce Journal* also claimed on September 6, 1886: 'No topic is more worthy to engage the attention of business men, and of the Chambers of Commerce... than the adoption of some national scheme of commercial education.' They were the chambers of commerce which initiated the movement for higher commercial education in Britain. In London the Technical Education Board of the London County Council led by Sidney Webb was also active for providing business education; it was the tripartite efforts of London Chamber of Commerce, Technical Education Board, and Fabian Society (Hutchinson Trustees), who collaborated to inaugurate the London School of Economics and Political Science, which opened its door in October 1895 for 'training in administration, whether commercial or governmental'. It was described by Sidney Webb as 'the beginning of a "High School of Commerce"' in his paper "The Provision of Higher Commercial School in London", read at the Fourth Meeting of International Congress on Technical Education held in London. [Webb 1897: 208] W. A. S. Hewins, an Oxford historical economist who became its first director, had often insisted on a close fit between the School's teaching and the needs of those responsible for British business. The 'High School of Commerce' was nothing other than a Business School in later terminology. [Dahrendorf 1995: 59] With the foundation of London School of Economics, as *The Times* wrote, the movement for higher commercial education in England had achieved its first practical step.

The next major step was sparked by the Fourth International Congress on Technical

⁹ The Committee consisted of W. Cunningham (Chairman), E. C. K. Gonner (Secretary), F. Y. Edgeworth, H. S. Foxwell, J.N. Keynes, and H. Higgs. The interim report (1893: 571-72) and the final report (1894: 365-91) are in the *Reports* of the British Association for the Advancement of Science.

Education, held in London in June 1897, which was followed by a considerable amount of investigative and hortatory work including Michael Sadler's Educational Blue Book, i.e., *Special Reports on Educational Subjects* (1898), which bears Hewins' report on "The London School of Economics and Political Science". The clustering propaganda in the late 1890s including *The Times'* articles on "Commercial Education and New Universities" provided a receptive atmosphere for the Faculty of Commerce in the British civic universities. As above mentioned, the Faculty of Commerce at the newly created University of Birmingham was the first major attempt to provide an education for business management in Britain. In 1903 the Faculty of Commerce and Administration was established at the Victoria University of Manchester under the directorship of Sidney Chapman. These were followed by Liverpool, Leeds, Nottingham, Newcastle, and some Scottish Universities. London School of Economics had just been incorporated in the reformed University of London as its Faculty of Economics and Political Science (including Commerce and Industry), conferring the degrees of B.Sc. (Econ.) and D.Sc. (Econ.) from 1901—"the first university degrees in the country devoted mainly to the social sciences". [Hayek 1946: 14] England was prepared now to follow the example of other western countries, and to remove the reproach that English Universities had neglected the provisions for economic and business studies.¹⁰

The choice of Hewins as the first director of LSE was significant, for he was an Oxford graduate and an outspoken critic of economic orthodoxy who had 'disliked their theoretical outlook, their materialism leavened with sentiment and their remoteness from real events'. [Hewins 1929: 15] The aims of experimental new institution LSE was described by Hayek; that 'If Webb and Hewins were guided by any one conviction it was mainly that the theoretical and individualist economics of Ricardo and Mill had kept their dominant position far too long and that it was time to give other schools a chance'. [Hayek 1946: 5] More recently G.M. Koot argued in his article "An Alternative to Marshall: Economic History and Applied Economics at the Early LSE" that LSE 'sought to mold economic history and applied economics into an alternative economics to Marshall's more theoretical vision of the subject than being rooted at Cambridge'. [Koot 1982: 3]

Following his report on LSE in Sadler's Educational Blue Book in 1898, Hewins published

¹⁰ See also Sidney Webb's "Memorandum on a Suggestion for a University Certificate in Commerce" (Passfield Papers, Coll Misc 523/1, LSE Archives), where he says: "The proposal to establish a University Certificate in Commerce appears to ignore what already exists. The University already has a Commercial Faculty (the Faculty of "Economics and Political Science, including Commerce and Industry", and it gives, in that Faculty the degrees of B. Sc. and D. Sc. The name of the Faculty was deliberately settled by the University Commissioners, and they advisedly refused to designate it a Faculty of Commerce, whilst including in its scope all the "Commercial" subjects that they thought within the purview of a University'.

For these movements, see M. Sanderson, "The Arts of Commerce 1890-1914", in Sanderson 1972: S. Keeble, "University Education and Business Management from the 1890s to the 1950s: A Reluctant Relationship", Ph. D. Thesis, LSE, 1984: Do., *The Ability to Manage. A Study of British Management 1890-1990*, Manchester University Press, 1992: and Smith 1990.

a *Brief Report on the Work of the School* in 1899, which recounted a remarkable success story. [Dahrendorf: 58] Then Marshall wrote to Hewins, he had felt rather sore since he read Hewins' account of 'the position of Economics in England' in Sadler's Educational Blue Book. He felt that he must make a protest, in public or private, sooner or later. Marshall said:

While impelled to lay stress on one side of the case as to London, it seems rather hard that you should have laid stress on the other side as regards Cambridge. I gather that you really do not know what is being done here, nor how it is being done. Taking the least important point of all, the number of lectures given, I think you would be astonished if you counted up the number that are given in the year here on subjects of the same order as those treated in the London School: I believe you would find that our number is not less than yours; I hope that ...your text will be 'Economics should be studied, and it can be studied in London', and that you will stop there; that you will not add as you did,...: —' & it cannot be studied anywhere else in England: so down with the cash please, for without the London School there would be no true economic study at least on this side of salt water'. [Marshall to Hewins, 12 October 1899, II: 258-59]¹¹

2. Marshall's Economics Tripos in the Making:

Plea for the Creation of Cambridge School of Economics

In the same letter to Hewins Marshall wrote in the following way, which seems to be a kind of declaration for creating the Cambridge School of Economics:

Cambridge has an idea of its own which asserts itself in spite of the partially non-Cambridge idiosyncracies of one or two members of the staff. The incidental work wh ... should be compelled to advertise if we were starting a new place like the London School ... is very great. I regard it as the more important half of my own work; & it is governed very much by a central idea, Cambridge born. You will say —why then not write a separate & peculiar panegyric of Cambridge ? ... So I have tried to indicate what I mean by the guiding principle of those Cambridge men who are —in my view most truly Cambridge men—the search for the One in the Many & the Many in the One. [II: 258]

In the course of the Moral Sciences Tripos reform, Marshall wrote to Neville Keynes (30 August 1897): 'The success of the Econ: & pol: school in London will strengthen the demand in Cambridge for a bonâ fide economics school, under a Board wh shall regard it as a study worth having in itself, & not as an "inferior" study'. [II: 194] Marshall was very keen on further development of LSE. Apologizing for his delayed answer, Marshall wrote to Hewins on 19 February 1901: 'those difficult problems of organization in which you are immersed... are of

¹¹ See also Marshall to Foxwell, 21 March 1899, II: 248. Marshall, having looked at an article "A School of Political Science" in the *Daily Chronicle* (June 7, 1895: 3), wrote to Hewins on the same day: 'I was very pleased to see that so much progress had been made on what seems so excellent a plan. ...And I was much delighted to hear about Bowley'. (Marshall to Hewins, 7 June 1895, II: 125)

vital importance for the economic wellbeing of England: London and Cambridge have in many respects a closer kinship with one another than with any other economic schools on this side of the Atlantic; and, if at any time you would like to arrange a talk, I would gladly try to hit it off with you'. [II: 300] LSE was on the point of being reconstituted into the University of London as its Faculty of Economics and Political Science (including Commerce and Industry) with ten 'recognized' lecturers, conferring the degrees of B. Sc. (Econ.) and D. Sc. (Econ.).

The making of Cambridge School can be understood and accounted as a sociological phenomenon and 'a battle of professional independence' of economics. In some sense Marshall led British economics from the rear and perennially anxious to complete his 'magnum opus'; still he 'employed a number of subtle and indirect methods of exerting his influence, and occasionally used a more direct approach'. Marshall advocated intellectual freedom and toleration of heresy and dissent, but 'his desire for harmony among the economists represented a kind of protective device that helped to reduce opposition to his own ideas'. He was a conciliator, but it was 'without concessions'. [Coats 1967: 710-12; Maloney 1976: 440]

Marshall's irritated references to Hewins, Webb and Chamberlain reveal his fears of competition from London School of Economics and the new Faculty of Commerce, headed by Ashley; and an effective Cambridge 'school' of economics seems not to have emerged until the tripos was set up. As will be seen below, Marshall apparently canvassed carefully and cautiously for Pigou's election as his successor in 1908, for if the appointment had gone to either of Pigou's two principal rivals—Foxwell (aged 58, in contrast to Pigou's 30) or Ashley (aged 48)—the emphasis of Cambridge economics would have shifted more decisively in favor of those dynamic, empirical, and realistic studies which Marshall himself once described as the principal task of future generation; and would have had much more in common with the 'science of (actual) business'. But analytical economics would have suffered for the sake of applied economics and economic history, and 'it seems ironic that the Cambridge "school" eventually became identified with a species of theoretical reasoning that Marshall himself considered to be of secondary importance'. Pigou indubitably did much to insure that Marshallian concepts and techniques of analysis dominated Cambridge economics. [Coats 1967: 713-14]

Liberation of Economics from the Incubus of Moral Sciences:

Marshall vs J.N. Keynes

For Marshall the first thing to be done in the reform of Moral Sciences Tripos was to liberate Economics from the 'philosophical' pressure of the Moral Sciences Tripos. The Moral Science Board had been discussing reform of the Tripos since November 1895. A subcommittee of Marshall, Sidgwick, Keynes, and Foxwell was established on 27 November 1896 to make detailed proposals on the political economy papers. The revisions to the Tripos were eventually approved by the Board on 10 May 1897. [CUR, 18 May 1897] The major changes contemplated by the Board were strengthening Part I, and the separation of Part II into distinct 'philosophical' and 'politico-economic' alternatives. However, since students were able to obtain a BA degree on Part I alone, and the weight of its 'philosophical' subjects was significantly increased,

the flow of students to go on to Part II was discouraged. Marshall thought that this would not be changed.¹²

Marshall had given a definite promise to sign the Report on the revisions in the Moral Sciences Tripos, if Part II were made suitable for economic students coming from other Triposes. But his promise was 'converted into something different' by the resolution of the Board to make Part I so heavy that few students were likely to take Part I and Part II on the economic side. He wrote to Keynes (16 August 1897): Comparing Cambridge economics with the London School, 'I feel I did very wrong in signing the last Mo Sc Report'. Marshall even wrote (30 August) that 'it is to me the most grievous deed I have ever done'. He thought that 'till that Report is superseded, or a Pol: Sc: Tripos started, mathematical casuals will remain almost the only men worth teaching economics in Cambridge: there will be no scope for advanced or organized *class* teaching'. [II: 193, 195]

Marshall thought that 'the heavy philosophical Part I of the new Mo Sc Tripos has rendered it impossible to have a respectable school of economics connected with that Tripos'; saying to Keynes (16 August) that 'If Part I had been lightened & Part II made compulsory, Philosophy would not have suffered; & economics would have breathed'.

The Mo Sc men, except the ablest are mere parasites of text books: they know nothing & seem to care nothing about real life. And the oppression & suppression of economics by the incubus of Moral Sciences seems to me at once so cruel & so great a national evil, that I should be a traitor to my trust if I allowed my personal regard for Keynes & others to prevent me from appealing to the judgment of the impartial University for redress. [To Foxwell, 14 February 1902, II: 358]

In the years around 1902, as mentioned at the beginning, the commercial education or the education of businessman seemed really to be booming. In January (27th) 1902 Marshall thanked to W. R. Scott, then at St Andrews University, for 'interesting scheme for higher commercial education' there, saying that 'I have with the printer a plea for the extension of economic studies here'. [II: 347]¹³ Marshall sent a draft of his "Plea for the Creation of a Curriculum in Economics and Associated Branches of Political Science" to Foxwell, Neville Keynes, Cunningham, Giffen, Phelps, and some others, in very early 1902. As he wrote, Keynes was 'the only correspondent who has found much fault with my scheme'. In fact Keynes was 'in considerable disagreement', as he wrote down in his "Diaries" (31 January 1902). Cunningham did not make any answer to his letter and draft of the paper. [II: 355, 359]

Keynes wrote to Marshall on 29 January 1902, saying that he was much interested although not in entire agreement.

The statement that Economics is an inductive science does not appear to me to be correct without some qualification: for it puts one side of the truth only. I should attach more impor-

¹² See Whitaker II: 177, 194.

¹³ For the higher commercial education in Scotland, see Sanderson 1972: 206-8.

tance to a sound knowledge of economic theory & of the right methods of economic reasoning than is suggested by the paper; & I should attach less importance to a detailed knowledge of economic facts, so far as any practicable undergraduate training in Economics is concerned. I should like to see the post-graduate study of Economics developed here; but I am not so clear that any fundamental change in our undergraduate curriculum is necessary. [II: 349]¹⁴

'Not unnaturally' Keynes did not agree with Marshall's attitude towards the Moral Sciences Tripos. For Keynes, if the Tripos was considered over a long period, the amount of economics was greatly increased. And he did not think it necessary to liberate economics from philosophical pressure of Moral Sciences. Marshall wrote back in length on 30 January 1902, saying: 'In all this weary & oppressive work for the liberation of economics from the incubus by which I believe it be oppressed, nothing has given me so much pain as the thought that I must necessarily go against your wishes'. Among the pupils Marshall had cared for, Neville Keynes and Pigou had 'a special charm' for him. And it grieved him increasingly to feel compelled to protest against doctrines, especially those relating to 'the economic man' &c which he once taught himself under 'the baneful spell' of Mill's *System of Logic*, and of which the studious members would find traces of in Keynes' *Scope and Method*. [II: 350]

Marshall had been utterly convinced that 'the hostility, wh businessmen & and men of affairs show to economics, is due not to anything which is really done by economists, but to things which logicians & especially Mill have said they did; & have been echoed or reechoed millions of times'. For Marshall, therefore, it was really necessary to liberate economics from 'the legacy of distrust and misunderstanding due to the false view of economics' so as to relieve the hostility of businessmen and to get public recognition. Gradually he had been forced to the conclusion that 'Unless the empirical treatment of economics is completely to oust the scientific & analytical—to wh you & I are almost the only two English economists who are perfectly loyal (I don't count Edgeworth, because he is so extreme), we must throw overboard the most mischievous & untrue statement that according to the classical economists "it was only on the assumption of free competition that their principles & terminology would apply"'. [Ibid.]

Marshall had been fearful of 'the narrowness of the studies' at Cambridge and thought that 'Oxford has a great advantage'. He had got more good economists out of one year in Oxford than from sixteen years in Cambridge. He wrote with imminent feeling:

It is a fact that the crop of economists whom I got out [of] Oxford in a single year—Price, Harrison & Gonner—is better than those whom I have got out of the Moral Science Curriculum proper in the last sixteen years. In fact McTaggart is the only first class man whom I have caught: & him I have only half caught.

¹⁴ Keynes wrote in his "Diaries" for 31 January 1902: 'Marshall is starting an agitation for the establishment of an Economics & Politics Tripos, & he has written a paper on the subject with which I am in considerable disagreement. We are having a correspondence that bothers me & I am sure worries him considerably. I want to nip it in the bud if possible'.

I must do all in my power to liberate economics from its shackles.... I have no time to wait. Economics is drifting under the control of people like Sidney Webb & Arthur Chamberlain. ... *the curriculum to wh I am officially attached [i.e. Moral Sciences Tripos] has not provided me with one single high class man devoting himself to economics during the sixteen years of my Professorship.* I exclude here on the ground of age Chapman. & the—as yet untried—Hamilton. [II: 350-52]¹⁵

Marshall was keen on the development of LSE, but he could not contemplate such a danger without grave anxiety that 'that the economic department of the London University might be "captured" by people acting more or less in alliance with the Fabians'. [To Hewins, 19 February 1901, II: 300]

Adelphi Terrace is doing wonderfully good work: but it has the defects of its difficulties.... Partly for this reason; & partly because it has to do with officials in public & and private employment whose province is the faithful execution of orders rather than a profound investigation of the principles on wh those orders should be based, the School tends to emphasize the mechanical methods of investigation: ie those in which highly specialized calculating machines—whether made of cog-wheels or of torpid flesh & blood—can be set to tunes based on formulae & and to grind out results wh. are officially pure & above reproach. [To Bowley, 3 March 1901, II: 305-6]

Still Marshall wrote again to Keynes on 6 February 1902: 'It is essential that students should acquire an extensive knowledge of *facts ie big facts*, in order that they may understand how a sense of proportion is, after sound reasoning, the most important equipment of an economist. You read the Economist & the Statist &c: & so are realistic. But the influence of clear reasoners without sense of proportion, or knowledge of reality, is I think not an unmixed good'. [II: 353]

Marshall and Keynes became quite hostile to each other. At the end of the letter of 14 February 1902 Marshall wrote to Foxwell: 'Keynes wrote a letter wh I have not been able to answer. This partly answers it. Would you be so kind as to show him this. And Oh Keynes ! please forgive !!' [II: 359]¹⁶

¹⁵ In replying E. C. K. Gonner's enquiry in connection with economic training at Cambridge, Marshall wrote to Gonner on 5 May 1894: 'Cambridge suffers much from the narrowness of the studies of all except those choice students who are able to think and read both for their Tripos and outside of their Tripos; and she suffers much from the lack of men who can put important truths in easy language that is attractive to able men who are not specialists. In these respects Oxford has a great advantage over her. Oxford gains too from the fact that her students can afford to read a little Economics, without departing from the straight path which leads to success in Greats; whereas in Cambridge Economics does not enter in any way whatever into any Tripos except the Moral Sciences and the Historical. And the provincial colleges have a great advantage over both Oxford and Cambridge, in the directness with which students at them are brought into contact with the problems of social and economic life'. [II: 112]

Referring the proofs of Keynes' *Scope and Method*, Marshall once wrote to Foxwell (30 January 1897): Most of the suggestions which he made on were aimed at 'bringing it more into harmony with the views of Schmoller'. Some were accepted. But 'it still remains true that as regards method I regard myself as midway between Keynes + Sidgwick + Cairnes and Schmoller + Ashley'. [II: 179]

The Statist (May 31, 1902), reviewing Marshall's *Plea*, wrote that the teachers of economics 'are too academic; too ignorant of real life; too far removed from the matters they treat of; and consequently their teaching is crude always, and not seldom absurd'. 'Economics, or political economy, or whatever name may be preferred, is purely a science of observation'. [1086] For Marshall thus, 'liberation of economics' probably meant to make economics more 'realistic', to secure more public and academic recognition, or to make more easy to access for businessmen, so as to reduce the 'risk of the alienation of English business men from the Universities' [CUR, 528]. The 1894 Report of the British Association well observed the position of economics and economic studies at that time. It stated Britain's problems and difficulties compared with the United States.

It was a matter of serious concern that Economics was not regarded as necessary part of professional curriculum. It was no doubt part of 'the legacy of distrust and misunderstanding due to the false view of Economics placed before a former generation', and it would be 'a long time before the popular conception of an economist as a compound of text-book theory and ignorance of fact can be entirely dispelled'. Owing largely to the early prominence of the abstract school of economic thought in England, the position of the subject in the university curricula was far from satisfactory. [British Association 1894: 387]¹⁷

In America economic studies were seized and followed because they seemed to offer an explanation of the vast and complex economic condition which was in process of rapid evolution —so great and so new.

That the study of Economics is a novel study is important, but it is of equal importance that it is novel at the present time and under present conditions. The American economists have not to shake off the half-uttered, half-silent opprobrium attached to their subject through the action of the more numerous though less conspicuous of their predecessors in their rigid adherence to incomplete or ill-founded theories. They are fortunate in entering upon their teaching at a time when the need of inductive inquiry and training is more fully recognized. [ibid: 380-81]

¹⁶ Keynes returned Marshall's letter to Foxwell with a covering note observing that 'I don't think there is anything more to be said at present: but we must talk the matter over together soon'. See Whitaker II: 359.

¹⁷ cf. Marshall letter to J. N. Keynes (10 June 1894), after reading the Report.

Economics and Political Science: With Lowes Dickinson

For Marshall, the action of the History Board was far more generous and broad minded. He had little to say against the new History scheme from the economic point of view, except that in his opinion 'historical economics, though infinitely more important than philosophical economics, because infinitely more real, is yet not economics proper'. [II: 194, 357] He would not deny that 'a man like Hewins who is dominantly historical, but also can reason straight, might find good work in connection with the new Historical Tripos'. But 'after all it is *not* Economics proper'. [II: 193]¹⁸

Marshall's role during the discussion now was 'to play economic accompaniment to a Political solo of Dickinson'. [To Oscar Browning, 1 May 1901, II: 311]. As he wrote to Foxwell (8 May 1901): 'A Committee (Master of Peterhouse, Dickinson & myself) appointed to report to the Board as to how best to extend the study of modern economics & politics in the University'. [II: 314] At a meeting of the History Board, Lowes Dickinson had moved that 'the Board consider the advisability of making better provision for the study of existing economic and political conditions'. In its special meeting of 6 May 1901 to consider Dickinson's motion, the History Board approved the motion and agreed to set up a committee consisting of A.W. Ward (Master of Peterhouse), Dickinson, and Marshall to 'consider what steps should be taken to give effect to the above resolution'.¹⁹

In the same letter to Foxwell (8 May 1901), Marshall wrote: 'My own hobby now is an entirely separate Tripos', as separate as are the Indian & Semitic Triposes, but under the same Board with the Historical Tripos as those are both under the Oriental Board. Only he would prefer that this Board did most of its business in two grand Committees one Historical, the other Economic & Political. [II: 314-15] Marshall incorporated there Dickinson's suggestions for the Political Papers with an amended version of the old scheme which Foxwell, Sidgwick, Keynes, and he himself discussed so much some time ago. He urged that 'if our studies were made to give no room for what business men want, we must expect their money to go to new Universities'. Some thought indeed that Marshall was going for a 'commercial school'. [II: 315]

The enclosed "Scheme for an Economic and Political Sciences Tripos" [See Appendix 1] was designed with a view to the needs not merely of professional students of economics and politics; but also for those who are preparing for;

- a) work in Parliament, or on local Representative Bodies;
- b) The Home or Indian Civil Service; diplomacy and the consular service;
- c) the higher work of large businesses, public and private, including railways, shipping, for-

¹⁸ Marshall wrote to Lord Acton (19 November 1897): 'So far as I can judge, he [Hewins] is the ideal man for the task you propose [Lord Acton planned to edit the *Cambridge Modern History*.]—the best man there has ever been in England. I had not thought of Clapham in connection with so weighty a task yet'. [II: 212]

¹⁹ Whitaker II: 312, 317. The History Board minutes include an unsigned duplicated memorandum, headed 'Scheme for a course of study designed as a preparation: 1) For business on a large scale, 2) For public life, 3) For the professional study of Economics and Politics'. [ibid. p.313.]

- eign trade & those branches of manufacture that do not require a long study of engineering and physics;
- d) the duties of a country gentleman;
 - e) the service of the poor.

Dickinson agreed that the economic side had better be presented by itself, leaving him to write as a free lance on political extensions. Marshall was modifying his paper in some details and proposing that it should be 'an Economic and Social Sciences Tripos'. But to have adhered to 'Economic & Social Science' or to 'Economics' simply would have laid him open to the charge of not keeping good faith with the majority on the Historical Board who voted for Dickinson's original plan. [To Foxwell, 18 February 1902: and 23 February 1902, II: 360, 361]

The Many is the ground of study: method of economics

Marshall much emphasized that he 'was never a partisan of' pure theory and for more than a quarter of a century he had 'set his face away from it'. In a letter to Hewins (12 October 1899) he wrote: 'It seems strange to me to be asked my views as to the study of pure economic theory; as tho' that were a subject on wh I were fit to speak'. He even said: 'As early as 1873 Walras pressed me to publish something about it; & I declined with emphasis'. As he wrote to Brentano (27 September 1900), he came to the conclusion twenty years ago that there were other things he was anxious to do and had 'scarcely touched it [economic theory]' since then. The fact was that he held 'Economics to be an organic whole, & has as little respect for pure theory'. [II: 256, 286]²⁰

Having discovered the One in the Many, they might set forth afresh the Many in the One. I repeat, I regard the use of mathematics on the way as a gain when convenient, but not as of the essence of the work. In my view the *Many* is the ground of study; the *One* is the Holy Grail to be thought by the pious & laborious pilgrim; & the One when so found is to help as a guide through life over the broken ground of the Many. [II: 257]

In fact nine tenths of my reading is of books & papers written by men in active life for men in active life—that is, chiefly business men & working men. I buy 'economic' books; but seldom read what they say about economic theory. [II: 286]

As he wrote to Foxwell [25 January 1897, II: 178], he did not like the classification of Theory, History, Policy, because he did not think that 'there is any "theory" to speak of', and 'analysis is unprofitable when separated from the study of facts'. If he was to try to classify economics, it would be somehow:

²⁰ Referring to the London University Calendar, he wrote to Hewins (29 May 1900): 'The subject wh you had described as economic science is officially called "pure theory". I knew that that had been assigned some place: but I am rather indifferent about it. Much of "pure theory" seems to me to be elegant toying: I habitually describe my own pure theory of international trade as a "toy"'. [II: 280]

- i Unanalytical acquaintance with leading facts as a basis (ie a ground work in the description & simple history wh set forth records of events & conditions & circumstances of life & action).

The study of facts are,

- ii Elementary qualitative
- iii Compound qualitative
- iv Quantitative

And the synthesis or 'applied economics' in subordination to ideals & aims are,

- v Simple general
- vi Complex general
- vii Detailed & Technical²¹

He still held that 'Theory' was essential. No one gets any real grip of economic problems unless he would work at it. But he conceived 'no more calamitous notion than that abstract, or general, or "theoretical" economics was economics "proper"'. The key-note of his *Plea* was that '*the* work of the economist is to disentangle the interwoven effects of complex causes'; and for this, 'general reasoning is essential, but a wide and thorough study of facts is equally essential', and that 'a combination of the two sides of the work is *alone* economics *proper*'. 'Economic theory is, as mischievous an imposter when it claims to be economics *proper* as is mere crude unanalyzed history'. [To Edgeworth, 28 August 1902, II: 393]

Edgeworth once characterized Marshall's work by a phrase, 'bearing under the garb of literature the armour of mathematics'. However, Edgeworth wrote later in his "Reminiscences" of Marshall in 1924: 'Excelling in the concurrent use of pure reasoning and concrete knowledge, Marshall was very sensible of the dangers attending the use of the first factor by itself. In many a letter he has warned me against this danger'. Marshall would, no doubt, have subscribed to Burke's dictum: 'The excellence of mathematics and metaphysics is to have but one thing before you; but he forms the best judgment in all moral disquisitions who has the greatest number and variety of considerations in one view'. 'These characteristics—supreme skill and extreme caution in the application of abstract reasoning—may be traced in most of Marshall's writings'. [Edgeworth 1924: 66-7]

Marshall's letters to his former student A. L. Bowley seem to be revealing how he thought about economic method. He had a growing feeling that 'a good mathematical theorem dealing with economic hypotheses was very unlikely to be good economics': and he went more and more on the following rules about using mathematics—(1) Use mathematics as a shorthand language, rather than as an engine of inquiry. (2) Keep to them till you have done. (3) Translate into English. (4) Then illustrate by examples that are important in real life. (5) Burn the mathematics. (6) If you can't succeed in 4, burn 3. This last he did often. 'You should do all

²¹ Marshall also wrote to Foxwell: 'What you call Policy; & I call applied economics'. [26 April 1897, II: 186]

you can to prevent people from using Mathematics in cases in which the English Language is as short as the Mathematical'. [27 February 1906, III: 130]

He was getting more convinced that except in purely abstract problems 'the statistical side must never be separated even for an instant from the non-statistical'. It was on the ground that, if economics is to be a guide in life—'people must be warned off by every possible means from considering the action of any one cause... without taking account of the others whose effects are commingled with it'. And, since many of the chief of these causes have either no statistical side at all, or no statistical side that is accessible practically for common use, 'the statistical element must be kept subordinate to general considerations and included among them'. [To Bowley, 7 October 1906, III: 145]

For general purposes I rely more on my 'field work' in the workingmen's quarters of many German towns, and on my conversations with Germans in the Tyrol, than I do on Statistics. For the Statistics seems to me specially full of traps. 'Arbeitslosigkeit' for instance means something very widely removed from 'Unemployment', and it is hard to find out how widely... [To Bowley, 15 October 1906, III: 146]

Writing thanks to Bowley for his *Elements of Statistics* (1901), Marshall wrote: that 'There was too much mathematics in your excellent book for the ordinary economic student': and that 'It presents an implicit claim for the applicability of abstract reasoning in the deduction of practical precepts from economic statistics, which I hesitate to admit'. Marshall regarded the method of Least Squares as involving an assumption with regard to symmetry that vitiates all its applications to economic problems. He thought that 'the economic, as distinguished from the mathematical, student is hurt by being invited to spend his time on them, before he has made a sufficiently realistic study of those statistics to know roughly, without calculation, on which side of the target the center of the shots lies'. Though accepting the rule that, other things equal, it is more important to multiply items for an index number than to adjust weights, he held that in economics 'other things' are so often not equal that greater proportionate stress ought to be laid on the necessity of examining each case to see whether the weights are important or not.

Marshall continued:

Independently of its [Ironfounding] unique statistics, that trade fascinates me. I love to linger in the foundry, and I never liked mechanical invention less than when I learnt that it was bound to drive out the life-earned skill of the artisan from many of the higher, as well as the lower, branches of trade. It was in 1885 that I was shown over the only Works in Keighley that were on full time.

Will you then be so very generous as to forgive me if I ask you to ask yourself whether, having now brought out this great and successful book, it is not time to make some further study of the broader relations between economic facts: to leave mathematics for a little on one side; and join more heartily in the quest for 'the One in the Many, the Many in the One'? [21 February, 1901, II: 300-2]

Recent Economic History, 19th Century: Marshall against Cunningham

Another effort of Marshall was to liberate the modern economic history from the mediaeval history and Cunningham. 'No one can have a greater dislike to minute study of mediaeval History than I', wrote Marshall to Foxwell (14 February 1902). He also wrote to a great Cambridge Chancellor, Sir William Harcourt (11 March 1902): 'The medioevalists, who think that half of our history happened before 1500 & scarcely any since 1815, dominate our historical school... The aim of the new movement is to provide an alternative course for those who wish to give their chief attention to the events of the nineteenth & twentieth centuries, & to their correlations'. [II: 357, 368]

Marshall thought that absence of any tolerable account of the economic development of England during the last century and a half was a disgrace, and a grievous hindrance to the right understanding of the economic problems of his time. Till recently the man for the work had not appeared. But now he thought the man was in sight. 'Clapham has more analytic faculty than any other historian whom I have ever taught', Marshall wrote to Lord Acton; he went on, 'If you could turn him towards XVIII & XIX century economic history, economists would ever be grateful to you. ... if he works at anything but recent economic history, he will disobey Babbage's canon that everyone shd do that work for wh. all his best faculties are wanted & none other'. [13 November 1897, II: 206].²²

Conflicts between Marshall and Cunningham had apparently been since Marshall's election to the Professorship of Political Economy in 1884, to which Cunningham was also a candidate. Cunningham opened hostilities against Marshall iteratively since 1889. As is well known, Cunningham attacked again Marshall's approach in "The Perversion of Economic History" in September 1892, which disqualified Marshall as an economic historian; then Marshall immediately made "A Reply" in *Economic Journal*. Edgeworth as its editor told Cunningham that 'the controversy must end with his attack & [Marshall's] reply'. 'The matter of Dr Cunningham' seems to have blown over.²³ Marshall believed that the majority of the Historical Board, including 'every teacher of economic history except Cunningham', were opposed to encouraging people to attempt to study 'economic history in the present fashion—to wh there is nothing analogous in any one University in the world except Cambridge'.

Now I do not want to attack Cunningham in any way direct or indirect. But to state that those people who are studying economic history as a mere series of facts without any scientific analysis, are students of economics, would I believe be a falsehood. It would I think be misinterpreted by Schmoller's students just as much as by Edgeworths... I have counted Cunningham among those who [are] teaching on the economic side:But I will not say that men who read 'economic history', & avoid the economics paper in the historical Tripos are

²² Marshall also wrote to Oscar Browning as to Clapham that 'he is a much better economist than he would have been if he had wasted the time which he spent on the XI-XVIII centuries'. [18 May 1903, III: 13]

²³ Marshall to Neville Keynes, 10 October 1892, II: 82. Benjamin Jowett to Mary Marshall, 16 October 1892 and 2 January 1893, II: 83-84. See Maloney 1976: 441-43.

'students of economics' without qualification. [II: 251-52]

A resolution was carried at the Historical Board [probably at the Board's meeting of 16 May 1896], to the effect that students should be encouraged to study economic analysis in connection with Economic History. Cunningham then said: 'Under those circumstances, it will be impossible for me to continue to teach economic history', or 'if this resolution stands, I shall retire from teaching'. Then Marshall said: 'Dr Cunningham is an able man, of whom we are proud. I do not think that we should adhere to a resolution wh he regards as destructive of his method of teaching the subject', and moved that the Resolution just passed be rescinded and it was. [II: 251, III: 65]

After the establishment of the Economics Tripos, Marshall wrote to Joseph Tanner (25 October 1903), concerning the relation of Economics to the History Tripos: he should regard it as a great evil to turn Economics out of Part I, unless Economic History after 1485 goes with it. Marshall opposed to a student being taught dogmatically a tissue of his teacher's statements which were called history, but which really, in his opinion, were its antithesis.

Domesday Book has no dogmas; it is a continued application of the analytical method: it is a noble training for the mind, & it will... gradually supersede the antagonistic view of medioeval times given by Cunningham. Even if his conclusions were generally true, as I believe them to be generally false, the method by wh they are reached would I believe exercise a deadening effect on the mind. The whole difference is this: I believe early economic history especially on the agricultural side to be 'catastrophic' in Maitlands phrase, & like the ice on the lower reaches of a glacier, not that on a pond. It is only because we are not near that the crevasses & pinnacles of wh the glacier is made seem to be smooth. Cunningham seems to be like a man who applies a crude form of spurious physical science to explain why the lower part of a glacier is stationary; & is so smooth that, if [it] were only level, one could skate on it nicely. His pupils look at it from a distance & say 'Oh, how smooth ! What a pity it is not level !' [III: 65-6]

Marshall's hostility to Cunningham was revealing in his another letter to Oscar Browning about Pigou [28 October 1903, III: 67]: Marshall argued that the Trinity as contrasted with the King's route to economics had not proved itself successful. Then Browning burst in with but Pigou studied economic history before economics. Marshall's answer was: Pigou 'never came under Dr Cunninghams influence at all: he tried to listen to his lectures; but, like other able men, found them designed merely to enable the weakest of students to understand his own book, a waste of time for men who already knew how to read for themselves'. 'From first to last the whole working of his mind has not been on Cunninghams lines, but on the opposite'.

Collaboration with Foxwell in the Economics Syndicate:

'Memorial to the Council of the Senate' (dated 26 April 1902) with 131 signatories by Members of the Senate, respectfully requested the Council 'to nominate a Syndicate to enquire

into and report upon the best means of enlarging the opportunities for the study in Cambridge of Economics and associated branches of Political Science'. [CUR, April 29, 1902: 762-3] Neville Keynes did not sign the Memorial, as Marshall was afraid of. This April 26 Memorial led to the creation of the Economics Syndicate. The members were A. W. Ward, then Vice Chancellor, as chairman, and Cunningham, Maitland, Westlake, Keynes, Sorley, Foxwell, Tanner, Leathes, Dickinson, MacTaggart, and Edmund Henry Parker, then Borough Treasurer of Cambridge. [CUR, May 27, 1902]

The Syndicate first met on 29 May. Then Dickinson was appointed Secretary, and Marshall submitted to the Syndicate many letters from men of affairs (such as Sir David Dale, Charles Booth, Walter Leaf, Sir Robert Giffen, Sir Clinton Dawkins, Mr Gibb, and so on), which were their very favorable responses to support Marshall's *Plea*, which had been sent and circulated. They bore 'almost exclusively on the probable demand for systematic education in economics by students preparing for the higher ranks of business, and for public life. But one or two of them touch the more vital question how Cambridge may do her part in training professional economists who will be able to apply high scientific faculty and sound knowledge of affairs to the great problems of coming generation'. ['Minutes of the Economics and Political Science Syndicate', U.A. Min. VI, 68]²⁴

Neville Keynes was quite hostile to Marshall and indifferent to the proceedings of the Economics Syndicate. In his Diaries of this day he wrote down: 'Marshall said a good many silly things, and I am afraid he had in consequence rather a bad time. Even Maitland appeared to be hostile to him'. Indeed Marshall wrote Keynes: 'I am filled with joy at this thunderstorm. It explains why I could not explain myself to some of my co-syndics or understand them yesterday: & why I spent the night almost without sleep for the first time for nearly twenty years'. ["Diaries" of June 1, 1902: Whitaker II: 406]

At the next meeting on 15 October Marshall proposed that 'Economics, with the allied parts of political and legal subjects, supplies matter sufficient in itself for three years' course of study, and not to be adequately dealt with in a tripos combining other subjects'. After the discussion the motion was amended by the substitution of the words 'associated branches of political science', for the words 'allied parts of political and legal subjects', and approved 11-2. The Syndicate were to meet every week. The following meeting on 22 October completed the agreement on principle and established a sub-syndicate (Marshall, Foxwell, Westlake, Maitland, Tanner, Leathes, Dickinson) to consider detailed proposals. [U. A. Min. VI. 68]²⁵

²⁴ A typewritten copy, dated 1 October 1902, of this submission of letter extracts to the Syndicate is preserved in the Marshall Papers. A selection of letters was printed and circulated as "To Members of the Cambridge University Senate" dated 20 May 1903. Some full letters were reproduced in Whitaker II: 369-84.

²⁵ Keynes wrote in his "Diaries": We are to meet every week. 'Marshall was as ridiculous as usual'. [October 15, 1902] 'We have appointed a large subsyndicate, who are likely to take some little time over their Report. That will give the rest of us a holiday'. [October 22, 1902] 'Battle-royal between Marshall & Maitland: the latter victorious'. [November 12, 1902]

On 22 October Marshall, jointly with Foxwell, submitted the following table as their answer to the first of questions to be discussed by the Syndicate. It showed the aggregate work which needed to be done. Those who looked forward to a diplomatic or political career, would omit some of the special economic subjects so as to be able to do more on politics and law: while those who were preparing for the higher work of business might concentrate their attention on one or two of them. It was not proposing to provide 'for those who, looking forward to the lower responsibilities desire mere technical instruction'. ["Economics Syndicate" by Marshall and Foxwell, U. A. Min. VI. 68. Whitaker II: 406-7]

	Number of Units	
	Minimum	Maximum
General Subjects		
Economic and general history, chiefly recent, of U.K., and in a less degree of the rest of the western world. Geography included.	4	6
General principles of economics	3	3
Elements of method, especially statistical method	1	1
Special Subjects (Lectures in some cases only in alternate years.)		
Money, banking &c.	2	4
Trade, transport and modern industrial development	3	6
Conditions of employment	2	4
Ethical aspects of economics	1	2
Taxation. Economic functions of Government. Socialism.	2	4
History of economic doctrine	0	2
Mathematico-economics and statistics	0	2
Politics and Law	2	6

The full syndicate met on 5 November. The report of subsyndicate proposing that the following subjects were to be added was agreed: 1. The existing British constitution 2. The history of political theory 3. Public international law 4. The law of contract. It was also agreed that the Tripos should be divided into Parts I and II. The nature of Part I was settled at that meeting. Part II was to be considered at the next meeting on 12 November. Agreement on Part II, particularly on economics subjects, proved more difficult, eliciting modified proposals from Marshall and Foxwell. Marshall and Foxwell first submitted the scheme for Part II (dated 10 November) as a basis for discussion. It says, Papers 1, 2, 3, 4, 5, to be Economics in general, with some facilities for specialization under heads A, B, C, D; and Papers 6, 7 to be Economic functions of Government. There, A for Modern industries, their structure, and problems; B for Employment; C for Money and credit; D for International trade and its policy. ["Economics and Political Science Syndicate" by Marshall and Foxwell, dated 10 November 1902. "Economics

Syndicate. Resolutions agreed to up to November 12, 1902." U. A. Min. VI. 68. Whitaker II: 409-11.]

Then they submitted Draft I and Draft II for Part II (dated 18 November). In Draft I; Papers 1, 2 were to be General economics; Papers 3, 4 A to be Modern industries, their structure and problems; Papers 5, 6 B to be Employment; Papers 7, 8 C to be Money, credit and prices; Papers 9, 10 D to be International trade and its policy; and Papers 11, 12 to be Economic functions of Government. If however the number of papers to be allotted to A, B, C, & D together must be four and not eight, then they would not see their way to providing both for the wants of students preparing for active life, and for those of professional students of economics, except on the more complex plan originally proposed in which A, B, C & D were all represented in each of the four papers: the last two of these four papers being designed mainly for professional economists. Accordingly they submitted an alternative Draft II, modified from their first scheme.

In Draft II for Part II: Papers 1-6 were to be Economics. Papers 1, 2 were to be of the general character. Papers 3, 4, 5, 6 were to consist chiefly of questions more or less specialized to one of the groups A, B, C, D; Papers 3, 4 to be realistic & adapted to the needs of those preparing for public or private business as well as professional economists. Papers 5, 6 were to be of a more exclusively academic character & to make provision for some of the more obscure problems of value, such as those connected with the shifting and ultimate incidence of the burden of taxes; for the history of economic doctrine; and for mathematical problems in economics and statistics. ["Economics and Political Sciences Tripos" by Marshall and Foxwell, dated 18 November 1902. U. A. Min. VI. 68.]²⁶

The following resolutions were approved on 19 November; that there be four papers on Economics each of which was so arranged as to encourage a limited specialization on some one or two of the principle divisions of Economics. That of these four papers two be realistic and adapted to the needs of those preparing for the higher work of public or private business, as well as to those of professional students; and that the remaining two be adapted mainly to the needs of professional students. ["Economics Syndicate. Resolutions Passed at the Meeting on November 19." U. A. Min. VI. 68.]

The Economics and Political Science Syndicate finally reported on 4 March 1903, recommending the establishment of a new Tripos.²⁷ This Report was debated by Senate on 7 May and a full account appeared in the *Reporter*, 14 May 1903. [pp. 763-74]

Schedule of Subjects

Part I.

1. Subjects for an Essay. 1 paper

²⁶ Whitaker did not take this document in *The Correspondence*, so I shall reproduce it as Appendix 2.

²⁷ See *CUR*, 10 March 1903: 528-38, for the text: "Report of the Economics and Political Science Syndicate" (4 March 1903). Keynes' "Diaries" (March 4, 1903) reads that 'Economics Syndicate. Report signed. I am glad that this business is practically at an end'.

2. The existing British constitution. 1 paper
3. Recent Economic and General History. 2 papers
4. General Principles of Economics. 3 papers

Part II.

1. Subjects for an Essay. 1 paper
2. General Economics. 3 papers
3. Advanced Economics, mainly realistic. 2 papers
4. Advanced Economics, mainly analytic. 2 papers
5. Modern Political Theories. 1 paper
6. International Law with reference to existing political conditions. 1 paper
7. International Law with reference to existing economic conditions. 1 paper
8. Principles of Law as applied to economic questions. 2 papers
9. Special subject or subjects. 1 paper each

For Part I: The questions on Recent economic history deal chiefly with the United Kingdom during the nineteenth century. The questions on Recent general history deal with the British Empire, Continental Europe, and the United States, chiefly during the nineteenth century.

For Part II: The papers on General economics were to pay special attention to 'Public Finance and the Economic Functions of Government, local as well as central' and also to include 'questions on the ethical aspects of economic problems'.

Each of the four papers on Advanced economics contains some general questions. But the majority of questions in each paper was to be divided in about equal proportions among the four groups A, B, C, D, defined below. Two of these four papers were to be 'realistic, and adapted to the needs of those preparing for public or private business, as well as to those of professional economists'. The other two papers were to be of 'a more exclusively analytic character' and to make provision for some of the more obscure problems of value, such as those connected with the shifting and ultimate incidence of the burden of taxes; for the history of economic doctrines; and for mathematical problems in Economics and Statistics.

- A. Structure and Problems of Modern Industry
- B. Wages and Conditions of Employment
- C. Money, Credit and Prices
- D. International Trade and Its Policy

Cambridge Tripos – Oxford Diploma

As regards the need to make greater provision for political economy or economics and associated subjects, Oxford was moving concurrently with Cambridge. Early in 1902, L. L. Price, one of Marshall's pupils at Balliol, launched his effective open letter to the Vice-Chancellor setting forth the importance of economic studies and their claim to an ampler space among the curricula of the University. [*"The Present Position of Economic Study in Oxford: A Letter to*

the Vice-Chancellor of the University" dated 14 January 1902.]²⁸

Price was 'a-middle-of-road man', whose outlook illustrates the dangers of generalizing about Oxford economics. As a favorite pupil of Marshall, Price wrote *Industrial Peace* (1887) with Marshall's 'Preface', and was invited, together with Neville Keynes, to read the first edition of the *Principles* in manuscript. He also sympathized with the anti-Marshallian elements in the writings of his fellow economic historians, Cunningham, Hewins, and Ashley; and, like them and Foxwell, he was a prominent supporter of Joseph Chamberlain against the orthodox free-trade view during tariff reform debate in 1903. Instead of making an alternative or rival doctrinal school, he formed 'a bridge between orthodoxy and heterodoxy'; and it was he rather than Edgeworth who took the lead in agitating for an independent degree course at Oxford. [Coats 1967: 116]

The movement thus initiated resulted in the promulgation of a statute of which the preamble declared that 'it is expedient to institute a Committee for the organization of the advanced study of Economics, and to establish Diplomas in Economics, to be granted after examinations'. The Committee were to have power to make arrangements for lectures and courses of instruction, and to make regulations for the admission to the examination of candidates. The expenses were to be 'defrayed out of payments made by or on behalf of Students or from funds otherwise provided, and would not be defrayed out of University funds'. [E. J., 1903: 278]

Oxford was also petitioning concurrently with Cambridge, nearly a hundred of the resident teachers 'respectfully request the Hebdomadal Council to consider the desirability of affording greater encouragement to the systematic study of Economics and cognate subjects than is given under our existing system'. 'We urge this request', the Petitioners continued, 'because such study must necessarily have a very important bearing upon the subsequent lives of our students, whether they intend to pursue a business career, or to offer themselves as candidates for administrative and other posts in the public service, ... and because a more prominent place is now being assigned to such study in other Universities'. Yet the Oxford petitioners did not venture to propose a new curriculum for undergraduate studies; 'they suggest that the School should be confined to such persons as have taken the degree of B. A., or B. Sc., or B. Litt., or have passed the examinations required for the degree of B. A.' [E. J., 1902: 290.]

While Marshall's *Plea* talked in terms of a new Honours Degree, the Oxford memorialists, though talking of the desirability of constituting 'a new School of Economics and Political Science', suggested that it should be confined to those who had taken the degree of B. A., B. Sc., or B. Litt. It was referred to as being postgraduates. The petitioners wisely disarmed opposition by explicitly not asking for a new Honours school. [Chester 1986: 5]

In Cambridge, the Economics and Political Science Syndicate reported that post-graduate studies would be 'wholly inadequate to the end'. 'If any sufficient provision of the kind sug-

²⁸ Marshall wrote that 'Oxford blesses it [a draft of his *Plea*] heartily, & an address to their VC is being got up wh Phelps tells me is practically a request for Part II of my scheme'. [To Keynes, 11 February 1902, II: 355-56]. See also II: 357.

gested is to be made in the University, it must take the form of a full three years course'. There must be the creation of a new tripos. The Syndicate were of opinion that 'a full provision for the study of Economics and associated branches of Political Sciences is part of the proper work of a University, both as a place of research and as a place of education', and that 'such provision cannot be satisfactorily made either by post-graduate instruction, or by the modification of any of the existing Triposes'. [*CUR*, March 10, 1903: 529-30; *E. J.*, 1903: 155-56]

As seen above, Keynes did like the post-graduate study of economics developed in Cambridge and did not think that any fundamental change in undergraduate curriculum was necessary. In the Senate discussion of the Syndicate Report (May 7), Cunningham also argued that a one year's postgraduate course was not to be altogether despised. [*CUR*, May 14, 1903: 766] Although Marshall's proposal for a new curriculum met with 'almost unanimous support' from British economists, unfortunately 'one influential Cambridge man' Cunningham was 'strongly, even bitterly opposed to it'. Cunningham, although a member of the Economics Syndicate, had 'stood aloof' from its proceedings. In alliance with MacTaggart he announced 'implacable resistance' to the establishment of a new Tripos, and the two refused to sign the Syndicate's Report. Cunningham introduced his specific alternative proposals only in a printed memorandum for the Syndicate (of 9 March 1903), when the Report (dated 4 March) had already been submitted. [Marshall to Brentano, 18 May 1903, III: 12]

"Memorandum" (4 March 1903) by W. Cunningham and J. Ellis McTaggart says: 'We do not think it desirable for any undergraduate to concentrate attention upon it as his main subject of study. Such concentration would be of too specialized a character to give a claim to a degree in Honours. The evil of this concentration would...be increased by the exceptionally large proportion of controversial matter in Economics'. As the Syndicate declined to append this Memorandum to their Report, Cunningham and McTaggart circulated it to the members of the Senate, which was dated 9 March 1903.²⁹

Cunningham further opposed in a flysheet "The Proposed New Tripos" (dated 26 May 1903), to the Grace to be offered on June 6th establishing an Economics Tripos, saying that its institution tended to 'over-specialization'. This was replied by Foxwell's "The Proposed New Tripos" (dated May 30, 1903) that the real safeguard against over-specialization was to be found in 'the thoroughness of study'. On the very eve of the Senate vote on the proposed Economic Tripos, Marshall circulated "The Proposed New Tripos" (5 June 1903) to Members of the Senate: He was certain it was well that 'one University urges all those students who are capable of thorough work to attain thoroughness at all costs, and to combine it with as much breadth as they can'.³⁰

²⁹ In the "Draft Resolutions" of 9 March, for the promotion of economic studies Cunningham moved that the Board for Moral Sciences be invited to provide lectures for men preparing for the Special Examination in Political Economy, suggesting that it might define a course for men who were willing to devote a fourth year to Economics, after taking their degrees in some other subject. [U.A. Min.VI. 68]

3. Marshall on Economics for Businessman³¹

In the Senate discussion of the Syndicate Report on May 7, 1903, Marshall wound up his speech, saying that the providing a good education for business men was 'not the main object' but 'a secondary aim'.

The main object was to render possible a thorough scientific and therefore realistic study of economics. But as a secondary aim it was important, for its own sake; and possibly also in relation to that poverty of the University.... For if this University should refuse to do what business men required: if in return they should, as it was said they were already doing, tend more and more to send their sons to new Universities (even though thereby the glorious training of Oxford or Cambridge corporate life were lost); and if, in consequence, the rising generation of wealthy business men became the loyal sons of the newer and not the older Universities, then this University might regret too late that it had seemed somewhat indifferent to the opinion of business men. [CUR, May 14, 1903: 774]

Oxbridge vs New Civic Universities

As the Syndicate Report stated, the instruction provided at some of the newer universities was of a more technical character than it would be expedient to introduce at Cambridge. But in the face of a movement so general towards the expansion of economic studies, it would be 'in the highest degree desirable that Cambridge should do her utmost to develop these studies on her own lines'. [CUR, 528]

The University should offer opportunities for study which would be welcomed by many men irrespectively of the career for which they might be preparing. But as repetitively stated, Marshall and the Syndicate had in view particularly two classes of students; firstly 'those who are proposing to devote their lives to the professional study of Economics', and secondly 'those who are looking forward to a career in the higher branches of business, or in public life'. Yet what was desired was 'not technical instruction, but an education of a high type', which would have the additional advantage of preparing the student to take a responsible place in business or in public life. [CUR, 528-9; Marshall 1903c: 2-3]

In his *Plea*, following the section "The national interest in the supply of trained economists", Marshall explained on "The study of economics regarded as a preparation for business and for public responsibilities", saying that 'we should not offer technical preparation for business.' 'It may be right that the university of a great city should offer to some classes of business men as direct a training for earning their livelihood as we do to schoolmasters and physicians. But the

³⁰ They are in the "Economics and associated branches of Political Science. 28.1", Cambridge University Archives. Flysheets from G.E. Green with W. F. Reddaway, H. M. Gwatkin, J. W. Headlam, J. M. E. MacTaggart, were in opposition: and those from G. Lowes Dickinson, F. W. Maitland, J. R. Tanner with S. M. Leathes, were in support. See Whitaker III: 24-25.

³¹ A substantial summary of Marshall's *Plea* was published with the title "Marshall on Economics for Business Men" in *Journal of Political Economy*, vol. 10, June 1902: 429-37.

proper work of the older English universities in relation to business seems to lie in another direction'. [Marshall 1902: 8]

For him, among the many changes in the methods of business of his age, two things stood out clearly;

While there is a tendency towards increased specialization in the work of subordinates, there is a no less marked tendency towards greater breadth and diminished specialization in the work of heads of business, of directors of companies, and of the higher public officials. Other institutions can give a technical training, suitable for the lower ranks of business more easily than we can, and with less harm to themselves. But we are well placed for giving a broad education which will bear directly on the larger management of affairs, and for adding to it that training of personal character which is offered by life at Oxford and Cambridge. [Marshall 1902: 8; Marshall 1903c: 17]

As mentioned above Marshall sent and circulated his *Plea* to men of affairs with whom he had come into contact, or who had taken part in public discussions on the education of business men. Nearly all of them wrote 'expressing in definite terms their agreement', expressing strong sympathy with the movement. These letters of cordial support were read at the first meeting of the Economics Syndicate (29 May 1902), and printed to circulate to the members of the Senate in May 1903. [Marshall 1903a: 1,8]

Sir Clinton E. Dawkins, (K.C.B., formerly Financial Member of Council of Governor General of India, Member of the Firm of J. S. Morgan & Co.) replied to Marshall that 'I am glad to find myself in general and hearty agreement with you in your main contention'. Certain schemes for business training that he had seen 'went far in the direction of technical preparation, and ignored the advantages of that general education of mind and character afforded at the old Universities'. [Dawkins to Marshall, 18 April 1902, II: 373] Sir Thomas Sutherland (Chairman of P. & O. Steamship Company), was of quite a same opinion, stressing 'a good general education'. He wrote back to Marshall (18 April 1902), saying that 'we are pretty much of the same mind'. Marshall even asked him 'the important question of what a curriculum in economics should consist of'. [II: 375-6]³²

Both *The Bankers' Magazine* and *The Statist* were very much in the same view with Marshall. For *The Statist* it was quite true that 'a university like Cambridge or Oxford is not qualified to give technical instruction, though we see no reason why the Universities of London, Birmingham, and others situated in great towns,...should not be competent to give technical in-

³² Sutherland had contributed to *The King's Weigh House Lectures to Businessmen* (London: Macmillan, 1901), which was reviewed by L. L. Price in *Economic Journal*, 1902: 227-28. These lectures were delivered at King's Weigh House, during session 1900-1, in connection with the Evening Commercial School, established by the London School Board. The lectures were introduced by an article on "England's Need of Commercial Education" by Michael Sadler. The first chapter is "Educational Equipment for Businessmen. Short Statements by a few Leaders of Commerce", whose first one was by Sir Thomas Sutherland, the other one by Arthur Chamberlain.

struction in all departments of business'. It even spoke for him:

The Professor would wish, apparently, to relegate to the newer universities which are being established in the great towns that technical instruction which would qualify subordinates for the specialized work which is to be their lot. Oxford and Cambridge, on the other hand, he seemingly desires to undertake the training of directors of business. It is an honourable ambition for his university, and if the university rises to the idea, and really fits itself for training great employers of labour, directors of companies, heads of public offices, and the like, it will justify the position it holds in the national life. [May 31, 1902: 1087]³³

Marshall vs *The Times* on Accountancy

By contrast, *The Times*, which had been rather cool to the Economics Tripos, in its Educational Notes of 18 November 1905 implied that Cambridge made no provision for the education of business men. It commented: 'Whether the older Universities will make any attempt to provide special training for students intending to enter business careers may be doubted'. One of the speakers in the discussion following S. J. Chapman's paper on commercial education expressed the opinion that 'Oxford and Cambridge graduates were useless as business men'. Marshall wrote to the editor of *The Times* on 20 November 1905 saying that 'Cambridge is making a great effort to perform her duty thoroughly in this direction', and explained the purpose and plan of the new full three years' curriculum for those who are 'looking forward to a career in the higher branches of business or in public life'.

However, *The Times*'s Educational Notes of December 11 questioned whether this curriculum can serve its purpose: since it made no direct mention of such subjects as 'balance-sheets, sinking funds, and depreciation, goodwill and the finance of machinery'. They further remarked, being especially critical of the absence of accountancy: 'If there is one subject a knowledge of which is indispensable to a business man, it is surely the theory and practice of accountancy, and the omission of this subject from the Cambridge scheme is certainly significant. ... If it is thought impossible to treat the subject in a sufficiently academic manner in the older universities the attempt to provide any special preparation [for business life] ... may as well be abandoned'.

In his reply, published on 18 December 1905, Marshall played down the importance of accountancy: It is true that economics, like every other new study at Cambridge, must put up with a small staff; and that 'no place has been found in our staff for an accountant'. But we are not endeavouring to teach the principles of business to passmen, but only to Honour men, and that Honour students in their third year are able to read books of some severity without the detailed supervision which is needed for an ordinary commercial education. 'It is not probable

³³ *The Bankers' Magazine* stated in its article "The Study of Economics at Cambridge": 'Gradually it has become clear that the real power of business direction lies in the power of the well-trained mind. Technical knowledge is of the greatest service in the hands of those who have charge of the detail, but for the actual direction the highest and most complete education—in its broadest sense—is required. We must look to our older universities to supply this'. [July 1903: 2]

that the University will allow much time to be given even by passmen to absorbing prematurely technical information about those “forms and accounts adapted to different classes of undertakings”, on which the Educational Notes lay stress. For Honour men, at all events, such work is inappropriate. The three sacred years of their University life are already fully occupied with studies which claim to help the able business man to be a leader in the world’.

James Odell Vinter, a businessman writing from Cambridge, wrote to *The Times*, December 18: Professor Marshall stated that ‘no place has been found in our staff for an accountant’. ‘This is a sorry admission to be obliged to make; and until this defect has been remedied he must not claim that much is being done in the way of commercial education.’ Vinter took it that no place being found means, in plain language, that the University could not, or would not, provide the necessary funds. If the University showed it ‘meant business’ as regards commercial education, said Vinter, then he and his associates of wealthy businessmen could doubtless endow the necessary funds for a chair in accountancy.³⁴

Marshall again wrote to *The Times*, 27 December 1905: He was not sure that its detailed forms ‘adapted to different classes of undertakings’ ought to be a part of academic education for any class of students. For they just filled the mind, without enlarging it and strengthening it. And the ablest business men told that it was faculty rather than knowledge which the business man of today needed. It was a powerful and capacious mind, rather than one already crammed with dead matter, that a University should send out to the work of world.

He further argued, referring Arthur Cayley’s ‘masterly pamphlet’ *The Principles of Book-keeping by Double Entry* (Cambridge: University Press, 1894),³⁵ which ended with the warning that bookkeeping routine, however perfect, was no guarantee of truth, but only of consistency between the several parts. For truth people needed judgment; without it routine might lead to ‘the fool’s paradise of a fictitious amount to the credit of profit and loss’. Marshall was informed that on the technical side of this judgment, that which dealt with special conditions of different classes of undertakings, the only education which was of much value was that of experience; and he had the highest authority for saying that, in so far as the principles on which this judgment was based were general, they rested on the same foundations as economic science.

A business education that would enlarge and strengthen the intellect and faculty, as opposed to pouring inert information into inert brains, had been a preoccupation of Marshall’s since his early days as Principal and Professor of Political Economy at University College, Bristol. There he had used his inaugural lecture, called “Some Aspects of Modern Industrial Life”, to excoriate business ‘education’ which consisted of ‘barren facts which the boy threw off when he went into business as a bird shakes the raindrops from its feathers when the rain is over’.

Business education—any education—should verse the student in human nature, or at any rate

³⁴ Herbert E. Morgan, in *The Dignity of Business, Thoughts and Theories on Business and Training for Business*, London, 1914, urged on Cambridge a more thorough-going commerce course, considering even this expansion of economics had not gone far enough to meet industry’s needs. See Sanderson 1972: 202.

³⁵ Arthur Cayley was Sadlerian Professor of Pure Mathematics in the University of Cambridge.

those sides of human nature not to be plumbed by playground and factory experience alone. This meant history, literature—also required to develop ‘the power of appreciating what is beautiful’—and the moral sciences, among which might be reckoned ‘Political Economy, the science of business’. [Maloney 1990: 186]

Cunningham’s Opposition to Marshall

On the contrary, for Cunningham, who opposed the independent Economics Tripos, the question as to the best means of promoting economic study, appeared to be quite distinct from that as to formulating a scheme for the University education of business men. He would propose to deal with these two subjects separately, and to make business education more specific. He would not think it wise to attempt to meet both sets of requirements at once, and drafted the resolutions on ‘the Training of University Men for a Business Career’.

Cunningham argued: While the instituting of an Economics Tripos, intended for the training of economic experts, might provide a good course for the exceptional men who were destined for high places in financial houses, it did not appear to afford a very useful scheme of academic work for men who were looking forward to commercial or industrial life. What seemed most important for this object would be the establishment of a ‘Modern Side’ General Examination, to include at least one Modern Language, and such subjects as Physical Geography, and the Government of the British Empire. It would also be desirable to institute a ‘Business’ Special, in which Commercial Law should be a principal subject. Cunningham thought it desirable to make a more specific business course. [“Draft Resolutions (For the Members of the Economics Syndicate)” 9 March 1903. U. A. Min. VI. 68.]

4. Ashley and Faculty of Commerce in the University of Birmingham: ‘Antithesis’ to Economics Tripos ?

Organizing Professor for Faculty of Commerce

Marshall’s Economics Tripos at Cambridge had been preceded not only by LSE but also by the Faculty of Commerce in Birmingham, both of the latter having been directed and organized by the two eminent historical and political economists, who graduated Oxford. Ashley stated that ‘a striking characteristic of the England to-day is the new prominence of the University’—the creation of the ‘provincial’ universities like those of Manchester, Liverpool, Birmingham, Leeds, and Sheffield. The rise of these universities had been due in large part to a widespread belief in their practical utility, something other than the old-fashioned vague respect for general culture which contributed to maintain the older universities even when they were least in touch with national life. [Ashley 1908b: 181-82]

The movement for business studies (and business schools) at the civic universities were vigorously supported by *The Times* newspaper. *The Times*, in its big article “The Birmingham University” (31 May 1900), was quite enthusiastic with the birth of an independent ‘university of Birmingham’ with Joseph Chamberlain as its chancellor (on 31 May 1900)—an urban

University without colleges. It said: 'The new departure inaugurated by Birmingham, while vindicating the character of the city as a center of independent thought and vigorous civic life, constitutes an experiment of the very highest interest to the future of University organizations in the country'. Furthermore 'a feature of startling novelty' was the Faculty of Commerce, and the development of the faculty of commerce (such as what the new London University statutes called 'economics and political science, including commerce and industry') was seen as an attempt to grapple with the problem of commercial education in a bold and ambitious spirit.

In May 1901 the Council of the University of Birmingham was ready to appoint a Professor in connection with the proposed Faculty of Commerce, who 'shall devote his time and energy to the establishment of a suitable curriculum in consultation with leaders in business and administrative affairs, as well as his colleagues'. The advertisement for "Organizing Professor for Proposed Faculty of Commerce" at an inclusive stipend of £ 750 was circulated and commented extensively in the press.³⁶ Then the leader of *The Times* (18 May 1901) made 'the highly important announcement' that the Council were about to give effect to a proposal to establish in the University 'a distinct faculty of commerce'. *The Times* was 'heartily in sympathy with the professed objects of the new departure, and with every success to the University of Birmingham in the work of perfecting its scheme and of bringing it into actual existence and utility'.³⁷

The Council did not wish to limit its choice by specifying in what department the first Professor to be a specialist, but assumed it would be in one or more of the following subjects: Economics, Industrial Organization and Administration, Finance and Statistics, Commercial Law, or Commercial History. It said that applications should be on or before 20th June. ["Adamson" 1901: 50] Foxwell had been interested in this professorship in Birmingham, as Marshall wrote to Keynes [8 January 1901, II: 291]. 'The Birmingham election is approaching', wrote Marshall to Foxwell: Marshall then did not know 'whether Ashley will be a candidate', and went on to say, 'Putting him [Ashley] aside, and Flux³⁸, my course seems clear: there remains no one whom, ...I should so gladly see promoted to that great position as yourself; & I will carefully do anything for you that is within my small power, & in whatever way you think best'. [24 May 1901, II: 324].³⁹ Then L. L. Price asked Marshall to be a referee and he as-

³⁶ "Adamson" 1901: 50. Extracts of the leading articles on the advertisement and its implications from *The Times*, May 18, 1901; *Birmingham Daily Post*, May 18, 1901; *Manchester Guardian*, May 20, 1901; *Nature*, May 23, 1901; *Standard*, June 3, 1901; and *Birmingham Gazette*, June 4, 1901; are reprinted in *ibid*: 51-60.

³⁷ *The Times* could not be blind to the fact that, both in America and Germany, capital and science were closely allied to the conduct of commercial pursuits than they had ever been before. It said: 'There is real cause for anxiety, if not alarm, lest our traders and manufacturers should commit the grave error of under-estimating the advantages possessed by their competitors'. (18 May 1901)

³⁸ A. W. Flux had been Professor at Owens College, Manchester, but he decided to leave for McGill University in Montreal. Flux was succeeded by Chapman at Manchester. Chapman had been Jevons Research Student at Owens College in 1898, and a Lecturer at University College, Cardiff since then.

sented.

Marshall had a letter from Ashley 'about ten days ago: it did not refer to Birmingham'. [Marshall to Foxwell on 28 May, II: 326] However he wrote to Foxwell, 17 June 1901, that 'You have probably heard that Ashley is a candidate for Birmingham'. Then he thought Ashley was 'as keen as ever to work for England; though he will lose money by doing so. His wife, who was keener than he to return, now seems less keen. I do not know what he will want me to do for him. But of course I shall do whatever he asks to the best of my power'. [II: 332]⁴⁰

Ashley was 'unanimously elected to the post' on the strength of the recommendations of Marshall and Cunningham. 'You will be interested to hear that we have to-day appointed W. J. Ashley as our first Professor in the Commercial Faculty, chiefly owing to the testimony of yourself on the economic side, and of Dr. Cunningham on the personal side', wrote Sir Oliver Lodge to Alfred Marshall, July 31, 1901. [A. Ashley: 94] The other applicants for the post were L. L. Price and H. S. Foxwell.

Ashley, an Oxford economist and 'the English socialist of the chair', studied under the double influence of German historical economist and of Arnold Toynbee. He left Oxford in 1888 to become professor of constitutional history and political economy at the University of Toronto, and four years later moved to Harvard to become the first professor of economic history in the English-speaking world and remained there until 1901. He came back to Birmingham and was appointed 'to the organizing chair in connection with the future Faculty of Commerce'; and his arrival at Birmingham coincided with an outbreak of public discussion on tariff reform, which was also devised and driven by Joseph Chamberlain.

Accounting and *Business Policy*: University and Business

Soon after his appointment, Ashley drew up his first prospectus *The Faculty of Commerce in the University of Birmingham*. Its Purpose and Programme (April 23, 1902), and the Faculty of Commerce began its work upon October 1, 1902. That work was 'the provision of a course of training suitable for men who look forward to business careers'. Its primary object was 'the education, not of the rank and file, but of the officers of industrial and commercial army; of those who, as principals, directors, managers, secretaries, heads of departments, etc., will ulti-

³⁹ Marshall wrote his testimonial for Foxwell; "To the Council, University of Birmingham, 11 June 1901" [Whitaker II: 331]. It was one of eighteen testimonials including Sir Robert Giffen, Henry Higgs, F. Y. Edgeworth, J. S. Nicholson, William Smart, J. N. Keynes. See "University of Birmingham Organizing Chair in the Faculty of Commerce. Testimonials and Application on the Part of Herbert Somerton Foxwell" in the Library of St. John's College, Cambridge.

⁴⁰ In this same letter Marshall wrote: 'When he [Ashley] was here several years ago he talked over possibly running for that post; & two years ago he seemed to have quite settled to do so. I took for granted that his brother was keeping him posted; & began to think that, as I heard nothing from him, he had changed his mind. It now transpires that his brother did not keep him posted: & that he did not know how quickly things were moving at Birmingham till he saw a notice in the Weekly (English) Times: ie probably about a fortnight after it appeared here. / Meanwhile however it seems to have been taken for granted at Oxford that he wd run'. [II: 332]

mately guide the business activity of the Empire'. A secondary object was 'the preparation of men for the Consular service, for masterships on the "modern sides" of schools, as well as for careers in municipal service or as accountants'.

Ashley went on to say that 'a training could be devised which, while strengthening the powers of judgment, widening the sympathies, and stimulating the imagination—the aims of all really liberal education—would yet be of real value as *a preparation for the practical duties of business life*'. It was felt that if universities were to maintain their position in the modern world they must have regard to the dominant interests of that world. As he recurrently stated, the mission of the university then was to put the university idea into the heads of that great majority of the commercial community which then did not send its sons to the university. 'The English business man will continue in most cases to be rather incredulous ...until the Universities will have begun to show that they are really doing something of which he can recognize the utility', was Ashley's opinion in his "The Value of University Training for Business Men". [Ashley 1902 and 1902a: 1; Ashley 1908a: 188]⁴¹

Looking at University history in large, Ashley wrote, a University had been primarily the home of professional education. In encouraging what may be called 'vocational' studies, the modern University was but reverting to its own age-long traditions. Yet he said with equal emphasis, that the education which would deserve the name of a University education, was one which aimed at training the judgment, not the memory or technical aptitudes: that, to be worthy of its place in a University curriculum, a subject must be capable of reduction to principles or grouping in generalizations—principles and generalizations illuminated by analysis and bound together by ties of causation.

He had been eager to introduce commercial studies, because he believed that thus alone the University could attract and bring any large number of business men's sons. The task before the Universities seemed to him to realize that subjects of instruction appropriate to a future business career were capable of being handled in two different ways: 'in a way which burdens the memory with unconnected facts and rules, and in a way which exercises the reasoning faculty and becomes the vehicle of a real education'. 'I have never been ashamed to be frankly and nakedly utilitarian in the curriculum I have recommended. Instead of aiming only at mental culture, and trusting that somehow utility will emerge as a by-product, we are completely justified', he held, 'in aiming directly at utility, and seeking, in and through such studies, for the mental discipline and mental enlargement which we all desire'. [Ashley c1921: 2-3]

A systematic business training would certainly raise the general level of efficiency in the ordinary management of commercial affairs; and, 'though it cannot create geniuses, it may direct into the paths of commercial life a great deal of ability of a high order which at present goes to waste'. Adverting to the objection that 'business can only be learnt in business' and that

⁴¹ Alon Kadish once discussed; 'It did not stop Ashley from questioning the practical value of the Cambridge approach to economics presented by Marshall as a means of training future business men. In many ways the new Faculty of Commerce, primarily intended for the training of business managers, was constructed as an antithesis to the new tripos'. [Kadish 1989: 229]

'college life unfits a man for business', Ashley discussed: 'men need, more than they did fifty years ago, to be able to think round and about their business to lift themselves above its daily details and to judge of it as a whole. But such qualities are certainly not likely to be stimulated by early absorption in the subordinate routine of a particular occupation. There is some chance of promoting them by courses of instruction which shall accustom the future trader to survey a wide range of industrial undertakings, to watch the development of the world's great markets, and to estimate the resources and capabilities of other nations'. [Ashley 1902 and 1902a: 3-4]⁴²

The curriculum which forms a three years' matriculated students course leading to the degree of Bachelor of Commerce, comprised four main categories. First, the students learn two modern languages and modern history (the nineteenth century history of Europe and America) to widen the student's outlook and mitigate their insularity and to see the foreign markets and implications of the policies of other countries. For those probably entering into manufacturing life, the sciences would be more desirable. Secondly they study Accounting; Birmingham was probably the first English university to realize its importance and educational value, and to appoint a professor to take it in charge, in which it was only following the example of Harvard and some other American universities like Michigan and Wisconsin. Thirdly they take the courses on Applied Science and Business Technique as well as Commercial Law. Those who are looking forward to mercantile pursuits take the courses on the Technique of Trade, on Money and Banking, and on Transport. The students for manufacturing career either take these courses, or substitute courses in Applied Science.

Fourthly, they attend the courses on Commerce, 'the most characteristic feature of the Birmingham plan', which give their colour to the whole scheme of instruction. These in the first two years were largely descriptive; the modern development and the present structure of industry and trade in the leading countries of the world. The course was to select the dominant features of the situation in any country, and to bring them into organic connection with the whole social environment. The course in the third year was business policy, those large questions of policy which confront a manufacturer or merchant in the course of his operations. They are looked at from 'the point of view primarily of business efficiency and success'; still most of them are of 'profound social interest', using the cases that Ashley gathered and codified from the experiences of business leaders and checked against observable facts. The course deals with such topics as: the location of works, capitalization, production of large and small scale, differentiation and consolidation of manufactures, combinations of manufacturers or mer-

⁴² Ashley further stated; Efficient executive officers can be promoted from the ranks; but 'men to whom may be delegated a share of responsibility in management can seldom be found among those who have been engaged all their lives in merely carrying out orders'. It is because their previous training has not accustomed them to take a large view of the policy of a business as a whole, and to consider the movements of markets and the fluctuations of price as the results of general as well as special causes. This is where a student should obtain in a course of higher commercial education. [Ashley 1902: 6]

chants, limited companies, factoring and manufacturing, machinery, works management, relations of employers and employed, methods of remunerations, hours of labour, markets, advertising, relation of selling cost to price, fixed charges, methods of sale and purchase, credit, goodwill, and trade cycles. [Ashley 1902: 12-13; Smith: 11]

It was quite clear that accounting deserves a large place in any scheme of higher commercial education. It begins with book-keeping in the ordinary sense of the term; but it does not stop there. As soon as the student has been well drilled in the necessary rudiments, accounting proceeds to become a critical study of financial stability and prosperity as revealed (or concealed) by balance sheets; and starting from a mere arrangement of figures by single and double entry, it insensibly makes its way to those questions of expediency and efficiency which are suggested by such words as 'depreciation', 'reserves', 'costing' and 'overhead charges'. Properly taught, 'it is a subject of high educational value; for it makes its appeal in the last resort not to arithmetical dexterity, but to a sound judgment of a business situation'. [1906: 6] The syllabus of instruction was drawn up after consultation with a committee of the Birmingham and Midland Society of Chartered Accountants, and the policy of the Faculty met with the warm approval of the national Institute of Chartered Accountants. [Ashley 1902: 10]

The inauguration of the Commerce Faculty, particularly the courses of Accounting and Professorship of Accounting were commented in details by *The Accountant* under the heading of "The Degree of Bachelor of Commerce" I, II, III (June 7, 14, 21, 1902). *The Accountant* in its leading on "The Birmingham University" (August 2, 1902) then told that Lawrence R. Dicksee was appointed to the Professorship, which was the first of its kind established in Great Britain. Dicksee was 'one of the largest contributors to the literature of the profession'. His first book *Auditing. A Practical Manual for Auditors* was published in 1892 and run its fourteenth edition, and his second work *Bookkeeping for Accountant Students* published in 1893 run its eighth edition before his death in 1932. In the same year of his Birmingham appointment Professor Dicksee was appointed Lecturer in Accounting at LSE, and in December 1906 he resigned the Birmingham post. In 1914 he was appointed to Professor of Accounting and Business Organization, and in 1919 he was appointed to Sir Ernest Cassel Professor of Accountancy and Business Methods at LSE.⁴³

Curriculum for the Degree of B. Com.

First year

Commerce I: 2 papers

Modern languages, two: 2 papers in each

Accounting I: 1 paper

Modern European history: 2 papers

Second year

⁴³ "Obituary. Professor Lawrence R. Dicksee, M. Com., F. C. A.," *The Accountant*, 20 February 1932. Hayek 1946: 20-21.

Commerce II: 2 papers
 Modern languages, two: 2 papers in each
 Accounting II: 1 paper
 Public finance: 1 paper
 Economic analysis: 1 paper
 Third year
 Commerce III [business policy]: 2 papers
 Modern languages, two: 1 paper in each
 Accounting III: 1 paper
 Commercial law: 1 paper
 Transport: 1 paper
 Once a week: Commerce Seminar, to train students in independent investigation and reasoning

Enlargement of Economics: Business Economics in the Making ?

The Faculty of Commerce was designed to promote a practical or 'utilitarian' approach to economic studies capable of overcoming the alienation between economics and real life, between economists and business. Ashley wrote a short article "A Science of Commerce and Some Prolegomena" (*Science Progress*, vol. 1) in 1906⁴: The really constitutive and most characteristic part of a commercial curriculum at the university must, after all, be found in Economics. Yet, political economy was 'defective both in its character and in its scope for the purposes of business education'. In commercial teaching the abstract political economy hitherto current in England should certainly find a place—but reduced 'to its narrowest limits and in its simplest terms'. [Ashley, 1906: 7]

The main lines of work appropriate to a commercial faculty would be found in two directions. The first and most obvious was the descriptive survey of the actual forms of economic activity: all the great industries of England and its rivals, as well as of typical smaller trades, and of the marked tendencies in their historical development. In his view, it should be the distinguishing note of a 'descriptive economics' worthy of a university. There was another direction in which the current economics required to be supplemented, and this was 'the very heart of the matter'. What was 'absolutely requisite and quite feasible' was 'the creation of a "science of commerce", in the sense of a systematic consideration of the problems of business policy'. 'What is wanted is "*private* economics" for the business man, as distinguished from "political" or "social" economy'. [Ibid: 7-8]

In England they had too long aimed at culture, and hoped that utility would appear as a by-product. The result was that the great body of the English middle-class left the culture se-

⁴ *Science Progress in the Twentieth Century. A Quarterly Journal of Scientific Thought*, is the journal, which succeeded *Science Progress*, 1894-1898, endeavouring to present summaries recent scientific works. Ashley's article was the very first one of this new Journal.

verely alone. 'Let us now not be ashamed to aim at utility, and let us trust that culture will appear as a by-product'. He was convinced that the introduction of these practical disciplines would revivify economic studies and contribute both to knowledge and social progress. [Ibid: 9] Though there was a distinction between 'humane' or 'humanistic' and 'technical' or 'utilitarian' or 'bread-and-butter' studies, the fitting purpose of a University in educating men for business life, he thought, would be '*the humanistic spirit applied to utilitarian studies*'. Criticizing 'Scientific Management' by Frederick Taylor for looking on the labourer as a machine, and brain and muscles as so many engine parts, for thinking of the life-work of human beings in terms of mechanics, Ashley wrote; in consequence 'Scientific Management' met with inevitable suspicion and opposition in America: and it would meet with the like in Britain, if it would undertaken in the same narrow engineer spirit. And so, even for its purpose, 'commercial education in our Universities must never be technical in the sense of the technician: it must be humane also, and aim at the understanding of men. And the fulfillment of this, its own, purpose is also the fulfillment of a social function'. [Ashley c1921: 10-11]

In 1907 Ashley made the Presidential address to Section F of the British Association, "A Survey of the Past History and Present Position of Political Economy". There he was highly critical of the institutional weakness of economic training and deprecating abstract economics, which 'has almost monopolized the attention of professed economists' and consequently alienated economics from real life and business. [Ashley 1907:] His main thrust was to demonstrate the strength and scope of the 'realistic method', and pointed out that empirical economics blossomed into an active and fruitful field of study with a firm institutional base at LSE and some of the provincial universities. [Kadish 1989: 238]

Then in his pioneering article "The Enlargement of Economics" in 1908, a lecture given at Owen's College, Manchester (10 February 1908), which was supplementary to his 1907 address, Ashley spoke: The hopeful direction looking for motives strong enough to make the study of economics 'flourish' academically, was implied in the term 'Faculty of Commerce'. The main chance for its study lay in the disposition of the public to believe that students be given in the universities a training definitely adapted to prepare them for a business life. Here was 'the utilitarian, the bread-and-butter, in a wide sense of the term the "professional", motive which is capable, as American experience already indicates, of filling our class-rooms'. [Ashley 1908b: 186]

For the men who come to economics with a utilitarian purpose a distinctly concrete handling of economic facts would be absolutely necessary. At the University of London, the subject of Economics was everywhere defined as 'Economics Analytical and Descriptive'. In Cambridge an even more suitable word had been acclimatized from Germany; and when the student in the tripos got to his Advanced Economics, he was allowed to choose between 'Analytical' papers, where 'place is found for such subtleties as interest the professed student more than the man of affairs', and '*Realistic*' papers 'adapted to the needs of those preparing for public and private business'. [ibid: 187-88]

The greater part of the economic world had not yet been surveyed descriptively and

realistically, as anyone would soon discover who inquired into the great modern industries of England, in its structure and working. When looking at seriously, they seemed to resemble 'living organisms—yet organisms of whose morphology and anatomy we had the dimmest notions'. There was good reason to hope that this wide and unexplored field would soon be cultivated. The establishing of a professorship of economics in a great industrial center was pretty sure to lead to valuable publications on the peculiar economic problems of the particular district, which was illustrated by Chapman's writings on the economics of the cotton industry and to Clapham's book on the woolen trades. [ibid: 188]

Most economists called upon to teach in commercial faculties recognize that 'the teaching must be largely concrete, descriptive, statistical, historical'; that it must come to close quarters with the actual structure of the existing economic organization and all the large forces visibly at work.

There has been a very encouraging growth in the number of books on concrete economics which one can put into hands of students, several of them the result of the creation of commercial faculties or of economic departments serving more or less the same ends: it would be invidious to single out particular examples. Yet I cannot refrain from pointing to Dr. Alfred Marshall's *Industry and Trade* as a masterly and informing survey of a large part of the field. Matters as to which some of us had been trying for years to dig out some scrappy material, and which we had been presenting to our classes with a feeling that we were cultivating quite untilled tracts, were there brought together for the first time in a general view. The motto of the book, 'The many in the one, the one in the many', presents our common ideal: the reconciliation of the abstract and the concrete; a reconciliation, let me add, of which each side is equally in need. [Ashley c1921: 5]

Marshall's book, like some other recent works, illustrated this further point: that 'for the education of future business men it is necessary for the teacher to put himself not only at the national or social or public point of view, but also at the point of view of business success, of efficiency, of profit-making'. [ibid]

But was economics in England as yet of a kind likely to secure and retain a firm hold upon the students who turned to it with this utilitarian purpose? It would need not so much to be transformed as to be enlarged, and enlarged in two directions.

Our 'political' economy will have to include a much more objective survey of the actual facts of commercial and industrial activity; and by the side of this widened 'political' economy—a science which looks at the interests of the whole society as organized in the state—there must be created something that I may provisionally call Business Economics, which frankly takes for its point of view the interest of the individual business man or business concern. [Ashley 1908b: 186-87]

In 1926, in the previous year of his death, Ashley published a small but pioneering book called *Business Economics*. He argued, now Political Economy or Volks-wirtschaftslehre or

National-ökonomie—as all these names imply—looks at things from the point of view of a state, a nation, or ‘society’, as a whole. What it is concerned with is ‘the Wealth of Nations’. As a systematic study it arose from two main sources: from the ‘cameralistic’ lectures of the German universities and from the nature-philosophy of France and Britain. So far it arose the former it was conceived of as a study designed for men who proposed to enter Government service, and it was a minor part of their professional training, law constituting the major part. As to the other source of Political Economy, it was not simply civil servants who were expected to be interested in Political Economy. But to citizens, not as concerned in their own businesses, but as creators or critics of the policy of the State—with respect to tariffs or poor relief or currency or banking or taxation. Doubtless it was vaguely thought that Political Economy ‘ought to be useful to a future business man’; but it was not held that Political Economy had any close bearing on the actual conduct of business affairs. Nor could the orthodox English or French Political Economy be of any practical use in business, however instructive it might be to the business man in his capacity as citizen or politician. [Ashley 1926b: 6-7]

In Ashley’s view, the economists had for a long time ‘a pretty poor opinion of the ability required in business’. Adam Smith thought the employer’s task of ‘inspection and direction’, and J. S. Mill called the nature of profit as ‘wages of superintendence’, which would indicate their low estimate of the ‘entrepreneur’ function. [ibid: 8] Ashley in his 1924 lecture (at Birkbeck College) on “Evolutionary Economics” forcefully criticized the negligence of the entrepreneurial function by the classical economists. [Ashley 1924: 46-50]

The best way of formulating the new departure was that ‘the content of the term Economics must be consciously and definitely widened beyond the political or national or social outlook’: it must be made to include two main divisions, Political Economy and Business Economics. By Business Economics, Ashley meant ‘the study of the organization and financing of business concerns, of the manufacturing policy of business concerns, of their price policy, their labour policy and so on, as they present themselves in the effort to secure profit’. Business Economics may serve for this new sister in the house of Economics; and it may be subdivided into ‘Business Policy’ in relation to the supply of capital and outside markets, and ‘Business Administration’ in relation to internal working. But Ashley did ‘not altogether like the term *Privatwirtschaftslehre*, because *Privat*, though the most obvious antithesis to *Staat*, is not very appropriate to a world of joint stock companies and capitalist combination; nor do I like *Betriebslehre*, since that has come to be used in a too exclusively accountancy sense’. [Ashley 1926b: 9-10]

However pioneering, Ashley’s *Business Economics* was only comprised of three lectures in 1926 at the Commercial College at Copenhagen. It was not systematic and merely described some important aspects of new academic disciplines which were going to be created in the ever-increasingly developing Business Schools in the United States and Handelshochschulen in Germany, as well as in the Universities of Commerce in Japan. Ashley’s pioneering attempt to enlarge the economics so as to create the business economics seems never to have developed in the British academics at least before the World War II.

5. Education of *Non-Specialized Business Faculty*; Marshall on Education of Businessman and Economist

For Marshall, as seen in section 3, a man would be likely to be more efficient in business who braced his mind to hard work in subjects that had no connection with it, than if he had occupied himself with technical instruction, however directly that might bear on his after work. Provided the studies be themselves of a truly liberal character, the closer their relation to his after work. Thus he argued iteratively: 'To a colliery manager, who has made a thorough study of geology, the shafts and galleries of a mine are a scientific museum and laboratory: his mind grows with his work, and he may increase the world's wealth of knowledge. As geology is related to mining, so is economics to general business'. [Marshall 1919: 821-22]⁴⁵

While one chapter in *Principles* is devoted to "Training in Industry", accentuating education as 'a national investment'; in *Industry and Trade* a chapter and an appendix are clearly dedicated to the required business faculties and their training as key issues of business organization. In *Industry and Trade*, Book II discusses "Dominant Tendencies of Business Organization", and its Chapters VIII to XII deal with "Business Organization". After discussing "The Growth and Influence of Joint Stock Companies" and "Its Financial Basis", Chapter X focuses on "Its Tasks and Requirements of Faculty", followed by "Applications of Scientific Method". In Chapter X Marshall argues on 'Faculties needed by the head of a large business; and by its chief officials' and 'The education of business faculty'.

For Marshall, an adequate supply of capital being assumed, 'the chief requisites of the head of a considerable business' may be classed as a) judgment, prudence, enterprise, and fortitude in undertaking and carrying risks: b) an alert acquaintance with appropriate technique; and some power of initiating advance: c) a high power of organization; in which system plays a great part, but 'always as a servant, never as a master': d) a power of reading character in subordinates; together with resolution, tact, trust and sympathy in handling them: e) prompt diligence in assigning to each the highest work of which he is capable, or can be made capable within a moderate time. [Marshall 1919: 355]

In *Principles* in the chapter called "Business Management" (Book IV, Chapter XII), Marshall argues: 'The chief risks of undertaking sometimes separated from the detailed work of management'.

Just as industrial skill and ability are getting every day to depend more and more on the broad faculties of judgment, promptness, resource, carefulness and steadfastness of purpose—faculties which are not specialized to any one trade, but which are more or less useful in all—so it is with regard to business ability. In fact business ability consists more of these non-specialized faculties than do industrial skill and ability in the lower grades: and the higher the grade of business ability the more various are its applications. [Marshall 1890 I:

⁴⁵ See *Industry and Trade*: Appendix K. "On education, with special reference to a business career. 1. The development of faculties at school. 2. University training for the responsibilities of business".

Employers and other undertakers could be divided into two classes, 'those who open out new and improved methods of business', and 'those who follow beaten tracks'. Marshall thought that 'the services which the latter perform for society are chiefly direct and seldom miss their full reward: but it is otherwise with the former class'. [Marshall 1890 I: 597] As John Maloney discussed, many of Marshall's arguments stressed the difference between the middle manager, who needed a good technical education so as to see to the details, and the 'captains of industry' that Cambridge was, or should be, producing, for whom 'the highest and most complete education—in its broadest sense—is required'. [Maloney 1990: 188]

Curriculum Regarded as Affording Liberal Education:

Imagination and Sympathy both for Businessman and Economist

As Marshall positively quoted, Sir Richard Jebb, General Manager of the North Eastern Railway, well defined a liberal education as one which 'trains the intelligence, gives elasticity to the faculties of the mind, humanizes the character; and forms not merely an expert, but an efficient man'. The curriculum in Economics and associated studies claims to do this, was of Marshall's opinion. [Marshall 1906: 6]

Marshall discussed: Every study would exercise in various degrees 'the three inseparable faculties, perception, imagination, and reason, or the three great faculties, observation, imagination, and reasoning'; the use of these three was the center of the intellectual life of every University. Imagination was the greatest of the three: it would make the great soldier as well as the great artist, the great business man, and the student who would extend the boundaries of science. 'The business man needs all three: especially he needs imagination to put him on the track of remote and invisible effects of causes which are obvious, and of the hidden causes of visible effects'. [Ibid.: 6; Marshall 1903c: 9]

Greater effort, a larger range of view, a more powerful exercise of imagination are needed in tracking the true results of, for instance, many plausible schemes for increasing steadiness of employment. For that purpose it is necessary to have learnt how closely connected are changes in credit, in domestic trade, in foreign trade competition, in harvests, in prices; and how all of these affect steadiness of employment for good and for evil. [Marshall 1890 I: 44]

In addition to a strong and alert mental faculty, the business man needs to have acquired a knowledge of human nature, together with the power of managing men, and to this end the social training afforded by life in a residential university of the Anglo-Saxon type was specially serviceable. For 'such a life draws out the faculties which are needed in the social relations of those who have to deal with large bodies of men and large public interest. On the river and in the football field the student learns to bear and to forbear; to obey and to command'. [Marshall 1919: 822]

What was even more important, the comradeship of generous youth tends to develop the

sympathies, which separate man by an impassable gulf from the most powerful machine which modern skill has taught 'almost to think'. Indeed 'an employer, whose sympathies are dull, often falls short even as a profit-winner; unless he has thought much, and cared much, about those sides of his work-people's life and characters, which are not directly reflected in the wages bargain'. But 'undergraduate sympathy tends always towards the weaker side: any bias, which an undergraduate may bring to these questions, is apt to be on the side of the employees. Thus trained, he is often able to read the minds of the employees more readily than can be done by an employer, even if much older than himself, who has not had that training. He interprets between the two sides: and thus that broad sympathy grows, which enables different social classes to put themselves in one another's points of view and welds the nation into one'. [Ibid.: 823]

Economic studies call for and develop the faculty of sympathy, and especially that rare sympathy which enables people to put themselves in the place, not only of their comrades, but also of other classes. This sympathy between classes is strongly developed by studies...of the reciprocal influences which character and earnings, methods of employment and habit of expenditure exert on one another; of the ways in which the efficiency of a nation is strengthened by and strengthens the confidences and affections which hold together the members of each economic group—the family, employers and employees in the same business, citizens of the same country; of the good and evil that are mingled in the individual unselfishness and the class selfishness of professional etiquette and of trade union customs; and of movements by which our growing wealth and opportunities may best be turned to account for the true well-being of the present and coming generations. [Marshall 1890 I: 45-46; Marshall 1906: 6-7]

A Plea for the Creation of a Curriculum in Economics and associated branches of Political Science, and Introduction to the Tripos in Economics and associated branches of Political Science, would be appropriate appendices to the *Principles of Economics*, Book I, in particular, Chapter IV "The Order and Aims of Economic Study". There Marshall says: 'the economist needs the three great intellectual faculties, perception, imagination and reason: and most of all he needs imagination'. 'The purely intellectual, and sometimes even the critical faculties are most in demand. But economic studies call for and develop the faculty of sympathy'. [Marshall 1890 I: 43, 45] Section 5 of Chapter IV is considerably reproduced from *Plea and Introduction*.⁴⁶

6. Selection of Pigou as Successor: Contraction of Economics ?

Marshall, Foxwell, Pigou

Marshall was 'the conciliator which British economics needed at a time when its future

⁴⁶ See Guillebaud's "Editorial Appendix to Book I, Chapter IV". [Marshall 1890 II: 160-81]

turned on its ability to avoid the surly sterility of the German *Methodenstreit*'. It was, however, 'conciliation without concessions; under the leadership of almost any other major economic figure it might not have been; and this was Marshall's greatest contribution to the development of economics'. [Maloney 1976: 440-41] He would not compromise his aspirations for a genuinely analytical and scientific economics, and he intervened in his colleagues' work where it fell short of what he desired, as seen above as regards 'Marshall against Cunningham'.

Although Marshall and Foxwell had very closely collaborated for the making of Economic Tripos and their lectures on economics were supplementary, yet their ideals and method in economics were different. And their differences were getting increased particularly after 1903, then Marshall rather appeared to stress 'One in Many'.

In a letter to Foxwell (12 February 1906) Marshall stressed their differences:

Of course our ideals in economics are different. I have noticed that when a book or a pamphlet pleases you greatly you describe it as 'Scholarly': whereas I am never roused to great enthusiasm about anything which does not seem to me thoroughly 'Scientific'. ... Our difference in temper causes you to lay greater stress upon accuracy as regards facts, & me to insist more on their wrestling with difficult analysis and reasoning. [III: 126]

In the course of making Economic Tripos, Marshall aimed to make all lectures tell, and not to waste their power on duplication, or the division of one course between two men. Marshall wrote to Foxwell (8 February 1906) that 'you and Macgregor divide English economic history' for the first-year. And 'if we provided a set of lectures to continue your course on economics, there would be another danger of overlapping in some matters, and omission as to others'. Then the time which men spend on history would be too long. Men often went to more than twice as many lectures on history as on economics, though there were three papers on economics and only two on history. [III: 123]

Marshall's intention seemed to divide the lectures on economics and economic history between Macgregor and Foxwell. He was struck by the keen interest which Foxwell showed in his lectures on history. It set him on thinking that 'a way out of three or four of our difficulties might be found in your undertaking *English Economic History in the nineteenth century*, & giving two terms to it', wrote Marshall to Foxwell (8 February 1906). Then 'Macgregor might give a full three terms course on economics'. And when they got satisfactory courses for the compulsory papers, and for the four 'advanced' papers in part II, Marshall thought it would be a very great gain to have a special course on Socialism, and the history of economic theory. Marshall was inclined to shift Foxwell from the main line of economics to economic history, socialism, history of economic theory. Marshall thought that 'the lectures which Foxwell affected were 'too much of the "London School" type to suit our better third year men'. [III: 123-24; see also III: 128-29]

Marshall did not share 'Foxwell's antipathy to theory' or his enthusiasm for the historical approach in economics. And Foxwell's speciality, the history of economic thought, was to

Marshall a subject of secondary importance. Marshall had written to Neville Keynes, 6 February 1902: 'In Germany even academic students have almost abandoned the study of the history of economic theory: wh I think goes to the opposite extreme. But, knowing the tone of your mind, ...you would not wish to make it compulsory'. The *Plea* took the position that 'the history of economic doctrine should be another optional subject'. [Marshall 1890 II: 176; Coase 1972: 478]

There had been some conflict and quarrel between Marshall and Foxwell about economics teaching and its contents. Marshall wrote to Foxwell with some complaints (14 May 1901): 'Your lectures did not cover the ground of a "general course"; and as no papers were set in them, students did not get to learn their own weakness, and I had often to begin from the beginning.... I had for many years to do the whole of the drudgery side of economic teaching. I believe there has never been anyone, as old as I, who has had to do the whole of the drudgery for so large a subject..... Twice more I went to you and implored you to lift some of this work from my shoulders; twice you refused, and the second time in words that hurt me so that I decided never to ask anything of the kind again'. [II: 319]

Then Marshall got MacTaggart and afterwards Clapham to look over his papers. They did all they possibly could, and the plan succeeded better than he had any right to expect. But it raised a wall of division between Marshall and his class. Clapham's turn of mind had always been dominantly historical. At last Marshall felt that:

in Pigou I had found what I wanted. *After that had been done*, I made a contract with Pigou to pay him £ 100 for the delivery of lectures in 1900-1, on condition that he should not undertake anything in the intervening year which would interfere with his preparing himself for his work. He has acted on this. ...I am much pained by your saying 'Pigou's appointment is of course a direct attack on my lectures, but it is a bread and butter question with me,...' I put on Pigou solely to do that which I had three times implored you to do. [II: 319-20]

Marshall further wrote to Foxwell, 24 May 1901: 'I fully recognize your right to teach economics on lines widely different from those which appear best to me: & I have often remarked how fortunately we supplement one another'. Partly for that reason, Marshall should regard Foxwell's removal to Birmingham or anywhere else as a grievous loss to him personally and as 'a deadly blow to Cambridge economics'. [II: 324] As above mentioned Marshall wrote a testimonial for Foxwell for the organizing chair of the Faculty of Commerce in Birmingham (dated 11 June 1901). However, Marshall went on to say, for that reason also, 'I have found it impossible to build a course of advanced lectures on the foundation of a preliminary course given on your lines, without further treatment of what I regard as fundamentals. So, if Pigou had been unable to respond to my request, I should have been forced to continue to give my General Course myself'. Pigou having accepted, Marshall hoped that Foxwell's lectures and Pigou's would supplement one another as Foxwell's and his own had done. [II: 324-25]

As Early in 1900 Marshall was inclined to think that 'the ideal man is at hand: —Pigou', as he wrote to Neville Keynes. But Pigou would 'hardly be ripe for lecturing in 1900-1'. Marshall

had some thoughts about of asking Bowley to give a course of about ten lectures on Statistics & statistical method, with special reference to his own subject—U. K. wages. He continued: 'I had Pigou in my mind at last Board meeting: but I had not then seen much of his papers. I have seen a good deal since then; & I think he is thoroughly satisfactory'. [To Neville Keynes, 4 March 1900, II: 269]

I propose, if I can get the right man as Pigou seems to be for the present, to continue to pay £ 100 a year in order that there may be one general course of lectures suitable for high-class beginners, & treated from the Scientific as distinguished from the historical & Literary point of view. [To Neville Keynes, 8 January 1901, II: 291]

Foxwell and Pigou had been 'thrown into a somewhat antagonistic position as lecturers', as Foxwell wrote to the Provost of King's College, 17 October 1901: 'I should have been very willing to report upon Pigou's dissertation, the subject of which was a special interest for me: but we have recently been thrown into a somewhat antagonistic position as lecturers, & I am afraid this rather disqualifies me for the always delicate work of acting as referee in a Fellowship competition'. [Coll 42/1902 Pigou, Kings College Archives] Marshall and Foxwell had been requested to report on a Fellowship dissertation submitted by Pigou to King's College. It was 'Essay upon "The causes and effects of changes in the relative values of agricultural produce in the United Kingdom during the last fifty years". Being the Cobden Prize Essay for 1901 by A. C. Pigou, King's College'.⁴⁷ Marshall reported to the Provost, King's College, on 16 December 1901, saying that 'I regard it as a strong confirmation of the hope which I had formed before I saw this thesis, that Pigou will be one of the leading economists of the world in his generation', while Foxwell wrote unenthusiastically. [Coll 42/1902 Pigou; also Whitaker II: 341-42]

Pigou had unsuccessfully submitted in the previous year his dissertation on "Robert Browning as a Religious Teacher", which was reported by the Bishop of Durham (Brooke Foss Westcott), former Regius Professor of Divinity, and Prof. Raleigh.

Marshall also wrote to the Provost, King's College (8 March 1901): 'In answer to your letter, I have great pleasure in saying that I have a very high opinion of the ability and character of A. C. Pigou. He seems to me to combine in a rare degree a patient and careful study of facts with vigorous constructive thought as to their mutual relations. He has a hearty, but well-balanced zeal for humanity. And this, combined with his eagerness and power in attacking hard problems, gives promise of exceptional energy and success in that realistic but thoughtful examination of the past and present, by which alone we can get good guidance for the future in great matters. In economics the work of youth is so different in character from that of mature age, that one cannot securely predict the future: but my hopes as to what he will

⁴⁷ Pigou says in it: 'It is impossible to mark off and claim as "original" any part of an Essay of this kind. Certainly there is no originality about the main ideas at the back of it. I have learned them all from Professor Marshall's Principles of Economics, and have merely endeavoured to apply them to the particular problem of agriculture'.

achieve for economics and for social well-being are as high as they well can be. Perhaps it is not improper to add that I have asked him to give my usual "General Course" for me in the coming year: so that I may give more time to advanced instruction. I have informed the Moral Science Board of this arrangement. With perhaps one exception, I have never wished so strongly to see any student retained in Cambridge, as Pigou. I remain, my dear Provost. Yours sincerely, Alfred Marshall [Coll 42/1901 Pigou]

Marhsall, in sending 'the M. S. S. of a book by Mr A. C. Pigou on Industrial Conciliation & Arbitration', wrote to Macmillan, 16 November 1904: 'Mr Pigou is, ...the ablest economist of his age (about 27) in England, & perhaps any where. I have no doubt that he will be among the leading economists of the coming generation; and I should like him to be connected from the first with the chief Publishers of economic books'.⁴⁸

Election of Pigou and Afterwards

Marshall wrote to the Vice Chancellor, University of Cambridge, on 4 October 1907 that he had long resolved to retire from official work at the close of the current academic year and that 'I should like my successor to be able to take part in the arrangement of lecture list that will be published next year'.

On April 30, 1908 Neville Keynes interviewed with Marshall on the subject of the election to the Political Economy Professorship. Keynes wrote down in his "Diaries": 'He [Marshall] speaks in the highest terms of Pigou and is clearly most anxious that he should be elected. He very distinctly does not want Foxwell to be elected. I very much wish that I were not an Elector'.

"John Neville Keynes Diaries" and some correspondences between the people concerned revealingly disclose how Marshall himself thought about his successor and how some others thought about the election of Pigou instead of Foxwell. The candidates were Ashley, Cannan, Pigou, and Foxwell.

"John Neville Keynes Diaries" around the Election reads;

May 24, Next Saturday's election is hanging over me.

May 27, Another interview with Marshall about Political Economy Professorship.

May 28, Palgrave has come to stay with us until Saturday.

May 29, Today Nicholson has arrived to stay until Monday.

Dinner Party – Palgrave, Nicholson, Dr & Mrs Tanner, Miss Jones, Dr & Mrs Bond, Florence, Margaret, & myself.

Edgeworth (who is staying with Marshall) arrived at 9:30 to discuss tomorrow's election.

⁴⁸ Pigou wrote in the Preface (February 1905) to *Principles and Methods of Industrial Peace*: 'My chief indebtedness, at once for the suggestion of this subject as one suitable for investigation, for detailed criticism, for encouragement, and for general guidance is due to the teacher whose pupil it is my privilege to be, Professor Alfred Marshall'. [Pigou 1906: vii]

We gathered that he had been sent by Marshall. Nicholson is intensely annoyed at what he thinks Marshall's unfairness to Foxwell.

May 30, Political Economy Professorship Election. V. C., Lord Courtney, Palgrave, Edgeworth, Nicholson, Stanton, Sorley, and myself. Balfour did not come.

The candidates were Ashley, Cannan, Pigou, Foxwell. Pigou was elected. I am extremely sorry for Foxwell. The whole thing has worried me very much.

We dined with the Marshalls. Nicholson tells me that Marshall did not speak to him the whole evening.

May 31, Palgrave left yesterday. Nicholson will stay till tomorrow. We have enjoyed having them both, & Margaret is full of admiration for Palgrave. I think Palgrave thoroughly enjoyed his visit, and even enjoyed the election, which I certainly did not.

Nicholson went in to see Foxwell. N. is very severe on Marshall's manoeuvring, & I certainly do not think that Marshall has come out of the whole thing well.

On the next day of the election (31 May 1908), Marshall wrote to Foxwell 'a very fulsome letter'⁴⁹;

Pigou is in my opinion likely [to] be recognized ere long as a man of quite extraordinary genius: and I hoped that he wd be elected to the Professorship. I should like to add a word of special gratitude to you, the oldest of my colleagues. We differ in opinion a good deal, and in temperament perhaps even more: so that some things, for which I cared much, seemed of little importance to you. But so far as these differences permitted, you have cordially, heartily, and generously supported and furthered my poor endeavours. [II: 190]

Foxwell 'rather frankly' replied on 1 June 1908 in a long detailed letter, which would clearly show how Foxwell had thought himself and felt:

I am much obliged to you for the kind things you say in your letter. ... But I must frankly say (I prefer not to mince matters) that at critical times in one's life one looks to one's friends for deeds rather than words. The unexpected blow dealt me by a majority of my friends the Electors is the heaviest I have received in my life, or could receive, short of the loss of my wife & children. The chance of leading the school here is one that has never been out of my

⁴⁹ John Neville Keynes "Diaries", June 2, 1908.

On the election day (30 May) Marshall wrote to the Master of Peterhouse in replying to the Special Board's resolution:

'I have to express my deepest and most heartfelt gratitude for the most kind and generous resolution of the Special Board for Economics & Politics which you have just sent to me. What little I have been able to do for the progress of economics in Cambridge would have been impossible had not others co-operated genially & unselfishly. I have always been abundantly paid. Others of day & to grow—as I hope & believe—towards a great future. As long as I live I shall cherish a happy and grateful remembrance of the kindest I have received from the whole Board, & from none more than from yourself.

Believe me to remain'.

[Minutes of the Special Board for Economics and Politics, U.A. Min.V.114.]

thoughts for the last twenty years, & has always been my supreme ambition. I had supposed that the candi[da]ture of Pigou on this occasion was rather, as is so often the case with young men, a formal appearance, with a view to a more real contest some ten years later, when, in the natural course of things I should have given up active work. I was encouraged by the talk of the place, which has always been very generous to me, to believe that I should be elected, & had already begun to write my lectures & and to prepare for the new duties, with many cordial promises of support from tutors. Perhaps I should have taken a more modest view of my deserts: but I thought experience & long service might count for something in an election to such a responsible post, the difficulties of which I certainly do not under-rate: & people are so polite now-a-days that it is only on illuminating occasions like this that one is able to realize what a poor figure one cuts in their real judgment. Of all my varied & heavy work the Cambridge lectures have always been the most enjoyable part. It is a further misfortune to me that an end is now put to my Cambridge work, for I never could have the assurance to address a Cambridge audience again, with the stamp of incompetency so publicly branded upon me by a body of experts, of whom I am bound to believe that they decided on a strict view of the merits of the case. [III: 191]⁵⁰

Neville Keynes wrote in his "Diaries" for this day: 'Foxwell has expressed his intention of no longer lecturing in Cambridge. At the request of Dickinson & Pigou I went in to see him & to try to persuade him to reconsider the question. But I knew of course that he would not. It was one of the most painful interviews I have ever had. He had felt so confident of being elected that he had even begun to write his introductory lecture. He was quite cordial to me personally, but he was very excited, & at one time I thought he wd break down. I felt and still feel exceedingly grieved on his account. He is very bitter against Marshall, and at this I do not wonder'.⁵¹ Keynes wrote again on June 14; 'I am a little tired. Perhaps I have not yet recovered from the Political Economy Professorship Election & all that it has brought in its train. It has been like a black cloud throwing its shadow over the whole of the term'.

A week after the election, Foxwell wrote his feeling very explicitly to his former pupil in

⁵⁰ Foxwell wrote to Pigou on the same day (June 1): 'I cannot pretend to disguise from you that your election to the Chair of P. E. has on its negative side been a heavy blow to me, in as much as it has deprived me of the opportunity for which I have been waiting & planning for many years past, in fact the dream of my life.... But I wish to lose no more time in assuring you very heartily that personally you have my very best wishes for your success in your new & responsible post.... What I wish for you now is a free hand & the disposition to use it; for it is my opinion, & I think it will be yours, that there is a great deal that requires to be done before the Cambridge School will get a real hold on the University'. [III: 192]

⁵¹ John Neville Keynes "Diaries" continued:

(June 2) 'Foxwell told me yesterday that Marshall wrote to him a very fulsome letter. Foxwell seemed to written rather frankly in reply'.

(June 4) 'Florence has had one or two interviews with Mrs Foxwell. She and her husband are still dreadfully upset over last Saturday's election'.

London, Clara Collet, on June 8, 1908:

This election puts a stop to my Cambridge work, the work I have enjoyed most.....It was regarded here as a moral certainty that I should be elected. 15 to 1 was Macgregor's estimate. I did not know that Marshall as an elector afterwards told me was moving heaven and earth to prevent my election, and raking up every conceivable thing that he thought might prejudice me. Ever since October I had been preparing for the reorganization of the school here. I had got Fay elected to a fellowship,...

Well Courtney, Edgeworth, Sorley and Stanton voted against me: Nicholson, Palgrave and Keynes for me. Balfour refused to come, on the ground that it seemed to turn on politics: a curious ground for a party leader to take. If he had come and had voted for me I should have got in, in spite of Marshall, for the V. C. would have given me 6 casting votes if he had them.

This is Marshall's rather savage revenge for a letter I wrote in 'The Times' a propos of the ridiculous professorial manifesto. He writes a hollow letter, extolling Pigou's extraordinary genius, saying he is glad P. was elected, and thanking me for 'hearty, cordial and generous support', extended even to cases where his policy did not commend itself to my judgment: The bare truth. The Webbs, on the other hand, with whom I have had many a difference, write in the kindest possible manner. Nicholson came here on Sunday, and paced up and down my garden for two hours abusing Marshall. A member of the Council told Olive yesterday that wherever he went in the University there was 'universal execration'. Cunningham's verger told my servant that he had never know[n] C. so upset and so indignant. C. referred to the business in his sermon yesterday!

It was the one piece of work I wanted, and which I have been encouraged to believe I could do well. If I had not trebled the members of the school in five years, I would have readily resigned. There are only 13 in for economics as against 167 for history! This is entirely due to Marshall's restrictive and repressive influence.

A member of Council writes me that 'this election will condemn the Cambridge school of economics to the same level of impotence to which Edgeworth has reduced the Oxford school'. I hope not. Keynes is doing what he can, but he takes a gloomy view of the outlook. [Quoted in Coats 1972: 493-94]⁵²

Marshall's attitudes towards Foxwell and his intention to make his own Cambridge School of

⁵² Sidney Webb wrote to Ashley, 'What a jump for Pigou is the Cambridge appointment! I don't at all approve, for more reasons than one. But Marshall seems to have moved Heaven & Earth to exclude you & Foxwell. I happen to have quite accidentally learned, a couple of years ago, that Marshall intended & expected Pigou to succeed him, but scarcely believed it to be possible with such more experienced & distinguished persons in the field. University affairs seem to me to be governed with as little wisdom as those of the unlearned world, and with quite as much simple prejudice not to say envy, malice and uncharitableness'. [Sidney Webb to William Ashley, 16 December 1908, in Ashley's correspondence, Birmingham University Library 1967/iii/24-25.]

Economics were getting even clearer during the discussions on the 'second Professorship'. After the election, Henry Higgs, a pupil and friend of Foxwell, suggested that money should be raised to provide a Professorship (a personal chair at Cambridge) for Foxwell.

Then in his letter to Higgs Marshall had gone on the assumption that Higgs was a devoted friend of Foxwell's, and that 'he would appreciate fully all Foxwell's merits, & not be in a position to note his deficiencies in regard to Cambridge work'. Marshall decided on a P. S. which 'would leave him no excuse for not recognizing that my estimate of Foxwell's suitability for the higher Cambridge work differs widely from his: especially in regard to the new features of the Economics Tripos'. [Marshall to Neville Keynes, (6?) December 1908, III: 213]

In answer to Higgs' continued urgency as to the importance of Foxwell's experience and judgment, Marshall wrote: in his view 'the speciality of Cambridge teaching is to develop faculty, & to leave judgment to be formed later: & that a lecturer, who imposes his own judgment to youth, is not acting up to the best Cambridge tradition'. 'On Finance in particular, one of the subjects proposed for him [Foxwell]', Marshall thought, 'his judgment is extraordinary bad. He seems never to see more than one side of any complex question'. Marshall continued,

If, as is possible, the question is raised whether a second Professorship—should there be one—should go to Clapham or Foxwell, I *must* speak for Clapham. I know you have not come much in his way, & do not share my eager admiration for him. ...I, who have seen a good deal of him, would always go to him as counselor of the first weight in any difficult matter of judgment. I think his achieved work is of a very high order, full of individuality and strength. Even if Foxwell were still in his prime, I should hesitate to put him on the same intellectual level with Clapham'. [To Neville Keynes, 13 December 1908, III: 215]⁵³

Epilogue

Marshall apparently did everything in his power to ensure that Pigou was selected. R. H. Coase discussed that Marshall 'would not wish to suggest that the electors, left to themselves, would not have selected Pigou—they might well have done this—but Marshall's active support for Pigou must have told heavily in his favour. Marshall was, of course, deeply concerned about the future of economics, and particularly Cambridge economics, and, given his temperament, it is unthinkable that he would not exert himself to the full to secure the election of the candidate who, in his view, would do most for Cambridge economics'. [Coase 1972: 473-74]

It had been getting clearer that Marshall's conception of economics and his views on economic teaching were very different from those of Foxwell. As seen above, Marshall suggested that Foxwell should lecture on economic history and that Macgregor and someone else should

⁵³ Marshall wrote to Neville Keynes (5 December 1908): 'The difficulty about the Cambridge Associations appeal struck me in the night. It gave me the worst night I have had for years. If Higgs & Co clutch the money, or any considerable part of it, wh we might have got, & divert it from low pay for high energy to high pay for low energy, we may be wrecked. If we can keep our present team together, I believe that we shall have ere long the finest school in the world'. [III: 212]

take over some of Foxwell's economics lectures. Marshall did not share Foxwell's antipathy to theory or his enthusiasm for the historical approach in economics. And Foxwell's speciality, the history of economic thought, was to Marshall a subject of secondary importance. 'Pigou, with his analytical approach to economic problems, his evident ability and high potential, was bound to appeal to Marshall. Given Marshall's views, and the seriousness with which he held them, it is inconceivable that he could have preferred Foxwell to Pigou as his successor'. [Ibid; 477, 478]⁵⁴

The making of Marshall's Economics Tripos and his School of Economics, which already had and would have taken for many years, looks actually parallel to the long haul and revision of the *Principles*, in which Marshall gradually excluded and transferred the economic history and history of economic thought to the Appendices. Of course, *Industry and Trade*, which was originally planned as Volume II of the *Principles* and highly praised by the historical economists, was published separately. Marshallian economics or school of economics, in contrast with Ashley's enlargement of economics and his attempt to create business economics, seem to have contracted and tended to exclude and alienate history and real business life from economic studies to become less realistic.

It was actually 'inconceivable' that Marshall could have preferred Foxwell or Ashley to Pigou as his successor, because of the differences in their views on scope and method of economics. Yet Marshall's "The One in the Many and the Many in the One" was favourably held in common by Foxwell, Ashley, Hewins, and some other historical economists. However, although Pigou was faithful to Marshall⁵⁵, Cambridge economics under Professorship of Pigou were gradually losing the half of Marshall's dictum "The One in the Many and the Many in the One" and alienated economics from the real life of business organization, which was to be revealed by Clapham in "On Empty Economic Boxes" in *Economic Journal* 1922, which was to make a cause of the debates on the representative firm and increasing returns in the late 1920s and during the debates the Marshallian orthodoxy was to collapse and the Marshallian school of economics was to be transformed.

⁵⁴ According to A.W. Coats, it is unnecessary to maintain that the events of 1903 marked a sharp breach in Marshall's relationship with Foxwell. For one thing, their continued cooperation was essential to the success of the new Economics Tripos, for which they had battled so valiantly for so long. But 'the fiscal controversy may well have marked the end of Marshall's willingness to view Foxwell as a suitable successor, for as Professor he would have become the leading spokesman for Cambridge economics. The heated public controversy among the professional economists had, admittedly, died down during the middle years of the decade. But the tariff question was still at the center of current politics both in Cambridge and in the country at large'. [Coats 1972: 491]

⁵⁵ 'The cause of my first interest in economic science was not a reason, but the personal inspiration of the master whose successor and whose pupil it is my high privilege to be. The Chair of Political Economy in Cambridge is still illustrious with his name..... It will be my earnest endeavour to carry on and to develop in this University the work that he has begun, and to pass forward to others what I have learnt from him'. [Pigou 1908: 7-8]

Appendix 1: Scheme for an Economic and Political Sciences Tripos (8 May 1901)

Part I

(at the end of second year; all papers compulsory)

- A. Modern History (economic & political, chiefly since 1780: to be treated broadly. Each paper to contain (say) nine questions, of which three are to be general, three distinctively economic, & three distinctively political.)
 - 1, 2. United Kingdom (two papers)
 - 3. France & Germany (with some reference to the rest of Europe)
 - 4. British Possessions & the United States
- B. Economics
 - 5, 6 A general study
- C. Politics
 - 7. The existing English polity (to include relations to Colonies and Dependencies)
- D. Essays

Part II

(Not less than six, or more than eight papers to be taken, inclusive of the Essays. Economic students to be required to take the whole of Group A, and at least one paper from either C or D.)

- A. Main Economic Course (A study, more detailed on the descriptive side and more advanced on the analytical side, than in Part I, of contemporary economic and social conditions: of their mutual relations and interactions and of their causes in the near past. The treatment to be international, where possible; and to require an elementary knowledge of economic geography & of statistical method.)
 - 1. Production. Distribution. (Resources of different countries. Causes that govern value & the distribution of the national income. Combination & Monopoly. Trade Unions.)
 - 2. Money, Credit, Trade. (Currency national & international. Banks. International Trades. Organized Markets. Fluctuations of credit, prices and employment.)
 - 3. Public business & finance. Public duties on their economic side. (Imperial & Local Government revenues, regulations & undertakings. Economic relations & obligations of the various social classes. The organization of effort for the removal of poverty & furthering of progress.)
- B. Secondary Economic Papers
 - 4. History of economic doctrine. (Socialism to be included.)
 - 5. Mathematico-economic & statistical methods.
- C. Politics
 - 6. The Structure & Functions of the Modern State (involving a comparative study of existing institutions)

7. Political Philosophy (i.e. an examination of the nature & end of the State with a survey of the history of Speculation)
8. Public International Law & existing diplomatic relations.
9. A Special Study of some existing polity (other than the British)
- D. Law
 10. Mercantile Law
 11. Private International Law
- E. Essays

[Whitaker II: 315-16]

Appendix 2: Economics and Political Sciences Tripos: Draft II for Part II

Papers 1-6 Economics, for details see below.

Papers 7, 8 Economic functions of Government, imperial and local; including the principles of public finance. Ethical aspects of economic problem.

Papers 9, 10 History of Political Theory.

Papers 11, 12 International Law.

Papers 13, 14 Principles of the Law of Contract.

Paper 15 Essays ?

Papers 1, 2 to be of the same general character as those in Part I, but with a larger international element.

Papers 3, 4, 5, 6 to consist chiefly of questions more or less specialized to one of the groups A, B, C, D in about equal proportions: but each to contain some general questions. Papers 3, 4 to be realistic & adapted to the needs of those preparing for public or private business as well as professional economists. Papers 5, 6 to be of a more exclusively academic character & to make provision for some of the more obscure problems of value, such as those connected with the shifting and ultimate incidence of the burden of taxes; for the history of economic doctrine; and for mathematical problems in economics and statistics. No one to answer more than a half of the questions in these two papers.

Every candidate to take papers 1, 2 & 15 together with not less than four & not more than eight others.

- A. MODERN INDUSTRIES, AND PROBLEMS. Modern methods of production, transport, and marketing; and their influences on prices and on industrial and social life. The recent development of joint stock companies. Combinations and monopolies. Railway and shipping organization and rates.
- B. EMPLOYMENT. Causes and results of recent changes in the wages and salaries of different classes of workers. Relations between employers and employees. Trade Unions. Employers Associations. Conciliation and Arbitration. Profit sharing.

- C. MONEY, CREDIT AND PRICES. National and international systems of currency. Banks, and banking systems. Stock Exchanges. Foreign Exchanges. National and international money and investment markets. Commercial fluctuations. Causes and measurement of changes in particular prices and in the purchasing power of money.
- D. INTERNATIONAL TRADE AND ITS POLICY. The courses of trade as affected by and affecting the character and organization of national industries, trade combinations &c. International levels of prices. International aspects of credit and currency. Foreign Exchanges. Tariffs, protective & for revenue. Bounties & transport facilities in relation to foreign trade.

English experience and problems to be compared throughout with those of other countries.

18. 11. 1902

Alfred Marshall

H. S. Foxwell

[U.A. Min. VI. 68, Cambridge University Library]

References

- "John Adamson" (1901) *Birmingham University and Commerce. Abstract of History & Constitution with special relation to the proposed "Faculty of Commerce"*, compiled (unofficially) by "John Adamson", Fellow of the Royal Statistical Society, June 1901, (private circulation). Coventry: Iliffe, Sons & Sturmev Ltd. University Collection, Birmingham.
- Ashley, Anne (1932) *William James Ashley; A Life*. London: P. S. King & Son.
- Ashley, W. J. (1902) *The Faculty of Commerce in the University of Birmingham: Its Purpose and Programme*, Birmingham.
- (1902a) Another edition, c. 1906.
- (1902-3) "Our Education: What it is and What it ought to be. III. Commercial Education", *The World's Work*, vol. 1.
- (1903) "The Universities and Commercial Education", *North American Review*, vol. 176, January.
- (1906) "A Science of Commerce and Some Prolegomena", *Science Progress (in the twentieth century. A quarterly journal of scientific thought)*, vol.1, 1906-1907.
- (1907) "The Present Position of Political Economy", *Economic Journal*, vol. 17, December.
- (1908a) "The Value of University Training for Business Men", *The Organizer*, vol. 3, March.
- (1908b) "The Enlargement of Economics", *Economic Journal*, vol. 18, June.
- (1909) "The University and Trade and Commerce", *The Birmingham Daily Post*, July 7.
- (c1921) "The Universities and Training for Commerce". University Collection, Birmingham.
- (1924) "Evolutionary Economics", in *Birkbeck College Centenary Lectures 1823-1923*. London: University of London Press.
- (1926a) *Commercial Education*. London: Williams & Norgate.
- (1926b) *Business Economics*. London: Longmans, Green, and Co.
- Bastable, C. F. (1894) "A Comparison between the Position of Economic Science in 1860 and 1894", in R. L. Smith ed., *Essays in Economic Method*. London: Gerald Duckworth, 1962.
- British Association for the Advancement of Science (1894) "Methods of Economic Training in this and other Countries", in *Report of the Sixty-Fourth Meeting...held at Oxford in August 1894*. London: John Murray.
- Cairnes, J. E. (1870) "Political Economy and Laissez-Faire", in *Essays in Political Economy*. London: Macmillan, 1873.
- Chester, Norman (1986) *Economics, Politics, and Social Studies in Oxford, 1900-85*. London: Macmillan.
- Clapham, J. H. (1922) "On Empty Economic Boxes", *Economic Journal*, vol. 32, September.

- (1927) "Obituary. Sir William Ashley", *Economic Journal*, vol. 37, December.
- Collini, S., Winch, D. and Burrow, J. (1983) *That Noble Science of Politics. A Study in Nineteenth-century Intellectual History*. Cambridge University Press.
- Coase, R. H. (1972) "The Appointment of Pigou as Marshall's Successor", *Journal of Law & Economics*, vol. 15, October.
- Coats, A. W. (1967) "Sociological Aspects of British Economic Thought (Ca. 1880-1930)", *Journal of Political Economy*, vol. 75, October.
- (1967) "Marshall and the Early Development of the LSE: Some Unpublished Letters", *Economica*, vol. 34, November.
- (1972) "The Appointment of Pigou as Marshall's Successor: Comment", *Journal of Law and Economics*, vol. 15, October.
- Dahrendorf, R. (1995) *A History of the London School of Economics and Political Science 1895-1995*. Oxford University Press.
- Edgeworth, F. Y. (1924) "Reminiscences", in Pigou ed. (1925).
- Foxwell, H. S. (1888) "The Economic Movement in England", *Quarterly Journal of Economics*, vol. 2.
- Groenewegen, Peter (1995) *A Soaring Eagle: Alfred Marshall 1842-1924*. Edward Elgar.
- Hayek, F. A. (1946) "The London School of Economics, 1895-1945", *Economica*, vol. 13, no. 49, February.
- Hewins, W. A. S. (1898) "The London School of Economics and Political Science", Education Department, *Special Reports on Educational Subjects*, vol. 2, C. 8943. London.
- (1929) *The Apologia of an Imperialist. Forty Years of Empire Policy*. Vol. 1. London: Constable & Co.
- Hey, John D. and Winch, Donald eds. (1990) *A Century of Economics. 100 Years of the Royal Economic Society and the Economic Journal*. Oxford: Basil Blackwell.
- James, E. J. (1900) *Relation of our Colleges and Universities to Higher Commercial Education* (An Address delivered before the American Economic Association, December 28, 1900).
- Kadish, Alon (1989) *Historians, Economist, and Economic History*. London: Routledge.
- Kadish, A. and Tribe, K. eds. (1993) *The Market for Political Economy. The Advent of Economics in British University Culture, 1850-1905*. London: Routledge.
- Keynes, J. M. (1924) "Alfred Marshall, 1842-1924", in Pigou ed. (1925).
- (1940) "The Society's Jubilee", *Economic Journal*, vol. 50.
- Koot, Gerard M. (1982) "An Alternative to Marshall: Economic History and Applied Economics at the Early LSE", *Atlantic Economic Journal*, vol. 10, March.
- Maloney, John (1976) "Marshall, Cunningham, and the Emerging Economics Profession", *Economic History Review*, vol. 29 no. 3, August.
- (1985) *Marshall, Orthodoxy & Professionalization of Economics*. Cambridge University Press.
- (1990) "Marshall and Business", in Rita McWilliams Tullberg ed., *Alfred Marshall in Retrospect*. Edward Elgar.

Marshall, Alfred

- (1885) “The Present Position of Economics”, in Pigou ed. (1925).
- (1890) *Principles of Economics*, 9th (variorum) ed., by C. W. Guillebaud, in two volumes. London: Macmillan for Royal Economic Society, 1961.
- (1899) “Political Economy” (March 24, 1899), in Cambridge University Association, *Statement of the Needs of the University*. Part 1. “Library, Departments of Divinity, Law, Literature, Philosophy and Art”. Cambridge: University Press, 1900.
- (1902) *A Plea for the Creation of a Curriculum in Economics and associated branches of Political Science* (7 April, 1902). Cambridge: University Press.
- (1903a) “To the Members of the Senate” (20 May, 1903). Cambridge: University Press.
- (1903b) “The Proposed New Tripos” (5 June 1903). Cambridge: University Press.
- (1903c) *The New Cambridge Curriculum in Economics and Associated Branches of Political Science; Its Purpose and Plan*. London: Macmillan.
- (1906) *Introduction to the Tripos in Economics and Associated Branches of Political Science*. Cambridge: University Press.
- (1919) *Industry and Trade. A Study of Industrial Technique and Business Organization; and of Their Influences on the Conditions of Various Classes and Nations*. Fourth edition, 1923. London: Macmillan.
- Marshall, L. C. ed. (1928) *The Collegiate School of Business. Its Status at the Close of the First Quarter of the Twentieth Century*. University of Chicago Press.
- Pigou, A. C. (1905) *Principles and Methods of Industrial Peace*. London: Macmillan.
- (1908) *Economic Science in Relation to Practice*. London: Macmillan.
- ed. (1925) *Memorials of Alfred Marshall*. London: Macmillan.
- (1952) “Looking Back from 1939”, in *Essays in Economics*. London, Macmillan.
- Price, L. L. (1902) “Review”. *King's Weigh House Lectures to Business Men* (London: Macmillan, 1901) in *Economic Journal*, vol. 12.
- (1902a) “The Present Position of Economic Study in Oxford: A Letter to the Vice-Chancellor of the University” (dated 14 January 1902), in James Bonar Papers, Marshall Library Archives.
- Sanderson, Michael (1972) *The Universities and British Industry 1850-1970*. London: Routledge.
- Smith, Barbara M. D. (1990) *Education for Management: its conception and implementation in the Faculty of Commerce at Birmingham mainly in the 1900s*. (First published in 1965), Birmingham: University of Birmingham.
- Webb, S. (1897) “The Provision of Higher Commercial Education in London”, International Congress on Technical Education, *Report of the Proceedings of the Fourth Meeting held in London, June, 1897*. London: William Trousce.

Whitaker, John K. ed. (1996) *The Correspondence of Alfred Marshall, Economist*. Cambridge University Press.

Vol. I "Climbing, 1868-1890".

Vol. II "At the Summit, 1891-1902".

Vol. III "Towards the Close, 1903-1924".

一橋大学社会科学古典資料センター *Study Series. No. 48*

発行所 東京都国立市中 2 - 1

一橋大学社会科学古典資料センター

発行日 2002 年 3 月 29 日

印刷所 新宿区早稲田鶴巻町 565-12

(有)啓文堂松本印刷
