

TRADE UNIONS AND THE THEORY OF COMPETITION*

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I.

After 1860 the number of trade unions and their membership in Britain began to increase, sometimes in fits and starts, but by 1890 when Alfred Marshall's *Principles of Economics* was published, unions were flourishing.¹ In this same period the academic profession of economist also emerged, dominated in Britain by Marshall. As marginal analysis was developed and refined, the theory of competition was ascribed the central role in explaining the operation of the market economy. In his most influential work Marshall assumed that the dominant market form was characterized by competitive price taking behavior by all economic agents leading to the establishment of "long run normal prices". (see Marshall 1961 A, pp. 5-10, 11-12, 35, 341, 540; 1961 B, pp. 155-6). Yet the assumption of competition, especially in labour markets, rested uncomfortably with the rapid growth of unions. This paper examines how a representative group of British academic economists contended with the apparent inconsistency between institutional developments and economic theory during this period.

Aspects of the work of five economists, Alfred Marshall among them, is examined in the following sections. Marshall had a central role in the professionalization of economics and its establishment as an academic discipline, principally because the views of the "Cambridge School", which he dominated, were representative of the mainstream of academic economics at the time. As early as 1887 Foxwell observed of Marshall: "Half the economic chairs in the United Kingdom are occupied by his pupils, and the share taken by them in general economic instruction in England is even larger than this." (Foxwell, 1887, p. 92)² The remaining four, specifically, Joseph Shield Nicholson, William James Ashley, William Cunningham and Langford L.F.R. "Important English Economists 1776-1915" (1965 B).³ In the following sections brief biographical details are provided in order to identify formative influences and significant turning points in the development of each writer's ideas. The principle focus will be on those aspects of their writing which relate to trade unions and the competitive model. Specifically, their methodological and political differences and similarities are illustrated by an examination of their analysis of wage both determination and the effects of wage minimums, the impact of strikes and proposals for tariff reform. Despite the differences of method and of perception it will be seen that, apart from Langford Price, this group of economists generally produced an analysis and conclusions which were not far removed from those of Alfred Marshall. Thus, Marshall's views were predominate and some possible reasons are suggested in the concluding section.

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II

The growth in numbers and economic importance of trade unions was clearly a development which caused Marshall enormous concern. His favourable attitude towards unions in his early work was gradually replaced by a neutral and finally negative attitude as he realized that unions were no longer just benefit societies, but also affected labor market outcomes (Petridis 1973). His awareness of the growth of forces impeding competition in labor and other markets is clearly visible in his earliest economic writings long before he published anything of significance.⁴ Despite his reverent and deferential attitude to his classical predecessors, Marshall was at a very early stage critical of their facile assumption that markets were always competitive. In 1873 he wrote: "The earlier disciples of Ricardo underrated the difficulties which obstruct free competition. They were wont to assume that no great error is in general introduced by applying without modification these results (obtained by pure theory) to questions concerning the relation between wages and prices in different places which were de facto in the same country" (Marshall Papers, 1). The same view survived without amendment through successive editions of the *Principles* (1961A).

Marshall saw himself at the forefront of a new breed of economists who were trying to establish "economic science" on a new footing. An appropriate methodology had to be found and presented in such a way to avoid unnecessary criticism of his classical predecessors. Controversy and acrimonious public debate were to be avoided as far as possible. The old "political economy" was to be replaced by the new "economic science" in which inductive and deductive methods were interlaced with economic history. In this way theory and analysis were to be brought to bear on practical problems thus encouraging men of affairs to study and use the new "science" of economics.⁵

With such formidable ambitions for economics Marshall had to tread cautiously in his analysis of trade unions. Of course, all Marshall's work seems to have been characterized by undue caution, but in the case of trade unions it was extreme. He never published a thorough going analysis of trade unions in the *Principles*, on the grounds that "a full appreciation of their aims and results lies beyond the scope of the present volume: for it must be based on a study of combinations in general, of industrial fluctuations and of foreign trade" (Marshall, 1961A, p. 702).⁶ Thus, apart from some unpublished material in the *Marshall Papers* his major writings on unions are found in two small books (Marshall, 1879 and 1892) both of which were intended for beginning students.⁷ He apparently believed that although his methodology was still incomplete its weakness would be undetected by his reading audience, and that it was essential not to convey the impression that difficult practical problems, such as the economic analysis of trade unions, could not be satisfactorily dealt with in the new framework of economics which he wished to establish.

Whenever Marshall discussed trade unions in his published work he either deliberately or subconsciously adopted an approach which made it difficult or even impossible for the reader to ascertain his genuine views. It is therefore equally possible to find statements by Marshall that trade unions played only a minor role in the labor market, or on the contrary, statements that "their importance is great and grows rapidly" (Pigou, 1956).⁸ Such views are not even necessarily separated chronologically as can be seen from an examination of any edition of the *Principles*.⁹ Because the *Principles* was intended to place economics and economists in a new and more respectable light, trade unions were not analyzed at all in the first four editions. But in the fifth edition Marshall succumbed to the pressure of economic reality and despite his uncertainty about the need for and the method of treatment of trade unions, he added new material briefly outlining the main effects of trade unions; see Marshall (1961A, pp. 702-19).¹⁰ The

reader of the new material is left in no doubt that Marshall regarded his treatment of trade unions as incomplete.

It is against this background that Marshall's methodological struggles with the economic analysis of trade unions must be seen. Marshall was aware of the problem of indeterminacy in bilateral monopoly (see Marshall (1961A, pp. 627-28; 1961B, p. 669)), but he adopted a methodology which deliberately fudged the issue, and carried out his analysis of trade unions under the assumptions of a competitive labor market. His development of joint demand and the principle of substitution were applied to the labor market in both the short run and the long run. The effects of union action to control the supply of labor in order to obtain increased wages was shown to be limited by the well known Marshall-Hicks conditions. See Marshall (1961A, pp. 384-87, 853) and Hicks (1932). His methodology was to admit the existence of imperfections in the labor market in the short run leading to temporary deviations from the competitive outcome. But in the long run, the effect of union action would be negated and competitive forces would be triumphant. See Marshall (1961A, pp. 628, 693, 702-10; 1892, Ch. XIV). Marshall had in mind a concept of a "normal" union action. The message which he wanted his followers to receive was that: "The power of unions to raise general wages by direct means is never great; it is never sufficient to contend successfully with the general economic forces of the age, when their drift is against a rise of wages" (Marshall, 1892, p. 396).¹¹ The general economic forces which Marshall invoked were competitive forces either from alternative supplies of labor or alternative supplies of products. Of course, some time usually had to elapse before such forces would emerge and have an effect, and Marshall usually slipped smoothly, even surreptitiously from the short run to the long run, from a less competitive to a more competitive situation, rarely warning the reader about the pitfalls of such an analysis. He thus failed to develop a satisfactory analysis of monopoly elements in labor markets, though he recognized the need for it.¹²

So it was that theoretical precision was sacrificed on the altar of the "science of economics".¹³ But he was acutely aware of the shortcomings in the methodology he employed. A letter to J.N. Keynes refers to the development of his concept of derived demand in the famous plasterer's illustration in which union action is assumed to affect the supply of labor. In the *Principles* he explicitly assumed that "the period over which the disturbance extends (is) short" (Marshall, 1961A, p. 382). The final outcome of the analysis depends on competitive forces in the long run. Not surprisingly "...the exposition gave (Marshall) a great deal of trouble and I fear is unsatisfactory yet. In particular I have taken an illustration in the text (not in the footnote) about plasterers which I knew at the time was not in perfect logical harmony with the assumption that the curves apply to periods sufficiently long to allow free action to the normal forces of supply (in this case the growth of plasterers) ... I thought that if I apologized for and explained away this logical change of point of view, I should alert the readers and that if I said nothing about it probably no one would find it out" (Marshall Papers, 3). He wanted Keynes' advice as to how best to deal with this methodological difficulty and listed three options "... (a) to explain the change of venue involved in the plasterer's illustration or (b) to destroy it ruthlessly or (c) run the risk of detection by lynx eyed (or minded) readers" (Marshall papers, 3). Yet this piece of theory survived unamended through eight editions of the *Principles* (see Marshall, 1961A, pp. 382-88). This episode illustrates the lengths to which Marshall was prepared to go to conceal difficulties and present his preferred public image of economics. A similar attitude is reflected in a letter he wrote to Edgeworth a few years later: "I have a letter to show you in strict confidence from the kind of reader I should lose if I wrote out on every occasion all the qualifications that are required, to make the abstract doctrines (not true as far as they go) but complete" (Marshall papers, 4). As J.M. Keynes noted in 1926 "...Marshall attained some of his objectives. The book reached the general public. It increased the public esteem of

Economics. The minimum of controversy was provoked..." (Pigou, 1956, p. 47). But apart from the general public, Marshall carried the mainstream of professional economists with him as well, perhaps at the cost of more rapid development in economics.

III

Joseph Shield Nicholson was a highly talented but perhaps underrated economist who came under Marshall's influence. He was a student at Cambridge when Marshall filled his first teaching appointment. Between 1876 and 1880 he was a private tutor at Cambridge before occupying the only Chair of Political Economy and Mercantile Law in Scotland at Edinburgh University.¹⁴ He occupied the chair for 45 years; retiring in 1925. Nicholson was a prolific writer, publishing numerous books and articles. After 1913, he also became well known to a wide public through his regular contributions to the Edinburgh based newspaper, *The Scotsman*. Nicholson's work is of interest, because he represented a strand of the economics profession outside the mainstream but which was a part of a continuing Scottish tradition dating back to Adam Smith. Through Nicholson's writing this strand through its reversion "back to Adam Smith", produced even greater conservatism than was present in Marshall. Nicholson always referred to political economy, not economics; he organized the material in his *Principles of Political Economy* with the theory of exchange after distribution and not before as Marshall had done; and approached mathematics and graphs cautiously referring to them as the vagaries of fashion. Nicholson believed his contemporaries' desire for novelty too often led to underrating of the work of earlier economists. Although Nicholson was a signatory to the "Economists' Manifesto" (1903) to *The Times*, he had doubts both about the participation of economists in the free trade debate and their appeal to the authority of earlier economists for support.¹⁵ On the methodology of economics Nicholson noted on more than one occasion that the two main approaches available to economists were "deductive, a priori, abstract, hypothetical, mathematical, analytical, etc." and "inductive, positive, a posteriori, historical, comparative, etc." (Nicholson, 1909B, pp. 13-14) and that each had its place according to the circumstances. Despite this observation, Nicholson's writing is dominated by an inductive approach to economic problems. Whenever his analysis of labor markets and the role of trade unions suggested an extension of economic theory was called for, Nicholson avoided the issue by attempting to appeal to facts only.

Because Nicholson's approach, to economic analysis was more conservative than Marshall's, his conception of the competitive mode of theorizing is instructive. His commitment to Adam Smith's exposition of the "liberty" system shines through in almost everything Nicholson wrote.¹⁶ In the first volume of his widely read *Principles*, Nicholson asserted that: "It is hardly too much to say that the great agency of progress has been competition, and the great obstructive the debris of old organizations" (Nicholson, 1902, p. 429). In his most important article he extolled the virtues of the competitive model. "It is so long since anyone had a good; word to say for perfect competition that a display of its excellences ought to be as interesting as removing the dirt from an old picture" (Nicholson, 1896). Nicholson drew an analogy between competition and sport (as Marshall had done in some unpublished material). As long as ever player observed the rules of the game, the outcome would be desirable (see Nicholson, 1908, p. 219). In its most uncomplicated form Nicholson observed how competition: "On the positive side ... implies that every person tries to attain his own economic interests regardless of the interests of others. Negatively it is implied that the self interest is not attained by combination or by custom" (Nicholson, 1909B, p. 219). In the labor market this competition between employers would tend to raise the wage, while competition between workers would tend to lower it. The outcome is the payment of equal wages for equal efficiency, with all workers finding equal employment in terms of conditions such as hours, work environment, etc.¹⁷ A further outcome of the

competition system is the attainment of the economically "best" distribution of wealth, each person receiving "a reward according to dessert" (see Nicholson, 1896, p. 148; 1902, pp. 233, 268).

But Nicholson's advocacy of the competitive model and system was not entirely unqualified. His trained historical sense and his down to earth institutional approach also led him to a number of qualifications. Various forces classified under the single heading of custom and inertia to change may modify competition which includes habit, laws, regulations of church, government, corporation or trade union. Moreover, he recognized that the requirements of knowledge on both sides of the market, and of mobility of labor and capital would only occasionally be completely satisfied. Rents, quasi-rents and monopoly profits could therefore arise. While wages would only approach the competitive norm in a stationary state. "As soon as we introduce change, or 'progress, time is required for readjustment, and until the readjustment' is made, some gain and others lose without merit and without fault". (Nicholson, 1908, p. 234).

Nicholson's awareness of the limitations of the competitive model is theory and practice never inhibited him from using it as an analytical device. On the contrary, he argued that, in certain circumstances trade unions might increase the degree of competition by their provision of information on market conditions and their influence on mobility of labor. "They may bring wages nearer to the rate that would be arrived at under really free competition; than would be the rate actually obtained under the imperfect competition possible in present conditions" (Nicholson 1903B, p. 74). Even in the presence of combinations, competition may be concealed though really at work. Borrowing directly from Marshall, he observed that "custom is often a form of slowly moving competition (Marshall) ... and "custom is often a form of slowly moving competition (Marshall) ... and within the combinations of labour and capital the law of substitution (Marshall) is a form of competition" (Nicholson, 1909B, pp. 159-60). Thus competition in labor markets may be overshadowed but never displaced by these other forces. The parallel with Marshall's approach of analyzing most situations with the competitive model, while still acknowledging the existence of imperfections, is striking. The difference in their approach is only a matter of degree. Nicholson was more straightforward in his admission of the limitations of the competitive model, in partly competitive situations. He openly recognized "that the idea of competition excludes the idea of combination or association, even if the combination is in origin and intention partly voluntary" (Nicholson, 1908, p. 211). The labor market could be assumed to be competitive, as long as the analyst was aware of the deviations from competition and their effects. The Marshallian influence is evident in dismissing such deviations as not a problem as long as "the general causes ... are always at work" (see Nicholson, 1909B, p. 168; 1892, pp. 108-109).

It would be invalid to classify Nicholson as firmly in the Marshallian camp on the basis of his analysis of trade unions. It is true that he was accorded considerable respect by the Cambridge School, and that he was one of their most respected external examiners. Through his close personal friendship with John Neville Keynes and his frequent visits to Cambridge when he stayed in Keynes' house, he was kept informed of developments at Cambridge. But from Nicholson's correspondence over many years with Keynes¹⁸ it is possible to discern disagreement with the Marshallian approach to economics. Nicholson implicitly criticized Marshall when he wrote to Keynes that: "The more a man sees the possible applicable and the practical importance of his science the more he will turn to Adam Smith and the less will he waste his time on purely hypothetical puzzles (Nicholson, 1889A). When Marshall's *Principles of Economics* was published in 1890, Nicholson wrote "a short impressionist review" of it. In a letter to Keynes he commented on this review: "On the whole on re-reading I think I let him off

too easily for some things. His history is vague, old fashioned and excessively weak; his examples mainly of the old a prior kind and at best (indecipherable) rather than important; the repetition is so great that his plan must be faulty, and if he is to cover the whole ground of what I understand by P.E. he will at the same rate take 6 volumes" (Nicholson, 1890).

Nicholson's dissatisfaction with Marshall's Principles prompted him to write his own book on the principles of economics.¹⁹ The first edition of his Principles of Political Economy expressed his debt to Marshall and Sidgwick, both for their "published writings" and "the influence of their teaching whilst a student at Cambridge" (Nicholson, 1902, p. viii). To a certain extent Nicholson appeared to crave Marshall's approval. When he published the third edition of his Principles of Political Economy a few years later he sent a copy to Marshall. As Nicholson wrote to Keynes: "(I was) amazed to receive more than the usual printed form with his compts." Marshall's letter commented that the book "will be of exceptional interest and assistance to me as well as a public benefit. What do you think of that?" (Nicholson, 1909C). Despite obvious pleasure in Marshall's response, Nicholson's attitude to Marshall's economic analysis of trade unions remained ambivalent. Nicholson, like Marshall, made a subjective estimate of the amount of competition in British labor markets and concluded that it was a dominant form. And, like Marshall, he argued that deviations from competition due to trade unions could still be dealt with in the framework of a competitive model. However, Adam Smith's influence overpowered Marshall's.²⁰ Thus, Nicholson never advanced, or even saw the need to advance the economic analysis of trade unions beyond that possible in the competitive model. Furthermore, the empirical question of the existence of competition, and the moral position that the best system is a competitive one, were intertwining strands in Nicholson's approach, which cannot be satisfactorily unravelled.

IV

Unlike Nicholson, William James Ashley and William Cunningham would have thought to themselves as economic historians first, and then as economists.²¹ Born in England just eleven years apart, in 1860 and 1849, their careers display some close parallels, with their conservative but dissenting views representing a twin challenge to the conventional orthodoxy of Marshall.

The German Historical School was the major common influence on their approach to economics and economic history. Ashley made several journeys to Germany and acquired a mastery of German historical economics.²² Although Cunningham's contact with the German Historical School was only through their writings, these had a profound influence, and he readily admitted that he was a member of the "extreme German Historical School".²³ Through the German Historical School both Ashley and Cunningham developed critical attitudes towards their fellow economists, and to economic theory. It is these attitudes which are of interest here, for perhaps inevitably they conflicted with Marshall, and in Cunningham's case the conflict developed into open confrontation (Malony 1976).

Their conception of the nature of economic theory differed from Marshall's and his contemporaries, and was a major factor shaping their choice of subjects for study and research. Cunningham's attitudes were more dogmatic, and more "heretical" than Ashley's. The Comtist criticisms of economic theory were adopted unhesitatingly, perhaps uncritically by Cunningham. The basic proposition that economics must issue from the study of society and that economic principles have no independent validity emerge from this criticism. This led Cunningham to assert that economic doctrine is relative, and that economic generalizations held good only within narrow limits of time

and space. (Cunningham, 1889 and 1892B). Soon after he was appointed to the more secure post of Tooke Professor at Kings College, London, Cunningham mounted his most concerted attack on economic theory, and especially on Marshall's views of economic theory.²⁴ Successive papers (Cunningham, 1902A; 1892B and 1892C) emphasized again the relativity of economic theory and its inability to provide prescriptive guidance. Marshall was accused of using ambiguous terminology and of "kowtowing" (sic) to common usage. Economic history, too, was perverted, Cunningham charged, by Marshall's neglect of serious factors. This assault provoked the usually reticent Marshall into one of his few public responses to a critic. A painstaking point by point reply followed which, because of Cunningham's overstatement of his case, easily satisfied the editor of the Economic Journal (F.Y. Edgeworth) who refused to publish a further comment by Cunningham. Not to be rebuffed, Cunningham published his reply in the form of letters to two periodicals, The Pall Mall Gazette and Academy respectively. Thereafter, he continued to attack the approach to economic theory espoused by Marshall and most of his contemporaries and to advocate the more serious study of economic history in its place.²⁵

Along with Cunningham, Ashley stressed the relative and hypothetical nature of economic theory. He believed that economists were moving towards acceptance of the two great principles "that economic conclusions are relative to given conditions, and that they possess only a hypothetical validity" (Ashley, 1966, p. 3). They could "leave to Cambridge people hair splitting analysis of abstract doctrines" (Ashley, 1932, p. 35).²⁶ Though he was not without praise of Marshall's Principles of Economics (Ashley, 1903A, p. 6), he was unwilling to accept its methodology, continually urging the study of facts and the use of the historical method.²⁷

Both Ashley and Cunningham were members of the Conservative Party and Ashley was closely connected with the party platform and the ultimate policy of the party.²⁸ They spoke unanimously (but independently) on the controversial question of tariff reform. Ashley strongly attacked the fact that "a majority of British economists have signed a pronouncement intended to veto any serious reconsideration of the commercial policy of this country" (Ashley, 1905, p. 256). In equally strong terms Cunningham wrote: "The professors who protested that there could be no change of circumstances which made it possible to reconsider the trading policy of this country did much to discredit the scientific character of the doctrine they taught" (Cunningham, 1916, p. 13). The circumstances under which England moved towards free trade in 1848, and the extent to which Britain's political ends had been achieved needed explanation in this context.²⁹ Precisely in this context (and contrary to commonly held economic opinions) Ashley and Cunningham argued that a half century of one sided free trade after 1860 had caused England to lag behind their competitors, the United States and Germany. They therefore favored a protectionist trade policy linked to the granting of Imperial preference to English colonies. That such a policy eventually materialized may be partly attributed to their influence.

Despite their apparent conservatism, Ashley and Cunningham were interventionist economists, running counter to the "norm" which was established by Marshall. They believed that there was a tendency for competition to decline in labor and product markets at the end of the nineteenth century. It was a natural reaction for employers and employees to attempt to avoid the insecurity created by competition. Ashley argued that although competition gave England cheap raw materials and food it also resulted in sweated labor, and as a reaction, the emergence of trade unions. In both product and labor markets the trend was to increased combination. To the extent that this resulted in increased efficiency in industry, and to the extent that the disadvantaged worker was protected by "trade unions acting as a foil to competition", interferences with the

competitive system were justified (Ashley, 1903A, p. 107). Cunningham's views on the extent and effects of competition paralleled Ashley's except that he was more emphatic and dogmatic. He constantly pointed to the harmful effects of the era of Laissez faire ushered in during the nineteenth century; see Cunningham (1894B and 1910A). Although Cunningham thought that competition has become "a word of evil omen" (Cunningham and McArthur, 1928, p. 141) he did not argue that competition should be eliminated. There was merit in the reward and recognition if offered to individual initiative, energy and enterprise. Nevertheless, state intervention was still justified because it would act as a check against either excessive competition or excessive monopolization through employers' organizations, trade unions, cartels, trusts, and the like.³⁰

In contrast to Marshall and Nicholson who both worked within the framework of a competitive economic model, Cunningham followed an ad hoc method of analysis; the framework for analysis being based on neither competitive nor monopolistic models.³¹ His analysis, therefore, tends to have more of an intelligent layman's commonsense flavour about it, there being no detailed reference to the technical tools of supply and demand and elasticities, which were used by Marshall and to a lesser extent by Nicholson. However, their conclusions do not differ drastically. When trade unions demanded higher wages they usually expected that these would be passed on in higher prices. Cunningham thought this would only be possible when producers had a monopoly, otherwise the result would be a diminution of employment or a reduction of wages. He concluded that "labourers may pursue their immediate interest so far as to damage trade and to render a serious loss of wages and of employment inevitable" (Cunningham and McArthur, 1928, p. 211). But these statements were presented more as self evident propositions than as the closely reasoned outcomes from an economic model. The similarity of the propositions to those painstakingly derived by Marshall is very striking. The discussion which followed pointed out in Marshallian terms that "Increased efficiency is the one means by which further progress can be attained" (Cunningham and McArthur, 1928, pp. 239-40). Elsewhere in analysing the effects of a strike by coalminers in 1888 for a ten percent rise in wages and the effects if all workers in England were granted a living (or minimum) wage, Cunningham again implicitly assumed a Marshallian type competitive model (Cunningham, 1894A, 1912).

Ashley argued that trade unionism had been looked at too exclusively from the points of view of "abstract ethics" or "abstract economics", which resulted in an underemphasis of the role of collective bargaining. Trade unions were to play the part of one of the two major actors in bringing about a resolution of the inevitable conflicts and divergencies of interest between capital and labor. "The only practical alternative to strikes - peaceful collective bargaining - depends for its efficiency on the existence of strongly organized unions" (Ashley, 1903A, pp. 20-21). He forecast that the future trend of industrial relations would be to even greater use of collective bargaining. But he did not attempt any theoretical appraisal of the manner in which wages were determined by collective bargaining between trade unions and employers' organizations. In a discussion of wage determination if the coalmining industry Marshall's theory of the derived demand for labor is implicitly accepted. He systematically linked variations in the demand for and price of coal, with the wages paid to miners. But, nowhere is there any economic analysis of the determination of wages by Ashley in which he takes account of the monopoly power of trade unions. Like Cunningham Ashley preferred to use a commonsense approach, rarely referring to any formal analysis of wages and trade unions, such as that put forward by Marshall. Nonetheless this approach tended to produce conclusions not far removed from Marshall's.

In only one respect did Cunningham and Ashley disagree with Marshall's analysis and this was in their empirical estimation of the effects of union action for a minimum

wage. Ashley acknowledged that the minimum wage would throw a burden on some industries, but he thought that unions would favor the minimum wage even if it meant higher prices for the consumer and a lower level of employment. He therefore agreed with Cunningham that minimum wages ought to be fixed for most industries, and then pegged to a sliding scale with a fixed lower peg.³² By contrast, Marshall argued that the effects on employment would be so severe that the minimum wage ought not be granted in some industries. Ashley and Cunningham thought that any loss of employment could be offset by a protectionist policy. In effect, their proposals amounted to the creation of protected bilateral monopolies with higher product prices, and stable employment and output. But they did not explicitly employ any theoretical models in arriving at this predicted outcome.

Thus the expectations that Cunningham and Ashley would have a substantial, original and enlightening contribution to make to economics, and especially the analysis of monopoly elements in labor and product markets, are left unfulfilled. Their criticism of the contemporary modes of economic analysis implies the promise that they would deviate from the conventional and so open new vistas for economists in the future. Yet their analysis of trade unions and of monopoly elements in a competitive economy, led to conclusions substantially similar to those of Marshall, Nicholson and other members of that school. A simplistic explanation for this outcome is that the competitive paradigm in the Kuhnian sense was so supreme that it outweighed any objections they had to the model of analysis established so predominantly by Marshall.³³ Another explanation may be that they saw the true role of economics as being only to provide information and guidance on what are usually regarded as applied economic problems, so that they shunned the use of abstract methods and techniques.³⁴ In the final analysis, despite third misgivings, they may have regarded Marshall's conclusions as tolerably sound. A third explanation may be that they simply lacked the ability or the confidence in their own ability to attempt to rewrite economic theory. Certainly their reputations were higher as economic historians than as economists, and most members of the conventional school of economics led by Marshall did not hold them in high regard. Their anti-theoretical, protectionist attitudes exposed them to strong antipathies and prejudiced the judgement of some economists against them. In a reference which Marshall wrote for Cunningham when he applied for the Tooke Chair at London University, Marshall described Cunningham in rather noncommittal terms as "not without strong signs of an aptitude for economic analysis" (Cunningham, 1950, p. 69). Nor were assessments of Ashley's ability as an economist more favorable. In an obituary notice Clapham wrote that "as a general economist he was remarkably many-sided but somewhat less distinguished (Clapham, 1927, p. 684) (than as an economic historian). It is clear that amongst professional colleagues the ideas of Ashley and Cunningham never attained complete academic respectability, or even sufficient recognition to challenge the well entrenched competitive paradigm.

V

In the period under consideration Langford L.F.R. Price was the only member of the economics profession who both challenged the orthodox approach and attempted to formulate an alternative theory. Price was another protege of Marshall's.³⁵ He began his academic career with an early commitment to the Marshallian methodology to which he was exposed when Marshall was a lecturer for a short time at Balliol College, Oxford. It was also due to Marshall's influence that Price was appointed to the first lectureship under the Toynbee Trust. It was this appointment that apparently set him on a divergent path. Under the terms of the Trust, Price chose as his subject industrial reactions problems in the shipbuilding industry of Tyneside. In collecting material for this research he later described how he embarked "on the interesting, if somewhat hardy venture of

interviews and correspondence with many officials of trade unions and other working men" (Price, n.d., p. 17). This research culminated in the publication of a book, *Industrial Peace* (1887), which clearly raised doubts about the efficacy of competitive models in analyzing wages and related issues. When Price was appointed to a fellowship at Oriel College in 1888 he became involved in the teaching of economic history; his doubts about the methodology of conventional economics grew rapidly. He began to argue consistently that economic theory was unable to handle empirical data satisfactorily and that economic history could augment or even substitute for economic analysis in explaining current economic problems. His extramural activities at Oxford, as a member of the political Palmerston Club, as secretary of the Oxford Political Economy Club and especially as Chairman of the Oxford University Tariff Reform League carried him further away from mainstream economics. Price made a final and decisive break in 1903 when he declined the invitation to be one of the new nonprofessorial signatories to the letter to *The Times* by a group of fourteen leading economists, opposing the British government's proposals to reform the tariff and increase protection. A copy of his letter of refusal was sent to *The Times* which, published it immediately below the "manifesto". See *The Times* (15 August 1903, p. 4). Inevitably, this reinforced Price's concentration on "practical affairs" and economic history. Soon after Price questioned "whether there was any use in continuing that study of theory, in which for some years (he) had mainly been engaged, and whether, after all, history was not the more safe and stimulating, as it was the more actual and comprehensive, region of inquiry" (Price, 1904, p. 375). After 1904 Price withdrew from an active role in the mainstream of economics, concentrating on the teaching of economic history and the development of the teaching of economics at Oxford.

Even without further elaboration Price's early work on the bilateral monopoly problem, still stands as the only significant attempt in this period to resolve the dilemma posed for the competitive model of economic theory by the presence of imperfections in both the supply and demand for labor (Price, 1887, 1888). Price explained how indeterminacy arises in a bilateral monopoly situation in the labor market. He attempted to resolve this indeterminacy by taking account of not only the direct costs of strikes (which Marshall and other writers had also noted) but also the indirect cost would be offset against the gains to both parties from a strike. Although not set out a rigorous model Price's theory is a precursor of an important class of bargaining theories and theories of strikes developed by economists, especially after 1945. (Chamberlain and Kuhn, 1965, 1932.) Yet it received scant attention and even less recognition by his contemporaries.

VI

In the four decades after 1880, Marshall was the dominant, if not domineering figure in British economics. Despite his apparent low key stance in professional activities, he undoubtedly led by example. Thus, his own response to the problems created for economic analysis by the presence of trade unions in a competitive analytical framework provided the lead for others. Marshall's response was to compartmentalize the problem. In one compartment he analyzed the impact of the trade union using the competitive tools of analysis he played such a large part in developing. In another compartment he placed all the issues which he regarded as socio-economic in nature and which impinged on aspects of welfare economics. The solution to the trade union problem was, he thought, to develop institutional alternatives to trade unions. These alternatives were to be based on the ethical idea of economic chivalry, including chivalrous competition. Cooperative schemes in production and distribution and even profit sharing were the natural substitutes for worker action through trade unions. Issues of poverty, unemployment and income distribution were also placed in this compartment.

The impression was therefore created that the natural order was one in which a competitive economy with fully flexible wages and prices adjusted automatically towards a long run equilibrium. This impression was reinforced by the academic heritage passed down from the classical economists, and which Marshall was always at pains to preserve. In the majority of economists naturally, almost automatically, assumed a competitive model, and treated this assumption as if it were a settled issue. Their economic analysis, as a result, rarely broke new ground, and rarely threw new light on the labor problems of the day. This was not less true of Nicholson on Marshall's conservative flank or of Ashley and Cunningham on the other flank. Despite their powerful critiques of the competitive mechanism in economic theory, only Price translated his critique into the semblance of an alternative mode of theorizing. And even he argued, ambiguously, that in the long run the competitive model would still provide reliable predictions about the labor market.

It is in precisely this context that in analyzing the events leading to the monopolistic competition revolution, Paul Samuelson has attributed the central role of villain of the piece to Marshall. Samuelson argued that "the ambiguities of Alfred Marshall paralyzed the best brains in the Anglo-Saxon branch of our profession for three decades" (Samuelson, 1967, p. 109).³⁶ There is no doubt that the analysis of trade unions provides further evidence from the area of factorial market analysis of the manner in which the Marshallian tradition may have hindered the development of imperfect competition theory.

Marshall should not and cannot be entirely blamed for this apparent hiatus in the development of economics. In a more general sense it was the drive towards professionalization in academic economics, admittedly led by Marshall, which may have inhibited the development of dissenting views. Professional behavior has been defined by Barber "in terms of three essential and somewhat independent variables: powerful knowledge, self control and autonomy, and public responsibility or direct service to the public and the public welfare" (Barber, 1978-79, p. 601). Although Stigler has argued that by the end of the nineteenth century, economics could be regarded as a legitimate and clearly defined profession, it is less clear that Marshall and his followers believed this at the time.³⁷ Marshall's well known public reticence, his avoidance of controversy and his counsel to others to avoid public debate on academic economics, and his expression of regret at his own participation in the tariff reform debate, all suggest his lack of confidence in the professional standing of academic economics in the eyes of the public.³⁸ The power of knowledge and service to the public and the public welfare tend to be undermined by the public display of dissent and disagreement. The "deviant" economics of Ashley, Cunningham and Price was therefore dealt with by attempting to ignore it, and when that was not possible, by downplaying the issues about competitive economics which they raised. Of course, all three academics believed that they had not always received their just rewards within the profession.³⁹ In the case of Nicholson's wholehearted but more conservative reversion to the economics of Adam Smith, his views were uncomfortably accommodated within the profession.

At the turn of the century membership in the newly emerging economics profession was still quite small. The training and/or the employment of these economists was concentrated in only a handful of universities. It was comparatively easy to socialize, indoctrinate and initiate new members into the profession. There can be no doubt that these processes of professionalization, in which Marshall played the key role by virtually dictating the limits of acceptable economic knowledge, tended to immunize the academic community from anomalous ideas in economic theory. A clearer acknowledgement of imperfections in factor and product markets, and a more satisfactory theoretical analysis of them, had to wait until after the passing of Marshall and the emergence of a more self-confident phase in the economics profession.

FOOTNOTES

- * I am grateful to Ingrid Rima for her helpful comments on this paper. My thanks also to John Whitaker for his comments of an earlier version of this paper.
1. The two strands of this development were associated with the "new model" unions after 1850 and the "new unionism" after 1889. For data illustrating this growth and a history of trade unions see Pelling (1963) and for an excellent detailed history of the "new unionism" see Clegg, Fox and Thompson (1964).
 2. But note the qualifications suggested in Whitaker (1975A, p. 35). See also Coats (1967 and 1968).
 3. Stigler's list also included Edwin Cannan, F.Y. Edgeworth, H.S. Foxwell, J.N. Keynes, A.C. Pigou, James E.T. Rogers, Henry Sidgwick, William Smart and Philip Wicksteed.
 4. For example see Marshall Papers (5 and 7) and reprints of Marshall's writings in Whitaker (1975A, pp. 184-204).
 5. Support for the arguments of this paragraph may be found in Pigou (1956). On this point Bharadwaj reaches the interesting conclusion that "... the old doctrines were indeed subverted and Marshall's theorizing played a major role in abandoning the old and in heralding in and establishing the new." (Bharadwaj, 1978, p. 271).
 6. This was a point that Marshall first made in the early 1870s. See Whitaker (1975B, pp. 120-28).
 7. Marshall regarded the treatment in the Elements (1892) as entirely provisional since it had to be carried out only with the competitive tools then available.
 8. Contrast the tone of his preface to Price's Industrial Peace, reprinted in the Memorials (pp. 212-26), which his address on "Some Aspects of Competition", an address in which Marshall had not intended to deal with trade unions at all, but which clearly conveys the view that the impact of unions is substantial. See Pigou (1956, pp. 256-91).
 9. There is no doubt that privately, consistent with the economic events of the time, he finally came round to the view that trade unions were extremely important actors in the labor market. See his correspondence in Pigou (1956), especially letters to Edward Caird and Bishop Westcott.
 10. Again Marshall regarded the new analysis as provisional. It was added when the decision had been made not to proceed with his volume 2. Marshall was careful not to stress the change: "The most prominent change made in this edition is a mere matter of arrangement" (Marshall, 1961B, p. 54). In some notes which he prepared as part of the introduction to the Royal Commission on Labour, Marshall observed that there was "clearly a tendency on the part of trade organizations to become more firmly compact and to extend the range of their actions over a great part or the whole of the country, to enter into allegiances with similar associations and even to combine together various trades, the services of one of which might have been substituted in case of need for those of another". Over 30 years later Marshall reviewed this material and cautiously noted: "I am not likely to make a new study of

this: and without it any considerable use of this paper would be unwise (11/10/23)" (Marshall Papers, 6).

11. He had reached a similar conclusion much earlier when writing some notes for an Introductory chapter, "Trade Unions and Other Groups" in the 1870s. "Whatever may be said to the contrary, the men as well as the employers recognize the doctrine of supply and demand" (Marshall Papers, 7).
12. The merging of induction and deduction is also clearly visible. By the use of this technique Marshall believed he could defuse the sterile debate in economics which characterized the German Methodenstreit of the period. It was preserved that modicum of realism after which he always strived.
13. Marshall's proseletysing on behalf of "economics science" began at a very early stage. In 1877 he was reported as stating the case in these very strong terms: "A great number of very able men has worked at the laws, and have found out what consequences would follow from certain causes. The work has been tested, it is now as certain as the propositions of Euclid" (Marshall papers, 2).
14. For biographical details about Nicholson see the obituary notices by Scott, Higgs and M.T.R. (1927A, 1927B, 1928). For additional details and a short analysis of Nicholson's economic writings see Price (1937).
15. Nicholson's views contrast sharply with Marshall's. Nicholson thought it was an abuse of authority "...to quote opinions of economists, even the most eminent in the past or the most fashionable in the present, as if such opinions were as binding as the decisions of the House of Lords as a final court of appeal" (Nicholson, 1903A, p. 565).
16. These views are expressed most cogently in Nicholson (1909A), but also see his introductory essay to an edition of Adam Smith's Wealth of Nations, (1895, pp. 1-32).
17. See Nicholson (1896, pp. 30-31), cf. his statement: "The basis of perfect competition is perfect liberty" (Nicholson, 1896, p. 33).
18. For example, the more conservative and deferential approach to the classical economists, is clearly visible in his correspondence with Keynes. In a letter dated 29/8/89 Nicholson wrote: "Of later years in spite of (or perhaps in consequence of) my attention to economic history, I have thought more of the English school - especially the natural system of Adam Smith - than I did. It is amazing how in the middle ages the natural economic order was always at work" (Nicholson, 1889B).
19. "I shall accordingly wait no longer but at once set to work to put my notes in the form of a complete and proportioned text book of about the size of Mill in the extreme" (Nicholson, 1890).
20. Marshall was aware of Nicholson's predilection. In commenting on Vol. 3 of Nicholson's Principles of Political Economy, Marshall noted that there was "a lot of Adam Smith in his (Marshall's) coming book - in the modern part". Presumably a reference to Industry and Trade. (Nicholson, 1909C).
21. Between them Ashley and Cunningham laid the essential foundations for the further study of English economic history. Their pathbreaking works were Cunningham

- (1910B), first published in 1882 and Ashley (1912), part I first published in 1888, Part II in 1893. Comparing Ashley's work with Cunningham's, Clapham wrote: "Entirely unpretentious, it marks together with Cunningham's weightier but less harmonious structure the conquest of a new field of learning - English Economic History as now understood." (Clapham, 1927, p. 680).
22. Benjamin Jowett, Master of Balliol College, Oxford encouraged Ashley to go to Germany. Jowett may have influenced the development of Ashley's flexible and reformist attitudes to English institutions. Ashley was a little too young to have been influenced by T.H. Green who was the dominant philosophical figure of the time. See Ashley (1932) and Semmel (1957).
 23. A label attached to him by J.N. Keynes; see Cunningham (1892A). Cunningham was greatly influenced by T.H. Green, "the man whom I looked on as my master in what I care about in philosophy" (Cunningham, 1950, p. 50).
 24. Earlier Cunningham had been an applicant for Fawcett's chair at Cambridge which was filled by Marshall in 1885. Subsequently there had also been friction between Marshall and Cunningham, when the latter was directed by the History Board at Marshall's instigation, to concentrate more on the teaching of economic theory and less of economic history. In 1888 he resigned his university lectureship at Cambridge, and in 1892 was appointed to the Tooke Professorship, which gave him greater independence. See Cunningham (1950, pp. 64-65).
 25. According to Cunningham's daughter both Marshall and Edgeworth supported Cunningham in his application for the Tooke Chair at King's College, and subsequently Cunningham "began to take a middle line" (Cunningham, 1950, p. 69). However, Cunningham never occupied a university (as distinct from a college) post after his brushes with Marshall and Edgeworth. Furthermore, his attacks on economic theory continued, but not his criticisms of individuals.
 26. Miss Ashley does not indicate the time, place of context of this quotation, but it is most likely to be from a private conversation or private papers.
 27. Ashley wrote that Marshall "overshot the mark" when he argued "that facts by themselves are silent" (Ashley, 1966, p. 14).
 28. On the question of tariff policy, Ashley "contributed largely to removing the gap between Chamberlain and Balfour" and "he was closely in touch with the leaders of the National Union of Conservative Associations whose programs in 1907 closely resembled Ashley's views" (Usher, 1938, p. 623). Ashley's most sober and reasoned treatment of the tariff question occurs in *The Tariff Problem* (1903B).
 29. See Cunningham (1905, pp. 302-22). The language of the economists' manifesto gave the same impression to the lay public "as if that science pretended to lay maxims of practical policy which hold good for all times and places alike" (Cunningham, 1905, p. 304). In a conciliatory move the editors of the *Economic Journal* invited Ashley (who was apparently more academically respectable than Cunningham) to explain his ideas on tariff reform. They were similar to and consistent with Cunningham's proposals. See Ashley (1905).
 30. Cunningham observed that: "Experience has shown that material prosperity can be best attained by giving play to the capitalist administration of industry. The modern problem is that of controlling this force so that its disintegrating effects upon

society and its pressure upon individuals may be kept within due limits." (Cunningham, 1900, p. 259).

31. Nevertheless, both Cunningham and Ashley had clear ideas on the directions in which economic theory should be developed. Ashley thought that "no modern economist of repute (can teach) that absolutely free competition - either between individuals or between nations - is a rule which ought to be observed at all times or places ..." (Ashley, 1966, p. 371). In similar vein, Cunningham wrote that "the ordinary economist, who assumes free competition and the laws of supply and demand, has awakened to realize that there is a vast field of industry and enterprise of which he ought to take account" (Cunningham, 1892C, p. 491).
32. For this analysis see Ashley (1903A) and Hills, Ashley and Woods (1904). The preface indicates that Ashley was the principal author of this report.
33. Cunningham referred to Marshall as "the acknowledged head of the dominant school of English economics" (Cunningham, 1892D). Ashley also regarded Marshall as the spokesman for a particular school.
34. Related to this point, it has been suggested by Professor Whitaker that "the (economic) historians seem to have been better at complaining about what was wrong, than doing anything constructive".
35. For biographical and other details see Petridis (1979).
36. Samuelson suggests that "Marshall's crime is to pretend to handle imperfect competition with tools only applicable to perfect competition" and "that much of the work from 1920 to 1933 was merely the negative task of getting Marshall out of the way" (Samuelson, 1967, p. 111). A similar argument may legitimately be applied to the economic analysis of labor markets at that time.
37. See Stigler (1965B). Elsewhere Coats has argued that: "The first group of British economists to regard themselves and to be regarded by important sections of the public as qualified, scientific experts were the Ricardians ..." (Coats, 1954, p. 88).
38. In 1902 when Marshall was pressing for a larger role for economics in the curriculum at Cambridge he wrote to J.N. Keynes that "economics is drifting under the control of people like Sidney Webb and Arthur Chamberlain" (Marshall Papers, 8).
39. Evidence for this may be found in biographies of Ashley (Ashley, 1932), Cunningham, (Cunningham, 1950) and Price (Price, n.d.). In a letter to E.R. Seligman, Ashley suggested that "Cunningham stands alone in the breach against Marshall at Cambridge, and has remarkable personal influence at Cambridge, especially with the younger University extension lecturers" (Ashley, 1889).

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