

Haldane's Mackindergarten: A Radical Experiment in British Military Education?

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Abstract

This article investigates the origins, development, and impact of a unique experiment in British military education. It began in 1907 as part of the radical post-Boer War reforms of the British army, and ended in 1932, a victim of the May committee's financial austerity programme that was forced on the War Office. 'The Class for the Administrative Training of Army Officers' was run by the London School of Economics on behalf of the War Office. Its students consisted primarily, but not exclusively, of army logistics officers. It was a synthesis of the ideas and praxis of two men: Richard Haldane, then secretary of state for war, and the polymath Sir Halford Mackinder, then director of the LSE. It delivered a syllabus of officer education that was embedded in a number of 'special ideas'. The first of these argued that the army existed to produce power, used to both maintain peace and in war to achieve victory. The second was a focus on the power of efficiency, interpreted as an outcome of both empirical knowledge and imagination. Both these 'special ideas' linked the course to one of the core functions of strategy, identifying the most suitable means to achieve set objectives. The course represented a synthesis between the practical utility of information and the general principles underlying it. Despite its radical approach the course passed the hard litmus test of military education. It covered a diverse number of subjects in a relatively short period of time, while ensuring that a single objective was met.

Keywords

Sir Halford Mackinder, Richard Haldane, London School of Economics, administrative training, Advisory Board, Mackindergarten, special ideas

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The name of Sir Halford Mackinder (1861–1947) today is associated with a form of theorizing about international relations called geopolitics. This can be described as an attempt to apply synthesis to geography, history, and international politics. Mackinder developed 'outlook', which had three important qualities: an ability to interpret the past, to visualize the present, and to imagine the future. Despite this formidable intellectual legacy, some geographers who are advocates of critical geopolitics have wrongly interpreted both Mackinder and his ideas² as being simply the handmaiden of western imperialism:

The British political geographer Halford Mackinder (1904) also argued that the ending of the nineteenth century would bring forth a different type of political and economic world. International politics would henceforth be operating in a closed world system because among other things, European colonialism and imperialism would encompass the entire earth's surface.³

This interpretation ignores an important aspect about Mackinder's career. He was that rare beast in British public life – a polymath. His career was as diverse as it was breath-taking. It could have constituted the careers of at least five men, not one. It included serving as the Conservative MP for the Camlachie division of Glasgow (1910–22), chairman of the Imperial Shipping Committee (1920–39), and British high commissioner to South Russia (1919–20). He was also the first principal of the University of Reading (1892–1903), director of the London School of Economics (1903–8), and founder of the School of Geography at Oxford University in 1899. Mackinder himself recognized that his career had not been one of linear progression:

There has been another kind of career I will describe as erratic and such a career has been mine, a long succession of adventures and resignations. I do not admit to having been a rolling stone, because I have generally known where I was going – but I have certainly gathered no moss.⁴

The aim of this article is to evaluate a dimension of this polymath career that has to date received only sparse and intermittent attention. Furthermore, it will be shown that it has been obscured by a combination of vague and inaccurate information. This lack of facts has been fused with an interpretation that has had the effect of distancing one of Mackinder's institutions – the London School of Economics – from any association with what was one of the most radical experiments in British military education during the twentieth century, namely the 'Mackindergarten'. This was the nickname given to it by

¹ For an overview of his geopolitical ideas, see G.R. Sloan, 'Sir Halford Mackinder: The Heartland Then and Now', in C.S. Gray and G.R. Sloan, *Geopolitics, Geography and Strategy* (London: Frank Cass, 1999), pp. 15–37.

² For an insight into the nature of this approach, see G. O'Tuathail, *Critical Geopolitics* (London: Routledge, 1996), pp. 21–35.

³ K. Dodds, Geopolitics in a Changing World (Harlow: Prentice Hall, 2000), p. 152.

⁴ Dinner speech given by Sir Halford Mackinder at the Imperial Economic Committee, 13 May 1931, Mackinder papers, School of Geography, Oxford University.

the LSE student magazine, *The Clare Market Review*. ⁵ Its official title was the Class for the Administrative Training of Army Officers.

The basic parameters of this course in military education are worth stating. The first class commenced in January 1907 at the LSE. The course lasted for approximately six months. It did not confer a degree or a diploma. Instead those army officers who passed were entitled to have the letter E (examination) placed after their names in the Army List. They also received a certificate from the LSE. Finally, each class was given a class photograph. In terms of overall numbers, between 1907 and 1914, there were approximately 31 officers appointed to attend this course. The majority were from the Army Service Corps, although the infantry and other corps were represented. There were also a small number of officers from the Indian Army. A brief analysis of the composition of the course will be given later.

To evaluate this course a fourfold approach will be taken. First, there is a need to establish the historical facts. Secondly, the unique circumstances in which the course was conceived, and the wider political and social ideas in which it was embedded, will be explained. This will also entail assessing the personal relationships that Mackinder was able to draw upon to make the course the success that it was. Thirdly, to address the question about the radical nature of the 'Mackindergarten', it is important to identify the generic qualities of military education. This will be done by posing the following questions: what are the causes of innovation in military education? Why in Britain was its development and progress erratic, and its utility sometimes contested? Why was the distinction between the two branches of the British army's staff - operations and intelligence, on the one hand, and administration, on the other - so important? Is military education, to paraphrase Hegel, like the truth, inherently dynamic; is it that the truism of one generation does not hold for another? Fourthly, an evaluation of the success achieved in sustaining the course's aims, and, as far as the available evidence will allow, the effectiveness of the knowledge transfer to the tactical and operational military environment, will be undertaken. The syllabus and exam questions of the geographical element will be used to provide a means to assess the radical nature of Mackinder's course. Finally, reasons for the demise of the course will be considered.

In terms of the historical facts, the path is littered with inaccurate and vague information. One of Mackinder's two biographers, Parker, maintains that the course ran for seven years and was for senior officers only: 'In 1906 Mackinder was asked by Haldane, now Secretary of State for War, to organize at the LSE, a course for senior army officers – which came to be known as "Haldane's Mackindergarten"; it was held annually until 1914.'6 In fact the bulk of the officers attending were captains and majors, with a few colonels. The student cohort of this course could not be described as senior officers. Mackinder's other biographer, Blouet, while identifying the parentage of the course and the date of commencement accurately, is vague as to when it was ended:

⁵ B.W. Blouet, Halford Mackinder: A Biography (Texas: Texas A&M University Press, 1987), p. 132.

⁶ W.H. Parker, Mackinder: Geography As an Aid to Statecraft (Oxford: Clarendon, 1982), p. 35.

Haldane (Minister of War) and Mackinder worked out a scheme to give Army officers administrative training. The first groups of officers entered the School in January 1907 and completed a six month course in which they were exposed to accounting, law, economic theory, geography, statistics, and transport studies. The program was a success and continued for many years.

It is only in the official history of the LSE that accurate historical facts are given in terms of the longevity of the course. What is curious about this account is that Dahrendorf attempts to distance the LSE from the course completely, and Mackinder's role is not commented upon or assessed:

Strictly speaking it was not the School that made the experiment but R.B. Haldane, who had become Secretary of State for War in the 1906 Liberal Government and who released some thirty military officers for 'a course of instruction in preparation for administrative duties'. They were soon known as 'Haldane's Mackindergarten'. The LSE Army Class was interrupted by the First World War but was soon reinstated in 1924 and it continued until 1932.⁸

It is very clear from a War Office communiqué issued on 10 December 1906 that Mackinder was in charge of the project:

In conformity with the decision already announced, it is now notified that it has been arranged by the Army Council that a Special Experimental Course of Commercial and Business Training for officers shall be commenced at the London School of Economics under Mr Mackinder the Director of the School on the 10th Jan 1907.⁹

Furthermore, Dahrendorf omits any reference to the reports produced by what was called the Advisory Board, London School of Economics. This consisted of 12 members, both military and civilian, who produced between 1907 and 1914 an annual report for the War Office. This report always contained an assessment of the academic attainment of the officers on the course, and information on changes in the syllabus. In the first report the key role played by Mackinder is clearly acknowledged:

We desire to acknowledge the invaluable services of Mr Mackinder himself in connection with the work which has been done. His unflagging zeal, and the energy and discretion with which he has organized and carried out a scheme which was entirely original and in several ways full of difficulties all of which have been successfully overcome, deserve the highest praise.¹⁰

⁷ Blouet, Halford Mackinder, p. 132.

⁸ R. Dahrendorf, A History of the London School of Economics and Political Science, 1895 to 1995 (Oxford: Oxford University Press, 1995), p. 89.

⁹ War Office Communique, Special Training for Administrative Officers, 10 December 1906, Army Class, 1906–62, box 232, London School of Economics Archives.

¹⁰ Report of the Advisory Board, London School of Economics, Cd 3696 (London: HMSO, 1907), p. 6.

It was Lenin who argued that 'war is the great locomotive force of change'. If there was one conflict that can be cited as the source of the change that brought the Mackindergarten into existence it was the Boer War (1899–1902). A royal commission¹¹ was set up to examine the problems that the war had brought to light. It underlined what the critics had pointed out: poor staff work, outdated weapons, a lack of tactical skill, and an absence of a coherent doctrine. Yet in one important sense this commission was incomplete: 'The majority report recited many of the Army's known deficiencies, but it did not outline a plan for remedying them.' ¹²

One key area that impeded the British war effort in South Africa had been the dysfunctional relationship between military operations and administration. This was emphasized by Major General Douglas Haig in an exchange that took place at a general staff conference in January 1908. Referring to the South African War, and the conflation of operations and administration that had taken place, Haig pressed home the need for the army to adopt Field Service Regulations Part 2. This would produce a uniform framework for military administration:

Retorting in his brusque and uncompromising manner, Haig reminded delegates of the South African War where three different systems (of administration) were adopted concurrently by three different headquarters. A more systematic approach, he implied, was essential in large wars, hence the need for a book of regulations produced by the War Staffs.¹³

On 1 January 1906 Haldane, newly appointed to the office of secretary of state for war, produced a memorandum which set out the rudimentary ideas upon which the regular and auxiliary forces of the army were to be organized in future. A second memorandum was produced on 1 February. The first outlined the policy objectives that underlined a need for the course that Mackinder was to develop:

In the first memorandum, Haldane specified the principles which would underpin the reform of the regular army. He contended that the army would have to differ from that of any other nation in order to meet its unique, long distance, overseas commitments. He affirmed that the country needed a highly organised and well-equipped striking force which can be transported, with the least possible delay, to any part of the world where it is required.¹⁴

There is no doubt that this was an ambitious objective. To project and sustain military power at a distance without an established basing structure presented a serious challenge for Haldane's policy objectives. One of the solutions he adopted could be described as a 'continental solution', as it took its inspiration from European armies. The key means of overcoming the challenge of power projection was the deliberate separation of military administration and military operations:

¹¹ Royal Commission on the South African War, *Report* (London: HMSO, 1903).

¹² D. French, The British Way in Warfare, 1688-200 (London: Unwin Hyman, 1990), p. 160.

¹³ E.M. Spiers, *Haldane: An Army Reformer* (Edinburgh: Edinburgh University Press, 1980), p. 152.

¹⁴ Ibid., p. 77.

Haldane had endeavoured to overcome those difficulties by separating the work of the General Staff from purely administrative duties, and by organising the force on a war and not on a peace basis. Having seen those principles operating effectively within the German Army in September 1906, Haldane had determined to implement them in Britain.¹⁵

Despite this assertion by Spiers there is evidence to suggest a more complex path of influence that has its origins in the British army of the early nineteenth century. This evidence was provided in 1922 by Haldane himself, speaking during the discussion of a lecture given at the Royal United Services Institute:

I remember well in 1906, when General Ellison and I were in Berlin studying the organisation of the German Army in those easy going days, after we had been struck, and expressed ourselves struck with the extraordinary perfection and distinctiveness to which the principle of separation of the two phases had been carried, and with the way in which it worked out in practice. I remember an eminent German general smiling and saying: You would be less surprised if you knew that we had only borrowed that lesson. Our great Moltke was a student of your Duke of Wellington and he based his great military plans of organisation largely on the practical work which your Duke of Wellington carried out in the Peninsular campaign and at other times. ¹⁶

It is also important to address the question as to why the British army, in the process of creating a general staff in 1906, created two distinct routes for the education and the training of its staff officers: Camberley and the Mackindergarten. There are three points that go some way to offering an explanation. The first aspect has been convincingly articulated by Strachan. It was a product of the geostrategic realities of the British Empire, and the need to mount various expeditions in disparate locations:

Planning for these colonial contingencies was not primarily a function of operational thought. The tasks were administrative and logistical; the issues were medical, cartographical, and calorific. Thus, as an imperial power, Britain needed a staff which put as much weight on administration as on command.¹⁷

The second aspect was that the British general staff, when it was created, was not a mirror image of the German general staff. It was not able nor designed to provide intellectual leadership and coherence that the latter was capable of doing. Finally, in terms of operational planning it was not a dominant institution like its German counterpart. It had to negotiate and deal with the army organization for manpower, the adjutant general, and the army organization for logistics, the quartermaster general. In terms of the conduct of operations, this presented British commanders with a unique challenge: 'The field

¹⁵ Ibid., p. 150.

¹⁶ Lieutenant General Sir H.S.G. Miles, 'Army Administration', Journal of the Royal United Service Institute LXVIII (1923), p. 37.

¹⁷ H. Strachan, 'The British Army, Its General Staff and the Continental Commitment, 1904–1914', in D. French and Brian Holden Reid, *The British General Staff* (London: Frank Cass, 2002), p. 87.

commander therefore had a dual function: the conduct of operations and the co-ordination of the administrative and fighting branches of his headquarters.' 18

To put these aspects in a broader context Spiers has argued, in keeping with Haldane's original conception, that the British Expeditionary Force was not designed exclusively as a force that would fight on the European continent. It could be deployed anywhere in the world; up until 1907 its potential opponent was more likely to be the Russian army in Asia than the German army in Europe. It has also been interpreted as tackling another problem: 'It was a solution to a long standing dilemma: the pressure to scatter British regular forces around the empire in penny packets as opposed to the need to create a central strategic reserve.' 19

It was not until 1909 that two important documents were published that gave doctrinal expression to the policy objectives that Haldane was trying to reach, Field Service Regulations Part 1 (operations) and Field Service Regulations Part 2 (administration). Interestingly the latter had existed in draft form since 1903, but it had taken the impetus provided by a new administration to overcome the resistance of a number of departments of the War Office that had been fearful of their prerogatives being eroded.²⁰

It can be suggested that the armed forces of a particular country are a product of their society. At any one time they reflect, like a time capsule, the values, beliefs, and social order of the societies from which they spring. This is only part of the equation. A more nuanced analysis would also claim that the armed forces of any state work in a social environment. Furthermore, the armed forces can face indifference or outright hostility to the wars they fight and the activities they undertake. Yet, as Michael Howard has argued, the support that they receive from the society that has produced them can affect them as an organization:

The less support which the Armed Forces get from their environment – intellectual, psychological, economic and personal support – the less efficient they are likely to be, or the harder it is for them to remain efficient; and the greater is the danger that they will harden into an inbred, inward-looking group fundamentally at odds with their surroundings.²¹

The prevailing social environment of the early twentieth century was to have its impact on the origins of Mackinder's course.

One of the remarkable things about the Mackindergarten was that it had its first students enrolled exactly one year after Haldane came into office. This rapid development and subsequent attempt to increase the power and efficiency of the army was drawn from the leading edge of a social and political movement in which both Mackinder and Haldane were actively involved, the National Efficiency movement. Its origins can be traced to a speech in 1901 by Lord Rosebery, a former Liberal prime minister, who had

¹⁸ Ibid., p. 88.

¹⁹ Ibid., p. 76.

²⁰ For an insight into this bureaucratic blocking, see Spiers, *Haldane*, pp. 152–3.

²¹ M. Howard, 'Military Science in an Age of Peace', RUSI Journal CXIX (1974), p. 4.

become increasingly aware of the institutional and societal weaknesses exposed by the Boer War. He spoke of his intention to organize a new party which had 'national efficiency' as its objective. A year later, in March 1902, he defined it in the following way: 'A condition of national fitness equal to the demands of our empire – administrative, parliamentary, commercial, educational, physical, moral, naval, and military fitness – so that we should make the best of our admirable raw material.'²² The political objectives of this new political movement were twofold: first, the desire for social reform; secondly, the strengthening of Britain's military and naval capabilities. Rosebery's ideas found common cause with some unlikely political allies, for example the Fabian socialism of Sidney and Beatrice Webb. The Fabian Society was focused on social reform and promoting the concept of the British Empire. This aim was articulated by one of its members, the Irish Protestant playwright George Bernard Shaw. In 1900 he argued that the Fabians should be concerned with 'the effective social organisation of the whole Empire and its rescue from the strife of classes and private interest'.²³

The Webbs were instigators and founders of an institution that originally was intended to be the brains trust of this new political movement of national efficiency. In reality it existed as a dining club, albeit one with a remarkable membership list. The name of the institution was the Coefficients.²⁴ The first meeting was held on 8 December 1902. The pertinent point is that both Haldane and Mackinder were among the original 12 members. Each member was to be an expert in a special field of knowledge. Haldane was the expert in law, and Mackinder was the expert in liberal imperialism. Other prominent members were Sir Edward Grey, Bertrand Russell, Leo Amery, George Bernard Shaw, Sidney Webb, and H.G. Wells.²⁵ Later members included the maritime strategist Sir Julian Corbett and the poet Henry Newbolt. The 12 original members, plus the later additions, constituted what today would have been described as the think tank of a new social imperial party. Mackinder and Haldane would have met on a regular basis between 1902 and 1908. Tensions over Joseph Chamberlain's tariff reform campaign led to the dining club being dissolved in 1910. It is this connection that partially explains the remarkable speed with which the LSE's Army Course was conceived and developed.

It can be argued that dining clubs in this period of British social and political history were often used as a mechanism of policy development: 'Throughout his career Haldane used the dinner party, lubricated by superb cooking and choice wines, and much admired cigars as an instrument for discussing, refining and influencing political policies.' This political and intellectual support, which was so important for the fast development of this course, was also facilitated by the institutional connections that both Haldane and

²² Speech given by Lord Rosebery in Glasgow, March 1902, in B. Semmel, *Imperialism and Social Reform, English Social-Imperial Thought, 1895–1914* (London: George Allen & Unwin, 1960), p. 63.

²³ G.B. Shaw, ed., Fabianism and the Empire (London: Grant Richards, 1900), p. 6.

²⁴ This name was intended to reflect the twin aims of national efficiency and collective solutions.

²⁵ H.G. Wells discussed the Coefficients at some length in his autobiography. The club also appears as the fictional 'Pentagram Circle' in Wells's novel *The New Machiavelli* (1911).

²⁶ E. Ashby and M. Anderson, *Portrait of Haldane* (London: Macmillan, 1974), p. 19.

Rosebery had with the LSE: 'Haldane became a member of the court of Governors, and in 1901 the Earl of Rosebery became president of the School.'²⁷

Was the 'Mackindergarten' really a radical experiment? In terms of educating and training its officers for staff duties, the British army had set up a Staff College at Camberley in 1858. This had been a direct consequence of the uncomfortable facts that had emerged from the Crimean War (1854–6). If not a product of defeat it was certainly the child of a lamentable performance: 'Four committees of inquiry, several Parliamentary debates and a flood of correspondence and memoranda testify that the concern for an improvement in military education – particularly of the Staff – on the part of politicians and soldiers was both deep and widespread.'28 The challenge was the lack of synthesis between the normative aspirations that were set by the entrance exam and the syllabus, and the anti-intellectualism that existed in the bulk of regiments that made up the mid-Victorian British army. This was an army that did not abolish the purchase scheme for commissions until 1871. The first commandant of the Staff College was Major General Sir Patrick MacDougall (1858-61), whose main task 'was to implement the recommendations of the Council of Military Education and to set the new institution on its feet'.²⁹ There was no focus on developing what could be described as higher-level critical thinking skills. Instead education, or more specifically at this time military history, had a number of specific functions to perform. MacDougall argued that it was:

of little importance to the state that the man who leads his regiment bravely should be a good classical scholar or a good historian. What was essential in his view was that the officer should be versed in military history, that he should be able to direct his men in strengthening a post by field-works, that he should have a good eye for ground, and that he should be able to speak other languages than his own. He recommended that all officers be required to attend a central military school for at least six or eight months before appointment to a regiment, and if specialized education were necessary for certain positions then he urged the establishment of a separate branch of the staff composed of scientific men, as in the French Army. Even the United States had undertaken to give all officers a scientific education; only in England did the professional education of officers remain entirely voluntary.³⁰

This laissez-faire attitude, which often left too much power in the hands of regimental officers, was to affect the British army's approach to military education throughout the twentieth century.

The British army saw military education in its earlier period as a narrowly focused activity done on a voluntary basis, and it was only at the end of the nineteenth century that things began to change. Major General Hildyard, who became the commandant at Camberley in 1893, began to develop an approach that emphasized solving problems of strategy, tactics, and organization. The assessment and evaluation were done through a

²⁷ Blouet, Halford Mackinder, p. 133.

²⁸ B. Bond, The Victorian Army and the Staff College (London: Eyre Methuen, 1972), pp. 74–5.

²⁹ Ibid., p. 84.

³⁰ J. Luvaas, *The Education of an Army* (London: Cassell, 1965), p. 105.

series of practical tests. The subject matter that was to be the focus of Mackinder's course, organization and administration, was still an integral part of the syllabus of the Staff College. While this approach was not about the development of critical thinking skills, the aim was to train the judgement of officers, so that they would make the right decisions in the uncertainty and confusion of battle: 'It is to Hildyard's credit that he transformed the College into a mental gymnasium for the Army just at a time when the future leaders of the First World War era were passing through.'31 One of the ways he did this was through the intelligent study of military history, facilitated by officers such as Colonel Henderson, who was a member of the directing staff of the Staff College between 1890 and 1899. To Henderson, success in any battle was dependent on knowing when to disregard the rules of war and to subordinate the theory to the challenges of the moment and be creative.³² Yet the emphasis was still on military history. Henderson argued this point in 1893:

No doubt it would be simpler by far to lay down a normal formation and to practise nothing else. But when we turn to military history, and fail to discover a single battle in which the initial formations of the infantry have not had to be very greatly modified, we may be permitted to believe that a system which accustoms officers and men to constant modifications of formations, compels them to use their own judgement, and brings peace-training and battle-practice into line is a thoroughly sound one.³³

Ironically it was Brigadier Henry Wilson,³⁴ commandant of the Staff College from 1906 to 1910, who was to be one of the most strident critics of the Mackindergarten:

Wilson opposed the course on the grounds that it might 'do an infinity of harm to the S.C. [Staff College]', and determined to fight it for all he was worth. 'Neither N. G. nor Hutch,'35 he wrote, 'have the slightest idea what Mackinder's school may mean, but Miles³⁶sees clearly enough that it may lead to a rival to the S.C. and complete separation of the Administrative and General Staff.' He proposed to attend as many lectures as possible 'so as to be in the best position to fight the game if necessary.'³⁷

Wilson had a point, as Mackinder's vision for the course went beyond mere professional education:

We have in this course to do something more than merely teach and learn; we have to evolve a tradition. As the officers who have passed through this course increase in the future from 30 to

³¹ Bond, Victorian Army, p. 155.

³² See G.F.R. Henderson, *The Science of War* (London: Oxford University Press, 1906).

³³ G.F.R. Henderson, 'Offensive Tactics of Infantry', *United Service Magazine* VII (1893), p. 42.

^{34 &#}x27;He was a tall, gangling Ulsterman who impressed everyone he met – though not always favourably – by his sharp intelligence, caustic tongue, oddities of dress and quirky sense of humour': Bond, *Victorian Army*, p. 244.

³⁵ This was Lieutenant General Hutchinson, director of staff duties.

³⁶ This was Major General Miles, director of recruiting and organization.

³⁷ Bond, Victorian Army, p. 252.

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40 to several hundred, as they rise in the Service and gradually man the Departments of Quarter-Master-General and the Master-General of the Ordnance, they must carry an administration tradition with them similar, mutatis mutandis,³⁸ to the tradition of the graduates from the Staff College.³⁹

It is intended to evaluate this course and the army's reaction to it. This will be done by examining the reports that were produced by the Advisory Board, London School of Economics.⁴⁰ Before doing this it is important to understand what made the Mackindergarten so different in terms of its approach.

The radical nature of the course that Mackinder launched at the LSE in 1907 can be understood by its intellectual departure points. Military history was dispensed with, and replaced with what Mackinder called 'special ideas'.⁴¹ The first of these ideas was the assumption that the British army was the greatest single business in the United Kingdom. He claimed that it even outstripped one of the leading railway companies of the time, the London and North Western Railway, which in 1907 had receipts of £15 million per year. He then went on to argue that both the Army Council and the Lords of the Admiralty were in fact two boards of business directors, the difference between the two being that the army transacted its business in India and throughout the empire. Thus the geographical scope over which it had to operate was greater than the Royal Navy. However, Mackinder had carefully qualified this point and made a series of nuanced observations that recognized a difference of function and principle, but interestingly a similarity in methods, as far as military administration was concerned:

The Army is undoubtedly the greatest single business concern in the country. It is true of course that it is necessarily conducted on a different principle from ordinary city business. The Army is not conducted for profit, but to produce power. This power is used in peace time in order to maintain peace and in war time to achieve victory. But although this distinction of profit and power is a real one, yet I do not think that it makes a very vital difference as regards methods. Your aim in the Army must be to produce the necessary amount of power at the least possible cost, and one of the main elements in a city business tending to produce profits is the saving of working expenses.⁴²

The second of Mackinder's special ideas was one with which he was closely identified in a political sense – efficiency. ⁴³ As far as the army was concerned, he argued that the idea had to rest on the twin pillars of knowledge and imagination. In turn these two concepts were used to link the course to one of the core functions of strategy, identifying the most suitable means to achieve one's objectives:

³⁸ This phrase can be interpreted as: 'when what must be changed has been changed'.

³⁹ Report of the Advisory Board, London School of Economics, Cd 3696, p. 14.

⁴⁰ See p. 000 for details of this committee.

⁴¹ H.J. Mackinder, Address delivered on the 10th January, 1907, by H. J. Mackinder, on the Occasion of the Opening of the Class for the Administrative Training of Army Officers (London: HMSO, 1907), p. 2.

⁴² Ibid., pp. 2–3.

⁴³ See p. 000.

A great artist, who with a few strokes produces a telling portrait, is characterised by the two powers of being able to see the truth, and then of being able to reproduce it with economy of effort. The same is true in the realm of strategy. What you admire in the achievement of the General in the field is the power of seeing the situation, so far as it is discernible in the fog of war, and then the power of changing that situation by the simplest possible means.⁴⁴

Given that this course had been created with the specific purpose of creating a separate administrative staff for the army, and was fully funded by the War Office, ⁴⁵ Mackinder developed this idea further by linking back to his first idea of the army as being like a business in certain methods and procedures:

Your great business man is as truly an artist as the great painter, or the great general. He has learned by apprenticeship to see the truth, and also by experience to accomplish his objects by simple means. The result is that he acts apparently without effort. The same is true of the business of war. And in this connection I venture to remind you that Lord Kitchener owes much of his success to the fact that in addition to all his qualities he was an economical administrator during the Sudanese Campaigns.⁴⁶

Despite this lucid articulation of his 'special ideas', Mackinder's course was subject to criticisms of various kinds. He found himself having to deal with one of the perennial challenges of military education: a contested utility. Furthermore, he had to respond to this criticism while conceding that the Mackindergarten was an 'experiment'. ⁴⁷ He dealt with two categories of attack:

The first is that by far the best plan would be to take civilians experienced in business and to set them to administer the army, leaving the officers to do the fighting. In reply to this I am prepared to say that all history shows that the interference of civilians in military operations has not proved a success ... The other group of objectors urged that army officers should be sent for a period into a city office, there to serve as dignified office boys.⁴⁸

The experimental nature of the Army Class and the evolving nature of its syllabus were acknowledged in the initial War Office communiqué of December 1906: 'The course which is now about to be inaugurated must be regarded as more or less experimental, and the syllabus of instruction will be amended and modified as hereafter may be found expedient.'49

⁴⁴ Mackinder, Address, p. 3.

⁴⁵ The course gave the LSE its first full-time student cohort, and made possible the opening of a refectory for the use of all staff and students. Finance and General Purpose Committee, 1906–11, 29 November 1906, LSE Archives.

⁴⁶ Mackinder, *Address*, p. 3.

⁴⁷ Ibid., p. 4.

⁴⁸ Ibid., pp. 4–5.

⁴⁹ Special Training for Administrative Officers, War Office Communique, 10 December 1906, Army Class, 1906–62, box 232, LSE Archives.

Mackinder approached the challenge represented by these two approaches by embracing synthesis. The method was for army officers to understand the perspectives of businessmen. He qualified this by saying that these methods had to be interpreted and utilized in a particular way:

What you have to form is another special kind of business man, the soldier. I repeat therefore that it will be our object to teach those business methods which have been approved by long and general experience, and to leave you to appropriate so much of them as fits with our own business of soldier.⁵⁰

Did Mackinder's 'special ideas' mark the inception of a radical experiment in British military education? This question can only be evaluated by an examination of two issues: the geography syllabus as it evolved between 1907 and 1932, and the army's view of the course as a whole over the same period. Mackinder in his opening address acknowledged that the syllabuses were tentative and not yet complete. He also underlined the fact that the course's development was going to be something of a departure for the LSE in that it would require a partnership between the academic staff and the army officers on the course before the syllabus could be finally fixed. Mackinder acknowledged the nature of the problem and the pathway to a solution:

Given the lecturers with their specialised knowledge of the several subjects, what portions of those subjects will be of the most use to you? It can only be by practice and experience that we can find what those portions are. There are two principles of selection which must be borne in mind. In the first place we must consider the direct utility to the soldier of the information given, and in the second place we must consider the general principles underlying it.⁵¹

To appreciate the scope of the challenge that Mackinder faced it is worth outlining the extent and diverse nature of the subjects covered on the course: accountancy, law, economic theory, geography, statistical method, and transport. In an opening address he explained the relevance of each of these subjects to the needs of military administration. Mackinder was to be personally involved in teaching geography to the Army Class. In the first Advisory Board report he revealed both the genesis of having the subject on the course and its purpose:

The course on geography has been included at the special request of the business men on the Consultative Committee. The object of economic geography is to enable the business man or the administrator in the clearest and most certain manner to grasp in his own mind and to convey to others the resources and conditions of a country resulting from its geography. We must learn to think geographically, if in writing a report, let us say, on the supplies and communications of a given region, we would make sure that our enquiry is exhaustive and that our statements are in perspective. In these days of world-wide communications and world prices you cannot think of any region in proper perspective unless you have the rest of the world in the back of your mind.⁵²

⁵⁰ Mackinder, Address, p. 5.

⁵¹ Ibid., pp. 5–6.

⁵² Report of the Advisory Board, London School of Economics, Cd 3696, p. 13.

He then went on to outline the intellectual challenge the course faced, and which linked back to one of the 'special ideas' of the course – efficiency:

We are really dealing with a great synthetic problem, and our object in the six months before us will be that all your studies should contribute to a single end, and that you should go back to your duties feeling that you have definitely acquired valuable knowledge, increased breadth of outlook, and therefore increased power of efficiency.⁵³

Apart from the formal aspect of the syllabus, Mackinder outlined the intention to set up what he called 'smoking meetings'. These were intended to take place once a week in the evening after dinner. The guest speakers would be businessmen. The purpose of these talks was stated in the following way: 'Thus we will accumulate the experience of practical men.'54

The manner in which these radical ideas were sustained can be evaluated in the fourfold approach that has been previously outlined.⁵⁵ This will include examining the advisory reports that were made on the course between 1907 and 1914; evaluating the part of the syllabus that Mackinder both taught and examined, geography; and understanding how the syllabus was amended and modified between 1907 and 1932.

The Advisory Board, which provided oversight for the War Office, produced a series of annual reports.⁵⁶ In the first report it is clear the army regarded the course as having been a success, and the syllabus effective, but some adjustments would be made:

In conclusion we desire to say that we are convinced that the results which have been achieved by this first class fully warrant the continuance of this experiment. The experience which has now been gained does not make it necessary to reorganize the scheme in any essential respects.⁵⁷

In terms of the numbers and background of the officers, the first course contained 31 students, and the largest contingent consisted of 12 from the Army Service Corps.⁵⁸

The first Advisory Board report also confirmed that the challenge of pedagogy had been successfully addressed:

⁵³ Mackinder, *Address*, p. 9.

⁵⁴ Ibid., p 11.

⁵⁵ See p. 000.

⁵⁶ The board was chaired by Sir Edward Ward, permanent undersecretary of state for war. Senior military members included Lieutenant General Hutchinson, director of staff duties, and Major General Miles, director of recruitment and organization. Mackinder and Sidney Webb were also members of the Advisory Board.

⁵⁷ Report of the Advisory Board, London School of Economics, Cd 3696, p. 6.

⁵⁸ The breakdown of the first course was as follows: 12 were Army Service Corps, 7 were from various line regiments, 1 was Indian Army, 3 were from the Army Ordnance Department, 5 were from the Royal Artillery, 2 were from the Royal Engineers, and 1 was from the Guards Division.

It is to be noted that many of the questions (on the exam papers) show that the lecturers have gradually adapted themselves to Army requirements. Mr Mackinder writes: 'In this matter the officers have also assisted in no small degree, and the friendly relations which have subsisted between the teaching staff and the officers justify me in regarding them as collaborators in what, when at first faced, appeared to be very difficult problems. It was necessary to teach the fundamental principles of several subjects, and yet so to teach them that in the utmost possible degree the treatment should be practical and pertinent to military requirements. We think that this has been done with considerable success.'59

Appendix B of the Advisory Board's report for 1907 contained the syllabus for the course as a whole. With respect to geography there was a dichotomy of approach. One element had what could be described as a regional study. The second element was an interpretation of geography as a theatre of military operations. When this perspective is utilized certain important changes take place. Geography becomes more abstract and simplified in terms of the way that it is interpreted. Furthermore, the military strategist or commander will perceive only those geographical features that are relevant to the military objectives that he is attempting to achieve. This view of geography has a long lineage that goes back to antiquity.⁶⁰ The region that was selected was India, which at the beginning of the twentieth century was of vital geostrategic importance for Britain: 'The course will be divided into two parts. The first part will be devoted to a careful study of India, as an example of the methods of inquiry into the resources and conditions of a region of the world.'⁶¹ The other five parts of the course were presented in a similar manner.⁶²

The second element of the geography course was intended to 'deal more generally with the geographical circumstances of those states with which this country is most likely to be concerned either as an opponent or an ally'.63 The subsequent exam questions revealed a close congruence with the geostrategic and geopolitical ideas that Mackinder developed in his book *Britain and the British Seas*, which had been published in 1902.64 Furthermore, it was one of the core textbooks for the geography section of the course.65 The book made a series of geostrategic evaluations of the nature of the relationship between geography, the defence of Britain, and what today is called the exercise of sea control and sea denial, although Mackinder called it command of the sea:

⁵⁹ Report of the Advisory Board, LSE, on the First Course at the LSE, January to July 1907, for the Training of Officers for the Higher Appointments on the Administrative Staff of the Army, August 1907, LSE Archives, LSE 20/3/29.

⁶⁰ See Sun Tzu, *The Art of War*, trans. S.B. Griffith (Oxford: Oxford University Press 1963). Chapters 9, 10, and 11 of this book are devoted to this interpretation of geography.

⁶¹ Report of the Advisory Board, LSE on the First Course at the LSE, January to July 1907, for the Training of Officers for the Higher Appointments on the Administrative Staff of the Army, Appendix B, LSE Archives LSE 20/3/29.

⁶² Report of the Advisory Board, London School of Economics, Cd 3696, appendix B.

⁶³ Ibid., p. 9.

⁶⁴ H.J. Mackinder, Britain and the British Seas (Oxford: Clarendon, 1902).

⁶⁵ See Army Class, box 232/B, LSE Archives.

The defence of Britain resolves itself into three problems: (1) the retention of command of the sea, or rather, of the power of taking that command should the occasion demand it; (2) the defence of Great Britain should the command of the sea be temporarily lost; and (3) the separate defence of Ireland in the same contingency, for under such a condition the prompt and certain reinforcement of the army in Ireland would not be practicable.⁶⁶

One of the questions that Mackinder set for this first Army Class was embedded in this perspective:

Britain is at war with a naval power which has succeeded in throwing a certain force into the West of Ireland, and has raised a great rebellion in that country. The fighting at sea has been indecisive, and the enemy is getting ships through with arms and ammunition for the rebels. Our forces have had to fall back on the Curragh and Dublin. Supplies are being brought from Great Britain only with difficulty, and it is essential that the English forces should, as far as possible, maintain themselves on supplies available in Ireland. Write a report on the geography of Ireland and indicate the supplies and communications which would be available.⁶⁷

This question demonstrated a foresight that was remarkable. In April 1916 the Imperial German Navy attempted to land, on the south-west coast of Ireland, a large cache of arms and ammunition to facilitate an insurgency in what was then an integral part of the United Kingdom of Great Britain and Ireland.

This ability to frame exam questions that had a real prescience was not restricted to Ireland. When the questions for geographical essays are examined with respect to the European continent, Mackinder appears not only to have anticipated the advent of the First World War by seven years, but also to have identified the geographical location of the deployment of the BEF:

Britain allied with the France is at war with Germany. The Germans have occupied Holland and are besieging Antwerp, so that the Scheldt is denied to Britain as a base. The German line extends across to Liege. The British as a left wing to the French are based in Dunkirk, Calais, and Boulogne. With a view to such a contingency, write a report on the supplies and communications of Belgium, and the French departments of the Nord, and the Pas de Calais. 68

Although this second scenario elucidated by Mackinder was in many ways in keeping with the strategic scenario that had been accepted by the British general staff since 1907, it reflected the broader changes that had taken place in Britain's geostrategy in the period prior to the First World War:

⁶⁶ Mackinder, Britain and the British Seas, p. 310.

⁶⁷ Report on the Advisory Board, LSE, on the First Course at the LSE, January to July 1907, for the Training of Officers for the Higher Appointments on the Administrative Staff of the Army, Appendix E, Examination Papers, July 1907, Questions for Geographical Essays, LSE Archives, LSE 20/3/29.

⁶⁸ Ibid.

The Anglo-French staff talks and the imposition of strategical unity by the CID [Committee of Imperial Defence] in 1911 were more decisive in establishing what sort of war Britain would fight *if* she came in than the question of *whether* she was obliged to come in; but they certainly caused many politicians and officials to regard intervention as being very likely.⁶⁹

In tackling these problems he wanted the students to focus on what he described as the 'great synthetic problem' in order to increase their power of efficiency. Mackinder laid great emphasis on this in his report on the geographical section of the course:

I regard as first class those reports in which the authors show a capacity for using scientific geography as a framework for the setting of practical details ... the value and necessity of this method increases in regions where detailed information is scanty or lacking.⁷⁰

In the second course, which ran from October 1907 to March 1908, geography was subject to a series of changes. The most important was that while it was still part of the syllabus, the course requirements were reduced. What were the reasons for this change? The answer was provided by Mackinder in the second Advisory Board report:⁷¹

I felt that it was necessary somewhat to reduce the range of instruction, and with that object we did not on this occasion repeat the experiment of requiring a geographical report from each member of the class. It will be remembered that stress was laid on Geography in the first place at the special request of the Advisory Board, but I felt all along that it was more pertinent to the study of Strategy than to that of Administration. A little of it, however, presenting aspects unfamiliar to those whose ideas of geography are based on the school lessons of a few years ago, appeared desirable.⁷²

In addition to this there was no longer a final examination. No geography paper was included in appendix C of the Advisory Board report which reproduced all the papers. The other important change that took place with respect to the geography syllabus was a change of emphasis in terms of area. The regional study of India was replaced by one that had Britain as its focus The second element of the course remained unchanged, as did the overall teaching objectives that applied to both parts. Mackinder focused on an interpretation of geography as a theatre of military operations:

⁶⁹ P.M. Kennedy, *The War Plans of the Great Powers, 1880–1914* (London: Unwin Hyman, 1979), p. 14.

⁷⁰ Report on the Advisory Board, LSE, on the First Course at the LSE, January to July 1907, for the Training of Officers for the Higher Appointments on the Administrative Staff of the Army, Appendix E, Examination Papers, July 1907, Questions for Geographical Essays, LSE Archives, LSE 20/3/29.

⁷¹ It is interesting to note that Major General Douglas Haig, in the post of director of staff duties, was listed as a member in the 1908 report.

⁷² Report of the Advisory Board, London School of Economics, Cd 4055 (London: HMSO, 1908), p. 3.

⁷³ See ibid., pp. 11–17.

Special regard will be had to such physical facts and human activities as most affect military operations – for instance, tidal conditions along coasts and in rivers, land forms, distribution of seasons, water supply, character of vegetation, distribution of population, labour supply, means of transport, trade routes, and trade centres.⁷⁴

By the time of the third course, which ran from October 1908 to March 1909, the significance of the Mackindergarten from the army's perspective underwent an important change. It went from being regarded by the War Office as a Special Experimental Course⁷⁵ to an organization where both the pertinence of the syllabus and the subsequent enhancement of the army's administrative efficiency were recognized as important to its overall operational effectiveness:

So far three classes have been held, and a fourth is to be arranged to begin in October next. The alterations made last year in the original syllabus appeared to give so much satisfaction that no further alterations were attempted this year ... We therefore again strongly recommend that the course be made a permanent annual institution, in order gradually to create a body of officers well fitted to undertake the varied administrative duties that may fall upon them.⁷⁶

It was during this third course that Mackinder's direct responsibility for the course came to an end. In 1908 he resigned from the directorship of the LSE to facilitate his election as a MP in January 1910. The Advisory Board in its 1909 report fully acknowledged the pivotal role he had played since its inception in 1906:

We learnt with deep regret of Mr Mackinder's resignation of the Directorship of the School. The scheme of training owes much to him, both in general outline and in elaboration in detail, and we are sorry that the course could not have been firmly established as a permanent one while he was in charge of it.⁷⁷

Despite his departure from the directorship, Mackinder continued to lecture to the course, and to tailor his lectures to the needs of the course:

Following the policy adopted in regard to the second course, I set no examination paper \dots I have therefore limited my work to the suggestion of methods and ideas, and have reason to know that in the case of certain officers, further work on their own account has been the result.

By the end of the third course the War Office now regarded it as part of the permanent professional training for selected army officers.⁷⁹ The Army Course represented a particular triumph for Mackinder during his time as director of the LSE.

⁷⁴ Ibid., p. 8.

⁷⁵ See p. 000.

⁷⁶ Report of the Advisory Board, London School of Economics, Cd 4610 (London: HMSO, 1909), p. 3.

⁷⁷ Ibid., p. 4.

⁷⁸ Ibid., p. 6.

⁷⁹ In terms of numbers and the units that the officers came from, there seemed to emerge a pattern. In the 1908–9 and 1909–10 courses there were 31 and 30 officers attending respectively. Furthermore, 14 and 11 on the two courses came from the Army Service Corps.

One of the qualities that gave this course its dynamic quality was the ability of the lecturers and the Advisory Board to sustain a focus on the great unifying themes. Mackinder had called this the 'great synthetic problem': providing a breadth of outlook and increasing the power of efficiency of the British army. One of the key contributions to achieving this end was the willingness and ability of academics at the LSE to make changes in the syllabus. In the Advisory Board report for 1909–10 the following changing were noted:

Those portions of certain subjects, eg, Banking, Statistics, Public Administration and Geography, which have less immediate practical bearing for the officers, have been omitted, and the time thus set free has been spent in amplifying the instruction in the remaining subjects, and in permitting the introduction of a few lectures on 'Business Organization.'⁸⁰

In the course that ran from 1910 to 1911 the same process can be discerned with respect to Mackinder's lectures on geography. The regional study of Britain, and the geographical circumstances of opponents and allies, was replaced by a completely new syllabus. The emphasis was still on the interpretation of geography as a theatre of military operations:

The geographical conditions will be discussed which control movement and supply in war. The examples will be chosen from among the following regions: The North-west Frontier of India, The Syrian Coastland, The Netherlands, The Spanish Peninsula, The Eastern Alps, The State of Virginia.⁸¹

It is also worth noting that Mackinder continued to teach on this fifth course, despite having to fight a second general election campaign in December 1910, which saw his majority reduced from 434 to 26.82

The army continued to be pleased with the results that the course was producing. In the report that was submitted in May 1911 to Haldane the following comment was made:

We have much pleasure in reporting that the work of the class has been highly satisfactory. The class resembled last year's in that it was a very level one, and, if anything, this characteristic was more accentuated this year. The class has worked well and all the officers have endeavoured to make themselves thoroughly acquainted with the subjects.⁸³

There was a recognition that one of the qualities that the army considered important to the development of its officers was a breadth of outlook, despite the professional focus:

⁸⁰ Report of the Advisory Board, London School of Economics, Cd 5213 (London: HMSO, 1910), p. 2.

⁸¹ Report of the Advisory Board, London School of Economics, Cd 5597 (London: HMSO, 1911), p. 8.

⁸² Parker, Mackinder, p. 41.

⁸³ Report of the Advisory Board, London School of Economics, Cd 5597, p. 3.

'In the search for immediate and tangible results it should not be forgotten that the principal object, which we have in view, is the acquirement by the officers of a good general knowledge of the subjects dealt with.'84

In the last three army courses that ran from October 1911 to March 1914 there were both continuities and discontinuities. In terms of overall numbers the course remained stable, with 31, 31, and 32 participants for these last years before the First World War. However, the number of Army Service Corps officers dropped below 50% of the course, with 8, 7, and 10 participants respectively over the same period. The army continued to be pleased with the results of the course, and was intent on raising the standard that was expected in the final exams:

We are glad to report that the class has again been a very satisfactory one, all the officers working hard and taking a great interest in the subjects. Alterations were made this time in the character of the examination in some of the subjects, which had the effect of making the test more severe. The officers, however, all acquitted themselves with credit.⁸⁵

In the same report, which covers the period from October 1911 to March 1912, there was a recognition by the Advisory Board that there was a relationship between the continuing funding of the LSE and the maintenance of academic standards: 'We are glad to note that arrangements have now been made for a three years agreement with the London School of Economics, which will greatly assist the School in maintaining the high standard of its lecturing staff.'86

The last Army Class before the First World War finished in March 1914, four months ahead of the outbreak of hostilities. So abrupt was the termination of this course that the LSE felt compelled to ask the War Office to continue certain payments, a consequence of the recent agreement, despite the fact that there were no longer any army officers available to attend the course:

I should be glad however, if Lord Kitchener would take into consideration the question of the possibility of continuing to pay us the annual gross of £600, which under ordinary circumstances we receive irrespective of the fees paid for each officer attending the Army Class.⁸⁷

Unfortunately there is no record of the War Office reply.

There was a year's gap between the Armistice in November 1918 and one of the academics who had been involved in the course writing to the War Office enquiring about its future. In his letter dated 19 November 1919 William Beveridge asked when it would be restarted. The response from Sir Harold Brade indicated that 1920 would be the

⁸⁴ Ibid., p. 3.

⁸⁵ Report of the Advisory Board, London School of Economics, Cd 6285 (London: HMSO, 1912), p. 3.

⁸⁶ Ibid., p. 3.

⁸⁷ Letter from W.P. Reeves, Director of the LSE, to Lord Kitchener, 19 August 1914, box 232B, LSE Archives.

intended date: 'I find that it is not proposed to revive the course for Officers at the School of Economics until next October [1920].'88

The Army Class was not restarted until 1924. This raises the question as to why there was a gap of nearly five years between Beveridge's letter and the start of the next course. The answer may lie in the austere economic climate that existed between the course's reincarnation and its demise in 1932. The first insight into this is provided by a short comment in the minutes of the Army Council meetings for 1924. In these minutes the decision is recorded to close the School of Military Administration at Chisledon and to revive the administrative course which was held before the war at the LSE.⁸⁹

A more comprehensive explanation was given in a letter that was sent by the War Office secretary to the Treasury secretary in June 1924:

The situation arising out of the abolition of the Army School of Administration has been very carefully considered, and the Council have come to the conclusion that alternative arrangements must be made to the extent of providing for instruction in the principles of administration for selected officers who, by their promise of performance are marked out for higher administrative and departmental appointments. They do not think that any better means can be devised than to reconstitute the Officers' Course at the London School of Economics on the pre-war plan, with such modifications as experience suggests, and they have caused the details of a scheme for such a course to be examined in consultation with the authorities of the School.⁹⁰

This letter also gave a breakdown of the proposed costs, a subsidy of £1000 and a capitation fee of £40 for each student, with a guarantee of not fewer than 25 students. It also indicated that the proposed start date of the course was October 1924.⁹¹

Between June and July 1924 the Treasury attempted to marshal a number of arguments that would militate against the reinstatement of the course. The first was a letter to the University Grants Committee which explored the argument that although the grant that the LSE received from the state could not be regarded as a ground for refusal of a War Office payment for this special course, there was a case for moderation in what the government should be asked to pay through the War Office. This relationship between the level of the overall state grant and the cost of the Mackindergarten to the War Office was articulated clearly:

When the subject was last discussed with the school the Government Grant was £2,000 a year. It is now £16,000 and this contribution to the general expenses of the school is a handsome and adequate subscription to overhead charges. The London County Council, I believe, in return for their subsidy, require a certain number of free places.⁹²

⁸⁸ Letter from Sir Harold Brade to William Beveridge, 25 November 1919, box 232B, LSE Archives.

⁸⁹ Army Council: Minutes and Precis, 16 January – 23 December 1924, p. 169, The National Archives, WO 163/90.

⁹⁰ Letter from the War Office Secretary to the Treasury Secretary, 10 June 1924, TNA, T 162/135.

⁹¹ Ibid.

⁹² Letter from A.E. Banham, HM Treasury, to A.H. Kidd, University Grants Committee, 25 June 1924, TNA, T 162/135.

The second argument deployed by the Treasury was much more direct. When they did a comparative analysis of the syllabus for the School of Military Administration and the Mackindergarten at the LSE they came to the following conclusion:

It is clear from this that theoretical instruction of the type proposed in the revived courses formed quite a small part of the curriculum at the SMA ... The case for the proposal rests therefore, solely on the pre-war arguments. The Treasury was always very sceptical as to the direct value of these courses to the army.⁹³

Furthermore, in the same memorandum the need for financial austerity was fused with an assertion of a lack of utility. The Treasury failed to comprehend or acknowledge the ability of this course to facilitate an increase in the army's power of efficiency:

It is on the departmental services that we think the present Army establishment shows signs of extravagance; they have not been brought down below pre-war level. In spite of the substantial reductions in combatant arms ... With these reductions due, it is not time to invent or revive schemes for giving officers, particularly fairly senior officers, employment of a non-essential nature.⁹⁴

The final argument used by the Treasury contained a curious paradox. On one hand they appeared to be disparaging of the utility of the course, yet at the same time they acknowledged that resistance to its reinstatement was of no real financial importance:

I doubt whether so many officers have any real interest or enthusiasm for the subjects taught at the School. In as far as they have, a course of six months taken between the ages of 30 and 40 is not likely to have any lasting influence, nor to give value for the money spent. I have not drafted on the proposal, as there will undoubtedly be very strong pressure, both from the War Office and from the Authorities at the School of Economics to force this scheme through, and it may be considered that our chance of opposing it is not sufficient to make it worth while. 95

The final push was provided by William Beveridge, who had contacted the War Office at the end of June 1924, and informed them that as the term was coming to an end he needed to make provision for this course in terms of staffing. This resulted in a letter being sent to the Treasury. The outcome was that a decision was taken to formally approve future funding for the course. A formal communication was sent, signed by Sir George Barstow on 11 July 1924, from the Treasury to the undersecretary of state at the War Office: 'I am directed by the Lords Commissioners of His Majesty's Treasury to request you to inform the Army Council that they sanction the resumption of special courses for officers at the London School of Economics on the terms and conditions approved.' Mackinder's course had finally made a phoenix-like ascent back to life.

⁹³ Note from Mr Morris, HM Treasury, to Mr Millar, 3 June 1924, TNA, T 162/135.

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ Letter to Sir George Barstow, KCB, 1 July 1924, TNA, T 162/135.

⁹⁷ Letter from Sir George Barstow to the Under Secretary of State, War Office, 11 July 1924, TNA, T 162/135.

The reasons for the reinstatement having been considered, it is intended to assess the syllabus of the post-First World War course. To what extent was it able to evolve in keeping with the original aims of the course? The best record of this period was given by one of the officers on the first reinstated course, Brevet Lieutenant Colonel Badcock:

The course for Army Officers is naturally a highly specialized one for in six months they have to do what an ordinary student for a degree has to do in three years. Like ancient Gaul in Caesar's days, our course, broadly speaking, consisted of three parts:

- A. A regular series of lectures on some fourteen seemingly different, but in reality closely inter-related subjects.
 - B. Some fourteen special lectures and addresses by selected people, such as Lord Haldane etc.
- C. Some ten 'visits of observation' as they are termed, to places like the London Docks, the Great Western Railway works at Swindon etc. 98

There was also evidence that attainment levels had not been allowed to slip: 'Sir William Beveridge informed the committee that the standard reached by students in the Army Class was, in the opinion of examiners who had experience of both, higher than that of classes before the war.'99 Interestingly in this postwar period there was evidence of what could be described as a creative tension in terms of teaching pedagogy between the LSE academics and the army. This was and is one of the touchstones of military education. During the same meeting the army director of staff duties asked Beveridge if there were not some utility in adopting the Staff College method of instruction in which students were divided into syndicates after the first three months of the course, the aim being to give them a problem to work out and to require them to present a joint report outlining the solution. The response was instructive:

Sir William Beveridge replied that he was sympathetic to the idea of promoting discussions at the expense of lectures and had this already in mind, but he doubted whether syndicate methods lent themselves particularly to this course since the students had no preliminary knowledge of the subjects of which it consisted.¹⁰⁰

This debate over teaching pedagogy has an echo today with respect to the United Kingdom's Defence Academy.¹⁰¹ What was also instructive about this meeting was the

⁹⁸ The Army Course at the London School of Economics, Brevet Lieutenant Colonel G.E. Badcock, CBE DSO RASC, 1924, LSE Archives, 20/3/90.

⁹⁹ Standing Advisory Committee on the Training of Administrative Staff, 7th meeting, 8 June 1925, Army Class, box 232/B, LSE Archives.

¹⁰⁰ Ibid.

Since the inception of the Joint Services Command and Staff College in 1997, there has been a consistent failure with respect to teaching pedagogy. Syndicates form a core element of the main staff course. They are tasked to cover an impossibly wide syllabus, and as a result this is done in a superficial manner. These syndicates are taught by a combination of the military directing staff and academic lecturers. The students who are posted to the Defence Academy have little or no prior knowledge of the subjects they are asked to study. This educationally flawed approach is still in place today.

manner in which the Standing Advisory Committee, which had replaced the pre-First World War Advisory Board, took an active role in shaping the syllabus of the course: 'The students should be encouraged to take a more active part in handling the various subjects and to develop their power of expression. Less Transportation more Banking and the Economic Problems of War.' ¹⁰² The ability of the LSE to amend and modify the syllabus was underlined by the topics addressed in section B of the syllabus. The Michaelmas term of 1924 still reflected the experimental nature of the syllabus of the Mackindergarten: H.J. Laski on Karl Marx; Baron A. Meyendorff, Russia; Philip Baker, military aspects of the Geneva protocols; Professor Bowley, unemployment. ¹⁰³

In 1925 Mackinder ended his involvement with the course: 'after only two years as Professor, [he] had to retire from his London University post because of the age limit then in force'. 104 The LSE academics who continued to teach on the course were a remarkable collection of intellectual talent. They included: Graham Wallas, Harold Laski, L.C. Robbins, Sir William Beveridge, and Philip Baker.

By 1931 the geographical element of the course was being taught by Dr Dudley Stamp. The Army Course continued to be responsive to current developments in international relations. The students also had an influence in shaping this section of the syllabus:

The second five sessions held in the Lent term were devoted to a consideration of the economic geography of areas selected by the officers themselves. The areas included Manchuria (with special reference to the present crises), Australia, Argentina (with special reference to British–South American Trade) and Canada. 105

This ability to adapt was also reflected in the other parts of the syllabus. This main part of the course now consisted of six areas: economics, political and social theory, international relations, transport, geography, and law. Furthermore, the lectures given on the informal section of the Army Course again reflected the issues of the day: Professor Coatman on the present position in India; Dr Meyendorff, modern Russia; Professor Hogben, US Army intelligence tests; Professor Power, the historical background of the Manchurian question. Having academics teaching on the Mackindergarten able to incorporate contemporary events into part of the syllabus clearly retained the focus of the original course aim: 'the syllabus will be amended and modified as hereafter may be found expedient'. ¹⁰⁶

The Mackindergarten came to an end in 1932. However, there is evidence to suggest that just two years after its reinstatement a concatenation of events began to unfold that created a continual resonance of uncertainty. The first was a decision by the army in 1926

¹⁰² Standing Advisory Committee on the Training of Administrative Staff, 7th meeting, 8 June 1925, Army Class, box 232/B, LSE Archives.

¹⁰³ Ibid.

¹⁰⁴ Parker, Mackinder, p. 52.

¹⁰⁵ Army Class, 1931–2, box 232/7A2, LSE Archives.

¹⁰⁶ Special Training for Administrative Officers, Communique, 10 December 1906, Army Class, 1906–62, box 232, LSE Archives.

to cut the number of students attending the course from 30 to 20. This needs to be balanced by the positive way in which the reinstated course was perceived by the army:

The courses have proved to be of great benefit and the Council are satisfied that their continuance is in the best interests of the Service. At the same time some difficulty has been experienced in releasing as many as thirty officers annually from their military duties, and for this reason the Council are of the opinion that the number of officers to attend the course should be reduced. It is proposed therefore to limit the classes in future to a maximum of twenty students. 107

There was also to be a corresponding reduction in the money the LSE would receive. ¹⁰⁸
This reduction itself, while not fatal to Mackindergarten, made it vulnerable to further Treasury attacks. In a letter dated 21 December 1926 approval for a course to start in January 1927 was given. There was a caveat attached in terms of funding, and the problems that the army had encountered in terms of the availability of officers was used as a weapon to question the future viability of the course:

My Lords limit their approval to a period of one year as they are not satisfied that as many as twenty officers likely to obtain direct benefit from the courses in respect to their Army career will continue to be available annually. They would be glad if in the interim the Army council would carefully consider the further reduction or suspension of the courses, in view particular of the number of officers who have already passed through them since their reinstitution in 1924.¹⁰⁹

The army's response to this was a robust defence of both the value of the course and the numbers of officers that were attending the LSE: 'The courses are of great value to the Army as a whole and while the Council fully appreciate the need for economy, they do not consider that any reduction in the size of the course should be made.'110 By the late 1920s funding for the Mackindergarten had been put on a short-term basis. In December 1927 the Treasury informed the War Office that it was extended only to the end of December 1929.¹¹¹ By this time it is clear that the pressures of economic austerity were beginning to bear down on War Office expenditure to the extent that the future existence of the Mackindergarten was put under review. Yet the Army Council still defended the value of the course, while declaring the intention to simultaneously make access to it more selective, and to cut the number of officers on the course:

¹⁰⁷ Letter from the Under Secretary of State, War Office, to the Secretary of the Treasury, 11 June 1926, TNA, T 162/135.

¹⁰⁸ The LSE would now be paid £1,750 for a course of up to 20 students. This was in lieu of a sum of £1000 per course plus a fee of £40 per student.

¹⁰⁹ Letter from Sir George Barstow, Treasury Secretary, to the Under Secretary of State of the War Office, 21 December 1926, TNA, T 162/135.

¹¹⁰ Letter from the War Office to the Secretary of the Treasury, 30 November 1927, TNA, T 162/165.

¹¹¹ Letter from R.R. Scott to the Under Secretary of State of the War Office, 8 December 1927, TNA, T 162/165.

After careful consideration they are satisfied that the Army as a whole has derived great benefit from these courses and they are strongly of the opinion that they should be continued. At the same time, in view of other pressing demands on the funds at their disposal, they propose to exercise an even more rigid standard of selection, and to limit future courses to 16 officers (including 4 or 5 Indian Army officers) at a fee of 100 guineas for each officer.¹¹²

The response of the Treasury was to approve the funding, but to inform the War Office that the existence of the course would be considered again in 1931. 113

The fate of the Mackindergarten was decided not on the quality of what was being delivered at the LSE, but by the growing global economic crisis that the British government of the day was trying to cope with. In 1931 the report of Sir George May's Committee on National Expenditure was published. The army had to find savings of £1,690,000 from its estimates. In addition, an extra £2,000,000 of cuts had to be made in the Army Estimates for 1932. What was clear from the Army Council minutes was that in addition to an £85,000 (or 10%) reduction in the army's budget for education for 1931, an extra £32,000 of cuts had to be found in 1932. It was this second round of cuts that made the Mackindergarten unsustainable.

There is a sense of genuine regret on behalf of the Army Council about the need to discontinue the Mackindergarten:

The Council [Army] have only arrived at this decision with great reluctance and in view of the pressing need for economy. I am to express their appreciation of the arrangements that have been made by the LSE in the past for these courses which have in their view proved of great value, not only to the officers selected to attend them, but to the Army generally. 116

The British army had been forced to cut the provision of education for its officer corps in this interwar period. It was a step that had not been forced on the American or the German army despite equally severe economic challenges. However, it would be wrong to say that this marked the end of the Army Course at the LSE. Ten years later, in 1942, in the midst of the Second World War, the LSE initiated a proposal to revive the Army Class at the end of the conflict. Professor Harold Laski wrote an initial letter to the War Office, and by March 1947 Professor Plant had formulated a proposed course for transport and other officers. ¹¹⁷ The War Office took seven months to consider the LSE's offer. When it finally provided an answer it gave no substantial reasons for withdrawing from a course that was in a state of advanced preparation:

¹¹² Letter from Widdows of the War Office to the Secretary of the Treasury, 18 December 1929, TNA, T 162/165.

¹¹³ See letter from R.R. Scott to the Under Secretary of the War Office, 30 December 1929, TNA, T 162/165.

¹¹⁴ Report of Sir George May's Committee on National Expenditure, Cmd 3920 (London: HMSO, 1931).

¹¹⁵ Army Council: Minutes and Précis, 9 June to 17 December 1931, TNA, WO 163/37.

¹¹⁶ Letter from the War Office to Dr Dickinson, 14 September 1932, Army Class, 1931–2, box 232 K, LSE Archives.

¹¹⁷ See Army Class, 1941–7, box 232/4L, LSE Archives.

Early in 1947 enquiries were initiated by the Directorate and discussions took place with Sir Alexander Carr-Saunders and Professor Plant in connection with the possible attendance at the LSE of a small number of RASC officers. Subsequent examination with the War Office has made it evident that, at least for the present, circumstances will not permit us to take advantage of the facilities offered. I apologise for our belated withdrawal from the scheme.¹¹⁸

It was the War Office, not the LSE, that brought the Mackindergarten to an end. The course had run for a total of 15 years in a 25-year period. Evaluating the success of the knowledge transfer over this period of time is not easy. The evidence is fragmentary. The course had a clear aim, yet it was not highly prescriptive as many courses in military education were and are. The final rejection of the offer by the LSE to restart the Army Class in 1947 underlined, it can be suggested, the absence of the political and personal connections that Mackinder had been able to call upon when the Army Class was first set up.

The clearest picture of the transfer of knowledge to the tactical and operational environment comes from the period before and during the First World War. In December 1906, as soon as the course was conceived, General Kitchener, then commander-in-chief of India, wrote a letter from Fort William in Calcutta to Sir Edward Ward, then permanent undersecretary at the War Office:

I see by the telegrams that the Secretary of State [Haldane] has now completed his arrangements for officers of the Army Service Corps going through a course of instruction at the LSE. As I feel sure that much of the instruction they receive there would be of the greatest value to Supply and Transport officers in India, I shall be very grateful if you would kindly arrange that any printed notes, lectures, instructions, which may be given to these officers, may be sent to me for the use of my officers here. 119

By 1909 the bulk of the lectures given at the LSE, with some changes for local circumstances, ¹²⁰ were being used at the Indian Army Supply and Transport School at Rawalpindi. ¹²¹

A second insight is provided by one of the erstwhile students of the course, Major R.B. Airey. In assessing the professional utility of the Army Course, he argued that:

It is rather the customs and methods of different kinds of businesses which will prove useful to the Army Service Corps officer in time of war. It must be remembered that the first and most important function of the supply officer in war is 'food-finding', and to be a finder of food it is invaluable to him to know the trade customs of the dealers in the commodities he has had to find.¹²²

¹¹⁸ Letter from Major General W. Colling, Inspectorate RASC, to LSE, 20 October 1947, Army Class, 1941–7, box 232L, LSE Archives.

¹¹⁹ Army Class, 1906–62, box 232, LSE Archives.

¹²⁰ The subjects being taught in India were: business accounts, statistical methods, Indian contract law. economics, and railways.

¹²¹ See Capt. M. Synge, *Certain Subjects Taught to Officers at the LSE* (Calcutta: Superintendent Government Printing, India), 1909.

¹²² Major R.B. Airey, Army Review, April 1913, p. 466.

Airey also evaluated the teaching of economics. This was a subject that helped to foster an *esprit d'armée* as opposed to an *esprit de corps*. Furthermore, it helped army officers to think collectively:

The School of Economics could teach us 'the spirit of the hive'. But before we learn to think collectively we must learn to think at all, and of all the subjects which helped us to new ideas, I think that most officers would agree with me that this subject gave us more to think about than all the rest put together. 123

His views of the lectures on geography were mixed. He acknowledged the importance of this part of the course: 'There is no need to emphasize the value of this information to the senior supply officers of our Army.' Yet there can be discerned an oblique criticism of the emphasis in these lectures, now given by Mackinder:

I thought that, perhaps, these lectures were too much strategical and too little commercial ... The lecturer attempted to apply his wonderful geographical knowledge to the conduct of a campaign and to plans of attack, subjects more suited, in my opinion to a training for the General Staff than for the QMG branch – but perhaps this is only the bias of the supply officer. Anyhow, all students at the School of Economics will agree with me that when the lecturer led us to the 'brink of an imaginary plateau' we seemed to see Europe, and that we have to thank him for several interesting hours. ¹²⁵

Interaction with civilian students was seen as a positive thing: 'The atmosphere of Clare Market is valuable. The social intercourse with men, women and research students (almost sexless in their enthusiasm for lost causes and forgotten policies), who are all so different from the average soldier, is in itself widening.' 126

The final insight was provided by Sir Almeric Fitzroy.¹²⁷ He made a direct connection between the Army Class at the LSE and the degree of logistical competence that was demonstrated by the British army on the Western Front:

He [Haldane] had there trained a whole school of military administrators, whose work at the mobilisation and afterwards behind the French Front, had made the conduct of the present war such a conspicuous success at any rate, in the field of communication and supply.¹²⁸

These three pieces of fragmentary evidence provide an insight into the knowledge transfer that took place.

¹²³ Ibid., p. 468.

¹²⁴ Ibid., p. 471.

¹²⁵ Ibid., p. 471.

¹²⁶ Ibid., p. 473.

¹²⁷ Sir Almeric Fitzroy (1851–1935), Educational Department of the Privy Council Office (1876–92), private secretary to the lord president of the Privy Council (1895–8), member of the Royal Commission on Venereal Diseases (1912–16) and the Dentist's Act Committee (1918–19).

¹²⁸ Sir Almeric Fitzroy, *Memoirs of Sir Almeric Fitzroy*, vol. 2 (London: Hutchinson & Paternoster Row, 1925), p. 649.

From the beginning of the war the British army faced logistical challenges in France. In terms of doctrine the departure point for this challenge was Field Service Regulations Part 2. This document was based on four principles. ¹²⁹ Taken together this 'provided a sound, if unimaginative, underpinning for British operations'. ¹³⁰ As the scope and scale of military operations on the European continent expanded, the British army faced the challenge of ensuring that its logistic organization could adequately sustain these operations. Two important developments took place to facilitate this. The first was the expansion of the army's administrative capability:

The successful administration of the BEF during the Great War hinged on the rise of the professional administrative officer. This officer was largely a product of the General Staff, created by the Esher and Haldane reforms of 1905–1906 and reinforced by the growing importance of the Staff College. 131

The second development was more innovative. This was the use of business expertise and knowledge that could be adapted for the purposes of military logistics. This approach had been one of the 'special ideas' of Mackinder's course: 'In 1915 also, the BEF struck on its most successful innovation in administration when it began tapping civilian expertise and using men ... at essentially the same jobs that they had done in Britain.' ¹³² Civilian experts such as Sir Eric Geddes were recruited to help enlarge the capacity of the military transportation system that existed in France. ¹³³ This in turn vastly improved the logistical structure and underpinned doctrinal development and ultimately operational effectiveness. ¹³⁴ The innovation did clash with the vested interests of the officer corps of the army in terms of promotion and authority: 'Business-organisers were therefore essential in the search for managerial improvements because of their honest portrayal of problems and the ability to recommend organisational solutions.' ¹³⁵

These three pieces of evidence cited, from the Indian Army Supply and Transport School, Major Airey, and Sir Almeric Fitzroy, underscore the veracity of the reports of the Advisory Board, London School of Economics, and the Standing Advisory Committee in the post-First World War years. They show the course, through modifications to the syllabus, was able to sustain and develop the power of efficiency. This was one of the unique hallmarks of the Mackindergarten.

¹²⁹ These were: (1) unity of control and effort; (2) extensive subdivision of the administrative organization; (3) provision by the administrative structure of the means for fighting troops to defeat the enemy's field forces; (4) the concept of a hierarchical command and control structure

¹³⁰ I.M. Brown, British Logistics on the Western Front (Westport: Praeger, 1998), p. 45.

¹³¹ Ibid., p. 230.

¹³² Ibid., p. 233.

¹³³ See K. Grieves, *Sir Eric Geddes Business and Government in War and Peace* (Manchester: Manchester University Press, 1989), pp. 10–39.

¹³⁴ In September 1916 Lloyd George appointed Geddes as director general of military railways at the War Office.

¹³⁵ Grieves, Sir Eric Geddes, p. 29.

In conclusion, the Army Class at the London School of Economics was indeed a radical experiment in British military education. It was an innovation that was born of the identified shortcomings of the British army's performance in the Boer War, and the subsequent desire to separate military operations from administration in a coherent manner. The true model for this was not the German army, although it was presented at the time as the source of inspiration, but the British army of the early nineteenth century. The Mackindergarten can also be situated within the broad context of the post-1906 army reforms: 'The Haldane reforms had sought to prepare officers for their duties by providing them with a mixture of education and training. The Army Class at the LSE was able to sustain its original radical core throughout the entire period of its existence. This point has been made previously, but when it is compared with the fate of other officer training and education courses that were developed in the same period the contrast is striking:

Whatever the objectives of the Haldane reforms, the staff at the cadet colleges who put them into practice insisted that conformity came before intellectual curiosity. One cadet who passed through Sandhurst in 1935 recorded that 'Independent thinking is frowned on as heresy – no divergence from official view allowed.'¹³⁸

The Army Course at the LSE was not typical of the way in which Mackinder's career has been characterized: 'Most of the causes he worked for were betrayed or came to nothing, and most of his farsighted warnings went unheeded.' ¹³⁹ It successfully tackled the unique problem that service education has to overcome: how to cover a number of diverse subjects in a relative short period of time so that they contribute to a single end. Mackinder had outlined the solution in 1907:

Your object here [at the LSE] is not merely to acquire so much knowledge, but to obtain a mastery over methods. It is, therefore, obviously essential that practice should go along with precept, that you should work problems, that you should write essays, and that you should criticise verbally the material that is put in front of you. Only when you have heard the point of view of a master of the subject, and have then attempted to handle a problem yourself, are you in a position to discuss with advantage the difficulties which arise on a nearer approach to the subject. 140

The Mackindergarten in terms of its aims developed the critical link between the process of education and the power of efficiency. It equipped officers in peacetime with the ability to understand the context of the situations that the army may be called to

¹³⁶ It has not been possible to find any further evidence of the comment made to Haldane by a German officer in 1906 and reported in 1922 during a discussion at the RUSI following a lecture by Miles.

¹³⁷ D. French, 'Officer Education and Training in the British Army, 1919–39', in G.C. Kennedy and K. Neilson, *Military Education: Past, Present, and Future* (Westport: Praeger, 2002), p. 121.

¹³⁸ Ibid

¹³⁹ Parker, Mackinder, p. 260.

¹⁴⁰ Mackinder, Address, p. 10.

operate in, and gave them the ability to meet its challenges by the simplest possible means. The Romans would have expressed this in the following way: 'Si vis pacem, para bellum' – prepare for war in time of peace. It is as relevant today as when Haldane instructed Mackinder to develop his 'special ideas' in 1906.

What marked out the Mackindergarten, in terms of military education, was the ability to solve the 'great synthetic problem'. This approach brought a special kind of knowledge to bear on the Army Course that ran at the LSE between 1907 and 1914, and from 1924 to 1932. Yet it was not divorced from the challenges that education as a whole faces:

Knowledge is an honorific title we confer on our paradigm cognitive achievements, which is why there is an important question about the nature of knowledge. As an important honorific term, "knowledge" is bound to be contested ... knowledge is not just a factual state or condition but a particular *normative status*. ¹⁴²

Mackinder was not alone in recognizing that the mere comprehension of new facts was not enough. Admiral Sir Herbert Richmond, when highlighting the deficient aspects of naval education, claimed that: 'We acquire some knowledge of facts about guns, ships, and other concrete subjects, but we are not trained to *reason*, nor are we taught anything about the conduct of war.' However, the Class for the Administrative Training of Army Officers was one of the few occasions in the twentieth century when a multi-disciplined, yet coherent course was developed and taught by university academics that satisfied the criteria of what a fighting organization required. This was a rare legacy indeed.

Acknowledgement

I wish to thank Dr Philip Giddings for his encouragement in writing this article.

¹⁴¹ See p. 000.

¹⁴² M. Williams, *Problems of Knowledge* (Oxford: Oxford University Press, 2001), p. 11.

H. Richmond, *National Policy and Naval Strength* (London; Longmans, Green, 1928),p. 258.