



Lord Northbourne, the man who invented organic farming, a biography

John Paull

School of Land & Food, University of Tasmania, Hobart, Australia
email: j.paull@utas.edu.au

“He was a man of great vision, decisiveness, quiet humour and kindly authority ... who brought to every facet of his widely ranging life a rare sense of harmony and balanced purpose. Above all he was a widely read man of very considerable scholarship with deep philosophical understanding ... He was a man of great faith and rare belief who saw ‘through a glass darkly’ so much more than is given to most of us to see and experience” Duncan Skilbeck (1983, pp.78-79).

Abstract

It was Lord Northbourne (Walter James; 1896-1982) who gifted to the world the term ‘organic farming’. His 1940 book *Look to the Land* is a manifesto of organic agriculture. In it he mooted a contest of “organic versus chemical farming” which he foresaw as a clash of world views that may last for generations. Northbourne’s ideas were foundational in launching the worldwide organics movement, and the book was a turning point in his own life. This biography relies on primary sources to draw a picture of Lord Northbourne. He was a very shy man, a talented artist, a capable linguist, a keen sportsman and an Olympic silver medallist, a graduate and lecturer in agriculture of the University of Oxford, a lifelong farmer, he was profoundly spiritual, an accomplished author, and as a wordsmith he could be a compelling advocate for his cause as *Look to the Land* shows. His interest in biodynamics led him to visit Switzerland in 1939 to invite the leading advocate of the times, Dr Ehrenfried Pfeiffer, to present the first conference on biodynamic farming in Britain, and it was in the following year that *Look to the Land* appeared. Rather than the mechanics or the practices of organics, Northbourne’s book presents the philosophy, the rationale, and the imperative of organic farming. The ideas of his organics manifesto took on a life of their own and were quickly spread globally, with early uptakes in the USA and Australia. Meanwhile, while maintaining lifelong interests and commitments to agriculture and education, Northbourne became progressively more engaged with spiritual matters, and his subsequent writings reflect his growing interest in metaphysics. He translated books by leading perennialist authors Frithjof Schuon, René Guénon, and Titus Burckhardt. Northbourne led a full life, but it is *Look to the Land* that is his enduring ideological legacy. This biography examines: firstly, the book, its ideas, history, uptake and impact; secondly, Northbourne’s life before *Look to the Land*; and thirdly, his life after *Look to the Land*.

Key words: Walter Ernest Christopher James, 4th Baron Northbourne, organic agriculture, biodynamic farming, biodynamic agriculture, organic food, Oxford University, Perennialism, perennialist philosophy, Traditionalist School, Traditionalism, Anthroposophy, Ehrenfried Pfeiffer, Eve Balfour, Rudolf Steiner, René Guénon, Frithjof Schuon, Kent.

Introduction

Farmer, philosopher, writer, Oxford University lecturer in agriculture, and Olympic silver medallist, Lord Northbourne (1896-1982) (Images 1 & 2) wrote of the clash of agricultures, “organic versus chemical farming” in his first book, *Look to the Land* (1940a). The book is a manifesto of organic agriculture, the canonical work in the field, and its legacy secures Northbourne’s place in history. Northbourne tapped a vein of disquiet over twentieth century changes to agriculture, he introduced the term ‘organic farming’, and his ideas and terminology were promptly taken up internationally. Northbourne secularized ideas that Rudolf Steiner (1924) and biodynamic farmers (Pfeiffer, 1938) had set in train beginning at Koberwitz (now Kobierzyce, Poland) in 1924 (Paull, 2011a). The publication of *Look to the Land* was a turning point in Northbourne’s life, and this paper presents an account of his life in three sections: the book itself; his life before; and his life after.

Methodology

This biography of Lord Northbourne draws predominantly on primary source material, both published and unpublished items including personal letters and other manuscript items. Archives, libraries and sources consulted included: the Oxford University Archives, Oxford; the Bodleian Library, Oxford; Magdalen College Archives, Oxford; Wye College Archives, Wye; King’s College, London; Eton College Archives, Windsor; the Hampshire Record Office, Winchester; the British Library, London; the Goetheanum Archives, Dornach; the Biodynamic Association, Stroud; the Soil Association, Bristol; and the present Lord Northbourne (Walter James’ son Christopher James).

Results

1. *Look to the Land*: Organic versus Chemical Farming

1.1 Introduction

The wartime chemistry of WWI (1914-1918) opened a Pandora’s box of cheap nitrogenous compounds and poisonous gases (Charles, 2005). However, young men dying an ugly death from toxic gas seemed the antithesis of a heroic death and the perpetrators of this novel lethality seemed ungentlemanly. For the purposes of modern warfare, the box was more or less snapped shut by the *Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare* (von Eckardt & 42 others, 1925) - but not for agriculture. In the inter-war years, repurposing the chemistry of poisons and the output of the Haber-Bosch ammonia process of ‘fixing’ nitrogen, for application to the food chain, seemed, to many, and in particular to policy makers, to be ‘scientific’ and to epitomize ‘progress’ (Smil, 2001).

In the early months of WWII, Lord Northbourne expressed the disquiet of a generation about the shift to the ‘chemicalization’ of the food chain. His 206 page book *Look to the Land* was first published in Britain on 30 May 1940 (Northbourne, 1940d, p.9). To a Britain once more at war, Northbourne’s book proffered a gentle message: “It now remains for us to try the way of love” (p.192). Northbourne’s message seems incongruous for the mood of the times, where contemporaneous newspaper reports wondered “What chance remains of saving France?” (Hammerton, 1940, p.1) and

presented tallies of “k. i.” (killed and injured) on the back pages, and centerfolds comprising photos such as Australian volunteers “From ‘Down Under’ to the Defence of the Homeland” (p.12). WWII Britain would appear to be an inauspicious time and place for Northbourne’s message of love to find a receptive audience, and yet, against the odds, it did.

Despite the increasingly imperilled state of Britain, books continued to be published and reviewed. A leading British agrarian periodical, *The Field*, wrote of *Look to the Land* that:

This book sounds an alarm. Lord Northbourne knows that for life and well-being man is dependent upon the soil. In this book he warns us that we are making improper use of our heritage ... He believes that salvation will come not through government, not through large-scale centralised control, but by individual labours of love ... That it is a good solution, the proper solution, we have no doubt ... this is one of the best, one of the most vital, farming books published in the last 20 years (*The Field*, 1940, p.1004).

Northbourne coined the term ‘organic farming’ (James & Fitzgerald, 2008; Paull, 2006; Scofield, 1986). Scofield referred to *Look to the Land* as a “forgotten classic” (1986, p1). A recent history of organics, *Organic Farming, An International History* (Lockeretz, 2007) continued the ‘forgetfulness’ and ignored Northbourne entirely. Some US authors, for example Michael Pollan (2006) and Lee Silver (2006), mistakenly attribute or imply coinage of the term to the American publisher, Jerome Rodale (1898-1971), citing his use of the term from 1942 which is two years after *Look to the Land* (1940). Rodale was an entrepreneur, a vigorous promoter, popularizer, and repackager of ideas, who actively harvested ideas out of Britain, and, in modern marketing terminology, a ‘fast follower’ (Jackson, 1974). He was the first to publish a specifically ‘organic’ periodical; his *Organic Farming and Gardening* appeared in May 1942, and he sought agricultural advice from biodynamics pioneer and organics advocate Ehrenfried Pfeiffer (1899-1961), the author of *Bio-Dynamic Farming and Gardening* (1938), who had, by that time, moved from Switzerland to the USA (Koeppf, 1991).

The first occurrence of ‘organic farming’ as a distinct phrase appears where Northbourne warns:

In the long run, the results of attempting to substitute *chemical farming* for *organic farming* are probably far more deleterious than has yet become clear. It is perhaps worth pointing out that the artificial manure industry is very large and well organized. Its propaganda is subtle, and artificials will die hard. But we may have to relearn how to treat the land before we can manage entirely without them, or without poisonous sprays ... imported chemicals can by no means make up for a loss of biological self-sufficiency [*italics added*] (p.103).

Northbourne sets up a clash of agricultures, pitting them in contention, within his Chapter 3 heading, as: “Organic versus chemical farming” (p.81). This contestation recurs in page headings as “organic v. chemical farming” at pages 99 and 101. *Look to the Land* is a manifesto of organic farming and it lays the ideological and philosophical foundation for differentiating organic farming from chemical farming.

1.2 Why Organic?

A key contribution of Northbourne was to take Rudolf Steiner's idea of 'the farm as organism' and derive from it a named practice, a differentiated agriculture, 'organic farming' (Paull, 2006; Steiner, 1924). In *Look to the Land*, Northbourne wrote of "the farm as a living whole" (p.81). He declared that: "the farm itself must have a biological completeness; it must be a living entity, it must be a unit which has within itself a balanced organic life" (p.96). A farm that relied on "imported fertility ... cannot be self-sufficient nor an organic whole" (p.97). He declared that: "The farm must be organic in more senses than one" (p.98). He maintained the holistic view that: "The soil and the micro-organisms in it together with the plants growing on it form an organic whole" (p.99).

Northbourne's underlying concept of 'the farm as organism' can be traced back to Ehrenfried Pfeiffer's book *Bio-Dynamic Farming and Gardening* (1938), and Pfeiffer had it from Rudolf Steiner's 1924 *Agriculture Course*. Steiner (1861-1925) declared, in the series of eight lectures held at Koberwitz, that: "Truly, the farm is an organism" (1924, lect.VIII, p.7). Steiner's disciple, Ehrenfried Pfeiffer wrote that: "the cultivated field is a living organism, a living entity in the totality of its processes" (1938, p.35), and that the farmer needs to "maintain at a high level his living organism, the farm" (p.40).

At the time he published his *Bio-Dynamic Farming and Gardening*, Pfeiffer was the Director of the Bio-chemical Research Laboratory at the Goetheanum, the headquarters of the Anthroposophy movement, in Dornach, Switzerland. Pfeiffer played a key role in testing and evolving Steiner's ideas into biodynamic agriculture, a system which eschewed synthetic fertilisers and pesticides (Paull, 2011c). In January 1939, Northbourne visited Pfeiffer in Switzerland to organise the first biodynamics conference in England, and at which Pfeiffer was the lead lecturer (Northbourne, 1939b). The outcome was the *Betteshanger Summer School and Conference on Bio-Dynamic Farming* conducted over nine days, 1-9 July 1939, at Northbourne's estate. One of Pfeiffer's lectures at the conference was "The Farm as a Biological Organism" (Northbourne, 1939a; Paull, 2011b).

1.3 Publication history of Look to the Land

Look to the Land was published by J.M. Dent, London, in 1940. The book was immediately taken up as a club edition by Basis Books (1940b). This was a subscriber club, where members received a book per month; *Look to the Land* was the eleventh book published for Basis Books, London. The advantage for subscribers was that they obtained their books "by virtue of their contract, at low prices" (1940b, verso). The advantage for the original publisher was that a guaranteed uptake of the production run offset some of the setup costs and thus reduced the unit production cost. For the author it offered an audience more diversified than those who might frequent a bookshop and seek out, in this case, an agrarian book. Dent printed their second impression, in 1942, to the prevailing 'War Economy Standard', employing paper of a thinner and poorer quality, reducing the point size of the text, and thereby trimming the page count, from 206 to 186, while maintaining the integrity and completeness of the text. The 1946 post-war third impression followed the 1942 text and pagination.

The currently available 2003 Sophia Perennis imprint of *Look to the Land* (1940c) has the advantage that it is a print-on-demand title and hence readily available. This latest edition has eliminated the 'Index' and the 'Bibliography' of earlier versions, and it is a "revised"

edition with some unfortunate textual redactions. Alternatively, a scan of the original book is available for free download at www.soilandhealth.org.

1.4 The Uptake of *Look to the Land*

Northbourne’s book *Look to the Land* was one of “the publications issued and distributed by the Economic Reform Club and Institute” (Rowe, 1944, p.16). Northbourne was a past president of the Club. Rowe reported that in the field of “agriculture and food production ... His book, ‘Look to the Land’ is a notable contribution and has been widely studied” (p. 20). Within months of its release in Britain, *Look to the Land* was available in Australia (Advertiser, 1940a) and favourably reviewed in the Australian press (e.g. Advertiser, 1940b; SMH, 1940).



Writing in *England and the Farmer*, published in 1941, Massingham recommends reading his own new book in conjunction with *Look to the Land*:

If this book be read in conjunction with Lord Northbourne’s noble and wide-embracing ‘Look to the Land’ published last year, the reader will come away flushed with a new light, contrary, it is probable, to all he has been brought up to think and believe, but valid, and a way out of the decadence from which Whitehall has not been able to save our English country. To refuse this way out is no less than to surrender, whether in war or peace, to the forces of death (p. 2).

Eve Balfour (1899-1990) published *The Living Soil* in 1943, and that book led directly to the founding in 1946 of the Soil Association which has become the UK’s leading organics advocacy group (Brander, 2003). Balfour declared in the Introduction to her book that: “The reader will find that much of this book consists of quotations” (1943, p.10). Chapter 1 of Balfour’s book presents just one page of her own text before she inserts an

uninterrupted multi-page excerpt of Northbourne's *Look to the Land*, of his pages 14 through 21, intact and unchanged, and hence a substantial part of Balfour's first chapter is Northbourne's work repackaged. Despite her debt to Northbourne, Balfour's book did not adopt Northbourne's terminology of 'organic farming' and 'chemical farming', and her book is the poorer for that.

In England, as early as 1944 Massingham, in his book *The Natural Order*, described *Look to the Land* as "a biological classic" (dated 1944, p.17). Massingham informed his readers that in *Look to the Land*, "The salient questions in agriculture and civilisation are here lucidly expounded in a short book" (1945, p.172).

Writing from India, Wrench (1946) dedicated his book *Reconstruction by Way of the Soils: "To Lord Northbourne"* (p.2), and he stated in his Acknowledgements that: "Lord Northbourne's book was published in 1940, and it has been my frequent companion in the three years which I have taken in the writing of this book" (p.5).

Writing in Australia, in his *Soil, Food and Life*, Professor Stanton Hicks (1945) recommended *Look to the Land* and acknowledged Northbourne's work as a source of inspiration. Australian author Elyne Mitchell in her *Soil and Civilization* (1946), likewise acknowledged Northbourne and *Look to the Land*.

In the US, a multipage excerpt from *Look to the Land* appeared in *Bio-Dynamics*, the journal of the Bio-Dynamic Farming and Gardening Association, as "Let Us Get Back to Earth" (Northbourne, 1948). A footnote to the article described Northbourne as "a Bio-Dynamic farmer of Kent, England" (p.32). Ehrenfried Pfeiffer (1952) adopted Northbourne's bifurcation of agriculture into chemical versus organic. Pfeiffer was consistently a champion for biodynamic agriculture, nevertheless he followed Northbourne in adopting his framing of organics as the lead category, within which biodynamics sat as a specific implementation. Pfeiffer wrote: "Our definition of 'organic' is not the one of the chemist, but pertains to the modus of production by nature, not artificially or synthetically" (1983, p.17).

As Heckman observes: "In 1940, Northbourne published an influential book, *Look to the Land*, in which he elaborated on the idea of the farm as an 'organic whole'" (2006, p.146). *Look to the Land* was promptly taken up by like-minded agrarian authors, and it quickly appeared in the bibliographies of many such writers. Those bibliographies included those of: Viscount Lymington's *Alternative to Death* (1943); Rolf Gardiner's *England Herself* (1943); the reissue in 1947 of Ehrenfried Pfeiffer's *Soil Fertility, Renewal & Preservation* (1938); and John Blackburn's *Organic Husbandry, A Symposium* (1949). (Albert Howard's books were issued without bibliographies).

Northbourne, in *Look to the Land*, recommended the works of a prominent Quaker socialist, Samuel George Hobson (1870-1940). Hobson's works *Functional Socialism* (1936) and *Pilgrim to the Left - Memoirs of a Modern Revolutionist* (1938) appear in Northbourne's "Select Bibliography". Hobson, in his autobiography, *Pilgrim to the Left*, described Northbourne as a "friend" (p.42), while Northbourne described Hobson as a "courageous and original" thinker (1940a, p.145) and he devoted pages 145-147 of *Look to the Land* to praising Hobson's socialist ideals and ideas.

1.5 Views in *Look to the Land*

Northbourne's book criticized the prevailing direction of agriculture and he warned that:

Farming cannot be treated as a mixture of chemistry and cost accountancy, nor can it be pulled into conformity with the exigencies of modern business, in which speed, cheapness, and standardizing count most. Nature will not be driven. If you try, she hits back slowly, but very hard (pp.90-91).

He identified biodynamics as one proven method of practising organic farming:

... the 'bio-dynamic method', evolved in accordance with the recommendations of the late Dr Rudolf Steiner. The ... method has been highly developed in the course of some fifteen years' work on the Continent, and its effectiveness may be said to be proved, though its supporters would be the last to claim that there is no more to be learnt about it (p.173).

He was a strong and early critic of, what has more recently come to be called, 'food-miles':

It is ludicrous to cart stuff about all over the world, so someone can make a 'profit' out of doing so, when that stuff could much better be produced where it is wanted (p.104).

Part of Northbourne's message was that: "Health depends on nutrition" (p.52). He wrote of obesogenic eating long before its current entry into the public health debate:

One strange consequence of the prevailing loss of real quality in food is that a great many people, even relatively poor people, eat habitually far too much ... Malnutrition is rarely nowadays a quantitative phenomenon. The organism can never be satisfied with the fearsome, tainted, bleached, washed-out, and long-dead material with which it is supplied, and being unsatisfied calls out for more. In vain does man distend his stomach with an excess of such things - what he must have is not there (p.71).

Northbourne presented an early formulation of what is now termed the Precautionary Principle:

... if we waited for scientific proof of every impression before deciding to take any consequential action we might avoid a few mistakes, but we should also hardly ever decide to act at all. In practice, decisions about most things that really matter have to be taken on impressions, or on intuition, otherwise they would be far too late ... We have to live our lives in practice, and can very rarely wait for scientific verification of our hypotheses. If we did we should all soon be dead, for complete scientific verification is hardly ever possible. It is a regrettable fact that a demand for scientific proof is a weapon often used to delay the development of an idea (p.41).

Northbourne wrote against the view of the 'conquest of nature':

The idea of conquering nature is as sensible as if a man should try to cut off his own head so as to isolate his superior faculties ... We have invented or

imagined a fight between ourselves and nature; so, of course the whole of nature, which includes ourselves as well as the soil, suffers ... We have tried to conquer nature by force and by intellect. It now remains for us to try the way of love (pp.191-192).

Northbourne warned in *Look to the Land* that reversing the current tide would be the work of generations:

It is a task for generations of concentrated effort, slow and laborious, needing all available skill and resources ... A combination of cooperation and individual effort ... And those engaged will be fighting a rearguard action for many decades, perhaps for centuries (p.115).

2. Life before *Look to the Land*

Lord Northbourne had a privileged life. He was born Walter Earnest Christopher James, in London on 18 January 1896, as he stated on his Oxford University enrolment paperwork (James, 1919). He attended Sandroyd School and then five years at Eton College (ISIS, 1921). At Eton he won the "Lower Boy French Prize" in 1909, he was a "House Captain", he rowed in the House IV, and, in 1914, he rowed in the VIII and he was Eton's "Captain of the Boats" (Hatfield, 2008).

Walter James (he was 'Lord Northbourne' from December 1932) served in WWI (1914-1918) in the 2/4th Northumberland Fusiliers, from 15 December 1914, serving in Salonika (1917) and Palestine (1917-1919) with the rank of Lieutenant (Craig & Gibson, 1920).

2.1 Oxford University

On his return from the war, he matriculated at Oxford University, on 1 May 1919, listing, on his candidature form, his father's occupation as "Artist", declaring a London address, and Magdalen College as his Oxford University college (James, 1919). Magdalen College (pronounced locally as 'maudlin') was founded in 1458, is situated on the River Cherwell and is opposite the University of Oxford Botanic Garden (Tyack, 1998). Northbourne was a student at the School of Agriculture and Forestry of Oxford University and a resident at Magdalen College (1919-1921). He achieved a distinction in Agriculture in Trinity Term 1920 and he received his degree of BA Agriculture (Distinction) on 20 January 1921 (Petre, 2008).

Oxford University student magazine, *The Isis*, profiled James as a celebrity, presenting him as an "ISIS Idol" and declaring that: "he graduated with such success in the School of Agriculture that for these last two Terms he has been initiating awe-struck pupils into the mysteries of patent manures. He is, then, an accomplished agriculturalist" (ISIS, 1921, p. 3).

The reverse of James's Oxford student record card reads: "Farming about 1000 acres" (University of Oxford, c.1920). In the Magdalen College Register of 1922 his occupation is listed as "Lecturer, School of Rural Economy" and "farming", with his address as "Nettlebed, Oxfordshire" (Magdalen College, 1922, p.119). He was a lecturer in the School of Rural Economy, University of Oxford, from 1921 to 1923 (ISIS, 1921; Magdalen College, 1979).

James studied a shortened course at Oxford. This was a consequence of a University decree, approved by Convocation on 12 June 1917, whereby military service undertaken before matriculation was reckoned as equivalent to a number of terms of residence. Nine terms were usually required for an Oxford undergraduate degree, but for WWI returnees this was relaxed, and James studied for four terms (Petre, 2008).

James was a champion rower. He was a member of the Oxford University Boat Club (OUBC) VIII, 1920-1921 (Magdalen College, 1979). He was elected President of the OUBC in 1920 (ISIS, 1920). The Oxford student magazine *The Isis* stated that: "he is the backbone of the Varsity Eight, and would be of any Eight" (ISIS, 1921, p.3). The historian of the Magdalen College Boat Club, Roger Hutchins, described James' period, 1920-21, as "the Second Golden Era" for rowing at Magdalen (Hutchins, 1993, p.37).

Five members from Magdalen, including "Jimmy James (later Lord Northbourne)", and three rowers from Cambridge, competed in the 'Rowing Eights' event in the 1920 Olympics in Antwerp, Belgium. Hutchins reports that: "They even had to carry their boat two miles from Brussels station to the course a few days before the race" (Hutchins, 1993, p.37). The British Rowing Eight team returned with Olympic Silver medals (databaseOlympics.com, 2006).

2.2 Lord Northbourne

On the death of his father on 24 December 1932, James succeeded to the title as 4th Baron Northbourne (Burke, 1938; Magdalen College, 1934). His books and articles are henceforth authored as 'Lord Northbourne', and his letters are generally signed simply as 'Northbourne'. He was now entitled to a seat in the House of Lords.

It has been asserted that Northbourne did not take up his seat in the House of Lords (James, 2008), but that account is mistaken. The Journal of the House of Lords recorded that on Wednesday 20 June 1934: "L. Northbourne takes his seat. Walter Ernest Christopher Lord Northbourne sat first in Parliament after the death of his father, Walter John Lord Northbourne, his Lordship having first, at the Table, taken and subscribed the Oath, pursuant to the Statute" (House of Lords, 1934, Q3). Hansard records that Lord Northbourne first addressed the House of Lords on 11 July 1934 (Northbourne, 1934). He took the oath subsequently on two occasions (House of Lords, 1936, 1937) but made no further contribution.

Northbourne was the first President of the Economic Reform Club, London, 1936-1937. At the inaugural address on 15 May 1936 to the, then, Petition Club and seeking an enquiry into "the causes of Poverty and War", he signalled that the problems before them were systemic, and that "We have a long job before us". He told his audience of economic reformers that "the Club exists to help the monetary reform movement to present a united front", and he warned that: "The time to quarrel about the minutiae of our pet schemes is not yet" (in Rowe, 1944, p.8). In that first year the name evolved from the 'Petition Club' to the 'Economic Reform Club', before settling on the 'Economic Reform Club and Institute' (Rowe, 1944).

Northbourne was one of the authors included in *Three Addresses on Food Production in Relation to Economic Reform* published by the Economic Reform Club and Institute. The addresses were delivered on 19 March 1940, two months prior to the release of *Look to the Land*. Northbourne told his audience: "plants and animals, and the soil ... We and

they can, in fact, be considered as one organism” (Northbourne, 1940d, p.7). The “Who’s Who in the Economic Reform Club” stated that: “In addition to his activities on behalf of economic reform, Lord Northbourne’s principal interest has been in agriculture and food production” (Rowe, 1944, p.20).

Northbourne inherited the family estate in Kent (following his father’s death) and took up residence there. His address is then recorded as “Northbourne Court, Kent” (Magdalen College, 1934, p.186), and his occupation as “Farmer and landowner” (Magdalen College, 1939, p.176), and he spent the rest of his life residing there.

2.3 Wye College & Swanley Horticulture College

Northbourne had a long association with two agriculture colleges, Swanley Horticultural College and Wye College (aka South-Eastern Agricultural College). He was appointed a Governor of Wye College (established 1447) in 1925, and maintained this association for four decades. Northbourne was Chairman of the Governing Body of Swanley Horticultural College from 1938 until it amalgamated with Wye College in 1945. Swanley Horticultural College dates from 1889. It became a women’s college in 1902 (Morrow, 1984).

Art was a “lifelong pastime” for Northbourne (James, 2008, p.xviii). Already at Oxford, his interest in art was acknowledged, and he was described as “a great artist as well” (ISIS, 1921, p.3). The Principal of Wye College, Duncan Skilbeck, described Northbourne as “a painter of consummate skill whose pictures are a joy to live with” (quoted in Richards, 1994, p.215). Skilbeck’s reference was to the artworks by Northbourne in the Wye College art collection. On the present author’s visits in mid 2008 there were eight Northbourne watercolours displayed on the walls of the Northbourne Room at the College, four landscapes and four floral works; the College has since closed.

Northbourne’s son describes him as a biodynamic farmer (James, 2008). Rudolf Steiner had presented his *Agriculture Course* in 1924 at Koberwitz (Kobierzyce) and his teachings were developed into ‘biodynamic agriculture’ (Paull, 2011c). There were no British attendees at the Koberwitz course (Paull, 2011a), and Steiner did not present any agriculture lectures in Britain. Steiner did, however, present a two week conference at Manchester and Keble Colleges in Oxford in the summer of 1922, and this was concurrent with Northbourne’s time at Oxford (Paull, 2011e). The topic of the conference, “Spiritual Values in Education Social Life” (Mackenzie, 1922), addressed two of Northbourne’s own lifetime-enduring interests, education and spiritual values. The present author did not locate evidence that Northbourne and Steiner ever met, and the list of attendees of the Oxford Conference was not located, however, this was the one clear opportunity when the interests and geography of these two organics pioneers coincided, and such a meeting cannot be ruled out.

Two years after his Oxford conference, Steiner advised the attendees at his *Agriculture Course* at Koberwitz to test and develop his agriculture ideas to a stage suitable for publication. It was Ehrenfried Pfeiffer who brought this instruction to fruition with the publication of his book *Bio-Dynamic Farming and Gardening* (1938) which appeared in five languages (Paull, 2011c). In the same year, Northbourne published an article on world economy, alongside articles by biodynamic and anthroposophic authors Lili Kolisko, Eugene Kolisko, and Max Stibbe, in *The Present Age*, a journal edited by leading anthroposophist Walter Johannes Stein (Northbourne, 1938c).

2.4 Betteshanger Biodynamic Conference

Northbourne met Pfeiffer several times in 1938, in Kent and at Viscount Lymington's Farleigh Wallop estate (Northbourne, 1938a; Portsmouth, 1965). In January the following year Northbourne travelled to Switzerland to meet with Pfeiffer to organize a Biodynamics conference in Britain (Northbourne, 1939b). The outcome was that Northbourne hosted the *Betteshanger Summer School and Conference on Bio-Dynamic Farming* (1-9 July 1939) at his estate in Kent.

Leading biodynamics practitioners and scholars of the day, Ehrenfried Pfeiffer, Otto Eckstein, and Hans Heinze, travelled from Switzerland and the Netherlands to Betteshanger, on Northbourne's estate in Kent, to present a nine day practical course for British farmers.

Although much of the work of Rudolf Steiner, Anthroposophy and associated initiatives, including biodynamic agriculture, had initially found fertile ground in Germany, the rise of Adolf Hitler and the Nazis had created a hostile environment there, culminating in persecutions, imprisonments, closures and bans. The German Anthroposophical Society was banned in the territory of the German Reich in 1935 as subversive to the ideals of National Socialism. Hitler had ranted against Steiner and Anthroposophy as early as 1921. Biodynamic products were banned in Germany in 1933. Waldorf schools were prohibited from accepting new students in 1936, and were finally closed in 1941 (Werner, 1999). The development and proliferation of biodynamics had been co-ordinated from Switzerland from the outset (Paull, 2011f) and thus it was that Northbourne had turned to Pfeiffer in Switzerland when he set out to organise and host a biodynamics conference.

An account of the Betteshanger Conference appeared in the *News Sheet of the Bio-Dynamic Method of Agriculture*. Of the course, Northbourne wrote: "It is extraordinary how many nice points invariably arise when a few are gathered together to perform any of the absorbing tasks associated with bio-dynamic farming and gardening" (Northbourne, 1939a, p.10). Viscount Lymington (writing later as the Earl of Portsmouth) described the Betteshanger Summer School: "It was one of the most exciting weeks I ever spent. We would work part of the day on his bio-dynamic methods, and then both for recreation and refreshment Pfeiffer would lecture to us in the evenings" (Portsmouth, 1965, p.84).

The Betteshanger Conference ended on 9 July, 1939, Britain declared war on 1 September, and the opportunity for further personal meetings with Pfeiffer was lost as travel opportunities were curtailed and Pfeiffer subsequently moved to the USA. When Northbourne's *Look to the Land* appeared, it was without any of the trappings of Anthroposophy or biodynamics, although the book did single out Steiner's biodynamic methods for praise, "its effectiveness may be said to be proved" (p.173), but without being prescriptive or exclusionary.

2.5 Misconceptions

It has been asserted that Northbourne was a "prominent disciple" of Albert Howard (Conford, 2001, p.72) but that claim is mistaken. These were two very different personalities travelling quite different life paths, and Northbourne was an independent thinker. In his book *Look to the Land*, Northbourne refers to "the 'Indore' process, developed from ancient Indian practices and introduced into this country by Sir Albert Howard" (Northbourne, 1940a, p.173). His book's bibliography cites Howard, including

the 1931 Howard & Wad book advocating composting, *The Waste Products of Agriculture*. Northbourne told a Kinship in Husbandry meeting held at Merton College, Oxford University, in 1942, of “The necessity of maintaining fertility by organic manuring alone” (Northbourne, 1942a, p.5). He nominated three methods for achieving this, including: “The second category I call the Indore-Hunza-Chinese method - Chinese for short”; and “the third is the Bio-dynamic method of Rudolf Steiner” (p.6). By characterising Howard’s ‘Indore’ method as ‘Chinese’, Northbourne implicitly signals what Louise Howard (1954) later admitted, namely that the so-called Indore method of composting was derived from descriptions of long established Chinese practices. Such practices were described and illustrated in King’s (1911) US-published book *Farmers of Forty Centuries, or Permanent Agriculture in China, Korea and Japan* which was first published in Britain in 1927 (Paull, 2011d). Northbourne stated that: “You will see that I am prejudiced in favour of the B-D [Bio-Dynamic] method, and if asked ‘how best can our ideas be expressed in terms of farm management ideas’ could only answer accordingly; though I don’t pretend to understand it fully” (Northbourne, 1942a, p.6). Both Northbourne and Howard, along with Ehrenfried Pfeiffer and Viscount Lymington (Gerard Wallop), participated in the development of the Farleigh Experiment during 1938 (Northbourne, 1938b; Paull, 2011b). However, for Northbourne’s Betteshanger Conference, presented in Kent in 1939, Howard was very intentionally excluded by Northbourne (Paull, 2011b).

A false claim has been made that “Lord Northbourne may have belonged for a time to the British Union of Fascists” (Conford, 2002, p.236). There is not a scintilla of evidence to substantiate such an assertion, and it is a claim that is incongruent with Northbourne’s life and character, his life’s work, and his writings. In lieu of evidence for his curious assertion, Conford uses a novel and dubious ‘methodology’. He cites an obscure 1965 work of fiction which he states features a character named “Captain Bohun-Borsholder”, of which name, Conford declares: “all the letters of ‘Northbourne’ can be found in the full name” (2002, p.241). As a novel research ‘method’ this is more worthy of a party-game rather than historiography, and it lacks any merit or credibility.

The term ‘organic school’ has been used by some writers (e.g. Conford, 2001) as a collective description for a diversity of individuals and/or groups with agrarian interests pre-WWII. The ‘organic’ in such a nomenclature needs to be read as a post hoc construction and attribution which adopts Northbourne’s ‘organic’ coinage of 1940. Certainly, before that date, recipients of the descriptor did not use it to describe themselves, and would not have recognised it. Thus the use of ‘organic school’ to describe people, events and times pre-*Look to the Land* needs to be read as anachronistic and hence with caution.

3. Life after *Look to the Land*

Look to the Land was a turning point in Northbourne’s life, and as the book took a trajectory that was perhaps predictable, his own life took a path that would not have been anticipated. His agricultural ideas promptly were taken up internationally, while he himself embraced new religio-philosophical pursuits.

In New York, the publishing entrepreneur Jerome Rodale founded the periodical *Organic Farming and Gardening* in 1942, the world’s first specifically ‘organic’ periodical. In Sydney, the Australian Organic Farming and Gardening Society (AOFGS) was founded in 1944 to promote organic agriculture, the world’s first specifically ‘organic’ association

(Paull, 2008, 2013a). In Britain, Eve Balfour quoted liberally from *Look to the Land* in her own book, *The Living Soil* (1943), which book led to the founding of the Soil Association in 1946 (Douglas, 1946). Northbourne was invited to the founders' meeting, in London, of the "Proposed Soil Association", but he sent his apologies (Balfour, 1945) and he appears to have played no role in the development of that association.

3.1 Perennialism

Northbourne was "a shy man of culture and sensitivity" (Richards, 1994, p.215), and thoughtful and contemplative intellectual pursuits suited him more than an activist role. *Look to the Land*, with its advocacy of the holistic outlook, led to an approach from Marco Pallis who introduced Northbourne to the Perennialist School of philosophy, also known as the Traditionalist School (James, 2008). According to Aldous Huxley's *The Perennial Philosophy* (1946), the German philosopher and mathematician Gottfried Leibnitz (1646-1716) coined the phrase "Philosophia Perennis", while Schmitt (1966) dates the term back to Agostino Steuco's 1540 book, *De Perenni Philosophia*. The perennialists are in pursuit of transcendental truths, what might be called 'meta-ecumenical' wisdom. Northbourne's perennialist circle included: Marco Pallis, a convert to Tibetan Buddhism; Titus Burckhardt, a convert to Islam; René Guénon, a Sufi scholar living in Egypt; and Frithjof Schuon who wrote on Islam and Sufism.

As a schoolboy, Northbourne had already demonstrated his skills as a linguist, winning school awards in Latin and Greek at Sandroyd and in French at Eton (Hatfield, 2008; ISIS, 1921). The embrace of Northbourne and the perennialist philosophers of his day was, in many senses, the drop of water finding its way to the ocean. His son described it as an "event which changed his life" (James, 2008, p.xxii).

Meeting the perennialists led to Northbourne translating, from French to English, three substantial books on metaphysical topics by the leading perennialist philosophers of his day. Those books were: René Guénon's *The Reign of Quantity and the Signs of the Times* (1953); Frithjof Schuon's *Light on the Ancient Worlds* (1965); and Titus Burckhardt's *Sacred Art in East and West: Its Principles and Methods* (1967).

Northbourne published nine papers in the perennialist journal *Studies in Comparative Religion* in the years 1967 to 1974 (1967, 1969a, 1969b, 1971, 1972, 1973a, 1973b, 1974a, 1974b). In its predecessor, *Tomorrow, The Journal of Parapsychology, Cosmology and Traditional Studies*, he published at least one paper, in which he advised "see God in all things" (1964b, p.274), and one book review (1964a).

He published two further books, *Religion in the Modern World* (1963) and *Looking Back on Progress* (1970b). Of these two books, Lings & Minnaar state that: "His books *Religion in the Modern World* and *Looking Back on Progress* are considered by many to be amongst the most accessible introductions to the 'perennialist' or 'traditionalist' outlook, and exercised a considerable influence on E. F. Schumacher" (2007, p.333). Schumacher (1911-1977) was elected President of the Soil Association in 1970 and during his tenure with the Soil Association he published his influential book *Small is Beautiful: A study of economics as if people mattered* (Payne, 1971; Schumacher, 1973).

A recently published perennialist anthology, *The Underlying Religion: An introduction to the Perennial Philosophy*, is a collection of twenty four essays, of which three are authored by Northbourne (Lings & Minnaar, 2007). The title describes Perennialism as

the “underlying religion” and is congruent with Northbourne’s translation of *Light on the Ancient Worlds*, in which Schuon wrote of: “the ‘invisible’ or ‘underlying’ religion, the religio perrenis” (1965, p.143).

While Rudolf Steiner trod the path from metaphysics to agriculture (Wachsmuth, 1989), Northbourne traversed the same path, but in the opposite direction, although he never lost sight of agriculture (and of course, similarly, Steiner never lost sight of metaphysics). In Northbourne’s second book *Religion in the Modern World*, he wrote of “the fact that there is strictly speaking nothing ... that has nothing to do with Religion, simply because there is nothing that has nothing to do with God” (Northbourne, 1963, p.18).

3.2 Food & Agriculture

During WWII, Northbourne was Chairman of the County War Agriculture Committee for Kent (James, 2008; Rowe, 1944). Before the war Britain had been heavily reliant on imported food. The objective of these committees was to boost local food production at a time when Allied shipping was under constant threat of attack and many ships with cargo and crew were lost. Northbourne had addressed the topic “Where is the food to come from” in an address to the Economic Reform Club and Institute early in the war, raising his concerns that 56% of Britain’s food “at present” is imported (Northbourne, 1940d, p.3). Britain achieved dramatic increases in domestic food production during WWII, with the area under total tillage increasing 66%, achieving a wheat production increase of 83%, barley of 96%, and potatoes of 102%, in the period 1939-1944 (Harkness, 1945).

At one point during the war, Northbourne made representations for assistance on behalf of a German refugee family (Northbourne, 1942b). He participated through the war years in an informal agrarian group called the Kinship in Husbandry (1941-1947) which held meetings in Oxford and London (Paull, 2011b). Another wartime agrarian pursuit was an effort, ultimately unsuccessful, to have Ehrenfried Pfeiffer visit and relocate to Britain (Paull, 2011b).

Northbourne revisited agricultural topics throughout his life. He contributed a chapter “Health and Fertility” to Massingham’s *The Natural Order* published in 1945. He wrote there that: “the continued existence of all living creatures, man included, depends on the state of the soil which we know as fertility” (Northbourne, 1945, p.111). He asserted that: “soil fertility and health are not two things but one” (p.116). He lamented that for the reform of agriculture “the knowledge cannot be found within what is now the orthodox school of agricultural thought” (p.118). He declared that: “We must acquire a new sense of purpose, we must achieve a spiritual reorientation” (p.118). He observed that “a revolt is beginning” against industrial and chemical agriculture, and he viewed this as a “spiritual struggle” (p.119). He reiterated his earlier warning from *Look to the Land* that: “the strength of the forces that oppose it is enormous, so that the struggle must be long and hard” (p.119).

Northbourne wrote, in 1949, in praise of “a valley in France where the traditional methods of cultivation have largely survived, and where the crops produced form a striking commentary on more recent farming methods” (p.4). The following year he contributed the ‘Foreword’ to Philip Oyley’s book *The Generous Earth* (Northbourne, 1950).

3.3 Wye College

Northbourne was Chairman of the Governing Body of Wye College from 1946 (Shrubsole, 1947). He was appointed a Governor of the College in 1925 and he retired as Chairman in 1965 (Richards, 1994). Wye College was a specialist agricultural college affiliated with the University of London, located in the village of Wye in Kent, and it possessed substantial adjacent farmland. In 2000 Wye College ceased to be an independent college of the University London, and it amalgamated with Imperial College, London (Burnham, 2007). For Wye College, this proved to be a fatal decision as Imperial closed the Wye campus at the end of 2008, and some years later a new tenant is still being sought by the property agent Savills (Jovanovic, 2014).

As the Chairman of the Governing Body, Northbourne presided over Wye College's 500th anniversary commemoration, 1447-1947, writing on that occasion:

Agriculture and Horticulture are the most ancient of the arts and sciences, and their practice is still in the main founded on immemorial tradition; and rightly so, for we cannot afford to discard the accumulated wisdom of our forefathers ... education means more than a mere absorption of technical knowledge, and that technical training need not be incompatible with the attainment of loftier aims (1947, p.3).

On Northbourne's retirement as Governor of Wye College, Hardy paid tribute to Northbourne's "long and distinguished record of voluntary service" in agriculture, education and agricultural education from 1925 to 1965 (1965, p.20). Acknowledging Northbourne's role at Wye College, Skilbeck recorded that: "He was a member of the Governing Body for forty years and its Chairman and Provost from 1946 to 1965" (1983, p.78). Skilbeck shared his fond memories of Northbourne:

... we listened spellbound to his wise and so carefully considered addressees ... it is more for his skills and his deep and lasting interests in so varying and widely ranging fields that he will be remembered with such affection ... He was a man of great vision, decisiveness, quiet humour and kindly authority ... one who brought to every facet of his widely ranging life a rare sense of harmony and balanced purpose. Above all he was a widely read man of very considerable scholarship with deep philosophical understanding ... He belonged essentially to himself though sharing with his intimate friends his search for truth. He was a man of great faith and rare belief who saw 'through a glass darkly' so much more than is given to most of us to see and experience (1983, pp.78-79).

After forty years tenure on the Governing Board of Wye College, the agricultural arm of the University of London, and a quarter century after *Look to the Land*, Northbourne's chosen Fellowship Lecture topic at Wye College was "Religion and Science". He sought to stake out some intellectual ground for metaphysics, declaring to his audience that: "The rightful domain of science is that of the observable, and surely it ought to be enough, for it is inexhaustible, though so very far from being everything" (Northbourne, 1965, p.6).

3.4 Looking Back on Progress

Northbourne's third and final book, *Looking Back on Progress*, was published in 1970. Chapter 6 of this new book was *A Glance at Agriculture* which had first appeared the previous year in the perennialist journal *Studies in Comparative Religion* (1969a). Thirty years had, by then, elapsed since *Look to the Land*. The founding of the International Federation of Organic Agriculture Movements (IFOAM) in Paris was still two years into the future and was not a foreseen event (Paull, 2010).

Thirty years after *Look to the Land*, Northbourne observed that the organic movement of the day was still alight but not ablaze:

A few people have tried and are still trying to produce food without the help of chemical fertilizers and sprays, and a few people - perhaps a growing number - prefer to buy food thus produced, and who dares to say that they are wrong? These counter-movements carry very little weight at present; a large majority of people are not interested and much prefer to swim with the stream, while dismissing the objectors to food grown by modern methods as being mere faddists (Northbourne, 1970b, p.80).

In *A Glance at Agriculture* (1970) he commented on the quickening pace of agricultural research and the inadequacy of safety testing regimes:

There is no chance at all of assessing or anticipating long-term effects, simply because they can only be assessed at the end of a long term; there is simply not time to take more than the mostly obvious and immediate effects into account. The one thing we know about these long-term changes is how complex and unpredictable they are, and that they are often irreversible (1970, p.85).

Northbourne stated that "we are entitled to expect of our food something better than harmlessness" (1970, p.79). He was critical of "changes brought about in agriculture by the rise to dominance of the modern industrial outlook" (p.77). An issue specifically raised was: "the substitution of chemical methods for older methods, both for the maintenance of productivity of the soil and for combatting diseases, weeds and pests" (p.78). He also took exception to "the widespread practice of adding preservatives, and substitutes for perishable or costly ingredients, to a growing range of foods, to an extent that amounts to a more or less serious adulteration" (pp.78-79).

A Glance at Agriculture went beyond *Look to the Land* in three important ways. Northbourne added the "factory farming" of animals as an issue of concern in the emerging practices of modern food production. Anticipating genetic modification, and perhaps nanotechnology, Northbourne sounded two new warnings. He cautioned that: "genetics ... offers possibilities of the artificial production of what would be in effect new species of plants and animals" (p.80), and he warned of: "how potentially dangerous to living creatures experiments on the structure of atoms can be" (p.85).

Looking Back on Progress was issued in 1970 in a Turkish language version and in an English-language version published in Pakistan in 1983 (Northbourne, 1970a, 1970c). Both these editions identify the author as "Lord Northbourne (Sidi Nuh)". The name in parentheses is an Arabic nom de plume. Nuh is the Arabic term for Noah; and Sidi is an

Arabic honorific title approximating to 'Lord', 'Sir', 'learned scholar', or 'from the line of the prophet' (Debarh, 2009). According to Professor Seyyed Nasr the name 'Sidi Nuh' was given to Lord Northbourne by "his Sufi master" (Nasr, 2009).

Concluding Remarks

Northbourne lived to see his framing of agriculture, as 'organic versus chemical farming', proliferate and take root internationally. When Blackburn issued his *Organic Husbandry, A Symposium* (1949), he reported 'organic' books, authors, associations and periodicals from around the world.

In 1972 five organics advocacy groups came together in Versailles, France, to found the International Federation of Organic Agriculture Movements (IFOAM), the umbrella organisation for the international advocacy and coordination of the organics sector (Paull, 2010). IFOAM have recently articulated four principles of organic agriculture, namely: Care, Health, Environment, and Health (IFOAM, 2006) (suggested mnemonic: CHEF). Each of these principles found expression in *Look to the Land* (see for example p.2; pp. 58-59; p.83; pp.141-142; p.149).

The organics meme has articulated into a US\$64 billion per annum industry, with statistics on organic agriculture are now reported from 164 countries (Willer & Lernoud, 2014). In the process of this proliferation, 'organic' has coupled with fibres, floristry, forestry, and cosmetics, and this process of extension, coupling, and diffusion is actively continuing. Leadership in organic agriculture is now widely distributed around the globe (Paull, 2012).

Organic agriculture has evolved to move beyond the exclusions of synthetic fertilisers and pesticides, to also exclude genetically modified organisms (GMOs), food irradiation, cloned animals, and nanomaterials (e.g. BFA, 2010).

Northbourne's holistic, non-dualist, view retains its vitality and salience:

The world with its inhabitants is multiple, but by virtue of its origin in the divine Unity it constitutes a unity. Whatever may effect one part effects the whole, and whatever effects the whole effects every part (Northbourne, 1970b, p.87).

Northbourne's three books are all now back in print, and a fresh compilation of his writings, *Of the Land & the Spirit: The Essential Lord Northbourne on Ecology and Religion* (James & Fitzgerald, 2008) makes a selection of his wisdom readily accessible once again.

Acknowledgements

Much of the research for this paper was conducted while the author was a visiting academic at the Institute of Social and Cultural Anthropology, University of Oxford, whose kind hospitality is gratefully acknowledged. The author also acknowledges the generous assistance and kindness of many other institutions, librarians and archivists and individuals in the pursuit of the present research, including: the Oxford University Archives, Oxford; the Bodleian Library, Oxford; Magdalen College Archives, Oxford; Wye College Archives, Wye; King's College, London; Eton College Archives, Windsor; the Hampshire Record Office, Winchester; the British Library, London; the Goetheanum

Archives, Dornach; the Biodynamic Association, Stroud; the Soil Association, Bristol; and the present Lord Northbourne (Walter James' son Christopher James).

References

- Advertiser. (1940a). Books Received: General. Adelaide: The Advertiser. 13 July, p. 4.
- Advertiser. (1940b). The Land Problem: 'Look to the Land' by Lord Northbourne. Adelaide: The Advertiser. 24 August, p. 10.
- Balfour, E. B. (1943). *The Living Soil: Evidence of the importance to human health of soil vitality, with special reference to post-war planning*. London: Faber and Faber.
- Balfour, E. B. (1945). Proposed Soil Association, Founders' Meeting. London: 5 pp. Typescript dated 27 June of Meeting 12 June; Soil Association Archives, Bristol, UK.
- BFA. (2010). *Australian Certified Organic Standard 2010 - Version: 1.0*. Brisbane: Biological Farmers of Australia (BFA).
- Blackburn, J. S. (Ed.). (1949). *Organic Husbandry, A Symposium*. London: Biotechnic Press.
- Brander, M. (2003). *Eve Balfour: Founder of the Soil Association & The Voice of the Organic Movement, A Biography*. Haddington, UK.
- Burckhardt, T. (1967). *Sacred Art in East and West: Its Principles and Methods* (Lord Northbourne, Trans.). London: Perennial Books.
- Burke, B. (1938). *Burke's Peerage, Baronetage and Knightage* (Coronation Honours (96th Edition)). London: Shaw Publishing Co.
- Burnham, P. (2007). *The College at Wye: A Historical Guide*. Wye: Wye Historical Society.
- Charles, D. (2005). *Master Mind: The rise and fall of Fritz Haber, the Nobel laureate who launched the age of chemical warfare*. New York: Ecco, HarperCollins Publishers.
- Conford, P. (2001). *The Origins of the Organic Movement*. Edinburgh: Floris Books.
- Conford, P. (2002). Finance versus Farming: Rural Reconstruction and Economic Reform, 1894-1955. *Rural History*, 13(2), 225-241.
- Craig, E. S., & Gibson, W. M. (Eds.). (1920). *Oxford University Roll of Service*. Oxford: Clarendon Press, Oxford University Press.
- databaseOlympics.com. (2006). 1920 Summer Olympics, Antwerp, Belgium, Rowing: www.databaseOlympics.com.
- Debbbarh, E. H. (2009). personal communication. Sufi scholar: The Tariqa Tijaniyya.
- Douglas, F. C. R. (1946). *Memorandum and Articles of Association of The Soil Association, Ltd*. 12 pp.; London: F. C. R. Douglas, Solicitor.
- Gardiner, R. (1943). *England Herself: Ventures in Rural Restoration*. London: Faber and Faber Ltd.
- Guénon, R. (1953). *The Reign of Quantity and the Signs of the Times* (Lord Northbourne trans. from the 1945 French original). London: Luzac & Company.
- Hammerton, J. (Ed.). (1940). *The War Illustrated* v.3 No.45. London: The War Illustrated.
- Hardy, E. (1965). The Right Hon. Lord Northbourne. *Wye: The Journal of the Agricola Club and Swanley Guild*, 6(2), 20-21.
- Harkness, D. A. E. (1945). *A Tract on Agricultural Policy*. London: P. S. King and Staples Limited.

- Hatfield, P. (2008). Personal communication. College Archivist, Eton College: Windsor.
- Heckman, J. (2006). A history of organic farming: Transitions from Sir Albert Howard's 'War in the Soil' to USDA National Organic Program. *Renewable Agriculture and Food Systems*, 21(3), 143-150.
- Hicks, C. S. (1945). *Soil, Food and Life* (The Annie B. Cuning Lectures on Nutrition, No. 3, University of Melbourne). [Melbourne]: The Royal Australasian College of Physicians.
- Hobson, S. G. (1936). *Functional Socialism*. London: Stanley Nott.
- Hobson, S. G. (1938). *Pilgrim to the Left - Memoirs of a Modern Revolutionist*. London: Edward Arnold & Co.
- House of Lords. (1934). Die Mercurii, 20° Junii 1934. *Journals of the House of Lords*, CLXVI(Q 3).
- House of Lords. (1936). 21° Januarii 1936. *Journals of the House of Lords*, CLXVIII, 52.
- House of Lords. (1937). Die Jovis, 25° Februarii 1937. *Journals of the House of Lords*, CLXIX, 126.
- Howard, A., & Wad, Y. D. (1931). *The Waste Products of Agriculture: Their Utilization as Humus*. Bombay: Humphrey Milford, Oxford University Press.
- Howard, L. E. (1954). *Sir Albert Howard in India*. Emmaus, PA: Rodale Press.
- Hutchins, R. (1993). *Well Rowed Magdalen: A History of Magdalen College Boat Club 1859-1993*. Oxford: Magdalen College.
- Huxley, A. (1946). *The Perennial Philosophy*. London: Chatto & Windus.
- IFOAM. (2006). *Principles of Organic Agriculture*. Bonn: International Federation of Organic Agriculture Movements (IFOAM).
- ISIS. (1920). *Varsity Sport*. *The Isis* (558), 9.
- ISIS. (1921). ISIS Idol: W.E.C. James (Magdalen) (President, O.U.B.C., 1920-1921). *The Isis* (556), 3.
- Jackson, C. (1974). J. I. Rodale: Apostle of Nonconformity. New York: Pyramid Books.
- James, C. (2008). Introduction. In C. James & J. A. Fitzgerald (Eds.). *Of the Land & the Spirit: The Essential Lord Northbourne on Ecology and Religion*. Bloomington, IN: World Wisdom.
- James, C., & Fitzgerald, J. A. (Eds.). (2008). *Of the Land & the Spirit: The Essential Lord Northbourne on Ecology and Religion*. Bloomington, IN: World Wisdom.
- James, W. E. C. (1919). MS handwritten form: Candidate for Matriculation. Oxford: University of Oxford Archives, UR1/1/71.
- Jovanovic, C. (2014). *Wye Campus*. London: Imperial College.
- King, F. H. (1911). *Farmers of Forty Centuries, or Permanent Agriculture in China, Korea and Japan* (Edited by Professor J.P. Bruce). Madison, Wisconsin: Mrs. F. H. King.
- Koepf, H. H. (1991). *Ehrenfried Pfeiffer: Pioneer in Agriculture and Natural Sciences*. Kimberton, USA: Bio-Dynamic Farming and Gardening Association Inc.
- Lings, M., & Minnaar, C. (Eds.). (2007). *The Underlying Religion: An introduction to the Perennial Philosophy*. Bloomington, IN: World Wisdom, Inc.
- Lockeretz, W. (Ed.). (2007). *Organic Farming: An International History*. Wallingford, UK: CABI.
- Lymington, Viscount (1943). *Alternative to Death: The Relationship between Soil, Family and Community*. London: Faber and Faber.

- Mackenzie, M. (1922). *Spiritual Values in Education & Social Life* (Conference programme; 8 pp.). Oxford: Oxford Holiday Conference, August 15th to 29th.
- Magdalen College. (1922). *The Magdalen College Register (1922)*. Oxford: Magdalen College, Oxford University.
- Magdalen College. (1934). *The Magdalen College Register (1934)*. Oxford: Magdalen College, Oxford University.
- Magdalen College. (1939). *The Magdalen College Register (1939)*. Oxford: Magdalen College, Oxford University.
- Magdalen College. (1979). *The Magdalen College Register (1979) (Seventh issue)*. Oxford: Magdalen College, Oxford University.
- Massingham, H. J. (1941). Introduction. In H. J. Massingham, *England and the Farmer* (pp. 1-11). London: B. T. Batsford.
- Massingham, H. J. (1944). Introduction. In H. J. Massingham, *The Natural Order: Essays in the Return to Husbandry* (1945, pp. 1-19). London: J.M. Dent & Sons.
- Massingham, H. J. (Ed.). (1945). *The Natural Order: Essays in the Return to Husbandry*. London: J.M. Dent & Sons.
- Mitchell, E. (1946). *Soil and Civilization*. Sydney: Angus and Robertson.
- Morrow, E. (1984). *A History of Swanley Horticultural College*. Wye, Kent.
- Nasr, S. H. (2009). personal communication 8/7/2009. Washington: George Washington University.
- Northbourne, Lord. (1934). *School-Leaving Age*. Hansard, 93, 484-486.
- Northbourne, Lord. (1938a). MS handwritten letter 19/11/1938 ("Dear Lymington"; 19/11/1938; 2pp; 15M84/F209/4, Archives, Hampshire Record Office, Winchester). Northbourne Court, Deal, Kent.
- Northbourne, Lord. (1938b). MS typewritten letter 2/10/1938 ("Dear Lymington"; 1p; 15M84/F209/8, Archives, Hampshire Record Office, Winchester). Northbourne Court, Deal, Kent.
- Northbourne, Lord. (1938c). *A Plain Approach to World Economy*. *The Present Age*, May, 3(5), 51-59.
- Northbourne, Lord. (1939a). *The Betteshanger Summer School*. *News Sheet of the Bio-Dynamic Method of Agriculture*, 9, 8-11.
- Northbourne, Lord. (1939b). MS signed typescript letter 25/1/1939 ("Dear Lymington"; 25/1/1939; 2pp; 15M84/F209/3, Archives, Hampshire Record Office, Winchester). Northbourne Court, Deal, Kent.
- Northbourne, Lord. (1940a). *Look to the Land*. London: Dent.
- Northbourne, Lord. (1940b). *Look to the Land (Club edition)* ("eleventh of the Basis Books programme and is sold to members only"; "by arrangement with J. M. Dent & Sons Ltd"). London: Basis Books.
- Northbourne, Lord. (1940c). *Look to the Land (Second edition)* ("Second, revised special edition"; 2003). Hillsdale, New York: Sophia Perennis.
- Northbourne, Lord. (1940d). *Where is the food to come from? In Three Addresses on Food Production in Relation to Economic Reform* (pp. 3-9). London: The Economic Reform Club and Institute.

- Northbourne, Lord. (1942a). Farm Management (Fertility and Health) (A 'Kinship in Husbandry' meeting; Oxford; 1/3/1942; pp.4-7; Typescript; Bryant E51, Liddell Hart Centre for Military Archives, Kings College, London). Merton College, Oxford.
- Northbourne, Lord. (1942b). MS typewritten letter 21/1/1942 ("My dear Gerard"; 1p; 15M84/F240/14, Archives, Hampshire Record Office, Winchester). Coldharbour, Northbourne Court, Deal, Kent.
- Northbourne, Lord. (1945). Health and Fertility. In H. J. Massingham, *The Natural Order: Essays in the Return to Husbandry by Fourteen Writers* (pp. 111-119). London: J.M. Dent & Sons.
- Northbourne, Lord. (1947). *Wye College 1447-1947*. Wye: Wye College.
- Northbourne, Lord. (1948). Let Us Get Back to Earth. *Bio-Dynamics*, 7(1), 31-32.
- Northbourne, Lord. (1949). Peasant Farming in the Dordogne Valley. Wye, *The Journal of the Wye College Association*, 1(2), 4-8.
- Northbourne, Lord. (1950). Foreword. In P. Oyler (Ed.), *The Generous Earth* (pp. 9-15). London: Hodder and Stoughton.
- Northbourne, Lord. (1963). *Religion in the Modern World*. London: J. M. Dent & Sons.
- Northbourne, Lord. (1964a). Book Reviews: *Physique Moderne et Realite* by Maurice Ollivier, Les Editions du Cédre, Paris. *Tomorrow, Journal of Parapsychology, Cosmology and Traditional Studies*, 12(4), 329-331.
- Northbourne, Lord. (1964b). Pictures of the universe. *Tomorrow, Journal of Parapsychology, Cosmology and Traditional Studies*, 12(4), 267-278.
- Northbourne, Lord. (1965). Religion and Science (Fellowship Lecture, Occasional Publication No. 13). Wye, Kent: Wye College, London University.
- Northbourne, Lord. (1967). With God all things are possible. *Studies in Comparative Religion* 1(3), 99-104.
- Northbourne, Lord. (1969a). A Glance at Agriculture. *Studies in Comparative Religion*, 3(1), 13-27.
- Northbourne, Lord. (1969b). Religion and Science. *Studies in Comparative Religion*, 3(4), 225-238.
- Northbourne, Lord. (1970a). *İlerlemeye Farklı Bir Bakış* (Turkish language edition of *Looking Back on Progress*; 1980; Trans Deniz Özer). Istanbul: İnsan Yayınları.
- Northbourne, Lord. (1970b). *Looking Back on Progress*. London: Perennial Books.
- Northbourne, Lord. (1970c). *Looking Back on Progress* (limited edition) (1983). Lahore, Pakistan: Suhail Academy.
- Northbourne, Lord. (1971). Intellectual Freedom. *Studies in Comparative Religion*, 5(1), 34-45.
- Northbourne, Lord. (1972). Chance. *Studies in Comparative Religion*, 6(1), 22-30.
- Northbourne, Lord. (1973a). A note on Truth, Beauty and Goodness. *Studies in Comparative Religion*, 7(2), 107-112.
- Northbourne, Lord. (1973b). The Survival of Civilization. *Studies in Comparative Religion*, 7(1), 21-30.
- Northbourne, Lord. (1974a). A Cross Awry. *Studies in Comparative Religion*, 8(2), 89-95.
- Northbourne, Lord. (1974b). The New Eschatology. *Studies in Comparative Religion*, 8(1), 33-39.
- Paull, J. (2006). The farm as organism: the foundational idea of organic agriculture. *Journal of Bio-Dynamics Tasmania*, (80), 14-18.

- Paull, J. (2008). The lost history of organic farming in Australia. *Journal of Organic Systems*, 3(2), 2-17.
- Paull, J. (2010). From France to the World: The International Federation of Organic Agriculture Movements (IFOAM). *Journal of Social Research & Policy*, 1(2), 93-102.
- Paull, J. (2011a). Attending the first organic agriculture course: Rudolf Steiner's Agriculture Course at Koberwitz, 1924. *European Journal of Social Sciences*, 21(1), 64-70.
- Paull, J. (2011b). The Betteshanger Summer School: Missing link between biodynamic agriculture and organic farming. *Journal of Organic Systems*, 6(2), 13-26.
- Paull, J. (2011c). Biodynamic Agriculture: The journey from Koberwitz to the World, 1924-1938. *Journal of Organic Systems*, 6(1), 27-41.
- Paull, J. (2011d). The making of an agricultural classic: Farmers of Forty Centuries or Permanent Agriculture in China, Korea and Japan, 1911-2011. *Agricultural Sciences*, 2(3), 175-180.
- Paull, J. (2011e). Rudolf Steiner and the Oxford Conference: The birth of Waldorf education in Britain. *European Journal of Educational Studies*, 3(1), 53-66.
- Paull, J. (2011f). The secrets of Koberwitz: The diffusion of Rudolf Steiner's Agriculture Course and the founding of Biodynamic Agriculture. *Journal of Social Research & Policy*, 2(1), 19-29.
- Paull, J. (2012). Organics Olympiad 2012: Global Indices of Leadership in Organic Agriculture. *Organic News*, 26 July, 2 August, 9 August.
- Paull, J. (2013). A history of the organic agriculture movement in Australia. In B. Mascitelli & A. Lobo (Eds.). *Organics in the Global Food Chain* (pp. 37-60). Ballarat: Connor Court Publishing.
- Payne, V. (1971). *A History of the Soil Association* (MA thesis). Manchester: University of Manchester.
- Petre, A. (2008). Personal communication. Archives, University of Oxford: Oxford.
- Pfeiffer, E. (1938). *Bio-Dynamic Farming and Gardening: Soil Fertility Renewal and Preservation* (F. Heckel, Trans.). New York: Anthroposophic Press.
- Pfeiffer, E. (1938). *Soil Fertility, Renewal & Preservation: Biodynamic Farming and Gardening* (1947 edition; first thus with the original title and subtitle interchanged). London: Faber and Faber.
- Pfeiffer, E. (1983). *Bio-Dynamic Gardening and Farming* (Vol. 1). Spring Valley, New York: Mercury Press.
- Pfeiffer, E. E. (1952). The organic-chemical controversy in agriculture. *Bio-Dynamics*, X(3), 2-19.
- Pollan, M. (2006). *The Omnivore's Dilemma: The Search for a Perfect Meal in a Fast-Food World*. London: Bloomsbury.
- Portsmouth, Earl of (1965). *A Knot of Roots*. London: Geoffrey Bles.
- Richards, S. (1994). *Wye College and its World: A Centenary History*. Wye: Wye College Press.
- Rodale, J. I. (Ed.). (1942). *Organic Farming and Gardening*. Emmaus, Pennsylvania: Rodale Press, 1(1):1-16.
- Rowe, R. (1944). *The Economic Reform Club and Institute, What it is - and What it does*. London: Economic Reform Club and Institute.
- Schmitt, C. B. (1966). Perennial Philosophy: From Agostino Steuco to Leibniz. *Journal of the History of Ideas*, 27(4), 505-532.

- Schumacher, E. F. (1973). *Small is Beautiful: A study of economics as if people mattered*. London: Blond & Briggs.
- Schuon, F. (1965). *Light on the Ancient Worlds* (Lord Northbourne, Trans.). London: Perennial Books.
- Scofield, A. M. (1986). Organic farming - the origin of the name. *Biological Agriculture and Horticulture*, 4, 1-5.
- Shrubsole, H. C. (1947). Report of the Annual Meeting held at Y.W.C.A. *The Swanley Magazine*, VI(15), 4-5.
- Silver, L. M. (2006). *Challenging Nature: The Clash of Science and Spirituality at the New Frontiers of Life*. New York: HarperCollins.
- Skilbeck, D. (1983). Lord Northbourne. *Wye: The Journal of the Agricola Club and Swanley Guild*, 12(1), 78-79.
- Smil, V. (2001). *Enriching the Earth: Fritz Haber, Carl Bosch, and the Transformation of World Food Production*. Cambridge, USA: The MIT Press.
- SMH. (1940). Land-Love: "Look to the Land" by Lord Northbourne. *Sydney: The Sydney Morning Herald (SMH)*. 21 September, p. 10.
- Steiner, R. (1924). *Agriculture Course* ("Printed for private circulation only"; 1929, first English language edition; George Kaufmann Trans). Dornach, Switzerland: Goetheanum.
- The Field. (1940). *New Books: Are We Misusing Our Heritage? 'Look to the Land' by Lord Northbourne*, Dent, 7/6. *The Field*, CLXXV(4566), 1004.
- Tyack, G. (1998). *Oxford, An Architectural Guide*. Oxford: Oxford University Press.
- University of Oxford. (c.1920). Student card: James, Hon. W.E.C. (Department of Agriculture). Oxford: University of Oxford Archives, AG 1/2.
- von Eckardt, H., & 42 others. (1925). *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare*. Geneva.
- Wachsmuth, G. (1989). *The Life and Work of Rudolf Steiner* (O. D. Wannamaker & R. E. Raab, Trans. 2nd edition; first published in German 1941). Blauvert, NY: Spiritual Science Library.
- Werner, U. (1999). *Anthroposophen in der Zeit der Nationalsozialismus 1933-1945*. Muenchen: Verlag R. Oldenberg.
- Willer, H., & Lernoud, J. (Eds.). (2014). *The World of Organic Agriculture: Statistics and Emerging Trends 2014*: Frick, Switzerland: Research Institute of Organic Agriculture (FiBL) & Bonn: International Federation of Organic Agriculture Movements (IFOAM).
- Wrench, G. T. (1946). *Reconstruction by Way of the Soil*. London: Faber and Faber.