

The Papers of Roy Harrod

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Abstract: This article describes the vast collection of papers gathered by Roy Harrod from his youth to his death in 1978. These include unpublished essays by himself and others, drafts, press cuttings, miscellaneous documents, and especially correspondence with a number of philosophers, politicians, and a *Who's Who* of economics (Keynes, Robertson, Joan Robinson, Haberler, Kaldor, Hawtrey, to cite only a few). Harrod's role in arranging these materials for 'future historians of thought' is discussed, and an overview is given of the importance of his papers for assessing Harrod's contributions to economics (and also politics and philosophy).

1 Introduction

Roy Harrod was a prolific writer. By 1970, his bibliography – excluding reviews – took 16 pages in print (Scott 1970); this was updated with Harrod's help in March 1971 by M.F. Scott, who added a 30-page mimeographed list of articles for daily and weekly papers (Scott 1971). Harrod, moreover, kept publishing till his death in 1978, and hundreds of earlier items are not yet listed. His correspondence is as copious as his output of articles and books for publication. Besides thousands of personal and routine letters,¹ Harrod preserved almost every written piece of paper which passed through his hands, and some of his correspondents have also been fairly meticulous hoarders. Together they have bequeathed us the documentary evidence relating to Harrod's life, career, thought and activities, providing a portrait of the man, of his environment, and of his contemporaries.

Section 2 gives a physical description of the several surviving collections of papers collected by Harrod and of materials by Harrod preserved by his correspondents. Section 3 discusses some problems relating to the archival organisation of the batch likely to be the most interesting for economists, with particular emphasis on Harrod's role as the classifier of his own papers. Section 4 argues that, in spite of the volume of Harrod's publications, his papers can shed additional light on his thought and enable a better assessment of his contributions to various subjects (not only various branches of micro- and macro-economics, but also philosophy and politics); a thematic description of his papers is therefore supplied. A concluding remark on the importance of Harrod's papers for the history of economic thought is offered in section 5.

2 The Papers²

Besides being a passionate letter-writer, Harrod described himself as having 'some instinct for hoarding',³ which brought him to preserve and, to some extent, arrange for posterity, tens of thousands of items: books, pamphlets, journals, offprints, drafts, proofs, reading and lecture notes, papers, and letters, gathered from his youth to his death.

Most of these documents are open to researchers, although they are divided into seven collections located in three continents. In this section these will be briefly described; readers may find this particularly useful as some catalogues – including those of the two main collections of Harrod’s professional papers – are not easily accessible.⁴

2.1 The Harrod Collection at the Nagoya University of Commerce and Business Administration

This collection was acquired in 1979 but has been accessible only since 1995, when the cataloguing was completed.⁵ It totals about 16,200 items, whose nature varies: it comprises Harrod’s working library, including journals, books (some of which are accompanied by other materials, including letters from the authors or notes by Harrod), and offprints by Harrod himself and by other authors (also sometimes accompanied by letters), and 23 boxes of documents, including notes, correspondence, memoranda and minutes.

The boxed items (about 2900 pieces) include several press releases, reports, statistics and articles by diverse British governmental bodies, including the Board of Trade, the Overseas Migration Board, the Federation of British Industries, and the Department of Trade and Industry, 1951-1976 (three boxes). Three boxes contain documents relating to the activity of the Oxford Economists’ Research Group, 1936-38: questions for discussion, questionnaires, minutes of meetings and of 51 interviews with entrepreneurs, essays, memoranda and notes by Harrod, Meade, Henderson, Hitch and Hall, and correspondence.⁶ Two boxes document Harrod’s chairmanship of the Conference on Trade in a Developing World, Brissago, September 1961; they include typescripts of the papers, Harrod’s manuscript and notes, and correspondence between Harrod and the participants in the conference: J. Bhagwati, M. Bye, B.P. Dyatchenko, G. Haberler, H.G. Johnson, C.P. Kindleberger, W.A. Lewis, J. Meade, D. MacDougall, B. Ohlin, F. Perroux, E.A.G. Robinson (62 letters), P. Samuelson, F. Modigliani, J. Viner, and others. The proceedings of the conference were published as Harrod and Hague (1963).

Two boxes contain miscellaneous galleys, typescripts and manuscripts on various subjects by other authors, 1935-76, including M. Allen, E. Bernstein, R. Frisch, N. Kaldor, E. Lindahl, J. Marschak, W. Beveridge and J. Tinbergen, some accompanied by related correspondence; some manuscript notes by Harrod are also included. A series of Harrod’s reports, typescripts, and manuscripts, 1954-71, fills one box, which includes reports from the Committee on the Working of the Monetary System, 1958, testimony to the Standing Senate Committee on National Finance, Canada, 1971, and related documents, speeches, drafts, lecture notes and numerous miscellaneous manuscript notes; the box includes a draft of Robertson’s unpublished notes on ‘Money-flows’ (1935). Another box lodges Harrod’s juvenilia (including notebooks, his school examinations with grades, reading notes, and some speeches before college and undergraduate societies).

Materials relating to the International Monetary Fund, 1952-53, 1964-67 and 1977 occupy one box (including some Executive Boards Agendas; research reports; official documents; materials relating to the British-Swedish Conference, August 1965; a paper on ‘Imbalance of international payments: a special study’, later published as Harrod 1953, with various comments on it – including some by Bernstein and A.G.B. Fisher; some press releases; correspondence with a number of IMF economists, including Bernstein and Polak; a number of papers and memoranda by other IMF staff members). There are also materials relating to the

Seminar on Asian Trade, Karachi, December 1961-January 1962 (conference papers, Harrod's comments on some of the papers, correspondence and some handwritten notes by Harrod are included), and to the Conference on Inflation and Growth in Latin America, Rio de Janeiro, January 1963 (three papers and some correspondence).

Four boxes contain abundant documentation relating to the European League for Economic Co-operation, 1948-76. They include orders of the day, minutes and reports of the General Assembly, the Central Council and the General Secretariat; materials relating to the British Section (agendas, meeting relations, minutes), the Monetary Commission (agendas, minutes, and reports), the 1952 Monetary Conference, documents relating to the United Europe Movement, several bulletins, reports and memoranda produced by various bodies and individuals, including several by Harrod (in particular on currency, growth policy, the trade cycle, and economic co-operation topics), some of Harrod's own notes, and related correspondence.

Three boxes house materials related to the United Nations, 1948-50 (reports and meeting records of the Economic Employment Commission, Economic and Social Council, the sub-commission on economic employment and stability, miscellaneous bodies and reports, and some correspondence). Finally, a box of Harrod miscellanea contains reports and statistics from the Ministry of Labour relating to employment, 1964-68, reports of the Society for Socialist Inquiry and Propaganda (Harrod took part in some of the activities organised by this body in the early 1930s), of the meeting of economists organised by the Antwerp Chamber of Commerce in 1935, of the International Economic Association Conference (Plovdiv meeting, 1964), miscellaneous documents, some of which relate to Oxford University, and some correspondence.

2.2 The Harrod Papers at Chiba University of Commerce

The collection of The Papers of Sir Roy Harrod was acquired in 1984 by the Chiba University of Commerce in Ichikawa, Japan. It consists of about 15,000 leaves, kept in 94 boxes⁷, and is undoubtedly the most important documentary evidence relating to Harrod's professional interests and political activities.

The documents have been classified in seven broad categories (numbered from II to VIII in the catalogue). The first part comprises letters, manuscripts and memoranda written by Keynes (or, in a few cases, relating to some of Keynes's writings). It also includes some letters to Keynes (among which are some from Harrod), war-time memoranda, and 6 photographs. These documents are dated between 1911 and 1946. There are also documents relating to Keynes's life, some of Harrod's writings on Keynes, Henderson's criticism of the *General Theory*, photocopies of miscellaneous correspondence with Keynes (Harrod's own, and letters from Beveridge, Shackle, Macmillan and others), copies from the Treasury files of correspondence between Keynes and various correspondents (1943) with other materials relating to Bretton Woods, and miscellaneous ephemera. Most of Keynes's letters were addressed to Harrod, 1923-46, but there are also a few letters addressed to Hawtrey, Robertson, MacDougall, Tinbergen, John Neville and Ada Keynes, Jean Nicod and others. These items are individually described in some detail by Riley-Smith (1982).

The second group of documents relates to the writing of Harrod's biography of Keynes (1951). It comprises the hundreds of letters Harrod received from members of Keynes's family (Lydia, Geoffrey, Margaret Neville Hill, but

especially Keynes's mother), from Keynes's friends and colleagues and from other people who were in contact with him – including Kahn (about 80 letters, to and from), Beveridge, Bernstein, Henderson, Edward Bridges, Abbati, Anthony Eden, Meade, Robertson, Hawtrey, Pigou, Robbins, Hayek, E.A.G. Robinson, Richard Hopkins, and some members of the Bloomsbury group, to cite but a few. Several of Harrod's replies are also extant (in particular 170 letters to Ada Keynes). Together with the correspondence, Harrod preserved the notes and card index he used while writing the manuscript, the galley proofs (two copies of which are annotated by Kahn and by Keynes's mother), reviews and press cuttings relating to the book, and letters he received after publication.

The third part of the collection contains the main body of Harrod's economic, philosophical, political, and academic correspondence. Most of the early correspondence preserved here is one-sided: up to part of the 1950s, Harrod mainly wrote letters in his own hand, and copies only exist as a result of the rare occasions when he sent letters off to be typed. Thereafter, typed copies are much more frequent.

This section consists of approximately 1500 cards, notes, articles, clippings, but especially letters, covering both in time-span and content Harrod's entire professional life. The list of correspondents reads as a *Who's Who* of economics; politicians and philosophers are also very well represented. Harrod's most frequent correspondents were Robertson, Austin and Joan Robinson, Kahn, Kaldor, Haberler, Hawtrey, Hicks, Meade, and Robbins among economists; Ayer, Joseph, Price and Russell among philosophers; and Lord Birkenhead, Robert Boothby, James Callaghan, Hugh Dalton, Douglas Jay, Selwyn Lloyd, Harold Wilson, and especially Winston Churchill and Harold Macmillan among politicians. Some files contain the correspondence and some cuttings relating to Harrod's early articles on policy in *The Times* (1932-38), and another file groups correspondence about Harrod's *Foundations of Inductive Logic* (1956). There is also a box containing miscellaneous proofs, reviews, and press cuttings, and four boxes of miscellaneous correspondence in this section of the catalogue, each containing several hundred items (letter and clippings), all grouped by subject. These include materials relating to some of Harrod's books (including *The Trade Cycle*, *The Prof.*, *A Page of British Folly*, *Economic Essays*, *Towards a Dynamic Economics*, *International Economics*), his articles for the press – including a number of obituaries – and for learned journals, some philosophical correspondence and abundant materials regarding the population issue.

The fourth group of items is a collection of the most disparate documents: we find Harrod's undergraduate notebooks (21 relating to Greats, 1919-21, and 14 to Modern History, 1921-22), and the reading notes taken in his first years as Student of Christ Church. These materials provide a unique insight into Harrod's school years, and into his original formation as an economist – his reading included Smith and Ricardo, Jevons, Cassel, Böhm-Bawerk, Marshall, Pigou, Hawtrey and Keynes. Some of his lecture notes are also preserved,⁸ as well as the preliminary draft (or drafts) of some of his books and articles (among which are 'Memory', *And So It Goes On*, *The Dollar*, the last edition of *International Economics*, *Foundations of Inductive Logic*, *The Prof.*, *Money*, *Sociology*, *Morals and Mystery*, *Economic Dynamics*), including some galley proofs, some of his early unpublished essays and memoranda,⁹ over one hundred typescripts of articles written for *Nihon Keizai Shimbun*, 34 written for the *Bank of Tokyo Review* and other articles for

various publications, and the typescripts of a few book reviews. Several of these items are accompanied by correspondence relating to them.

The fifth section of the catalogue groups the documents relating to various activities in which Harrod took part. Some of these were connected to his academic life (the Bodleian Library Commission, 1930-31, the Civil Service Commission, 1934-37, the Royal Economic Society, 1962-71, and the editorship of the Economic Section of Hutchison's University Library Publications, 1950-69), some to his political activities (the Popular Front before the war, Liberal Party candidate in 1945, his attempt to seek a nomination as a Conservative candidate in 1950, correspondence relating to later elections, the European League for Economic Co-operation, 1948-72; the latter file also contains over a hundred letters from Juliet Rhys-Williams). Other materials are related to his participation in the civil service (the Statistical Branch during wartime, the evidence he gave before the Commissions on Population in 1944 and on Equal Pay in 1945, his membership of the United Nations Sub-Commission on Employment and Economic Stability, 1947-50, his position as economic adviser to the IMF, 1952-53) and to economic policy and propaganda (population 1937-42, the House of Commons Monetary Committee, 1938-39). Most of these files also contain extensive correspondence. Of interest also are the scripts of 23 radio broadcasts, 1946-49.

The sixth part of the Collection documents Harrod's academic life, and includes documents and correspondence relating to his visits to foreign universities (two boxes regard his visits to America, and include correspondence and lecture notes, and further materials regarding his visits to, and activities in connection with, Japan), his teaching in Britain (in particular regarding his Fellowship in International Economics at Nuffield College, Oxford) and his participation in a number of economic conferences. Finally, the last section contains books by Harrod, offprints of some of his articles, and offprints and pamphlets by other authors, some of which are inscribed.

2.3 The Harrod-Woodruff Collection, Georgetown University Library, Washington, DC

This collection, acquired from Lady Harrod in 1986 through the bookseller, Hamish Riley-Smith, consists of a box containing 48 letters and four postcards from John Douglas Woodruff to Roy Harrod, 1922-46 (most of the items, however, relate to the period 1922-29), and one letter from Mrs Woodruff to Lady Harrod, 1978, arranged in chronological order.¹⁰ The items in this collection complement the folder of letters from Harrod to Woodruff in the Douglas Woodruff Papers (83 letters and postcards), also housed in the Special Collection Division of Georgetown University Library.

Both sets contain essentially personal correspondence, concerning their respective activities and careers, and life and Liberal politics. Most letters are very detailed, and provide vivid descriptions of Oxford in the 1920s, besides providing a portrait of both correspondents.

2.4 John Maynard Keynes and Roy Harrod – Letters and Memoranda at Tokyo University

This collection, purchased in December 1989, consists of 227 items, classified in six parts.¹¹ The first includes nineteen letters and postcards from Keynes to Harrod, from 1922 to 1938, a letter from Bonn to Keynes, and an offprint of Keynes's article in the September 1938 issue of the *Economic Journal*. The second part

includes 47 items, dated between 1941 and 1943, mainly letters and memoranda exchanged between Keynes and Harrod, but also a memorandum by James Meade to Robbins and a copy – addressed to Harrod – of a letter from W.F. Crick to Keynes. Part III includes one item only: an autographed recollection of Keynes at Eton, written by Bernard Swithinbank in 1948. The fourth part consists of forty notes and memoranda, dated between 1941 and 1943, by Harrod and others (including Henderson, Keynes, F. Leith-Ross, Kingsley Wood, Meade, and Macgregor), on problems relating to war and postwar policy.

Part V includes 35 items of correspondence, dating from November 1941 to January 1943, between Harrod and Richard Hopkins, Lindemann, Dalton, Gerard Clauson, Nigel Roland, A.W. Hurst, Robbins, Playfair, Gaitskell, Desmond Morton, F.W. Leith-Ross, W. Eady and W.F. Crick. The last part includes 83 letters Harrod received from his fellow economists, philosophers, and others between 1922 and 1974, mainly regarding economics. Among the authors of these letters are Clapham, Edgeworth, Fisher, Haberler, Hayek, Hicks, Kahn, Lindsay, Macgregor, Palyi, Phelps Brown, Robertson, Joan Robinson and Taussig; among the philosophers one may cite Braithwaite, Joseph, Price, Ramsey and Whitehead.

2.5 British Library (Harrod Papers, Three Additions)

The British Library acquired three collections of Harrod Papers in February 1992, January 1994 and January 1995. Totalling more than 25,000 pieces of paper arranged in 121 folders, this is the richest collection of Harrod's private correspondence. Most of the documents, in fact, are letters Harrod received from his friends and relatives, from his years at Westminster School to his death in 1978. These are primarily of a personal character, but the collection also includes some academic and professional correspondence, mainly relating to the postwar years (in particular some of Harrod's philosophical writings, correspondence relating to the *Economic Journal*, to Harrod's *Life of John Maynard Keynes*, *The Prof.*, and other publications), and other documents relating to the population question, Liberal Party politics, Harrod's academic visits abroad, and so on. The collection also includes private correspondence of Lady Harrod.¹²

The most frequent correspondents were Lady Harrod (28 folders), Harold Acton, Cyril Asquith, John and Penelope Betjeman, Maurice Bowra, Robert Byron, George Catlin, Frank Coe, Robert Dundas, Henry Green (Henry Yorke), Bryan Guinness, Basil Sheridan Hamilton-Temple-Blackwood, Maurice Hastings, Basil Herbert, Leslie Hore-Belisha, H.B.W. Joseph, Nancy and Diana Mitford (Diana Mosley), Gilbert, Mary and Basil Murray, Desmond and Michael Harvey Parsons (6th Earl of Rosse), Juliet Rhys-Williams, Gilbert Ryle, Edward Sackville-West, Henry F. Scott-Stokes, John Sparrow, Fred Warburg, Douglas Woodruff, and some of Harrod's friends from Westminster School. Some folders group Harrod's undergraduate essays, philosophical materials (relating to *Foundations of Inductive Logic* and some philosophy lectures, circa 1950), school and miscellaneous notebooks, pocket diaries 1919-23, autobiographical materials, and documents relating to Harrod's participation in the activities of the Oxford University Liberal Club (of which he was Treasurer in 1919), including his editorship of the *Oxford Outlook*, an undergraduate periodical linked to the Oxford liberals.

2.6 Other Archives

As to the thousands of letters Harrod wrote, when extant, these are preserved in the archives where the papers of his correspondents are held. Not all of them have been

as meticulous as Harrod in preserving their mail, but nonetheless several complete, or at any rate very informative, exchanges of correspondence are extant. Among the most important of these repositories one should mention King's College (where the papers of Keynes, Kahn, Joan Robinson and Kaldor are deposited¹³), Trinity College (the Robertson, Sraffa and Pethick-Lawrence Papers¹⁴), and Churchill College (the Churchill, Duncan-Sandys, Archibald Sinclair and Hawtrey Papers) in Cambridge, Nuffield College in Oxford (the Lindemann and Henderson Papers), and the British Library of Political and Economic Science (the Meade, Andrews and Brunner, Durbin, Cannan, Dalton,¹⁵ Rhys-Williams, Royal Economic Society¹⁶ and Beveridge Papers). The Macmillan Papers are deposited at the British Library, the Jacob Marschak Papers at the Library of the University of California Los Angeles, and the Haberler Papers are at the Hoover Institution, Stanford.¹⁷ Other materials concerning Harrod can be found in the archives of the institutions with which he collaborated, for instance the Royal Institute of International Affairs in London and the League of Nations in Geneva.

3 Harrod, Archivist of Himself

The existence of such a huge mass of material obviously raises some problems of classification and arranging. Although this is the archivist's job when the papers arrive in his or her hand, and the editor's job when the papers are prepared for publication,¹⁸ the documents bequeathed by Harrod also raise a special problem for interpreters. It is apparent, in fact, that the main corpus of his scientific papers (the collection at Chiba University of Commerce) was to some extent organised by Harrod himself. Some blocks of correspondence, in fact, are prefaced by later notes in Harrod's hand providing a summary description of their content, or an aide-mémoire relating to the occasion on which a piece was written, or stressing the interest of a particular exchange for historians of thought. For example, Harrod prefaced the correspondence relating to Ramsey's rejection of his July 1928 article expounding the notion of marginal revenue with a note describing the events and claiming priority (a modified version of the paper appeared in the 1930 volume of the *Economic Journal*, after marginal revenue appeared in print in December 1928 in an article by Yntema¹⁹), which began with the following statement: 'This letter is of some interest for the history of economic thought'.²⁰

It is therefore clear that Harrod periodically tidied up his files, and arranged them himself, not only for his own convenience in terms of searching and reference, but also to bequeath them as a legacy to historians of thought. The evidence is therefore presented in support of Harrod's own *ex post* interpretation of his writings and their role in the development of economic thought in those years. On the question of whether, and to what extent, this process has been selective, one can only speculate. Some gaps are rather suspicious in a corpus of documents which includes, along with seminal correspondence, also the tiniest scraps of paper with fragmentary notes or calculations. In particular, one wonders whether the lack of documents relating to Harrod's activities in the bosom of the New Fabian Research Bureau between 1931 and 1934 is accidental, as when he turned Conservative, rather on the right wing (Harrod 1956b), he could have found his collaboration with this left-wing organisation embarrassing. Again, one wonders whether some of Harrod's letters to Keynes concerning his own career ended up in his files by accident or because he preferred not to make them available to researchers before his own death (if at all).

Whether or not a selection process was applied, what remains is certainly extremely informative. First, the extant documents are not tampered with, and they are abundant enough to enable researchers to identify gaps by cross-references. Secondly, gaps are at least partly filled by documents found in other archives: the New Fabian Research Bureau files and Meade's papers, for instance, do indeed contain copious evidence regarding Harrod's involvement with the group, and even a few papers he read are extant. Thirdly, Harrod's re-arrangement of, and comments upon, the documents tell us something of Harrod's later interpretation of his own role in, and impact on, economic thought. What is to be regretted is rather the cataloguer's partial intrusion into Harrod's original ordering: the frequent disruptions in the numbering of the items reveal in fact that materials found elsewhere at a later stage were slipped into folders to which they did not originally belong.

One can only speculate on the reasons inducing Harrod to arrange his papers for conservation; most of the accompanying notes are undated, although clearly written in Harrod's postwar handwriting, and do not therefore supply an essential clue. It is possible that this operation was carried out throughout the years. Some diary-like notes already accompanied the documents relating to Harrod's participation in the Bodleian Library Commission in 1930-31, describing the outcome of talks between himself and the Chairman regarding his minority proposal; these early notes, which seem to be addressed to readers other than himself, suggest that Harrod did not disdain leaving written traces of his ideas and actions.

It is, however, also possible that Harrod's growing dissatisfaction, first with the lack of recognition of his priority in the discovery of the marginal revenue curve, and later with the interpretation of his dynamic theory, induced him to leave his papers in such a state that historians could easily evaluate his claims. While this inference is tentative, its premise is founded on the surviving documents. The marginal revenue episode was referred to in print a number of times,²¹ and Harrod also occasionally reminded his correspondents of it, from Joan Robinson upon publication of her *The Economics of Imperfect Competition* (1933)²² to G.L.S. Shackle in 1960, to whom he wrote (not without exaggeration):

I am always just a tiny bit sore that Joan Robinson and Chamberlin [...] are given the credit for 'imperfect competition'. Joan Robinson, of course, got her tool of 'marginal revenue' from me, and I believe that the most important features of her book are to be found in my articles. (Harrod to Shackle, 17 August 1960, in GLSS 9/7/260)

Harrod's dynamics apparently has all the ingredients for being a successful story: his trade cycle theory, based on the interaction of the multiplier and the acceleration principle, was acknowledgedly the first such model²³ and had a notable following; his growth rate formula was recognised as the forebear of modern growth theory, his name (associated with Domar's, who independently but later rediscovered a similar formula) was given to the archetypal postwar growth model, and his original article and his later contributions on the subject were widely cited in the literature and in textbooks on growth. Although Harrod's ultimate and repeatedly stated theoretical objective was to lay the foundations of a new discipline of economic dynamics, for some time he seemed content with this state of affairs, and limited his complaints to some pointers aimed at differentiating his approach in terms of the mutual consistency between the rates of increase (or decrease) of certain magnitudes in a growing economy *at a given point of time* from

the 'time-lag theories of the cycle' (a portmanteau word including almost everything from Robertson to the Swedes and from Hicks to the econometricians) and stressing the originality of his own notion of dynamics. From the mid-1960s, however, his grievance at being misunderstood became more insistent and explicit.²⁴

Two comments seem to have triggered his change of attitude, and may therefore possibly also have induced him to prepare his papers for posterity. The first was the chapter on 'models of systematic movement' in Shackle's *A Scheme of Economic Theory* (1965). Harrod seems to have been particularly impressed with the following passage:

Despite the suggestion conveyed by the words 'regularly progressive economy', Harrod is really examining a moment in the economy's life, and asking what internal structure of this moment, what set of relations amongst its various groups of decisions and upshots, will be self-consistent and self-satisfying and lead to a repetition of similar growth in the 'next' moment. A moment, not a stretch of time; an event or compact complex of events, not a span of history artificially united by the detached observer's viewpoint, is what Harrod is concerned with. (p. 102)

Harrod commented, in fact: 'This is much the most carefully considered and understanding treatment that my views have had. I like particularly your analysis of the part that *time* plays in my theory. I have found difficulty in getting this apprehended by others.' Nonetheless, Harrod disclaimed 'having produced a *model*' (Harrod to Shackle, 11 January 1966, in GLSS, file 9/1/383), and at the first opportunity he specified this point in print (Harrod 1968).

The second comment which may have triggered Harrod's reaction was of the opposite nature: Harrod felt misrepresented by Joan Robinson's 'Harrod after twenty years' (published with a slightly altered title as Robinson 1970). This article generated a prolonged correspondence, in which Harrod complained that 'the situation [was] becoming intolerable' (letter to Joan Robinson, 20 December 1969, copy in HP V-124) and that 'it is not pleasant to have had ideas that one values and have them travestied' (Harrod to Robinson, undated [April or May 1970], carbon copy in HP IV-1089-1107). Harrod eventually publicly expressed his dissent from Robinson's interpretation (Harrod 1970) and started working at a revision of his 1948 book, making *Economic Dynamics* (1973) a rather different product altogether.²⁵ There he systematically rebuked the main misinterpretations, and restated his theory in a spirit closer to his interwar writings than to the most recent ones.²⁶ Harrod's last writings provide his own statement of his intellectual legacy, while his correspondence witnesses the making and the evolution of his ideas and supplies historians of thought with the means for ascertaining his priority.

4 Harrod, His Intellectual Environment, and His Papers

The cursory look at the catalogues of Harrod's paper given in section 2 immediately suggests (and the actual papers confirm and strengthen this impression) that Harrod's interests were not confined to economics, but ranged over a vast spectrum which primarily included philosophy and politics. This, of course, was already well known before Harrod's archives were opened (see for instance Brown 1980), but the mutual influence of each of these components of Harrod's intellectual activities on the others could not be easily ascertained. The

extant papers throw abundant light on this. Harrod's reflections on induction and deduction, for instance, not only began two decades before *The Foundations of Inductive Logic* was published in 1956,²⁷ but also provided the basis for the axiomatic approach to dynamics used in the famous 'Essay in dynamic theory' where the equilibrium growth rate was first expounded and discussed.²⁸ As to politics, Harrod's involvement with the New Fabian Research Bureau provided the background to his seminal idea that the trade cycle takes place on a basis of advance, and his dissatisfaction with the political situation in October 1931 prompted him to write *International Economics* (1933) to provide a theoretical apparatus (which included the foreign trade multiplier) in support of his free trade credo. Or again, the idea of the 'natural rate of growth' limiting the rate of actual advance is probably not independent of Harrod's concern with population (he believed that, at the rate of decrease which prevailed in those years, the British stock and perhaps even the human race would disappear within a few generations, and frequently wrote on the economic consequences of and possible remedies for this situation²⁹).

The abundance of Harrod's papers also sheds light on other sides of his mental laboratory. There are, in fact, scarcely any aspects of his work which are not discussed with his fellows. His major writings³⁰ were sent for comments to friends and colleagues; most of the pieces he submitted to the *Economic Journal* were commented upon by Keynes as the editor; and the letters he received after publication have been carefully preserved, some of them initiating prolonged exchanges. After he succeeded Keynes as editor he commented upon other people's writings, and of course kept arguing out his own and his colleagues' ideas.³¹

One may wonder, however, whether these papers can tell us something new, as Harrod's abundant output of published writings surely gave him enough chances to give full and clear expression to his thoughts. Yet, as I have pointed out in section 3, Harrod often complained of feeling 'a voice in the wilderness' (Harrod 1950, p. 553) and that his views on dynamics were misunderstood. Harrod's readers are not the only ones to be blamed for this, as his exposition of his ideas was often rather confused and especially partial. In particular, he tended to reply to his critics one by one, focusing on some interpretation problem or another without supplying a comprehensive and consistent account of his views. For instance, Harrod defined 'dynamics' as 'concerned with an economy in which the rates of output are changing', the unknown in the equations to be solved being not rates of output per annum, but 'increases or decreases in the rate of output per annum' (1948, p. 4), but also as concerned with the formulation of 'laws establishing the necessary relationship between various growth factors' (1955, p. 359), as the study of 'the relations between the rates of increase (or decrease) of certain magnitudes in a growing economy' at a given point of time (1960, p. 277) – in particular with regard to the mutual determination and consistency of these rates of change (1962, p. 1009; see also 1938b, pp. 402-4, and 1939d, p. 164) – as involving 'the formulation of a new set of propositions, relating to the increase of wealth and income' (1936, p. viii), as 'referring to propositions in which a rate of growth appears as an unknown variable' (1939b, p. 17; 1937b, p. 86), as 'concerned with the determinants of the rates of increase of the main categories of demand' (1973, p. 11), and as 'purporting to specify what the steady rate of growth at a given point of time would be' (1959, p. 454); in addition he also stressed that the characterising feature of dynamics as opposed to statics consists of whether or not the rates of change are continuous (1948, p. 6; 1957, p. 193; 1963, p. 402), whether or not there

are savings and investment (1948, pp. 11-12; 1959, p. 454). Another example of the potential confusion his readers were bound to perceive is given by the presence, in Harrod's seminal 'Essay in Dynamic Theory' (1939), of no less than six different and sometimes conflicting notions of 'warranted growth rate', defined as 'the rate which (1) leaves each entrepreneur satisfied with what he has done; (2) allows for some individual disappointments but keeps entrepreneurs as a group, on balance, satisfied; (3) keeps them doing the same thing; (4) equates *ex ante* *S* and *I*; (5) concerns only the part of investment directly linked to consumption; and (6) somehow differs from the "proper" warranted rate which "would obtain in conditions of full employment"' (McCord Wright 1949, p. 326).

Reading Harrod's published books and essays therefore does not always help us to understand exactly what he meant. But when he was taken to task on specific problems by some of his correspondents he was often forced to make his assumptions explicit and his definitions clear-cut. These documents are therefore a necessary complement to the published writings for understanding Harrod's ideas. I have myself done some work in this respect, and found the unpublished materials illuminating as regards the origin and development of Harrod's notion of dynamics (Besomi 1999b and forthcoming), its comparison with alternative conceptions – in particular the 'time-lag theories of the cycle' (Besomi 1998a) – its relation with growth theory (Besomi 1998b, 2001) and with Harrod's classification of technological progress in opposition to Hicks's (Besomi 1999a).

An example of how revealing and surprising the unpublished correspondence may prove to be, not only for Harrod's own thought but more generally for the all-pervasive problem of the circulation of concepts, is given by the story of Harrod's appropriation of the 'multiplier'.³² Having read Kahn's original *Economic Journal* article (1931), Harrod transposed Kahn's employment multiplier to foreign trade; the concept was first expounded early in 1932 in a paper (unfortunately no longer extant) read before the Marshall Society in Cambridge and subsequently in correspondence with Kahn (only Kahn's side of the correspondence remains), and was mathematically refined with the help of James Meade. Late in 1932, Keynes read Harrod's statement (to become *International Economics*), and failed to understand it; a prolonged correspondence (of which only Keynes's side is extant) failed to convince him, and all his doubts resurfaced in 1937, when he found the foreign trade multiplier expressed again in *The Trade Cycle*; the concept had to be explained to him by Robertson, by no means an admirer of multipliers. Meanwhile, Keynes transposed Kahn's multiplier to investment; it was now Harrod's turn not to understand what was going on, in spite of a 'tutoring' by Kahn in the autumn of 1934 (Harrod maintained that the new view was 'simply frightful': letter to Kahn, 2 November 1934, in KP 13/57/72–76). Harrod only understood the multiplier after reading *The General Theory* in proof in the summer of 1935. This episode, besides being rather amusing, is revealing of how Harrod was estranged from the development in Keynesian thought from the *Treatise* to the *General Theory*, and how apparently simple notions, the technicalities of which were well understood by both Keynes and Harrod, may be difficult to understand because of the deep conceptual shifts they involve.

The cursory description of the Harrod collections given in section 2 does not – as no catalogue does – describe the contents of the correspondence. Given the potential interest of Harrod's correspondence for economists and historians of thought, it seems important to list the main topics under discussion and to remind the reader that, as the example cited above shows, the correspondence is not only

important for understanding Harrod's thought but also reveals aspects of Harrod's correspondents' approaches to the problems under discussion. Dynamics, for instance, were discussed at length by Keynes in his correspondence with Harrod, and these exchanges provide an indispensable complement to his published writings. Keynes also liked to express to Harrod his views on methodological problems,³³ and his comments on specific issues raised by Harrod in articles for the *Economic Journal* are also illuminating. Robertson often submitted drafts of his papers to Harrod for comments, and himself discussed a number of Harrod's contributions, so that their correspondence covers both men's activities until Robertson's death; in particular, they thoroughly discussed banking policy, saving and investment, Keynes's economics, international trade and the trade cycle.

Exchanges with other economists were more occasional, but nonetheless interesting. With James Meade, Harrod discussed his books on *International Economics* (Meade supplied a neat formula for the foreign trade multiplier, in terms of a series of secondary effects) and *The Trade Cycle*, and also briefly commented on Meade (1932) and some memoranda drafted by Meade for the New Fabian Research Bureau. Hubert Henderson discussed with Harrod imperfect competition in connection with Harrod's *Trade Cycle*, and Keynesian theory. Henderson and Meade were also important members of the Oxford Economists' Research Group, whose activities are well illustrated in the almost complete documentation which is preserved partly at Nagoya University of Commerce and partly in the Andrews and Brunner Papers at the London School of Economics. This includes notes, papers, correspondence, minutes of discussions among members of the group, and reports on the individual interviews with entrepreneurs.³⁴

In the interwar years Harrod discussed imperfect competition with Joan Robinson, Pigou, Ramsey, Henderson, Schumpeter, M. Allen, Edgeworth, Meade and Viner; capital theory with Hawtrey and Kaldor; Keynesian economics with Kahn, Haberler, Pigou, Knight and Beveridge; dynamics with Tinbergen, Richter-Altschäffer, Marschak, Neisser and Mitchell; technological progress with Joan Robinson, Hicks, Kahn, Hawtrey and Keynes; methodological issues with Beveridge, Phelps Brown, Robertson and Henderson; saving and investment with Kahn, Haberler, Bode and Durbin; banking policy with Durbin, Cannan, Ernst Dick and Neisser; and international economics with Hall, Edgeworth and Haberler. With Dennis Robertson, who had a special place among Harrod's correspondents in terms both of frequency and regularity of exchanges, he discussed almost all these topics.

During World War II Harrod wrote a number of memoranda and commented on proposals submitted by other economists; in particular, extended correspondence survives relating to Keynes's memoranda discussing the Hansen-Gulick plan (1941), proposing an International Currency Union (1941), on Article VII of the Mutual Aid Agreement (1942), on national income and expenditure after the war (1942), on the international regulation of primary products (1942) and on Buffer Stocks (1942). These documents are all preserved, as well as large files relating to his participation in Churchill's Statistical Branch. These include Harrod's memorandum on Anglo-American Collaboration (1942), a 'Note on the International Regulation of Primary Products' (1942), his 'Classification of Measures of International Economic Collaboration' (1942), a proposed strategy for the American conversations (1942), a memo on foreign lending, industrialisation and the Clearing Union (1942), and a revised proposal for a Clearing Union (1943).³⁵

After the war, Harrod discussed technological progress with Hicks, Meade, Samuelson and Fellner, growth theory with Matthews, Solow and Joan Robinson, kept working on imperfect competition theory (lecture notes and some correspondence are preserved), and extensively discussed monetary theory and policy with numerous colleagues (Kahn and Kaldor are among the most frequent writers), as well as arguing out his philosophical writings on memory, induction, and the translation of Nicod's *Geometry and Induction* (Harrod 1942, 1956, 1970b; the main correspondents were Ayer and Bertrand Russell). He took part in numerous conferences (some of which he organised himself) and kept all the materials (sometimes including correspondence). As editor of the *Economic Journal* he commented upon a number of articles submitted for publication. He preserved lecture notes on various topics (in particular growth and currency problems, those referring to the time after his retirement at Oxford being better represented, when he lectured extensively in the United States), and drafts and correspondence relating to several of his books (including *Economic Dynamics*, 1973, and *The Life of John Maynard Keynes*, 1951, regarding which a very large documentation survives), which provide detailed insights into the working of Harrod's mental laboratory. Large files document his activities in various bodies, including the IMF, and his continuous commitment to discussing the policy topics of the day: in particular, his activities against Britain joining the Common Market are well represented. Harrod's political files are also quite rich: Harrod preserved about 30 letters from Churchill, and about 70 from Douglas Jay, while his exchanges with Harold Macmillan amount to more than 150 letters, of which just under a hundred are from Macmillan, mostly written between 1956 and 1963.³⁶

For the student of Harrod's thought, his unpublished essays are particularly important. Most of these date from the interwar years, and comprise papers read before various societies and congresses, including the Philosophical Society, the Meeting of Economists held at Antwerp in 1935, Section F of the British Association for the Advancement of Science, and the British Import Union in Copenhagen; memoranda for the General Federation of Trade Unions, the Royal Institute of International Affairs, the Oxford University Board of Social Studies (or, perhaps, the Hebdomadal Council), the New Fabian Research Bureau and the Oxford Economists' Research Group; an address before the Parliamentary Monetary Committee; a lecture on Marx for sixth-formers, broadcast by the BBC; an electoral manifesto; a pamphlet on tariffs and related problems; the preliminary drafts of a couple of papers later radically revised and printed in the *Economic Journal* as 'Notes on supply' (1930) and 'An essay in dynamic theory' (1939b), and an article which was withdrawn as it was made redundant by Joan Robinson's *The Economics of Imperfect Competition*.³⁷ Several draft chapters of an unpublished book to be titled *The Known and the Unknown* are also extant; most of it was written in 1940-41, and parts were revised between 1944 and 1951. Although it was eventually superseded by *Foundations of Inductive Logic* – in Harrod's view, the best of his writings (Harrod 1980, p. 617) – the projected book was much broader in scope, as it included chapters on topics such as 'The External World', 'Materialism', 'Knowledge', 'Other Selves', 'Political Theory', 'Memory', 'Pleasure', 'Goodness', 'Beauty', '[The Existence of the Conscious Being]', 'God', '[Dialogue Between the Author and a Theologian]', '[Infinity]'. Numerous unpublished postwar items also survive; although most of them are short notes, some detailed lecture notes survive: a set on 'Imperfect competition theory

revised', delivered at the London School of Economics in 1950, and a lecture on 'Growth theory' delivered in Moscow in 1966 are particularly noteworthy.

Harrod also systematically preserved newspaper and magazine cuttings,³⁸ including his own articles and letters to the press (see, for a partial bibliography, Scott 1971), and writings by other authors, ranging from rejoinders to Harrod's pieces to reviews of his books. This impressive collection, although scattered in different files in particular in the CUC collection, is revealing of the 'public' Harrod, that is, the Harrod who campaigned on various causes and Harrod as seen through the eyes of his contemporaries.

Finally, Harrod's papers provide precious details for a personal and intellectual biography. Out of the four thousand or so interwar items of correspondence, about three-quarters are personal letters to and from friends and relatives or routine letters.³⁹ Occasionally Harrod mentioned his work, but often these letters commented upon people and social life in Oxford and London, portraying aspects of the character of numerous Oxford figures, from Harrod's teachers and tutors to his friends, contemporaries and pupils. A large number of personal letters dating from later periods is also extant, the range of correspondents becoming wider and more diverse as time went by.

5 Conclusion

Although some parts of Harrod's papers – especially those relating to the interwar years – have already been studied and the publication of a selection of the interwar papers and correspondence is forthcoming, there is still a large mass of materials waiting to be examined and accounted for. These are as diverse as Harrod's personal and academic interests, and offer insights not only into his own ideas (including his thoughts on himself) but also into those of his correspondents. Harrod's systematic hoarding and organising of his own papers make these collections very reliable for their completeness, while his eminence and central place in some of the developments of economic thought of the twentieth century, and his taking part in a number of seminal debates, make them invaluable sources of information for economists and historians of the thought and events of that period.

* C.p. 7, 6950 Gola di Lago, Switzerland. Email: dbesomi@cscs.ch. I am indebted to two anonymous referees for their helpful comments on a previous version of this paper. I am grateful to all the repositories cited in the reference section, to many other libraries and archives not named here, and to all their respective curators of collections for their invaluable help in locating and accessing the materials relating to Roy Harrod.

Notes

1 Approximately three thousand in the interwar years alone.

2 This section expands the editorial introduction to *The Collected Interwar Papers and Correspondence of Roy Harrod* (Harrod 2003). For a brief description of this project see note 18.

3 Harrod to Florence Ada Keynes, 7 November 1950, in HP III–250/2.

4 A small part of these papers has been published. Harrod's exchanges with Keynes on the proofs of the *General Theory*, on Harrod's *Trade Cycle* and 'An essay in dynamic theory', and on Tinbergen's League of Nation inquiry are included in Keynes's *Collected Writings* (1973). Large excerpts of Harrod's correspondence with Robertson, Meade, Allen, Hawtrey, Kaldor, Haberler, Henderson and others are quoted by Warren Young (Young 1989; Young and Lee 1993). Harrod's interesting letter to Tinbergen concerning the latter's review of *The Trade Cycle* is published and commented upon by Albert Jolink (1995). Some correspondence with Winston Churchill is included in Gilbert (1981), and a collective letter drafted by Harrod and sent to President Roosevelt in 1933 is printed in Freedman (1967). A selection of Harrod's interwar papers and correspondence is forthcoming (Harrod 2003): see note 18.

5 The catalogue used to be posted online in the Harrod sub-directory of the Information Centre of NUCBA, at <http://www.joho.nucba.ac.jp/Rare/Harrhome.html>. It was, however, recently withdrawn.

6 These documents complement (with some overlapping) the collection preserved by P.W.S. Andrews, now housed in ABP; the two sets together form an almost complete collection of the documents produced by the OERG.

7 The catalogue was prepared by the bookseller who negotiated the sale of the papers in 1982 (Riley-Smith 1982). It still provides the guidelines for the reclassification which is presently in process. It was printed in 60 copies, which were presumably distributed to potential bidders. Some of these are accessible to scholars: specimens can be found, for instance, at Cambridge University Library, the Bodleian and Nuffield College Libraries in Oxford, and the University of London Library; Chiba University of Commerce possesses a copy printed at a later stage. As the individual items are reclassified by the librarians at Chiba University of Commerce, a description is made available and searchable on the Internet via the CUC library home page (URL: <http://www.lib.cuc.ac.jp/Library/eng/information.htm>). The itemised web catalogue, however, does not render the broad, thematic presentation of the printed catalogue, and in spite of being much more detailed it proves to be of limited use.

The rules for accessing the collection, which are also specified in the library's web site, are rather restrictive: users do not have access to the originals but only to photocopies, and further copying is prohibited; the latter limitation also regards the catalogue.

8 The courses on Ricardo and on the Federal Reserve System were repeatedly given in the interwar years. This section of the catalogue also includes notes for occasional lectures, and notes for his American lectures in 1968-71 on growth, the UK monetary system, the international monetary system, Keynes, and other subjects.

9 For a description see section 4 below.

10 The finding aid, processed by March 1988, individually describes each item, and provides a name index (<http://gulib.lageorgetowdept/speccoll/cl218.htm>). Photocopies of the items of both collections can be obtained.

11 The whole collection, in the form of both gif and pdf images, is online at <http://www.e.u-tokyo.ac.jp/Exhibition/keynes/index.htm>.

12 All these documents are open to researchers. They have been catalogued in-house, in chronological order by author. However, as each batch was processed at the time of acquisition, the cataloguing could not be entirely consistent: on a number of occasions, letters from the same correspondent written during overlapping periods have been filed in different folders. Finding aids, available at the library and on the Internet at <http://molcat.bl.uk>, should be consulted by addition number: Harrod Papers, Add 71181-71197; Supplementary Harrod Papers, Add 71609-71620; Second Supplementary Harrod Papers, Add 72727-72818.

13 Catalogues are online at <http://www.kings.cam.ac.uk/library/archives/modern/catalogue/>.

14 Catalogues are online at <http://rabbit.trin.cam.ac.uk/~jon/Msscolls/type.html#Economists>.

15 Catalogue at <http://library-2.lse.ac.uk/archives/handlists/Dalton/Dalton.html>.

16 Catalogue at:

<http://library-2.lse.ac.uk/archives/handlists/RoyalEconSoc/RoyalEconSoc.html>.

17 Catalogue at <http://www.oac.cdlib.org:80/dynaweb/ead/hover/> (search under Harrod's name; a few items relating to Harrod are also in the Hayek and Popper Papers at Hoover).

18 A scholarly edition of Harrod's interwar papers and correspondence is forthcoming, edited by the present author (Harrod 2003), and will be accompanied by a free-of-charge electronic version. Due to the impossibility – given the huge volume of extant documents – of publishing everything, the choice of the 1919-1939 interval was suggested by two considerations. On the one hand, the interval covers the first two decades of Harrod's professional activity, and is therefore an appropriate logical and chronological starting point. This will enable potential future editors to work at other periods without gaps or overlapping. On the other hand, the interwar years were the period during which Harrod produced most of his original contributions to economic theory, while generally the output of writings in economics has reached qualitative standards never approached again. This makes the study of these years a most gratifying undertaking for an historian of thought. One of the three volumes collects 23 of Harrod's unpublished (or difficult to retrieve) essays and memoranda, and 35 articles for, and letters to, the press. The remaining two volumes are dedicated to Harrod's correspondence. Given the impossibility of including the four thousand extant letters, it has been necessary to be selective. Such a process is inevitably arbitrary, as what is interesting for some scholars can be irrelevant for others. The criterion adopted was to concentrate on Harrod's professional and political correspondence, leaving out routine and personal letters. The most relevant letters (approximately 480), judged by this criterion, are reproduced in full, while letters with only a few relevant remarks are cited in notes or summarised as diary entries (approximately 470). As, however, scholars have the right to know which documents are publicly available and where they are deposited, a section is dedicated to the listing of the items not included in this selection; another section lists the hundreds of documents not found, the existence of which is inferred from internal or external evidence. The letters are arranged in chronological order, so that the reader can see them in the order in which they were received and sent by Harrod. The editorial apparatus, however, provides references to the relevant associated documents, in particular to the letters answered by and replying to each item; reading is therefore also possible in thematic order.

19 It should be noted that Ramsey's criticism did not relate to the marginal revenue curve, which both he and Keynes regarded instead as 'most neat and elegant' (Keynes to Harrod, 17 July 1928, in HP II-16), but concerned the second part of the paper on the benefit that cartels could bring to the national dividend. Although Ramsey later recanted his criticism (Ramsey to Harrod, 6 July 1929, in HP IV-963-973), Harrod did not include this part of the paper in the version published in 1930.

20 HP IV-963-973; the note is dated 8 May 1945.

21 It was reported in an 'egoistic footnote' to pp. 159-60 of Harrod's *Life of John Maynard Keynes* (1951), and the 'rather boring question of priorities' was taken up again in the footnote to p. 65 of Harrod 1967. It is also referred to in Harrod 1972, p. 394.

22 Harrod to Robinson, 1 July 1933 (in JVR vii/191/9-10). Joan Robinson asked Harrod to send her the original article and the correspondence with Ramsey (Robinson to Harrod, 19 August 1933, in HP IV-1089-1107).

23 See Samuelson 1939, and the exchange between Heertje and Heemeijer (2002) and Besomi (2003).

24 In 1964 Harrod had an occasion to discuss Hahn's and Matthews's survey of growth theories, as he was asked to comment on the origin of his switch from trade cycle to growth theory. Although he could easily have specified the relationship between growth processes and the growth rates characterising his instantaneous dynamics, he seemed to consider dynamics as regarding growth theory: 'I think that the use of the expression "dynamic determinants" in the Trade Cycle shows that I was feeling my way towards a growth theory that should complement a static theory' (Harrod to Matthews, 7 January 1964, photocopy in HP, drawer of unclassified materials). Harrod changed his mind later: his notes for a lecture on Growth at Rutgers University in 1969 begin as follows: 'Refer to Hahn and Matthews. Dec. 1964 and since. Not quite happy.' (in HP V-132/7).

25 Meanwhile Harrod expressly stressed that his 'own views of dynamics [...] have been grossly misrepresented by most commentators', expressed his surprise at 'the persistent misrepresentaton' as he felt not to have had the reputation for obscurity, and approved of 'an admirable catalogue of some of the misrepresentations' made by Bruno Miconi (Harrod 1971, p.78). Miconi's article (1967) surveys the secondary literature on Harrod's instability, focusing in particular on the analytical aspects.

26 The distinction between the 'normal' and the 'temporary' warranted rate of growth (Harrod 1973, p.101) was already expounded in similar terms in the preliminary draft of Harrod's 'Essay in dynamic theory' (1939), but was eliminated when the draft (now published as Harrod 1996) was revised to meet Keynes's criticism. The timing of the publication of *Economic Dynamics* suggests that Harrod may have re-read the draft and taken the idea from there as a consequence of the publication (which he discussed with the editor) of his correspondence with Keynes on the subject in vol. XIV of *The Collected Writings of John Maynard Keynes* (1973). I could not, however, find any conclusive proof (nor any disproof) of this hypothesis in Harrod's papers.

27 This is indicated by Harrod himself in the preface of his book (1956, p.v) and confirmed by the extant correspondence with Ayer at the end of 1933, with Robertson in 1935 and again in 1938, by Harrod 1938b, and by a manuscript book on these topics which was initiated in 1940-41.

28 Harrod 1939b. According to the Social Science Citation Index, this was the most frequently cited of Harrod's writings between 1951 and 2000, with 120 hits.

29 Harrod frequently wrote on this issue, beginning with an article in the *Oxford Magazine* (Harrod 1934b), followed by articles in learned journals (for instance Harrod 1938a, 1939a, 1939c, 1955), and in the press (for instance Harrod 1936b, 1937a). He spoke before various societies (the Primrose League Political School, the Liverpool Economic and Statistical Society, the Manchester Statistical Society, the 1938 Liberal Summer School, the Oxford University Political Economy Club), considered writing a book, frequently mentioned the topic in correspondence with his friends – often provoking sarcastic comments – and took part as an outsider in the Parliamentary debate on the revision of the Population Bill by means of further letters to the press, including one signed by a number of economists and social scientists (Harrod and others 1938). In 1943 he submitted oral evidence and two long memoranda to the Royal Commission on Population (Harrod 1952, Chapter 1); he insisted on his proposals in the evidence submitted before the Royal Commission on Equal Pay (Harrod 1952, Chapter 2).

30 In particular *International Economics*, *The Trade Cycle* and the 'Essay in dynamic theory' in the interwar years; after the war, the work he most thoroughly discussed was *Foundations of Inductive Logic*, although of course correspondence on most other books is extant.

31 Harrod's editorship probably deserves a closer examination (most of the relevant documents are housed in the Royal Economic Society archives at the LSE), for even a

cursory look reveals notable examples of intrusiveness. In 1958, for instance, he rejected a paper by Hawtrey for the following reason: ‘When I was a young man I believe that I grasped clearly why, in conditions of perfect competition, one must assume that production costs are a homogeneous linear function, if one is to avoid contradiction. ... After getting my thoughts clear on this subject once more, I composed my modified criticism of Samuelson [Harrod 1958, with reference to Samuelson 1948 and 1949]. As a safeguard I delivered this at the Association of University Teachers to an audience containing Harry Johnson and other brilliant young economists. They were not able to find faults. I accordingly believe that my modified criticism is correct. It cost me immense labour. If I publish your article, I am sure that I would at once get a decisive rebuttal from Samuelson. I feel that all this would be rather a pity. It would diminish the impact of my article on the minds of economists all over the world if it was followed by a faulty article, which was then successfully refuted by Samuelson’ (Harrod to Hawtrey, 12 September 1958, in HTRY, file 10/49).

On another occasion Harrod insisted on some amendments in Robertson’s obituary of Hubert Henderson, arguing as follows: ‘The point is not especially relevant to the question of Hubert. But the notion that the Americans extorted this agreement in return for supplies of war, though not, I am sure you will agree, correct, is very widespread, and has done much to injure the Americans in the British estimation. In these days we don’t want to add un-necessarily to anti-American feeling!’ (Harrod to Robertson, 5 October 1953, in RES). Robertson did not accept the amendments (letter to Harrod of 12 November 1953, in RES).

32 The documents supporting the following account are cited in Besomi (2000).

33 Besides the well-known 1938 exchange on Tinbergen’s League of Nations statistical inquiry on trade cycle theories, included in Keynes’s *Collected Writings* (1973, vol. XIV, pp.295-305), Keynes’s comments on Harrod’s review of Pigou’s *Theory of Unemployment* (Harrod 1934a) well express his methodology of criticism, while his views on the use of mathematics in economics are expounded in a letter on MacDougall (1936).

34 The Oxford Economists’ inquiry on prices and interest, and especially Harrod’s role in it, are discussed in Besomi (1998c).

35 These materials are collected in the Tokyo University and the Chiba University of Commerce papers.

36 Most of these papers are now housed in the collection at Chiba University of Commerce, although interesting materials are also to be found in the Nagoya collection.

37 All these essays are included in *The Collected Interwar Papers and Correspondence of Roy Harrod* (2003). The titles, years, and repositories are, respectively: ‘Morals and Arithmetic’, 1926 (in HP V-107); ‘A Comment on the Questions for Discussion’ (Harrod 1935); ‘The Trade Cycle & the Theory of Distribution’, read in 1925 (HP V-105), and ‘Business Experience and Economists’ Assumptions’, reporting on the Oxford Economists’ Research Group’s inquiry on prices and interest, read in 1937 (in HCN 5.13.5); ‘The Choice of a Currency Policy’ (Harrod 1936a); ‘Memo on the Effect of Falling Prices on Employment’ and ‘The Trade Cycle’, 1927 (in HP V-108 and HP V-110); ‘Continuity of Values and the Long-term International Problem’, note for one of the autumn 1934 discussions of the Group on International Monetary Problems (in CH 9/6ff); ‘Memo. On Economic Studies in Oxford’ (in RF 1.1, Series 4015, Box 75, Folder 984); ‘Central Banking’, read in 1932 (in FS J/14/8-9 and J/2/3/120-121), and ‘Memorandum by R.F. Harrod on the Possible Scope of the Costings Group’s Work’, read in 1933 (FS J30/1/1-3); ‘Notes on Interviews with Entrepreneurs’ (in HCN 4/24/1 and ABP 173); ‘Speech to the House of Commons Monetary Committee, 10 Nov. 1938’ (in HP V-115); ‘Karl Marx’, read in 1939 (in HP V-356); Untitled, relating to the Popular Front campaign in Oxfordshire,

early 1939 (in VI/176/1); Untitled, October 1931 (in HPBL 72734/148-151); 'Notes on Monopoly and Quasi-Competition', 1928 (in HP II-17/b), and 'An Essay in Dynamic Theory', submitted in 1938 (in HP V-113, published as Harrod 1996); and 'A Note on Collective Bargaining', 1932 (in HP II-41).

38 Harrod subscribed to a news clipping service.

39 Although I have not worked out statistics relating to postwar correspondence, letters of a private character never stopped flowing in and out of Harrod's mailbox.

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Abbreviations to archives in the footnotes refer to the following: ABP = Andrews and Brunner Papers, British Library of Political and Economic Science, Archives Division, London; CH = Royal Institute of International Affairs Archives, Chatham House, London; FS = Fabian Society Papers, British Library of Political and Economic Science, Archives Division, London; GLSS = Shackle Papers, Cambridge University Library, Add. 7669; HCN = The Harrod Collection, Nagoya University of Commerce and Business Administration; HP = The Harrod Papers, Chiba University of Commerce; HPBL = Harrod Papers, British Library, London; HTRY = The Hawtrey Papers, Churchill College, Cambridge; KP = The Richard Kahn Papers, King's College, Cambridge; RES = Royal Economic Society, British Library of Political and Economic Science, Archives Division, London; RF = Rockefeller Foundation, Rockefeller Archives Centre, Tarrytown, New York.

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