Keynes on population and economic growth

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This paper provides an account of the development of Keynes's writings on population, the subject which many of his contemporaries saw as his intellectual Achilles' heel. In particular, it shows the central role of Keynes's unpublished manuscript entitled 'Population' in the evolution of his later work on this topic (i.e. chap. II of The Economic Consequences of Peace and his biographical essay on Malthus). This has hitherto been underestimated. The content of Keynes's early neo-Malthusianism is explored. His defeat in debate with Beveridge in 1923–24 and the phases of his subsequent recantation of neo-Malthusianism are then considered, as are his views on birth control. The paper concludes with an assessment of whether Schumpeter's negative judgement of Keynes on population can be sustained.

1. Introduction

The population question was for Keynes always in the second rank of his intellectual interests, although he tackled it in books and academic papers as well as in his journalism. He continued to write on population matters intermittently throughout his career, at least until his Galton Lecture in 1937. From the beginning, his chosen mode of engagement with population issues was polemical. The first illustration of this style was his contribution to a debate in 1910 with Karl Pearson, Professor of Eugenics at London University.\(^1\) But among many of his contemporaries, his pronouncements on population came to be regarded as his intellectual Achilles' heel, the topic on which his views were least reliable and on which his controversial skills were most severely tested by his opponents. Joseph Schumpeter's obituary of Keynes, referring to his 1923–24 debate with Beveridge, went so far as to describe it as 'perhaps the least felicitous of all his efforts and indicative of an element of recklessness in his makeup which those who loved him best cannot entirely deny' (Schumpeter, 1946, as reprinted in Wood, 1983, I, p. 69).

\(^{\text{1}}\) The topic was whether physical degeneration in children was hereditary (as Pearson held), or whether it was caused by negative environmental influences—the position that Keynes defended. Keynes's contribution focused on the alleged invalidity of Pearson's statistical inferences. Keynes expressed what now appears to be an extreme and unjustifiable scepticism of the usefulness of the statistical analysis of population data, basing himself on his own studies of probability theory.
This essay aims to provide an account of the development of Keynes's thinking on population. In particular, it tries to show the central role of Keynes's unpublished manuscript entitled 'Population' in the evolution of his later work on this topic. This has hitherto been underestimated. The content of his early neo-Malthusianism is explored, and the phases of his subsequent recantation of it. The essay concludes with an assessment of whether Schumpeter's negative judgement on Keynes on population can be sustained.

2. Keynes's 1913–14 manuscript on population

With the exception of the 1910 debate with Pearson, the first account of Keynes's views on population questions is to be found in his unpublished manuscript entitled 'Population', now in the Modern Archive of King's College, Cambridge. It was not included in the Royal Economic Society's edition of Keynes's Collected Writings. The reason for this exclusion was presumably because Keynes never gave it a final, finished form for publication. The extant version is evidently unfinished. Each page was numbered by Keynes, but although the manuscript starts with f. 1 and ends with f. 39, it lacks f. 2, f. 3, f. 5 and ff. 8–12 and has additional sheets f. 21.1, f. 21.2, f. 21.3 and f. 26.1. It thus has 35 pages. It is not, pace Skidelsky (1992, p. 429) 'a thirty-nine page manuscript'. That is a small slip, of course, but one that indicates that its examination by Keynes's great biographer may have been somewhat cursory.

Indeed, the authoritative modern commentators seem not to have done 'Population' full justice. Moggridge merely noted it as a source for Keynes's biographical essay on Malthus, which is right as far as it goes (1992, pp. 562–3; 1993, p. 101). Skidelsky omitted to mention it at all in the first volume of his biography, which is where it belongs chronologically. It is accorded a brief summary in the second volume in connection with Keynes's interest in Malthus (Skidelsky, 1992, pp. 416, 429–30). This belated notice, however, leaves much more to be said. 'Population' is more seminal for understanding Keynes's views on population than readers of Skidelsky would be likely to conclude.

'Population' is described by Skidelsky as the text of ‘an unpublished lecture on population he [Keynes] gave at Oxford in 1914’. This is correct: it was used for a meeting of the Political Philosophy and Science Club at New College, Oxford, on 2 May 1914, to which Keynes lectured on the subject ‘Is the Problem of Population a Pressing and Important one Now?’ But the date of its composition is not clear. One the one hand, it could have been a set of notes cobbled together immediately before the lecture. This is the impression given by f. 31, where Keynes begins a sentence with the words ‘Even today, Saturday May 2 …’ But there is other internal evidence which suggests, although it does not conclusively prove, that part of the draft might have been written in the previous year, 1913, and then laid aside. On f. 27 Keynes originally wrote: ‘When I was in Egypt this year, …’ but subsequently corrected ‘this’ in pencil to ‘last’.¹ While it is possible that Keynes could simply have been mistaken about how long ago he had been in Egypt, this explanation seems less plausible than supposing that at least a part of the manuscript dates from 1913. What, if anything, would follow if this were true? Only that we would see ‘Population’ not just as an occasional offering, prompted

¹ Keynes visited Sir Robert Furness in Egypt in March and April 1913, travelling to Cairo, Luxor and Alexandria.
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by the need to give a guest lecture, but as something begun under the recent impress of his Egyptian experience and which blocks out themes which will continue to resonate, though with gradually decreasing vibrancy, in his subsequent work.

The extent to which the essay on Malthus derives from 'Population' is distinctly underestimated at present. According to Skidelsky, the latter includes only 'some biographical remarks (on Malthus) ... based largely on Bishop Otter's Life', while 'the learned biographical essay dates only from 1922'.\textsuperscript{1} From this one would hardly suspect that almost half of the manuscript, 16 out of 35 pages, is devoted both to Malthus's life and to Keynes's evaluation of Malthus's ideas. Furthermore, the essay on Malthus, finally published in Essays in Biography (1933), not only follows the basic structure laid out in the first 16 pages of 'Population', but a great deal of its verbal detail as well. The additions made to the original structure in the 1920s are indeed 'learned'. But they are all in the nature of antiquarian embellishments. They concern such matters as Malthus's distant ancestors, his tutor Gilbert Wakefield, and his personal relationships with Coleridge, Ricardo and Harriet Martineau. But all of Keynes's central ideas about Malthus and population issues can be shown to belong to the previous decade.

As well as being the major source for the Malthus essay, it is from 'Population' that the key ideas in chapter 2 of The Economic Consequences of the Peace are taken. The argument was that the European standard of living had become precarious well before 1914, as a result of changes in international trading conditions that occurred at the turn of the century. This much is noted by Skidelsky, who states that 'from the point of view of Keynes's post-war preoccupations this is the most important passage in the 1914 talk' (1992, p. 429). But there is more to be gleaned on this, from Keynes's jottings at the back of the manuscript, which he used to take notes on both who attended his seminar and the questions that they asked. Among the recorded members of the Oxford audience was W. H. Beveridge. Among the scribbled notes on questions was the phrase '1900 turning point'. From this evidence it is possible to conjecture that Beveridge disagreed with Keynes's proposition that 1900 had marked a major turning-point in the terms on which Europe traded, and hence in the security of Europe's standard of living. He may already have read Keynes's note of 1912 in the Economic Journal (C.W. XI) which gave the evidence on which Keynes relied, and concluded that it was faulty. The fact that in 1919 an unrepentant Keynes published the offending passage almost word for word in Economic Consequences, taking no heed of Beveridge's objections, might well have irritated the latter. Thus 'Population' was probably also the original source of the fierce controversy which erupted between the two men in 1923–24 on the subject of Keynes's neo-Malthusianism.

As well as providing the groundwork for three themes that would be central to Keynes's future writing on population issues, 'Population' contains fascinating material that was never followed up thereafter. It casts its discussion within a global framework, for the first and only time. Keynes's perspective on population narrowed progressively over the next quarter of a century. In 1913–14 he took a global view which incorporated the poor, densely populated countries. Then, in Economic Consequences and other writings of the 1920s, he narrowed his focus to Europe, including Russia, and North

\textsuperscript{1} In making this statement, Skidelsky may have been influenced by the Editorial Note at the start of the essay on Thomas Robert Malthus in C.W. X, p.71. This states quite baldly that 'the earliest version of this essay that survives among Keynes' papers dates from 1922.' While this may have been thought to be correct at the time of publication (1972), it is not true today. The manuscript on 'Population' is beyond any doubt an earlier version of the Malthus essay.
America only. Finally, in his population writings of the 1930s he narrowed his focus still further—to England and Wales alone, although the USA continued as a focus for many of his other concerns.

A second, unique feature of 'Population' is that in its pages Keynes is franker in his advocacy of the wider use of birth control than he ever was in his subsequent published writings. He complained about the characteristic English inhibitions to the candid public discussion of the subject, which he thought was not only gross hypocrisy on the part of the respectable persons who used such methods themselves, but also highly damaging to sound public policy. Eugenicists like Karl Pearson and Ethel Elderton opposed birth control because its adoption by the upper and middle classes implied a future fall in the overall 'quality' of the population. To which Keynes replied that '... to put difficulties in the way of the use of [artificial contraception] checks increases the proportion of the population born from those who from drunkenness or ignorance or extreme lack of prudence, are, not only incapable of virtue, but incapable also of that degree of prudence which is involved in the use of checks' (f. 34). In other words, while he also was concerned about the quality of the population, he believed that it should be raised by other means than raising the fecundity of the respectable classes.1

What then does 'Population' have to say about the larger picture within which Malthusian ideas, European food security and contraception have to be set? Keynes argues that 'three quarters of the world have never ceased to live under Malthusian conditions' (f. 28). He takes as paradigmatic of that three quarters, the countries of India, Egypt and China. He fails to mention any of the then thinly populated poor countries of Africa and Latin America. Not only are the paradigm countries overpopulated, but the efforts of colonial governments (in the cases of India and Egypt) to raise the standard of living are regularly negated by population increase. The example of rising real wages in the Punjab is cited as the exception which proves this rule. Keynes claimed that investment in canal irrigation in the Punjab would have had no effect on real wages if the population had not been decimated by plague between 1901 and 1911. In these circumstances, he argues, specific health interventions to reduce the mortality rate are misguided, since all that they do is weaken the positive checks and thereby prevent any rise in living standards. The possibility that reducing infant mortality would induce lower fertility is not considered. This is the traditional Malthusian view of famine, disease and war as beneficent safety valves for societies.

The one ray of hope with which Keynes lightened this archetypal Malthusian scenario was the reversal of inter-generational income flows. He believed that 'the transition comes when, by a change from agriculture to industry, a large family instead of being an advantage, begins to occasion great expense.' In contrast to his objection to intervention in health matters, he argued that, when this transition begins, it can be assisted by public policy. ‘The raising of the school leaving age and strict regulations against the industrial employment of children may thus exercise a profound influence upon the birth rate’ (f. 32–3).2 But the mechanism by which couples respond to incentives created by public policy (whether by the changing age of marriage, or increased

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1 It is worth noting that remarks in a similar vein to these made by Sir Keith Joseph in 1974 almost certainly cost him the leadership of the Conservative Party. They express a very middle-class view of the working class, which in contemporary Britain is widely resented, and which Keynes was picked up on by at least one of the participants in the 1914 Oxford seminar.

2 Keynes hereby distinguishes himself from Adam Smith, Malthus and J. S. Mill, who all justify state intervention in education on other grounds than its effect on the birth rate; see Weiner, 1991, pp. 121–6.
abstinence, or what) is not discussed. The possibility of extending the use of birth control in the paradigm countries is not considered.

For the remaining quarter of the world—Europe and North America—the previous 50 years had already been a period of reprieve from Malthusian pressures. This was because new sources of food supply had opened from parts of the world hitherto uncultivated, and an international market in foodstuffs had developed. But, thought Keynes, ‘it must be plain to the meanest intelligence that this factor is temporary’ (f. 23). Keynes cited one economic indicator as his evidence of a ‘1900 turning point’.

Up to about the year 1900 the law of diminishing returns was to this extent suspended that every year a given quantity of manufactured products tended to be exchanged for a larger quantity of agricultural product. Since 1900 there has been a tendency for this to be reversed; and a given quantity of manufactured goods tends to be exchanged for a smaller and smaller quantity of agricultural product. (f. 24)

No numbers were cited. He evidently relied on those in the *Economic Journal* note. From this alleged reversal in Europe’s commodity terms of trade, he concluded that food security was likely to diminish just at the moment when ‘in the principal states of Europe an enormous literature is growing up . . . to call on all patriotic citizens to propagate’ (f. 21). To Keynes’s mind, this was folly which would undermine the European standard of living.

But at the same time, and contrary to Malthusian doctrine, the rate of population growth had responded by declining, rather than rising. This was primarily because the birth rate had declined. Keynes correctly diagnosed that ‘the ability to avoid offspring, namely the use of artificial checks, is of enormous importance’ in explaining the continuous fall in the birth rate. But, having understood the effectiveness of artificial checks for adjusting voluntarily the rate of population increase to economic circumstances, he still foresaw imminent danger to the standard of living because of the ending of abundant food supplies from North America and Australia. There is an unresolved contradiction here, which Keynes does not fully probe.

What was to be done? How could he show the patriotic pro-natalists that they were wrong? This was more difficult than it at first seemed. The difficulty that he saw was that policies which encouraged the English rate of population growth to decline further would have only a very slight impact on the protection of the English standard of living. The significance of the development of an international market in foodstuffs, on which England had become dependent, was that food prices were set in a global market, in which England’s demand was but only one element of total demand. If world food supplies had reached a plateau, while world demand was expanding because the overpopulated countries were failing to restrict their population growth, a moderation of English demand would hardly arrest the rise in food prices, and the consequent loss of welfare. As Keynes put it, ‘the advantage of a fall in the birth rate in any country is shared by the whole world . . .’ (f. 29–30). By the same token, a rise in the birth rate in any country will, ceteris paribus, cause a welfare loss to the whole world. This loss will not be able to be offset by small countries that do attempt to restrain their own population growth.

From an analytical viewpoint, this sketch of a model of the welfare implications of differential population growth in what today would be known as the North and the South is the most interesting thing to be found in ‘Population’. It is not fully worked out. It plainly abstracts from some crucial aspects of the problem which it addresses. It
assumes that the extra food demand of the South's additional population will all be met from the international market, as well the North's. It ignores the fact that the strength of the South's additional food demand will be mediated by income, of which by definition the South has less per head. There is no attempt, even on the back of the proverbial envelope, to try to calculate empirically the welfare effects of plausible population growth-rate differentials. In empirical terms, Keynes underplayed England's dominance in the world food market: at that time, England was much the largest food importer in the world.

What Keynes presents is an early example of an 'isolation paradox', a paradox of population growth that prefigures his later famous paradox of thrift in the General Theory. As he puts it, 'every patriot urges his country forward on a course of action [that is] in the widest sense anti-social', just as he was to argue much later that the more virtuous people are in exercising thrift, the further the national income will have to fall. Such paradoxes, based on the insight that the structure of individual incentives is inconsistent with the achievement of the social good, have characterised political economy and economics from at least the time of Mandeville to the modern environmentalists' concern for the 'tragedy of the commons'. They provide one link between the intellectual approaches of Keynes and Malthus.

In his final summary of the argument in 'Population', Keynes concludes against the patriotic pro-natalist case, but with some heavy reservations. Notwithstanding his population paradox, he suggests that 'in future we can act with our attention chiefly directed towards the economic well-being of the population of our own country, with but secondary regard to the numerical position of our race in the world as a whole [because] national and military advantages are at least as likely to be diminished as increased by the evils of over-population' (f. 37).

The effect of the population paradox is felt in the immediate qualification of this conclusion by what Skidelsky calls 'a typical Edwardian Yellow Peril coda' (1992, p. 430). 'On the other hand', Keynes warns, 'cosmopolitan humanitarianism must be indulged in but very moderately if evil consequences are to be avoided' for the English standard of life. Appropriate protective measures against economic injury at the hands of 'more prolific races' are given as 'some definite parcelling out of the world' by means of rigorous immigration laws, or even regulation of the international trade in food supplies. The former, however, would not in all logic mitigate the welfare loss to the North postulated by the population paradox, while the latter, as Keynes himself conceded, might well be economically infeasible (f. 38). The ambivalent message of the paper is perhaps best captured by the first sentence of its final paragraph: 'though awkward dilemmas confront in every direction ... one can feel some hope' (f. 39).

3. Keynes's essay on Malthus

One significant aspect of Keynes's well-known essay on Malthus was the fact that, after

1 Keynes recognised Malthus's place in the Anglo-Scottish tradition of 'prosaic sanity free from sentiment and metaphysic, and ... an immense disinterestedness and public spirit' (CW X, p. 86). Malthus had turned public opinion against the 'Speenhamland system', the pre-1834 English Poor Law which allowed poor relief to be given in proportion to the number of children in each poor family. He argued that the virtue of charity to the poor could become a source of misery. This kind of paradox was attractive to Keynes, who later traced it back to Mandeville (1970, 1714). Strictly speaking, Mandeville claimed that private vices created public benefits, where Malthus and Keynes both claimed that private virtues could create public disbenefits.
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blocking out its basic structure in ‘Population’, he continued to work on it and, at intervals, to give variant versions of it at seminars for almost 20 years. It was not published in its final form until 1933, in his volume Essays in Biography (CW X, pp. 164–5). It stands out oddly in this volume, because Malthus was one of the few subjects of these biographical essays whom Keynes had not known personally. At the same time, it is clear that Keynes increasingly recognised his own strong personal affinities with Malthus, and the history of the essay is a history of increasing identification between its author and its subject.

As finally published in 1933, the essay says rather little about Malthus the population expert. The first third of the final version of the essay is occupied by Robert’s father, Daniel Malthus. With a great display of antiquarian erudition, Keynes discussed Daniel’s life and intellectual achievements, including his friendship with David Hume and Jean-Jacques Rousseau.1 The final third of the 1933 version concerns Malthus as ‘the first Cambridge economist’, identifying in Political Economy and his correspondence with Ricardo the embryo of ideas which later underpinned the General Theory. To Malthus is attributed an understanding that unemployment can originate in the lack of effective demand, and that demand deficiency can result from ‘an attempt to accumulate very rapidly’—which Keynes identified with his own paradox of thrift.2 But the effect of these two lengthy interpolations is to shrink the remarks on Malthus’s population theory to a small, almost vestigial, central section of the essay in its final published form.

The 20-year evolution of the essay on Malthus thus shows a gradual shift away from Malthus, the writer on population, and towards Malthus, the writer on political economy. The mid-point in this evolution is described by Harrod, who was present when Keynes gave his Malthus paper to the Political Economy Club in Cambridge in the Michaelmas Term, 1922. The description runs as follows:

[Keynes] himself read a paper on Malthus. This was Malthus in his aspect of population expert, the precursor of Darwin, not the initiate of the doctrine of effective demand. . . . [Keynes] also dwelt on modern conditions; the Malthusian devil was still evidently with us. In the discussion Mr Dennis Robertson produced some recent statistics; he was not sure about the Malthusian devil. Indeed he hinted that the modern danger might be the opposite one, a decline in numbers. Robertson seemed to know what he was talking about, and I had the uncomfortable feeling that it was he, and not my master, who was in the right on this occasion (Harrod, 1972 (1951), p. 385).

1 Keynes shared with Malthus a talented, but much less successful father. Although the parallel is never made explicit, the reader finds a comparison of Daniel Malthus with Neville Keynes never far away from thought. Having written this, it was reassuring to discover that Skidelsky had had the same reaction. ‘Malthus’s father Daniel, a man of intellectual distinction and notable friendships who nevertheless allowed “diffidence to overcome ambition”, reminded Keynes of his own father; and his account of a delightful father–son relationship mirrors his view of his own relationship with Neville Keynes’ (Skidelsky, 1992, pp. 416-7).

2 Keynes’s discussion of these attributions in the final version of his essay has been used to pinpoint the period (late 1932 and early 1933) when the key ideas of the General Theory were finally integrated by Keynes himself (Moggridge, 1992, pp. 562–3). This is a powerful indication of the influence of Malthus in stimulating Keynes’s own thinking. This is not to say that Malthus was indeed the true precursor of Keynes’s theory of effective demand. Harrod (1972, 1951, p. 543) certainly doubted that he was. ‘I cannot believe that Malthus, splendid as he was as a population theorist, contributed much of value to economics, in which he was always muddled.’ Subsequently, Corry (1959, pp. 712–24) argued that Malthus did not break with the classical doctrine of the equality of ex ante saving and ex ante investment in his analysis of ‘overproduction’, and therefore ‘was not in fact an analytic forerunner of Keynes’. But there have been other economists since who have taken the contrary view.
This passage catches the attention not just because it records the essay’s half-way stage between ‘Population’ and the 1933 version, with its heavier emphasis on Cambridge political economy. Harrod also shows here both how Keynes made a link between Malthus and ‘modern conditions’ and that he and Robertson doubted the validity of Keynes’s postulated linkage.

Despite the intellectual and personal affinities which he felt with Malthus, Keynes’s reaction to Malthus’s work on population (as opposed to that on political economy) in the 1933 essay now seems superficial. He favoured the youthful inspiration of the original 1798 edition, judging that the importance of the Essay ‘consisted not in the novelty of its facts but in the smashing emphasis [Malthus] placed on a simple generalisation arising out of them’ (CW X, p. 86). The second 1803 edition added very substantially to its empirical content, including country and area studies of an astonishing range—the South Seas, Africa, Siberia, Turkey, Persia, ‘Indostan’, Tibet, China and Japan—to mention only those in Book 1. This greatly expanded empirical material is rich in historical scholarship and sociological and anthropological insights—so much so that it ought to be recognised much more than it is as a precursor of modern ‘development studies’. But the qualification and attenuation of the force of the original principle which the case-studies required did not appeal to Keynes. He thought that posterity would join him in the view that the 1798 edition was ‘a superior book’.

The 1913—14 manuscript on ‘Population’ provides a distinctly more nuanced appreciation of Malthus’s work on population than the 1933 biographical essay. The latter praises Malthus’s simple generalisation, but it does not specify precisely what he understood that generalisation to be. ‘Population’ had already provided what the essay omitted. On this point, therefore, it merits extensive quotation.

There is of course a good deal in Malthus’s book which subsequent writers have rightly discarded. His reminiscences of the Mathematical Tripos led him to use the analogy of the geometrical and arithmetical ratios to describe the rates of growth of population and subsistence in a manner for which there is no foundation. Nor did he see explicitly in what way his generalisation depended on the tendency towards diminishing returns in agriculture. Most important of all, experience has disproved his proposition that any increase in economic well-being tends to bring about a corresponding increase in the rate of population. For a failure to anticipate the great increases in the sources of food supply which have actually occurred he can scarcely be blamed.

But his main thesis is simple, clear and irrefutable. There is a limit to the available supply of subsistence of quite a different kind from any limit that there may be to the tendency of the human race to propagate. In general the rate of propagation has actually been so great that equilibrium has only been brought about by the influence of various kinds of checks, most of them destructive of happiness. From such considerations two painful conclusions emerge—first, the point with which Malthus was most immediately concerned, that all political projectors and setters forth of a Utopia have had presented to them a problem which they often avoid and for which they can seldom offer a satisfactory solution, and second, that promotion of the degree of populousness in the world which is most to be desired is not to be expected from the working of the natural order, that the natural degree of populousness is likely to exceed the ideal, and that the question of population is the first and perhaps the most urgent and important of the problems facing those who seek to improve the material condition of mankind. All these conclusions were true in Malthus’s time and are true now. It is not in accordance with Malthus’s position to suppose that a day will actually arrive either in the near future or at any time when population will have become so dense that all the inhabitants of the world will live on the margin of starvation. Before that happens, some check is likely or certain to intervene. But such an admission does not affect two judgements of pessimism—that, even as it is, the maintenance of a proper equilibrium generally involves misery; and that in most places the material condition of mankind is inferior to what it might be if the populousness were to be diminished.
Here we have a clearer and more comprehensive statement than anywhere in his published writings of what Keynes believed to be the enduring contribution of Malthus to population studies. Keynes used a shorthand phrase to represent this set of ideas in the many interventions which he made to the population debate. This phrase is 'the Malthusian devil', which is sprinkled copiously through his collected writings, and is again echoed in Harrod's account. 'Population' gives us the missing content of that phrase: a persistent propensity for population growth to exceed that of the means of subsistence, leading to positive checks that add to human misery and indicating the desirability of interventions that would protect the economic standard of living.

The weight of contemporary opinion on Malthus the population expert does not concur with Keynes's judgement of the superiority of the first, polemical edition over the second (see, for example, Hollingsworth, 1972, p. xv; Winch, 1987, p. 95; Wrigley, 1988, p. 38). Von Tunzelmann puts the mainstream modern view as follows.

The polemical first edition ... became thereafter synonymous with 'Malthusianism' ... The reality of Malthus's model is not only more optimistic but far richer in its historical and predictive content. For this reason we should clearly distinguish Malthus's model from 'Malthusian' models. (von Tunzelmann, 1991, p. 274)

Keynes's definition of the enduring truths of Malthus shows him to have been, in von Tunzelmann's sense, a Malthusian, rather than a connoisseur of Malthus's population model. But he was a Malthusian for a secular world. On the one hand, he was well aware that Malthus intended a 'justification of the methods of the Creator, in spite of appearance to the contrary' (CW X, p. 84; Winch, 1987, p. 35). One the other hand, his choice and repetition of the term 'devil' suggested that, notwithstanding his earlier reference to the Punjab plague as a 'benevolent visitation', he did not really accept an eighteenth century theodicy, but rather believed that human countervailing action was after all desirable.¹

4. The Malthusian devil: unchained, chained and loosed again

But when, in The Economic Consequences of the Peace (1919), Keynes came to analyse the working of the Malthusian devil, his geographical canvas, though wide, was much narrower than that of Malthus himself in the 1803 edition of the Principle of Population. It was also much narrower than the one he had used in 'Population' for his own first intellectual encounter with Malthus. Keynes focused largely on Europe and its economic relations with North America, with the briefest of side-glances at tropical Africa. He chose the one quarter of the world where, as he had previously argued, 'the cloud had lifted' and the Malthusian devil had been successfully defied. On this restricted canvas, he then drew, in chapter 2 of Economic Consequences, a four-phase

¹ Keynes's criticism of modern 'political projectors and setters forth of Utopia' for not intervening in population matters when otherwise proposing radical social change is surely justified. One contemporary Cambridge utopianist whose work displayed this fault was J. R. Bellerby (1931). He classified the sex instinct as 'natural self-interest', whose workings were treated as inevitable, while concentrating his proposals for change on 'acquired self-interest' only. Keynes gave Bellerby a platform at the Political Economy Club in 1929, but was critical of his proposals, although we do not know whether this was on the population point or for other reasons.

The classical utopianists did not fail to intervene in population matters, e.g. the proposals for eugenic marriage festivals for the Guardians in Plato's Republic. Such proposals, however, were intended to maintain population constant in the face of losses caused by wars and epidemics. If the problem was population growth by the lower classes, however, constancy of total population could only be maintained by restricting eugenic childbirth by the Guardians (Cornford, 1941, p. 156, n. 1).
history of the relation between population and resources for the subsistence of Europe's peoples.

Before 1870, Keynes argued, Europe as a whole was self-reliant in food production and population was at appropriate levels for the available food supply, 'adjusted' to it by the standard Malthusian negative checks of famine and disease. From 1870 to 1900, population increase in Europe and North America was more than validated by growth in the available food supply—'as numbers increased, food was actually easier to secure'. This came about because of increasing returns to scale of production in both agriculture and industries; and increasing specialisation and division of labour, facilitated by emigration from Europe to North America, and increased transatlantic trade with improved communications. During this phase, the Malthusian devil was effectively 'chained up'. From 1900, 'a diminishing yield of nature to man's effort was beginning to reassert itself', evidenced by the rising real cost of North American cereals. But this was balanced by an inflow of foodstuffs from tropical Africa. The Malthusian devil remained out of sight, but was beginning to threaten what Keynes nostalgically termed 'this economic Eldorado'. Then the war of 1914–18 dislocated the accumulation of capital both physically and psychologically:

(i) the pre-war division of labour within Europe was disrupted by the breakdown in transport and the organisational framework for international commerce;
(ii) the decline of the exportable surplus of food from North America available to feed the industrial populations of Europe, and Europe's decreased ability to pay, threatened basic living standards;
(iii) the Victorian social psychology had involved a 'double bluff', whereby workers were persuaded to accept as wages an unfair share of their product and the capitalists were persuaded not to consume, but to accumulate and reinvest the profits of such exploitation of labour. This double bluff had now been exposed.

Keynes's thesis was that late Victorian prosperity, which had chained the Malthusian devil, had come to be wrongly assumed to be normal. But, by 1919, it had been revealed as exceptional, an 'extraordinary episode', a 'happy age' whose growth had been unstable. Anthropomorphising society, he wrote as follows about the Victorian capital accumulation process:

Society was working not for the small pleasures of today but for the future security and improvement of the race—in fact, for 'progress'. If only the cake were not cut, but was allowed to grow in the geometrical proportion predicted by Malthus of population, but not less true of compound interest, perhaps a day might come when there would at last be enough to go around, and when posterity could enter into the enjoyment of our labour. In that day, overwork, over-crowding and under-feeding would come to an end... One geometrical ratio might cancel another and the nineteenth century was able to forget the fertility of the species in contemplation of the dizzy virtues of compound interest. There were two pitfalls in this prospect: lest, population still outstripping accumulation, our self-denials promote not happiness, but numbers; and lest the cake be after all consumed, prematurely, in war, the consumer of all such hopes. (CW II, pp. 12–13)

This is a slightly confusing, but central passage. It is worth making two points by way of clarification. The slight confusion arises from the statement that 'one geometrical ratio might cancel another'. If the rate of capital accumulation precisely cancelled out the rate of population growth, then without some other change, the rise in the standard of living which the Victorians looked forward to would not have taken place. Instead,
the result would merely have been one of capital-widening, the provision of a growing population with the same average endowment of capital per head. The ending of overwork, overcrowding and underfeeding could have been achieved only by a rising standard of living. Keynes is not explicit about the mechanism which actually raised living standards in the Victorian era, and which, if continuing to operate, might allow the eventual arrival at the stationary state which all the classical economists contemplated. The second, and related, point is that Keynes makes no mention of technical progress in surveying an era which displayed it at an historically unprecedented rate. It could be argued that it is technical progress which raises output per head, permits the wage rate and wages to rise, and thus leads via substitution of capital for labour to a rising capital/labour ratio. By leaving technical progress out of consideration, Keynes's account of economic progress remained underdetermined, even at the most naive level.

Returning to Keynes's historical periodisation, 1870–1914 represents the move towards a stationary state with capital accumulation proceeding faster than the rate of population growth. Keynes does not, in fact, find an historical phase where the two rates were equal, and only capital-widening took place. 1914–18 represents clearly enough the second of the two pitfalls, the consumption of capital in war greater than the losses of population through war, which Keynes regarded as relatively small. But Keynes also expected that in the aftermath of war, Europe would suffer from the first pitfall: that capital accumulation would not recover to equal the rate of population growth and that therefore, according to him, the average standard of living would fall. The Malthusian devil would again be on the loose.

In 1919, Keynes did not see that these two pitfalls clearly bear a very different economic significance. Pitfall no. 2, wartime capital consumption, is a discrete or one-off phenomenon with welfare implications for the short and medium term. Pitfall No. 1, the reversal of the capital accumulation/population growth relationship, has welfare implications that will persist over the long run. In 1919, there was no lack of empirical evidence of the distress caused by Pitfall No. 2—falling output of coal, declining agricultural productivity, railways severely disrupted, with consequent malnutrition and increased morbidity and mortality (CW II, pp. 143–8, 157–9). Neo-Malthusians and anti-neo-Malthusians alike would have acknowledged this evidence. The key issue between them would have been that of the speed of recovery and return to the pre-war economic conditions. Had the war caused only a substantial, but brief, loss of economic welfare, or something much more fundamental, like Pitfall No. 1?

The Economic Consequences of the Peace was the work that made Keynes a world-famous figure. Having captured the world stage, Keynes returned to the subject of population in his post-war journalism. In the sixth Supplement which he edited for the Manchester Guardian in August 1922, he wrote a brief essay entitled 'An Economist's View of Population'. This begins by distinguishing, in a way not fully carried through in Economic Consequences, between the effects of Pitfalls No. 1 and No. 2 in the post-war world. But instead of an assertion, Keynes now posed a question:

The most interesting question in the world (of those at least which time will bring us an answer) is whether, after a short interval of recovery (sc. from the effects of the war) material progress will be resumed, or whether, on the other hand, the magnificent episode of the nineteenth century is over. (CW XVII, p. 442)

His answer was one of modified pessimism. The availability of new natural resources, and of unexploited scale economies in production, were both more limited than they
were a hundred years ago, he claimed, despite his statement that 'we may still regard
the possibilities of scientific improvements as unlimited'. The growth rate of output
would therefore be slower and the right policy was 'to prepare the social structure for a
return to conditions of quantitative stability' (ibid., p. 443). This would be difficult
because demographic forces affect economic life only after a 20-year time lag: the post-
war labour market would be affected by births determined by pre-war conditions and
expectations. It was not clear that people would save enough to finance the capital-
widening necessary to prevent the average standard of living from falling. The picture
was a gloomy one unless unforeseen developments (presumably the realisation of some
of the possibilities of scientific improvement) helped to restore the equilibrium of popu-
lation and resources.

Keynes used this gloomy analysis to argue, in coded language, for increased use of
contraception. He castigated socialists who spoke as if the problem of poverty were
soluble only by redistributing existing resources.

To treat the question of [meeting basic needs] as primarily one of the redistribution of existing
resources, without regard to the long-period effect of the new social order on the proportion
between numbers and resources, is a far-reaching error. (ibid., p. 452)

He declared himself unable to see any way of materially improving the average human
lot which did not include a plan for restricting the increase in numbers. This plan
would not be Malthus's plan for increased sexual abstinence and moral restraint, but a
plan for something which both Malthus and many of Keynes's contemporaries found
abhorrent—the more widespread use of physical methods of birth control (Harrod,
1972 (1951), pp. 385-7). Keynes was well aware of where the obstacle lay, but
persisted in his advocacy:

If, in Malthusian language, the checks of poverty, disease and war are to be removed, something
must be put in their place. It may prove sufficient to render the restriction of offspring safe and
easy, and to change a little (not so very much) custom and conventional morals. Perhaps a more
positive policy may be required. In any case, the question must be faced ... (CW XVII, p 453)

It is difficult not to criticise the close link which Keynes made between his positive
analysis of population and resources and his advocacy of contraception. There are after
all many reasons why birth control is desirable, other than an impending Malthusian
危机。It is interesting that Keynes himself never advocated the abandoning of contra-
ception once he became convinced, in 1937, that ‘we shall be faced in a very short time
with a stationary or declining level of population’ (CW XIV, p. 125). Yet, in the 1920s,
it seems that he felt the campaign for birth control would be undermined if his positive
analysis was disproved, and indeed that those who disagreed with it did so because they
were opposed to the spread of contraception. It would have been more realistic to
argue, as contemporary demographic analysts did, that the increasing use of birth con-
trol had already removed the possibility of a future Malthusian crisis in the industrial
countries whose prospects he was analysing. As Moggridge has noted, ‘Keynes worries
about the reappearance of the Malthusian devil ... were certainly misplaced in the light
of the events he was discussing’ (1993, p. 57).

Keynes's neo-Malthusian linkage between population analysis and the advocacy of
birth control muddied his debate in 1923–24 with Sir William Beveridge (then Director
of the LSE) on the validity of the population analysis in chapter 2 of the Economic
Consequences of the Peace. That a disagreement between the two men had already surfaced at Keynes's pre-war Oxford talk on population has been hypothesised in Section 2. In 1923, in his Presidential Address to the British Association (Section F), Beveridge publicly denied the occurrence of any 1900 turning-point, and thus the pre-war emergence of Pitfall No 1. After presenting a mass of detailed statistics, Beveridge summed up this part of his address by saying:

Mr Keynes' fears seem not merely unnecessary but baseless; his specific statements are inconsistent with facts. Europe on the eve of war was not threatened with a falling standard of life because Nature's response to a further increase in population was diminishing. It was not diminishing; it was increasing. Europe on the eve of war was not threatened with hunger by a rising real cost of corn; the real cost of corn was not rising; it was falling. (Beveridge, 1923, p. 459)

Beveridge conceded that for Britain alone, rather than the whole of Europe, the statistics could permit the interpretation of 'some faltering of progress' between the Victorian and the Edwardian Age, but this could have been merely a 'transient phenomenon'. He did not deny the validity of Malthus's fundamental principle that mankind cannot without disaster 'control death by art and leave birth to Nature'. But he did deny that 'the authority of economic science can be invoked for the intensification of these [birth control] practices as a cure for our present troubles' before further enquires were made into the potential agricultural resources of the world, on the one hand, and into the physical, psychological and social effects of fertility restriction, on the other.

In his reply to Beveridge, Keynes shifted his ground. He cited two different indices for the United Kingdom, rather than Europe as a whole. These were Bowley's and the Board of Trade's indices of the 'volume of manufactured exports given for a uniform quantity of food imports'. These showed not a decline after 1900, but merely a stabilisation after a period of improvement. He admitted that such figures 'can never do more than suggest conclusions,—they cannot prove them'. But he then asserted that his conclusion that Western Europe was overpopulated did not stand or fall with the 'particular point of detail' which he had chosen to discuss, which was 'only one item in a vast field of evidence and argument'. Finally, citing newspaper coverage of Beveridge's speech, which (at least in the examples used by Keynes) construed it as a victory for opponents of birth control, he blamed Beveridge, in effect, for the misleading conclusions that had been drawn by the press. He flatly accused Beveridge of sheltering the 'ignorance and prejudice' of the opponents of birth control.

This audacious but flawed public defence was demolished in a further article by Beveridge (1924, pp. 1-20). This showed that Keynes's UK result followed from his splicing of two indices which were not equivalent, which neglected the change in the composition of manufactured exports, and which covered only between 65 and 50% of all UK manufactured exports. The '1900 turning point' was thus shown up as a statistical artefact. More importantly, Keynes's argument confused the falling purchasing power in terms of food of a manufactured item with the falling purchasing power over food of a unit of labour applied to manufacture. A downward drift in the former was compatible with an upwards drift in the latter, when technical progress was achieving increasing returns to labour in manufacturing (ibid., pp. 14–16).

But, in the course of his demolition work, Beveridge made the error of attributing to Keynes 'the definite and immediate advocacy of birth control as a means of limiting population', whereas Keynes's professionally published pronouncements had in fact
been rather indirect and euphemistic. This gave Keynes the opening to make the startling claim that he had 'certainly never presented any arguments whatever in favour of birth control, despite the *Manchester Guardian* article of 1922, which has already been quoted. In private correspondence with Beveridge, he claimed that (a) he had published only 'three sentences' on population in his life and that (b) what he had written was absolutely right, or would be seen to be so if taken in the context of the vast amount which he knew about population, but had not yet written down. But when invited by Beveridge to develop these arguments further for publication in *Economica*, Keynes did not take up the invitation (CW XIX, pp. 119–42). He retired from the field.

It was galling for Keynes, just when *Economic Consequences* was bringing him the most spectacular success, for one of its *obiter dicta* to be picked on by a weighty senior, examined at length and found wanting. Beveridge had the advantage of knowing, if our speculation in Section 2 above is correct, that Keynes was chancing his arm with unrevised pre-war research. What is so interesting is Keynes's reaction to criticism by an opponent thus forearmed. He could not accept it, because in his mind the question of the correctness of his analysis was entangled much too closely with the success of his campaigning for birth control. So, instead of backing off when his analysis was faced by an overwhelming challenge, he pressed on, which further exposed the weakness of his position.

Despite the unsuccessful debate with Beveridge, Keynes maintained his Malthusian stance on his visit to Soviet Russia in the autumn of 1925. His views on the question of population in Russia had already been stated in his *Manchester Guardian* Supplement on that country published in July 1922. His picture was one of fast (1.7% a year) and accelerating population growth between 1890 and 1914, generating a total of 150 million people at the outbreak of the First World War, and an annual increment of four million at that date. As a result of the War and the Russian Revolution, the economic structure of the country had collapsed and Malthusian checks were operating—'Nature ... is restoring by her usual weapons the equilibrium between man and his surroundings' (CW XVII, pp. 434–7). Keynes saw 'the swelling body of ever more numerous workers' as 'the deepest disease of the organism' of Russian society (*ibid.*, p. 439). In a lecture in Moscow, on 15 September 1925, he said:

I believe that the poverty of Russia before the war was due to the great increase in population more than to any other cause. The War and the Revolution reduced the population. But I am told that now again there is a large excess of births over deaths. There is no greater danger than this to the economic future of Russia. There is no more important object of deliberate state policy than to secure a balanced Budget of Population. (Modern Archive Centre, King's College, Cambridge, JMK RV/1)

In the light of modern historical research on Russian demography, these judgements would have to be somewhat modified. The 1914 population total is now put at 140 rather than 150 million. That total was not reached again until 1925, the year of Keynes's lecture. He was correctly informed that the excess of births over deaths was unusually large in 1925 (44.7 births compared with 23.2 deaths per thousand represented the largest annual net increment to the population since before 1914). Under this stimulus, population did grow rapidly, reaching his 1914 estimate of 150 million in 1928 (Danilov, 1988, pp. 38–40). It seems that Keynes somewhat exaggerated the scale of Russia's pre-war population, and the influence of pre-war population growth (rather than war itself) on the outbreak of the Revolution.
5. The revival of the stationary state scenario

In a talk written in 1928, which later became *Economic Possibilities for our Grandchildren* (1930), the opening sentences indicated a spectacular volte-face.¹

We are suffering just now from a bad attack of economic pessimism. It is common to hear people say that the epoch of enormous economic progress which characterised the nineteenth century is over; and that the rapid improvement in the standard of life is now going to slow down ... I believe that this is a wildly mistaken interpretation of what is happening to us. We are suffering not from the rheumatics of old age, but from the growing pains of over-rapid changes ... (CW EX, p. 321)

This passage contains no acknowledgement of his own argument ten years before that Victorian prosperity was 'an extraordinary episode', or of his own warnings on the need 'to prepare the social structure for a return to conditions of quantitative stability', or that he was himself one of the people whose views he now regarded as wildly mistaken.

What had been the mistakes? First of all, technical progress over the previous ten years had proceeded 'at a greater rate ... than ever before in history' *(ibid., p. 325)*. In 1923, Keynes had argued against Beveridge that it was not safe to leave the question of numbers unregulated in the mere hope that the Malthusian evil day would be postponed by improvements (like the swifter progress of science) which were 'conceivable, but as yet unrealised' (CW XIX, p. 124). By 1928–30, he was predicting that 'in our own lifetimes ... we may be able to perform all the operations of agriculture, mining and manufacture with a quarter of the human effort to which we have been accustomed' (CW IX, p. 325).

What of the Malthusian devil? In spite of the enormous growth in the population of the world, and the widening of capital which this had made necessary, technical progress had been so rapid that the average standard of life in Europe and the United States had risen very substantially. This was despite that fact that technical progress had been labour-displacing in its effects, and a new 'disease' of technological unemployment had manifested itself. Furthermore, population growth was actually decelerating: ‘from now on we need not expect so great an increase in population’.

Keynes’s focus on the population question had now narrowed again, from Europe and North America to England and Wales. The bald, brief statement that in future those countries need not expect so great a population increase was indeed correct. The broad tendency of their population growth in the second half of the nineteenth century was one of deceleration, as the crude birth rate fell more rapidly than the crude death rate. In 1870, growth was 1.4% a year; by 1914 it had come down to about 1%. Under the impact of the First World War, which both disrupted normal fertility patterns and temporarily pushed up the crude death rate, the growth rate slumped to 0.4% (1915–19). In the first half of the 1920s it returned to its pre-war trend (0.9%). Thereafter, the deceleration became somewhat sharper, but even at its lowest point before the mid-1970s, it never pushed the rate of population growth below about 0.2% a year (1935–44) (Woods, 1987, p. 284). The entire century from 1870–1970 is one of slowly decelerating growth (from 1.5 to just below 0.5%), with two major deviations caused by the two World Wars.

¹ It is instructive to compare the quotation from Keynes which follows with the opening sentences of Beveridge’s 1923 Address that criticised Keynes’s Malthusianism, viz: ‘The impression that the civilised world is already threatened with over-population is very common today. Many, perhaps most, educated people are troubled by the fear that the limits of population ... have been reached ... I propose to begin by raising some doubts as to the validity of these arguments’ (1923, p. 447).
By 1930, the post-war demographic rebound had taken place, and the forces of deceleration had reasserted themselves on population growth. At the same time, Keynes had rediscovered the immense powers of technical change to raise productivity. This dramatic readjustment of the respective strengths of the growth rates of capital accumulation (embodying technical progress) and population allowed him to resurrect the scenario of the stationary state, which supported (as he had previously argued) the social psychology of Victorian capital accumulation. His conclusion, that the economic problem would not be the permanent problem of the human race but might be solved, or be within sight of solution, within a hundred years, echoed very clearly the view which he rejected as outdated in 1919—that 'a day might come when there would at last be enough to go round ... (and) overwork, overcrowding and under-feeding would come to an end'. Although Keynes distinguished in a recognisably modern way between absolute and relative deprivation, or between normal consumption goods and what Hirsch called 'positional' goods (1977, p. 25, n. 13), and recognised that the problem of relative deprivation (or the availability of positional goods) was not soluble in principle, he argued that

this is not so true of absolute needs—a point may soon be reached, much sooner perhaps than we all of us are aware of, when these needs are satisfied in the sense that we prefer to devote our further energies to non-economic purposes. (CW IX, p. 326)

Thus the stationary state was put back in central place. Keynes himself was now devoting himself to re-establishing in the public mind the very psychology which ten years before he held to be so exploded that it could never be re-created. Appreciating, as he did, the importance of expectations and conventional beliefs in a world of pervasive uncertainty, he became, in 1930, the somewhat disdainful exponent of the very same 'double bluff' which he had exposed to view a decade before. The broader significance of Economic Possibilities in Keynes's thought goes beyond the way in which the balance between population and resources is handled (see Catephores, 1991, pp. 5—15, 40—5). From the particular focus of this essay, Economic Possibilities marks a complete but unacknowledged recantation of his early Malthusian views.

But what of the two pitfalls which he had earlier found on the route to the stationary state? They had not disappeared, but remained in vestigial form as limiting assumptions. The economic problem may be solved 'assuming no important wars and no important increase in population'. Far from our deep instincts being the threat that they were in 1923, when the working of one particular fundamental instinct needed to be brought under social control (CW XIX, p. 124), in 1930 it seemed to Keynes that 'we have been expressly evolved by nature—with all our impulses and deepest instincts—for the purpose of solving the economic problem' (CW IX, p. 327).

6. Round three: population decline and the other devil

It was highly ironical, in the light of his total recantation of Malthusianism in 1928–30, that Keynes should have begun his last major intellectual encounter with the population problem by asserting that

perhaps, the most outstanding example of a case where we in fact have a considerable power of seeing into the future is the prospective trend of population.
Keynes on population and economic growth

Indeed, it was doubly ironical, because what his foresight told him was that in the place of the steady and indeed steeply rising level of population which we have experienced for a great number of decades, we shall be faced in a very short time with a stationary or declining level.

Admittedly, the rate of decline was doubtful, but the extent of the change-over from rise to decline would be substantial (CW XIV, p. 125).

No analysis of demographic statistics to back this claim was cited by Keynes. Looked at from one point of view, he was simply acknowledging what others had been saying for a long time. According to Harrod, it is what Robertson had told Keynes in 1922. It had been said by Sir Arthur Salter in 1932, in a book which we know that Keynes had read. G. C. Leybourne’s projections, showing Great Britain’s population starting to fall in 1946 and reaching 33 million by 1976 were published in 1934 by the Committee on Economic Information, a body with which Keynes was closely associated (Howson and Winch, 1977, pp. 297–301). Another possible source is Special Memorandum No. 40 of the London and Cambridge Economic Service by Dr Enid Charles. There is every reason to suppose that Keynes would have had access to it; in any case, it was much discussed by his contemporaries and its population projections correspond pretty exactly with his own foresight. Charles assumed that both mortality rates and fertility rates would in future decline along recent trends, and on that basis predicted that the population of England and Wales would drop from 40.5 million in the mid-1930s to 17.5 million by the year 2000, when it would contain more people over than under the age of 60 years (Titmuss, 1938).

Basic logic should have given Keynes pause for thought before accepting such projections at face value. It is precisely because demographic trends at the aggregate level do not alter dramatically, even over decades, that they are relatively knowable in advance, compared with other social statistics. To argue strongly for their predictability and then predict as a virtual certainty a ‘substantial’ change-over from growth to decline in ‘a very short time’ seems to involve a self-contradiction. In the event, it took a further forty years for the UK to reach zero population growth.

The Galton Lecture which Keynes delivered in February 1937 takes the population projections as a device to explore the relationship between population and other factors that determine economic growth, especially the demand for capital. The level of rigour with which Keynes handled the subject represents a distinct rise, compared with that of his own previous work on this issue. The General Theory had been completed a year previously, and the intense discussions preceding and following publication had strengthened his analytical sinews greatly. At the same time that work focused his mind on questions of equilibrium in the short period. There is a constant tension, seen repeatedly in his professional correspondence with Harrod, between Keynes’s instinctive tendency to try to capture adequately the forces of short-period fluctuation and the need to achieve clarity about the conditions for steady state growth—Harrod being much more single-mindedly taken up with the latter task.

Although he did not use the notation below, Keynes formulated the issue in terms of the following concepts:

1 ‘The birth rate in England and in France ... foreshadows a population soon stationary, perhaps even at no distant date in decline.’ (Salter, 1932, p. 7). The book in question was Recovery. The Second Effort, to which Keynes refers in CW XVIII, pp. 374–5, in the context of reparations rather than population, however.
18 J. Toye

\[ K = \text{the capital stock} \]
\[ n = \text{rate of growth of population, taken as the rate of growth of the labour force} \]
\[ v = \frac{K}{Y} = \text{the capital-output ratio (or ‘the technique of capital’)} \]
\[ s^* = \frac{(Y^* - C^*)}{Y^*} = \text{the equilibrium saving rate} \]
\[ I = \text{planned investment (or ‘the demand for capital’)} \]

He then assumed that \( K \) was inherited from the past, that \( v \) was a reflection of ‘the technique of capital’ currently in use and that \( n \) was given exogenously by demographic factors. The saving rate was determined by the distribution of wealth and the prevailing interest rate. Thus all of the basic concepts for exploring the conditions of steady-state growth were assembled.

They were used as follows. On the basis of rough historical statistics for 1860–1913, it was estimated that about half of the real capital increase of this period had been absorbed merely to prevent the average capital endowment of the growing population from falling. Capital for that kind of capital-widening would obviously not be required for a population that was stationary. It was deduced from this that saving at the current rate would be excessive, because autonomous adjustments in technique or consumption would be small. The conclusion was that some policy intervention would be required either to depress the saving rate and/or to alter the capital/output ratio. If these interventions were not undertaken, and saving remained excessive, unemployment would result.

Having posed the problem of ensuring steady state growth, the question naturally arises whether Keynes also solved it. It has been argued that Keynes ‘precisely anticipated’ the dynamic theory of Harrod (Thirlwall, 1985, pp. 20–1). It is probably more accurate to say that Keynes in 1937 posed the problem which Harrod’s dynamic theory solved. Harrod submitted a draft of his article ‘An Essay in Dynamic Theory’ in August 1939 to Keynes, as Editor of the Economic Journal. A strenuous tussle of minds ensued about the contents of successive drafts (CW XIV, pp. 321–50). Keynes found it difficult to understand Harrod’s dynamic equations, although he responded warmly to the new concept of the warranted rate of growth. In the end, Keynes summed up his attitude to the final version in a letter to Pigou:

I do not think there has ever been an article about which I have corresponded with the author at such enormous length in the effort to make him clear up doubtful and obscure points and reduce its length. I produced a little effect, but perhaps not very much in proportion to the effort. In the final result, I do not find myself in agreement, but I do think that he has got hold of a very interesting point which, subject to the necessary qualifications, is of real importance. (CW XIV, p. 320)

This is not, perhaps, the comment of a man who had precisely anticipated the Harrod–Domar theory of economic growth.

Keynes had ended up by paying final homage to Malthus. But now it was to Malthus the population expert and the initiator of the doctrine of effective demand. In these two roles, Malthus had provided two devils, not one—\( P \), the threat of over-population and \( U \), the threat of unemployment. Now that \( P \) was chained up, \( U \) was on the loose. Malthus, like Cardinal Morton, seemed to have invented a fork such that the more society escaped from one prong, the more it impaled itself on the other.\(^1\) Thus Keynes

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\(^1\) This position contrasts with Keynes’s riposte to Beveridge in the Nation and Athenaeum, 6 October 1923, when he maintained that ‘unemployment may be a symptom of a maladjustment very closely connected with [excess] population—namely, that which results from an attempt on the part of organised labour, or of the community as a whole, to maintain real wages at a higher level than the underlying economic conditions are able to support’ (CW XIX, p. 121).
managed to maintain his affinity with Malthus, the odyssey of his beliefs about population mirroring the evolution of his 20-year effort to write his essay on Malthus.

7. The least felicitous of all his efforts?

Skidelsky characterises the Galton Lecture as follows: ‘According to taste, this authoritatively gloomy conclusion, based on a series of audacious guesses, may be considered Keynes at his best or his worst’ (1992, p. 632). But which is it? What do we think, not only of the Galton Lecture, but the whole range of Keynes’s efforts to understand the relationships between population growth, capital accumulation and technical change, as we have laid them out here?

Keynes changed his position not once, but twice in the course of the evolution of his ideas. In 1919, the population devil was on the loose. By 1930, such pessimism was wildly mistaken; there was a solution to the economic problem. By 1937, the population devil had been exorcised so thoroughly that it was the exorcism that was causing grave problems. During all of this, the actual rate of population growth in England and Wales was much less unstable than Keynes’s opinions about both it and its consequences. Changing one’s mind is not itself a ground for criticism, as Keynes himself famously pointed out. ‘When I see that I am wrong, I change my mind: what do you do?’ That in the wake of the bruising debate with Beveridge, Keynes eventually recanted his youthful neo-Malthusianism could be seen as a late response to superior logic and facts. The ground for criticism must be the unreasonable persistence with his neo-Malthusianism, and the failure to acknowledge publicly and to explain honestly the reasons for his change of mind.

The secondary nature of Keynes’s interest in population questions might excuse the rather sketchy basis in research of some of his grander pronouncements on the topic. His failure to look carefully at the relevant demographic data, and to think carefully about the assumptions on which others made their demographic projections, might also be excused by the fact that demography was not his area of specialisation. As we have seen, the 1920s and the 1930s were, in terms of population growth, somewhat more volatile than the period 1870–1914, during which Keynes had grown to maturity. This may explain both Keynes’s sensitivity to population matters, and the abrupt switches in his perceptions of what was happening. The real problem was that he too hastily interpreted each sudden blip as the start of a new long-run trend. But, having made these allowances, one has to recall that it was to the resources side of the Malthusian equation that he devoted most of his effort, and it was there that his analyses were also found wanting.

There is a strong contrast between the coded advocacy of birth control in his professional writings and his vigorous public campaigning for it.¹ These partly hidden, social concerns hindered rather than helped the quality of his analysis. The contribution of his support for birth control to his persistence with neo-Malthusian views has already been noted. But, although he believed that birth control safeguarded the economic standard of living, his concerns went wider than that. Keynes felt keenly that over-population could undermine the social psychology of Moorean idealism. He was speaking from the heart when he asked Beveridge rhetorically:

What is the use or the purpose of all our strivings if they are to be neutralised or defeated by the mere growth of numbers? Malthus’s Devil [sc. ‘P’] is a terrible devil because he undermines our

¹ For details of Keynes’s public work for birth control, see Appendix on ‘Mr Keynes and Dr Stopes’.
faith in the real value of our social purposes, just as much now as when Malthus loosed him against the amiable dreams of Godwin. (CW XIX, p 122)

Whatever one thinks of Keynes's social purposes, and in many ways they were admirable, one cannot help wishing that they were not so firmly in the driving-seat of his population analyses. In this area of his work, and especially in the pre-1937 phases, instant prescription could have been traded off against analytical coherence with real advantage.

Despite the swings, both in Keynes's understanding of the demographic facts and the way in which he related these different understandings to capital accumulation (and sometimes also to technical change), the one consistent thread in his thinking can be identified. At all stages, he is concerned with the precariousness of steady growth. At first, it is the precariousness of the psychology of accumulation which threatens disaster. Then, rampant technical innovation suddenly introduced to avert disaster reopens the prospect of reaching the stationary state, but only if we can live with the 'disgusting morbidity' of the money motive for another hundred years and cope with technological unemployment. Finally, it is population decline which constitutes the source of upset, unless the capital/output ratio can be raised or saving depressed. Although the source of the threat varies, the prospect of economic breakdown in one form or another is Keynes's constant preoccupation. Keynes was deeply aware of the problem of uncertainty. As he put it in 'Population', 'there is hardly a feature of our economic life the long continuance of which we are justified in anticipating' (f. 23).

In his obituary of Keynes, Schumpeter was scornful of the latter's early neo-Malthusian views. Referring to the controversy with Beveridge, Schumpeter describes it as an attempt by Keynes 'to conjure Malthus's ghost to defend (at the threshold of the period of unsaleable masses of food and raw materials) the thesis that, since somewhere about 1906 nature had begun to respond less generously to human effort and that overpopulation was the great problem, or one of the great problems of our time . . .' (Schumpeter, 1946). In the same vein, Schumpeter had previously remarked that 'in the second half of the nineteenth century it should have been clear to anyone that the valuable things about Malthus's law of population are its qualifications. The first decade of this century definitely showed that it was a bogey. But no less an authority than Mr Keynes attempted to revitalise it in the post-war period! . . . Will economics never come of age?' (Schumpeter, 1987 (1943), p. 115, n. 6).

Schumpeter's criticism, fuelled as it was by professional jealousy, is no doubt too harsh. Keynes had after all dropped neo-Malthusianism before the 1930s, which were the real age of unsaleable surpluses of food and raw materials. More telling perhaps were his criticisms of Keynes's post-recantation population work, although these were by implication rather than direct. In 1943, he considered the same problem that Keynes had discussed in his 1937 Galton Lecture—the problem of 'the vanishing of investment opportunity'. He was aware of the Enid Charles projections of future population. He saw that a considerable absolute decline in population would raise additional problems, because of its effect on the demand for investment. Unlike Keynes, however, his response was to ignore such problems 'because this cannot be expected to occur during the space of time under consideration' (Schumpeter 1987 (1943), p. 113, n. 3). He did not feel the need to resolve the potential policy problems of every startling new population projection that came upon the scene.

On the issue of population at least, Schumpeter now seems a rather more reliable
guide than Keynes. Schumpeter's obituary judgement on Keynes's population work has also stood the test of time. Compared with his writings on other long-run issues, such as the role of agriculture in development or the organisation of the Soviet economy, let alone the short-run monetary topics which were his central interest and achievement, his output on population surely ranks as 'the least felicitous of all his efforts', while the 'element of recklessness in his makeup' is indeed, on the evidence surveyed here, very hard to deny. But it is a pity that the most interesting and comprehensive part of Keynes's 'least felicitous effort', the 1913-14 manuscript on 'Population' remains still almost unknown and, when known, misunderstood.

Bibliography

Beveridge, W. H. 1924. Mr Keynes' evidence for over-population, Economica, vol. 4, no. 10
Cw 1971-89. The Collected Writings of John Maynard Keynes, 30 volumes, Basingstoke, Macmillan
Keynes, J. M. undated. 'Population', manuscript, King's College Cambridge, Modern Archive, Document SS1 (Box 32)
Rose, J. 1992, Marie Stopes and the Sexual Revolution, London, Faber and Faber
Salter, A. 1932. Recovery. The Second Effort, London, G. Bell and Sons Ltd
Appendix: Mr Keynes and Dr Stopes

Where did Keynes stand in the spectrum of contemporary views on the population question? His views are most closely identified with those of the Malthusian League: an acceptance of Malthus's principle of population combined with a practical activism in promoting contraception on strictly economic grounds (Weeks, 1989 (1981), p. 130). Keynes's views in 'Population' are, in broad terms, similar to those expressed in the publications of the League. For example, his critique of 'setters forth of Utopias' is reminiscent of the tactic of using Malthus against Marx that was the frequent resort of C. V. Drysdale, the individualistic and anti-socialist President of the League.

The Eugenics Society, though small in number, was also influential at this time in its advocacy measures to improve the quality of the population stock. Keynes is listed by Nancy Stepan (1982, p. 119) as a member of the Society, but with no indication of when or for how long. It may be that he remained a member until the 1940s. The Eugenics Society was seriously divided on many population questions, so that mere membership cannot be taken as an indication of any particular doctrinal allegiance. Keynes was not a eugenicist. As already mentioned, he had quarrelled with the Society's leading lights, Francis Galton and Karl Pearson, as early as 1910. He was also temperamentally and philosophically opposed to their championship of a fecund middle class, believing that family life militated against both intellectual creativity and participation in public affairs (Skidelsky, 1983, pp. 223-6). On the other hand, in his 1926 lecture on 'The End of Laissez-Faire', he declared that the community must pay attention to the 'innate quality of population as well as 'mere numbers' (CW IX, p 292). This suggests that he was not averse to eugenics in its dysgenic aspect, and in this, too, he agreed with C. V. Drysdale (1933, p. 292).

The advocates of birth control in the 1920s were also divided among themselves. Until 1921 all that had been achieved since the Bradlaugh–Besant trial in 1876 had been the spread of information. It is estimated that between 1879 and 1921 some three million pamphlets and leaflets had circulated urging the principle of family limitation, but only one million gave usable detail on contraceptive practice. It was not until 1921 that the first birth-control clinic was opened in Britain by Dr Marie Stopes. Stopes's success in softening opposition to birth control during the 1920s depended on her particular, socially conservative style and argument. Her main emphasis was placed on two considerations—physical contraception as an aid to marital fulfilment and stability, and as a means to improve maternal and child health. Her crusade also played on the fashionable eugenic concern for population quality. She deliberately kept a good distance from the Malthusian position adopted by Keynes, and Keynes returned the compliment.

As Keynes was to discover to his discomfort, the politics of the various birth-control organisations in Britain in the first half of the 1920s were fairly complicated. A good recent account can be found in Soloway (1982). The Malthusian League was seriously challenged as the leading birth-control organisation when Marie Stopes and her husband opened their clinic. This was something which Dr Drysdale had been advocating since 1913, but had not actually done. To respond to Stopes, the Drysdales opened their own clinic in Walworth, but it soon closed from lack of funds, popular hostility and internal wrangling. In 1922, the Malthusian League was relaunched without the Drysdales as the New Generation League, and among its official patrons was J. M. Keynes (ibid., p. 196).

In mid-1921, Stopes had founded her own support organisation, the Society for Constructive Birth Control and Racial Progress. She too sought the sympathetic talented and famous as official

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1 For a summary statement of C. V. Drysdale's position, see Drysdale, 1933.
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patrons of her CBC, as it came to be called. Although I have not been able to trace the invitation or reply, Keynes agreed to become a vice-president of the CBC. Thus, by 1922 he had publicly connected himself with two birth-control organisations. But they increasingly saw each other as rivals and acted competitively. For example, in July 1922 the Malthusians successfully mounted an International Neo-Malthusian and Birth Control Conference without the presence of Stopes. This conference featured the American birth-control advocate Margaret Sanger, whom Stopes already regarded as a personal rival and had earlier dissuaded from pre-empting the Stopes’s clinic. Keynes participated actively as the leader of one of the conference sections (ibid., p. 225). He retained among his papers The Lancet’s report of the private medical session (King’s Modern Archive, SS/3).

Throughout the early 1920s, Keynes involved himself in various events organised by the Malthusian League and its successor the New Generation League. Apart from the 1922 International Conference, Keynes campaigned within the Liberal Party for more enlightened birth-control policies, along the lines of the New Generation League’s thinking. Early in 1923 Keynes had aided the League’s defence of the publishers of Margaret Sanger’s pamphlet on Family Limitation when they faced an obscenity charge. He stood surety for them for the sum of £50 (Soloway, 1982, p. 230). The case caused Keynes considerable vexation, because of muddles between himself, Bertrand and Dora Russell and others about which lawyers should conduct the defence and how they should be paid for. To compound matters, Stopes not only did not assist, but wrote to the Director of Public Prosecutions to condemn the pamphlet’s illustrations as ‘both criminal and harmful’ (Hall, 1977, p. 210). The case was lost, although the defendants were not punished except by loss of their stock.

The 1922 Conference had also discussed the possibility of using the theatre as a medium for the birth-control message (ibid., p. 221). Stopes once again acted decisively to achieve what the Malthusians were still only discussing. The author of Married Love and Wise Parenthood put her gospel onto the London stage. Keynes commented on this in a letter to his wife Lydia in 1923.

.. M Stopes has written a play. I wonder how dramatic critics will demonstrate their opinions. I hear that she is so much introverted (sic) in her subject that even when conversation centres around polo, birth control is applied to it by her. (28 October 1923, in Hill and Keynes, 1989, p. 117)

The play in question was Our Ostriches, which was just about to open at the Royal Court Theatre, and the critics generally dismissed it as undisguised birth-control propaganda. Keynes’s comment about Stopes’s personality was, however, prophetic of the difficult, distant and intermittent relationship which he was to have with her.

Shortly before this letter to Lydia, Stopes had solicited Keynes’s help when The Times refused to publish an announcement of a forthcoming CBC meeting. She asked him, along with the other vice-presidents, to write a personal letter of protest and request for an explanation, which he duly did. In January 1924, Keynes was again approached in his capacity as a vice-president of the CBC, but this time by a Mr G. H. Wales, who complained that the CBC was publishing misleading warnings against the birth-control work of a ‘Dr Courtenay Beale’. In his own publicity material, ‘Dr Beale’ had offered the public confidential birth-control advice for a fee. As his handbill indicates, ‘Dr Beale’ was blatantly trading on Marie Stopes’s reputation.¹ She hastened to persuade Keynes that the complaint which he had received was unjustified and that, on the contrary, she was the injured party. She had in fact attempted to take legal action against ‘Dr Beale’

¹‘Wise Wedlock’ Advisory Bureau

We have great pleasure in announcing that Dr G. Courtenay Beale, the author of our important publication ‘Wise Wedlock’, has consented, in the interests of his thousands of readers, to deal with and answer correspondence touching any aspect of the marriage relation.

We need hardly point out the immense boon which is being offered to multitudes of perplexed and suffering men and women; such will now be able to obtain the individual, frank, confidential and sympathetic advice of an unquestioned expert, who will do his best to solve their conjugal problems, disentangle their matrimonial knots, and point the road to married happiness.

Avail yourself of this unique offer; write fully and candidly, enclosing cheque or P.O. for 7/6 to the ‘WISE WEDLOCK Advisory Bureau’ c/o HEALTH PROMOTION Ltd. 19–21 Ludgate Hill, London EC4 and you will receive in due course Dr G. Courtenay Beale’s signed reply in plain sealed envelope.
in 1921, but she was unable to find him or the booksellers who slipped his handbills into her books (Hall, 1977, p 204). Now she proposed that Keynes reply to Mr Wales with a catechism of leading questions designed to unmask those who hid behind the pseudonym of 'Dr Beale'. Keynes was confused by these proposed tactics and wrote her the following reply.

46, Gordon Square
Bloomsbury
30th January 1924

Dear Dr Stopes,

Thank you for your letter. But I am still in ignorance of what the precise ground of complaint is. I gather from your letter that the suggestion is that there is really no such person as Dr Courtenay Beale. At least this seems to be the point of the questions which you suggest that I should ask.

But if so, it seems to me better that I should be free to state in so many words that this is the complaint rather than to ask rather strange questions. May I reply to the complainants that I find on enquiry that one at least of the grounds of complaint is that the doctor in question is a fictitious person?

Yours truly

[signed] J. M. Keynes

Dr Stopes
7, John Street
Adelphi W.C.2

We can trace the later phases of the relationship with the help of four further letters from Keynes to Stopes which are not in the Collected Writings, but are to be found in the Stopes Collection in the British Museum. After the Courtenay Beale affair, he held Marie Stopes and the CBC at arm's length. In 1927, soon after Vera Brittain wrote an article in the Nation and Athenaeum on 'Our Malthusian Middle Classes', advocating 'eugenics' rather than 'dysgenics' birth control (meaning larger, planned families for the middle class), Stopes wrote a letter to the Editor. It seems that her letter was not published, and I have been unable to establish its precise content. But she sent Keynes a copy. Perhaps she took the opportunity of promoting the eugenic approach of the CBC as against the neo-Malthusianism of the League. In any case, in his reply, Keynes did not bother to disguise his frustration with attempts to foment divisions within the birth-control movement:

King's College
Cambridge
26 May 1927

Dear Dr Stopes

Thank you for sending me a copy of your letter to the Editor of The Nation. I confess, however, that I wish the various Birth Control Organizations would not spend so much time scrapping with one another! It tends to sap public confidence in all of them alike.

Yours very truly,

[signed] J. M. Keynes

Undeterred by this rebuff, Marie Stopes continued to try and use Keynes as an occasional facilitator of her activities. In 1929 she sought his signature on a circular letter and in 1930 she asked for his help in setting up one of her meetings in Cambridge. On both occasions he declined, as follows:
King's College,
Cambridge
23.5.29

Dear Dr Stopes,

I am trying to make it a rule not to sign circular letters - except on matters with which I have a very close personal connection. So I must ask you kindly to excuse me.

Yours very truly,

[signed] J. M. Keynes

(BM Add. MS 58705, f. 101)

46 Gordon Square,
Bloomsbury
3rd April, 1930

Dear Dr Stopes,

It is rather difficult to know whom to suggest as a Chairman for your Cambridge meeting. I shall not be in Cambridge on that day myself. No doubt you are in touch with the local Birth Control organisation. Probably you would find someone amongst their Vice-Presidents or Committee who would help you.

Yours very truly,

[signed] J. M. Keynes

(BM Add. MS 58707, f. 73, hand-written)

By this time much of the energy and excitement which had characterised the birth control movement in the early 1920s had begun to ebb. The defences of Church and State were crumbling and contraception was at last achieving some respectability in the eyes of British public opinion. The end of government resistance came when the Ministry of Health was forced to concede that local authorities already had statutory powers under an Act of 1915 to offer birth-control advice to married women on medical grounds. A new National Birth Control Council was formed at this time to coordinate the various unofficial birth-control organisations. This Council took it upon itself to inform all local authorities of what they could and could not do under the law. Keynes joined as one of its patrons. So, eventually, did Marie Stopes, but within three years she had managed to quarrel with others on the Council and resign (Soloway, 1982, p 311).

Marie Stopes did not trouble Keynes again, except with a belated enquiry in 1939 as to whether he wished to continue as a vice-president of the CBC. She received this revealing reply:

46 Gordon Square,
Bloomsbury

Miss Marie C. Stopes,
The Mother's Clinic,
106 Whitfield Street,
Tottenham Court, (sic) Road,
W1

March 26th 1939

Dear Miss Stopes,

In reply to your letter of March 24th, I am sorry to say that I was unaware that I was still a
Vice-President of your organisation. I had meant some little time ago to withdraw from this, and I would be grateful if you would now agree to my doing so.

Yours truly

[signed] J. M. Keynes

(BM Add. MS 58721, f. 46)

When he agreed to become a vice-president of the CBC, Keynes had evidently badly underestimated the persistent, maverick behaviour of Marie Stopes. Once he found out the truth, which he had by 1923, he engaged in what was essentially a damage limitation exercise. He continued to put his support behind the New Generation League's activities, while fending off approaches from Stopes. He found his position of being formally at least in both the CBC and NGL camps an uncomfortable and irritating one, but he did succeed in sustaining it until it ceased to be of any importance to him.

History does not relate whether Keynes ever read the results of a 1935 survey of American academics' ranking of the 25 most influential books of the previous 50 years. Stopes's *Married Love* was ranked sixteenth, just behind *Das Kapital*. But it was ranked ahead of *Relativity, The Interpretation of Dreams, Mein Kampf* and Keynes's own *The Economic Consequences of the Peace* (Hall, 1977, p. 120). Perhaps Keynes never discovered that Stopes, the tireless self-publicist, had done it again!