A Survey of 18.441 -- ‘History of Economic Thought’

Preliminary Observations

1. The purpose of this course is advertised as being to help apprentice economists understand why economists do ‘economics’ in the way that they do today. Why were some possibilities chosen and others rejected? By posing and attempting to answer this question, it is believed by the members of the UM Economics Department, one may have a better understanding of the intellectual strengths and weaknesses of the main stream of ‘orthodox’ economic theory in relation to alternative and rival ways of formulating the questions and methods of economic science.

2. It is important to be aware of the underlying ‘philosophy of science’ presuppositions of this view:
   (a) It is both possible and useful to distinguish ‘orthodox’ from ‘heterodox’ traditions of science;
   (b) Any approach to scientific inquiry imposes costs (loss or exclusion of possible knowledge) and confers benefits (gains in knowledge);
   (c) An ‘orthodox’ tradition can be described as that way of doing a particular science which in the opinion of the majority of its practitioners, most of the time, yields (or at least promises) the greatest excess of benefits over costs;
   (d) There are (or there seem to be) no certain, universally acceptable procedures for measuring heuristic costs and benefits, hence heterodox traditions may often -- if not always -- coexist with orthodoxy.

   These imply that the purpose of this course is not to learn why the orthodox main stream is ‘right’ and heterodox alternatives ‘wrong’: but rather, why most thoughtful and professionally-trained economists accept, at least provisionally, the working hypothesis that the main stream is more likely than its alternatives to maximise net scientific knowledge; and why a minority rejects this hypothesis.

About ‘History’

3. The historical questions (what happened? how and when did it happen? who did it? why? etc.) may be addressed in more than one way, and herein lies much confusion in the so-called ‘history of economic thought’ (HET). As used in the literature, and even in the names of scholarly associations and their journals, HET seems to be a catch-all to include:
   (a) the intellectual history (IH) of ‘political economy’ broadly defined,
   (b) so-called ‘history of economic analysis’ (HEA) as Schumpeter (1954) understood that activity.

   Some authors -- mainly historians -- concentrate on (a) and disparage (b). Others -- mainly ‘incompetent or retired’ economists (see Winch, Riches and Poverty, 1996, p. 421) -- concentrate on (b) and ignore (a). Many authors of journal articles, text-books, even of serious book-length treatises, are so vague and un-self-critical that the two are unwittingly confounded in their writing. Some attempt both, but in separate and distinct works. A very few authors try to combine the two, knowingly, in a single work.
4. **IH is true history**: that is, it is a sustained and scholarly attempt to understand the meanings which the texts of past authors had for themselves and their contemporaries, and which does so in part by locating those texts in their contexts. The key terms in this definition, ‘understand’, ‘meaning’, ‘text’ and ‘context’ are neither innocent nor uncontroversial (indeed they strew the battle-field of present-day, ‘Post-Modernist’ Literary or ‘Critical’ Theory now in vogue in university departments of English and other languages). Many intellectual historians, however, are content for good reason to use these terms along lines suggested by Quentin Skinner (‘Meaning and Understanding in the History of Ideas’, *History and Theory* 1969).

5. The ‘context’ within which past authors wrote includes both the ‘objective’, material circumstances emphasized by Marxists and the intellectual content of the conversations in which the authors were engaged and to which they wished to respond rationally. Explanations based on the former are labelled ‘externalist’ (sometimes called ‘relativist’ in some older sources); explanations based on the latter are labelled ‘internalist’ (sometimes called ‘absolutist’). It is evident that IH must be both ‘externalist’ and ‘internalist’. A merely ‘internalist’ explanation fails to do justice to the fact that authors are motivated by many other things beside a desire for truth; and therefore excludes as a possible explanation that scientific progress may arise as the unintended outcome of (say) ideological polemic, or intra-professional competition for fame and status, or even of profit-motivated ‘applied’ research. A merely ‘externalist’ approach, on the other hand, is self-defeating. For it suffers from the general intellectual defect of all kinds of relativism. If ‘truth’ is and must be ‘relative’ to time and place (not to mention race, sex, ‘culture’, power etc.) then an utterance which proposes or implies any such generalization can never be known to be ‘true’. [For this reason, by the way, all attempts to justify ‘Post-Modernist’ theory must be vacuous -- see 4 above.]

6. HEA is not and cannot be genuine ‘history’ because it deliberately ignores the real world in which dead economists once lived, which they tried to understand and explain, and about which they disputed with their contemporaries. It is concerned strictly and solely with the logical relations between the economic analysis/es of the past and that/those of the present. **HEA is a branch of Economics**: an ‘in-house’ activity of economists; a local example of what Paul Feyerabend (*Against Method* 1988) describes in general as the process by which ‘the history of a science becomes an inseparable part of the science itself ... essential for any further development as well as giving content to the theories it contains at any particular moment’ (F’s italics). It is clear from F’s examples that by ‘history’ he means the pseudo-history so useful to practitioners. HEA is well described by the title of Blaug’s textbook: *Economic Theory in Retrospect*.

7. Unlike IH the method of HEA is simply ‘internalist’. The relation between IH and HEA may be illustrated by an analogy. HEA is like the coloured diagrams of the London Underground which show us how to get from Uxbridge to Charing Cross. It is not drawn to scale, and save for a surreal ‘River Thames’ it ignores all geographical features save railway lines and stations. Its purpose is solely to exhibit the connexions between various routes and nodes. But IH is like a true map of London, with roads, parks and public buildings correctly plotted in, perhaps even the Underground stations. Is HEA then a ‘subset’ of IH, as is sometimes suggested by historians who want to take over our discipline (eg Birken, *HOPE* 1994)? No, it is not. We cannot superimpose our diagram of the London Underground on a map without distorting geographical truth. We
cannot fit our HEA ‘diagrams’ into the IH ‘map’ without distorting historical truth. This is because those who do HEA are engaged in ‘an attempt to employ history as a means of advancing their own interpretations of what the modern version of the science should or should not encompass, and the means by which it should do so’; and this may ‘exert a coercive influence on our understanding of the past’ (Winch, *Riches and Poverty*, 1996).

8. It should be noted first, that it is perfectly legitimate for economists to use HEA ‘for advancing their own interpretations’ of modern economics; secondly, that although HEA is not ‘history’ it may be a tool of historiography. For at least some part of the conversations in which our subjects were engaged were discussions about the definition and use of the network of related concepts, and the logical structure of that network, which we now call ‘economic theory’ or ‘economic analysis’. Our ‘rational reconstructions’ (which include formal, mathematical reconstructions) of these past debates may throw light, not only on our present-day understandings of the science, but also on the inner logic of past conversations which caused our predecessors to take certain options rather than others.

The Proper Use of IH and HEA in this Course

9. Therefore apprentice economists can profit from HEA because:
   (a) It is often easier to learn a scientific discipline by recapitulating its development than by starting at the present stage of knowledge. Primitive science is usually simple; and development often consists in elaboration. Beginning students can grasp Archimedes’ hydrostatic principle, or Adam Smith’s deer/beaver exchange, more easily than modern fluid dynamics or general equilibrium modelling.
   (b) Secure knowledge of the primitive core of a science can motivate the difficult and technical study of its subsequent development: once we really grasp ‘first principles’ we are led by natural curiosity to ask, ‘Where do we go from here?’
   (c) Study of past theoretical controversy enables us to see the ‘internal logic’ of why one particular line of development was pursued rather than another, historically possible, one. [E.g. why the Smith-Malthus S/D analysis of price-determination eventually ‘won out’ (Schumpeter) over the Ricardo-Marx LTV.]
   (d) Knowledge of byegone controversy protects us against ‘re-inventing the wheel’.
   (e) Theoretical ideas that were rejected in the past for what seemed at the time to be good reason (e.g. Malthus’s heterodox theory of ‘effectual demand’ in relation to ‘general gluts’) can stimulate a later thinker to produce a ‘modern-dress’ version which does useful theoretical work in his own day (e.g. the revival and reconstruction, first by Marx and later by Keynes, of Malthus’s macro-theory). In Economics at any rate -- though Feyerabend argues that this is true of all science -- *no theory is ever completely ‘dead’* and we can never know whether or when a discarded idea might not again become vital.
10. It seems clear from 9 why HEA should be regarded as a useful part of the training of apprentice economists. **But why IH?** History is quite a different discipline from Economics, its techniques and its literature are time-consuming to master and often quite uncongenial to minds which turn easily and naturally to Economics. Moreover, the present state of Canadian secondary education produces undergraduates who for the most part are wholly ignorant of the past and its literature -- even the recent past of their own society -- and who, therefore, must make a considerable investment in general historical knowledge in order to enter the world even of early-20th-century economic thinking, let alone that of the 19th or 18th centuries. Serious attention to IH, therefore, imposes a significant opportunity cost upon apprentice economist. What are the prospective benefits? Or to put it differently, what are the costs of concentrating on HEA to the exclusion of IH

11. (a) If Winch is correct in fearing that HEA may ‘exert a coercive influence on our understanding of the past’ (7 above), the study of HEA alone may impose the cost of ignoring or distorting ascertainable truth.
   
   (b) Uncritical willingness to accept this cost runs the risk of forming minds that are unsubtle, uncritical, lazily willing to accept oversimplification and thus to depend upon *textbooks*, which are the greatest single intellectual evil of HEA (and perhaps of North American ‘education’ as a whole).
   
   (c) It also leaves undisturbed the widespread, anti-intellectual prejudice of our time: the unexamined assumption that **the past has no causal connexion with the present**, and therefore nothing to teach us.

12. It would appear, therefore, that whether IH is useful for apprentice economists depends upon **what apprentice economists are being apprenticed to do.** If an economist be regarded as a technician of low intellectual culture (like a plumber -- or a dentist as Keynes once suggested) whose more or less routine application of skill can perform certain humble but necessary tasks in our society, the costs of ignoring IH can safely be borne. But if the work of an economist is expected to require much creative and/or critical thinking, then mere HEA can be stultifying (11 above). A prospective high-status economist, who might be expected to engage in research and/or advise in public policy, must be trained to search diligently for the truth wherever it might be found, to identify and eschew simplistic short-cuts to ‘knowledge’, and to be systematically critical of all aspects of Economics including its history. In such case the benefits of supplementing HEA with IH can be safely assumed to outweigh the costs in foregone technical training. For the latter can always be acquired later when and as required. But the habit of rigorous and scrupulous thinking must be acquired early or not at all.
What about the Subject Matter of HET?

13. ‘Economic Thought’ is as old as civilization and is clearly to be seen in Homer, Hesiod, and the Bible, not to mention Plato and Aristotle. Hence any starting date for HET is arbitrary and must be justified. In this course it has been assumed:
   (a) that most economists and historians of ET believe that *Wealth of Nations* (*WN*) is the first ‘canonical’ text in ‘political economy’;
   (b) that most economists believe that present-day ‘economics’ is directly continuous with ‘political economy’ as understood by Smith’s immediate successors, and that in a significant sense it is really the same thing, *mutatis mutandis*;
   (c) that all historians know that Smith’s achievement in *WN* was not so much the presentation of new ideas, as the assembling, criticizing, repairing and codifying the economic thought both of his contemporaries and of his predecessors back to the Ancient world.
   (d) that all historians know that *WN* is a major production of the ‘Scottish Enlightenment’; and therefore that the philosophical, theological, political and scientific context (in 18th century Edinburgh) must be known in order to understand the meaning that this text had for Smith, his contemporaries and immediate successors.

These four assumptions, especially (b) and (d), set the agenda for the entire course.

14. 13(c) suggests the need of preliminary attention to Smith’s predecessors and contemporaries in ‘Political Arithmetick’, ‘Mercantilist’ analysis and polemic, the ‘French Economists’ especially Cantillon, Quesnay, Turgot and Condillac; and the major English and Scotch political authors after Locke: Hume, Berkeley, Steuart, and Josiah Tucker. What did Smith learn from these? What did he criticize and/or reject? What did he ignore, either accidentally or deliberately? How did he combine their insights into a single, coherent and comprehensive treatise? Fundamentally (in terms of the ‘cost-benefit’ approach to scientific knowledge presupposed in this course), *what was gained and what -- if anything -- was lost* by Smith’s ‘canonical’ codification of the scope and nature of political economy in *WN*? To put this question differently and perhaps more pointedly: *Would (could) economics have developed any differently had *WN* not been written?*

15. 13(d) requires a serious excursion into IH. What was the ‘Scottish Enlightenment’; and how did its characteristic (and historically novel) way of looking at social explanation leave a permanent mark upon what we now call ‘economics’? We must examine the philosophic presuppositions (chiefly developed by Hume from Mandeville) of the doctrine of ‘*unintended consequences*’, and in particular we must study the form of this doctrine (canonically illustrated by Smith’s ‘Invisible Hand’) that Hayek has labelled ‘spontaneous order’. We must consider the tension between this essentially ‘evolutionary’ and biological, proto-‘Darwinian’ understanding of social processes, and the Newtonian ‘mechanical’ science which was so powerful an influence on all 18th-century thinking -- and towards which Hume was so ambivalent. And we must be prepared to identify and if possible disentangle the effects of these two very different legacies of the 18th-century ‘Enlightenment’ upon all subsequent economic thought.
16. 13(b) requires a careful (HEA) examination of what Smith’s ‘classical’ successors (esp. Malthus, Ricardo, J. S. Mill and Marx) did with the material -- that is the general approach, the method, the subject matter and the analytical results -- of WN. It is clear that there were changes of emphasis (e.g. DR in a land-scarce, agric. economy being emphasized rather than IRS in a mfg economy); and also divergence of theoretical development. In the Malthus-Ricardo growth model Smith’s Invisible Hand leads to the stationary state; but in Marx’s somewhat differently specified growth model it leads to concentration, crises and a growing ‘Industrial Reserve Army’. Smith’s rudimentary value theory bifurcates into (i) the Malthus-Mill-Menger-Marshall orthodox (‘subjective’) S/D price theory; and (ii) the Ricardo-Marx-Sraffa heterodox (‘real’, ‘objective’ etc.) value theory.

13(b) also poses the question of continuity subsequent to the ‘classical’ codification of the analytical content of WN. Was there a ‘Marginal Revolution’ in the 1870s which inaugurated a genuine and significant discontinuity between the putatively classical, ‘surplus’ approach to pol. econ. and a new and different ‘marginalist’ approach? Was there a ‘Keynesian Revolution’ in the 1940s which permanently changed the method and content of Economics? Has there been a technical ‘revolution’ since the 1930s -- resulting from the development and rapid extension of mathematical and econometric methods -- which has changed the method and content of Economics? Has there been a fresh ‘revolution’ in the second half of the 20th century in light of the implications of information and transactions costs for the fully specified model of general competitive equilibrium? Here too HEA is generally sufficient.

17. 13(a) directs our attention to what is meant, in any ‘literary’ discipline (and in this sense Economics is undoubtedly ‘literary’) by a ‘canon’ of important texts which are held either/both: (i) to define the significant content of that discipline; (ii) to exhibit the definitive and ‘correct’ method of its study. These considerations suggest:

(a) IH study of the importance of D. Stewart and the Edinburgh Review in establishing the ‘canonicity’ of WN;

(b) HEA study of the use made by the next generation of Smith’s ‘economic analysis’ narrowly defined [e.g. Samuelson’s ‘Canonical Classical Model’; Sraffa, Pasinetti etc. on Ricardo; Samuelson’s Marx as a ‘minor post-Ricardian’; Hollander’s counter-claim that all the classics including Marx were at least implicit general equilibrium theorists; etc.];

(c) IH study of the emergence and intellectual relations between various (geographic) ‘schools’ in the 19th and early 20th century [‘English’, Lausanne, Vienna, Stockholm, Cambridge, Chicago]; Cambridge, Marshall and the establishment of orthodoxy;

(d) HEA study of the redefinition of orthodoxy after Keynes: Samuelson’s ‘Neo-Classical Synthesis’ of Marshallian orthodoxy (micro) underpinned by Keynesian income analysis (macro); the importance of Samuelson’s textbook in promoting the new orthodoxy;

(e) HEA study of the undermining of the ‘Neo-Classical Synthesis’ in particular, and the consequences for our understanding of orthodoxy in general of the new ‘information paradigm’, of the ‘new institutional economics’ arising from explicit consideration of transactions costs, and of public choice theory.

(f) IH study of the emergence, in the early 19th century, of methodology: in Whately, Senior, J. S. Mill; of Menger, the ‘German Historical School’ and methodenstriet; of the codification of orthodox methodology by J. N. Keynes and Robbins; of recent methodological debate (Friedman, Samuelson, Stigler; the philosophers of science -- Kuhn, Popper, Lakatos,
Feyerabend -- their domestication by economists, Blaug, Boland etc.; McClosky and ‘rhetoric’; Mirowski and ‘physics envy’; Rosenberg and ‘mathematical politics’)

(g) IH study of the rejection of canonicity and the emergence and persistence of rival and incompatible heterodox ‘schools of thought’ in economics: Marxist, German Historicist, American Institutionalist, ‘Italo-Cambridge’ Post-Keynesian, American Neo-Austrian.

The Relevance of Detailed Studies of Recent Economic Thought

18. 14-17 point to a lifetime of research by professional specialists in IH and HEA. It would be unreasonable to expect apprentice economists to engage with all or most of these questions at any serious level. What is the point of their spending any time and effort at all in detailed study of IH and/or HEA topics? The answer to this question is implied in 9 and 12 above.

(a) A detailed HEA study of the evolution of any particular branch of economic theory is an excellent way of becoming intelligently familiar with the present state of that theory. We may learn (e.g.) International Trade Theory by ‘recapitulating’ its logical development from Hume’s suggestions of geographically differential natural advantage combined with his ‘specie-flow’ international monetary theory; through Ricardo’s (or perhaps James Mill’s) rigorous LTV analysis of comparative advantage; Mill’s attempt to determine the Terms of Trade left unexamined by Ricardo; Hecksher’s and Ohlin’s generalization of Ricardian comparative advantage by the use of neo-classical production theory; to Meade’s international and domestic general equilibrium analysis which subsumes the work of all his predecessors.

More generally (and perhaps more importantly), we may also learn from any one such study, how economists go about the work of criticizing and refining their theories.

(b) But HEA alone, as has been explained (11 above), corrupts and enfeebles the intellect, fostering a dependency on textbooks and textbook-type thinking which eventually drives out criticism, originality and any real concern for truth. It is essential for the mental health of the student (not to mention the professional) to turn away, now and again, from diagrams of the London Underground and look carefully at a real map. Detailed studies of IH topics -- such as the origin and development of the theory of spontaneous order, or the Newtonian roots of stability analysis, or the question of theoretical ‘revolutions’ in HET -- compel students to attend to the real world and thus to remember the abstract character, and narrowly circumscribed usefulness -- of HEA studies. Here too, much of general value can be learned from one or two careful investigations.

19. The agenda for a course in HET set by 13 is too large even when individual topics for detailed study are distributed among students. Some questions must be left unasked, not because they are unimportant but because life is too short -- and therefore here again some kind of cost-benefit estimate is required. In 2004-2005 the following economies were made:

(a) HET of the Ancient and Mediæval world was virtually ignored; and only cursory treatment given in seminars to Political Arithmetick, Mercantilism and the French Æconomists. However, essay topics in First Term provided each student with an opportunity for one in-depth study of pre-Smithian pol. econ.

(b) In post-Smithian pol. econ. the important contributions of J.-B. Say and J. S. Mill were virtually ignored.
(c) Classical monetary theory, esp. the important contributions of Thornton, Malthus and Ricardo, were largely ignored in First Term. However, a very little, formal, HEA study of classical and neoclassical monetary theory was included in Second Term in the session on the ‘Keynesian revolution’.

(d) Formal, HEA study of the analytical differences between the so-called ‘surplus’ formulation of general equilibrium (Ricardo and Marx as reconstructed by Sraffa and Steedman) and the ‘marginalist’ formulation (Cournot, Walras, Edgeworth, Marshall as reconstructed by Hicks, Samuelson and Arrow), conveniently summarized in Walsh and Gram, was omitted on the grounds that it would be more appropriate to a specialised, 700-level course in HET.

(e) The question of whether any genuine discontinuities (‘revolutions’ in Kuhn’s inflammatory language) of content and/or method exist in pol. econ. after WN, perhaps the most important single question of HET, was deliberately ignored in seminars because students must make up their own minds in this matter and any opinion or comment of the Instructor might coerce or bias their judgment. Essay topics in Second Term provide opportunities for assembling and considering evidence relevant to this question in one way or another. The most obvious candidates for consideration as possible discontinuities are (i) what Smith did with his predecessors’ work; (ii) what Malthus, Ricardo and Marx did with WN; (iii) what Jevons, Menger, Walras et al. did with value theory; (iv) what Ramsay, Neumann, Samuelson, Arrow et al. did with the mathematical formulation of economic analysis; (v) what Keynes (and Kalecki, also ignored in this course) did with monetary/macro theory; and (vi) what economists since 1950 (building on the insights of Frank Knight, F. A. von Hayek and Ronald Coase in the 1920s and 1930s) have done with information theory, transactions costs and public choice theory to destroy the mid-century ‘Neo-Classical Synthesis’ of Lerner, Lange and Samuelson. But a great deal of HEA attention was paid in seminars to the intellectual content of (ii), (iii), (v) and (vi), the last of these only for the third time in this course.

(f) The IH of the canonization of WN by Dugald Stewart and his pupils was ignored. As with 19(d) above, this seems a more suitable study for a specialized, 700-level course in HET. [For a convenient summary, see B.-M. Fontana, Rethinking the Politics of Commercial Society: the Edinburgh Review, 1802-1832, Cambridge 1985.]

(g) Detailed HEA study of the vast literature, beginning with Bortkiewicz and running through Samuelson and Morishima and beyond, criticizing and reinterpreting Marx’s pol. econ. was omitted as more suitable to a specialist course in Marxian economics.

(h) The (very great) historical significance of the Chicago School was virtually ignored. Here too, as with 19(f), (d), this topic deserves a specialized, advanced course, or a MA thesis, to itself. Little attention was paid, in 2004-2005, to any ‘regional’ schools (Vienna, Lausanne, Stockholm etc.) except only for Cambridge, and even there less than in former years.

(i) Heterodox ‘schools of thought’ (German Historical, Marxian, American Institutionalist, Post-Keynesian, Neo-Austrian) were largely ignored. Some of this is dealt with -- in an elementary, HEA fashion -- in other undergraduate courses offered by the Department.
20. There are and can be no generally acceptable criteria for exclusions of these kind. Instructors inevitably -- and excusably -- tend to concentrate on material they know best and have contributed to by their own research (Chernomas on Marx, Forget on J. S. Mill and Say, Waterman on Malthus). The same Instructor (e.g. Waterman) may include some material -- such as 19(a) or (i) -- in some years but not in others. The considerable attention paid this year and the last two to mainstream economic analysis since 1950 was new in 2002-2003; and was purchased at the cost of ignoring methodology and important ‘topics’ such as international trade, monetary theory, and macrodynamics. **It is important for students to recognise that this does not matter.** Students’ ‘responsibility’ in this course is:

(a) to be aware of the agenda as a whole;
(b) to understand its rationale;
(c) to be willing to criticize that rationale if they believe it to be defective;
(d) to think long and hard about the important historiographic and methodological questions raised by the agenda;
(e) to appreciate the distinct nature of HEA and IH and to understand the importance of each in HET;
(f) as time allows, to undertake reading, and to use HEA and IH in detailed studies (whether or not the topic has been addressed in seminars or essays), which might bear in some way upon the important historical and methodological questions.

What’s the Bottom Line?

21. **In the development of our discipline, why were some possibilities chosen and others rejected?** And why have some -- recognisably ‘economists’ by their aims and methods, and not merely incompetents or cranks -- persisted in pursuing lines of inquiry rejected by the profession as a whole? These are the ostensible, primary questions with which the course as a whole is concerned. Like all intellectually powerful questions they suggest a range of secondary questions [e.g. What difference did Smith make? What is the relative importance of ‘spontaneous order’ and Newtonian mechanics in economic theorising? Does it make sense to talk of a ‘Marginal’ (‘Keynesian’ etc.) Revolution’? Does it aid or obfuscate our understanding to identify a ‘Surplus Tradition’ in Economics and to contrast this with orthodoxy? etc.] . Answers to these secondary questions -- which in turn will depend upon a wider range of tertiary questions they themselves suggest, and so on -- contribute to our ability to answer the primary questions knowledgeably and intelligently.

22. **There are no ‘right’ answers,** though there are many clearly wrong ones. However, among those answers that are not obviously wrong some will be better than others. A good answer is one which ‘sticks its neck out’ (does not evade commitment by a spurious judiciousness), and is based upon sound reasoning: i.e. knowledge of the relevant facts, awareness of the differing quality of ‘factual’ material, clarity of thinking, and honesty of purpose (a good answer will be intended to persuade, but by fair means only). The educational value of this course to the apprentice economist is ‘very exactly in proportion’, as Malthus would have put it with his habitual exaggeration, to the intellectual energy with which (s)he works out good answers for her(him)self.
A. M. C. W.
9 April 1997; revised 6 April 2005.

Bibliographic note
Much of the analysis of paras 3 – 8 was incorporated, sometimes in the same words, in A. M. C. Waterman, ‘Reappraisal of “Malthus the Economist”, 1933-97’, History of Political Economy Vol. 30, No. 2 (Summer 1998). This was the leading article in a ‘mini-symposium’ on ‘Malthus at 200’. For critical responses to Waterman’s historiographic methodology see the comments of De Marchi, Winch and Hollander.