## PROGRESSIVE AND DEGENERATING RESEARCH PROGRAMMES IN ECONOMICS:

# A LAKATOSIAN EXAMINATION WHILE APPRAISING LAKATOS' MSRP AS APPLIED

### TO THE HISTORY OF ECONOMICS.

A Ph.D. Proposal by Peter E. Earl, Queens' College, Cambridge University. (Supervisor: Professor Brian J. Loasby, University of Stirling.)

Lakatos (1970) has argued that the history of science is the history of research programmes rather than theories and that scientific research programmes may be characterised by a 'hard core' surrounded by a 'protective belt' of auxiliary hypotheses which has to bear the brunt of tests. An SRP is defined as theoretically progressive (having a claim to scientific status) if it contains excess empirical content over its predecessor and is labelled degenerating if it is characterised by the endless addition of ad hoc adjustments that merely accomodate whatever new facts become available. Lakatos argues that an objective reason for rejecting a research programme is provided by the existence of a rival which explains its previous success and provides a further display of heuristic power. Programmes are not forever scientific but may become progressive and tend to dominate normal science (to use a Kuhnian term) or degenerate as time passes.

One case study of Lakatos' MSRP as applied to economics has already been carried out by Latsis (Situational Determinism in Economics, L.S.E. Ph.D. in 1974). He argued that theories of perfect and imperfect competition formed part of a common SRP which was degenerating. But his case for degeneracy was a) confined to just the neoclassical theory of the firm (which is only part of an SRP which takes in also theories of consumer behaviour, interest rates, etc.) and b) conducted almost entirely on the grounds of the superior logic of the multi-exit decision choice approach, hardly referring to empirical content. In a world where incomplete information and transactions costs are facts of life situational determinism is bound to seem an inferior approach if one is judging theories on realism of assumptions rather than predictive content. Hence while Latsis has usefully identified the 'hard core' of the neoclassical SRP his study "does less than justice to Lakatos's methodology." (Blaug (1976),p.171)

Furthermore, although Latsis speaks approvingly of the multi-exit decision choice approach his study is very one-sided since he considers it too early to do an appraisal of 'behaviouralism' as a budding research programme on the grounds that a) it does not provide answers to questions open to treatment in a simple way with the neoclassical SRP, b) has not successfully predicted any new fact that was unexpected, c) as a research programme it is much less rich and less coherent than its neoclassical opponent and d) in any case, the two research programmes are largely uncommensurable; 'importantly different and mutually exclusive over an extensive area.' As a result it rather seems to be implied that economics (whose subject matter Latsis, unlike Hutchison (1977), takes for granted along with its purpose) is a degenerating science since there is no alternative to the collapsing SRP and the neoclassical SRP, while bad, is the best available. As Loasby (1976) argues, if no paradigms commanded any support in a particular field research would cease.

The planned Ph.D. dissertation aims to avoid these deficiencies in the course of examining how well suited Lakatos' 'Methodology of Scientific Research Programmes' is to explaining the history of economic science - in this field is it itself a progressive SRP compared with

Kuhn's most recent views on 'The Structure of Scientific Revolutions'? In order to assess the history of the subject in terms of rival research programmes we need a rival to the SRP of situational determinism that might have some justification to claim that it ought to dominate as 'normal science' which can be tested for conformity with Lakatos' objective acceptance rejection criterion. A large degree of commensurability is obviously essential. The natural alternative to situational determinism is a multi-exit SRP whose hard core recognises the importance of time, uncertainty and learning in economic processes. Joan Robinson (1974) claims that the Post-Keynesians have a history of concern for historical time and processes in economics which starts from Ricardo and leads up to Sraffa, a claim that Hutchison has hotly disputed. We are inclined to support behaviouralism as a rival SRP, but not in the narrow sense in which Latsis appears to understand the term.

Loasby (1976, p. 225) argues that Keynes and Marshall, through their emphasis on psychological variables and the need for observation rather than axioms (a much more inductive approach than the neoclassical SRP). have a claim to be among the founders of behavioural economics. We would consider including in the alternative school Shackle and the L.S.E. subjectivists (see Buchanan and Thirlby, 1969) as well as Richardson (1960, 1972) and Andrews (1949, 1964) (see Loasby, 1978) and those whom Latsis would call behaviouralists. The proposed dissertation will examine whether these economists, all of whom have been exceedingly unpopular with the adherents of the 'Situational Determinist SRP', share a research programme with an identifiable hard core and protective belt which we shall call, provisionally, a 'Post-Marshallian' approach. This multi-exit programme we shall then compare with the neoclassical SRP identified by Latsis to see whether there are objective reasons for its lack of acceptance so far (i.e. in operationally relevant areas is it a less progressive programme than its rival?) or whether it is because its critique of orthodoxy has been badly co-ordinated (n.b. we have in the present dissertation to see whether there is a coherent programme there at all). If the latter is found to be the case we will tend to be driven towards the conclusion that, as an explanation of the history of economics, Lakatos' MSRP is degenerate relative to the approaches of Loasby (1976), who appears to want to explain the process in behavioural terms (for Loasby a theory may operate on many levels: ) and Kuhn (1970), whose theory can be rationalised in behavioural terms as well as having applications to business behaviour and company histories (as we shall argue as part of our penultimate chapter).

To the extent that it can be shown that the Post-Marshallian SRP is 'objectively progressive' in an operational sense the dissertation will not only have contributed to knowledge on the Philosophy of Science/History of Economics front, it will also have provided a critique of the prevailing view that multi-exit approaches to the subject are merely 'economic poetry' (to use a phrase sometimes uttered by Professor Hahn) or useless because they are unable to give general predictions. Furthermore, insofar as we are successful in bringing together an operational multi-exit SRP we will be helping to point the way to further research. The structure presently envisaged for the dissertation is as follows:

# CHAPTER 1. 'Textural' versus: 'Directional' Empiricism and Operational Relevance in Economics.

Central to Lakotos' methodology in assessing the progressiveness of a research programme is the assessment of empirical content in such a programme. Because of this we cannot proceed without a discussion of what we expect the operational content of economics to be so that we are able to distinguish between the purely logical failings of a theory

(in areas in which we do not necessarily expect to find empirical content) and empirical shortcomings. An idea of the operational content of a subject is essential if one is to be able to use Lakatos' MSRP for if, say, both Hahn and Eatwell specifically stated to their Prelims students that what they were about to hear had no relevance to the real world we would be dealing with alternative approaches to Alice in Wonderland Economics and Lakatos' concept of a refutable protective belt would itself be non-operational. The subjectivist view would deny that many things can be predicted in even a directional sense since much data exists in the imagination and even Hahn (1975) has argued that we cannot specify in general which way the price of butter will shift when demand moves in favour of it from theoretical axioms alone. (We would need to know data on the precise technology facing the economy and subjective preferences, which may not be obtainable.) Coddington (1976) says that fundamentalist (essentially multi-exit) Keynesianism is able to give an idea of the texture but not usually of the direction of the economic process; but if even theories which claim to predict the direction of the process given certain data cannot be tested because the data are not avaiable it may be that in important areas theories can only be assessed on some criteria of textural empiricism, yet this may still be useful for policy-making. (e.g. If financial markets may be prone to Minskian instability our policies with regard to banks will be unwise if based on an I.E.A.-type view, even if neither school can attempt to predict for any point the direction of trends, let alone quantitative changes in the growth of credit in certain markets if regulations are changed.) The testing of textural predictions may thus be important and novel if economics is to have some scientific content in particular areas, but the notion of 'texture' is one which we will have to discuss in some detail in this chapter. A related concern will be whether a multi-exit approach to economics might be accused of being logically irrefutable (if we only test directional predictions, which it may decline to give us); a 'pseudo-theory, able to explain anything' - a charge which Hutchison levels against some approaches to Marxism.

## CHAPTER 2. The Multi-Exit Post Marshallian SRP in Economics.

This chapter will follow Latsis' approach to identifying the situationally determinist SRP in trying to see if there is a Hard core and protective belt to be found in the work of the authors we cited above, despite disagreements between them on certain aspects. (Just as imperfect and perfect competition theories to some extent clash but are part of the same SRP, so Marshall and Keynes differ but in many respects may belong to a common SRP. We may then be able to discover what might be the appropriate microfoundations for macroeconomics and go some considerable way to answering Leigonhufvud (1976,p.105)'s questions on the degeneration of the Marshallian programme. N.b. I believe that Leijonhufvud's long-awaited paper 'Maximisation and Marshall' will, when it appears, offer considerable support to some of the claims of this chapter.)

Chapters 1 and 2 form the core of the proposed dissertation, identifying the rival SRP and setting out the criteria for using Lakatos' methodology in a subject whose aim is too often taken for granted and whose hypotheses may often be untestable in the usual sense. The next five chapters compare the rival SRP's in terms of logic and Lakatos' emparical concept of progressiveness/degeneracy. In the course of these chapters we plan to make an important contribution to integrating aspects of the work of the authors cited above within the multi-exit SRP to form a more coherent whole thus helping to pave the way for a more co-ordinated attack on orthodoxy than has usually been achieved in the past.

#### CHAPTER 3. Value and Distribution.

Against the theories of the multi-exit SRP will be ranged orthodox and, for this chapter only, Neo-Ricardian theories (partly in order to decide whether these are something distinct or merely subsets of either of the first two). This chapter forces to look at the distinction between the pure G.E. theorists by whom partial analysis is to be scorned and the 'vulgar' neoclassicals whose theory is seen to be fundamentally logically flawed in the light of Richardson's work. We find that the directional/textural distinction is very important here given the subjective aspects of the non-Ricardian theories (on the demand side in particular) and the Neo-Ricardian theory's ability to predict only 'natural' prices and not the market prices that are. At the end of this chapter there will be some discussion (expanding on chapter one) on inductive and deductive approaches to theory, the acceptability of unrealistic assumptions and the role of belief and intuition in theorising where directional predictions are difficult to make and test.

#### CHAPTER 4. Taut and Slack Aspects of Economic Systems.

The multi-exit approach regards slack as necessary for the working of a system under uncertainty and finds the origin of slack in uncertainty. For the situational determinist SRP slack has to be excluded to avoid the possibility of multi-exit choice (a problem G.E. theorists are slowly realising as they relax their unrealistic assumptions and set off down the forbidden road to behaviouralism), The subjectivists would deny that slack can always be observed (and our view of slack is much wider than Cyert and March's) but its uptake can be observed and this may be evidenced by behaviour of firms or agents which contradicts the logic of situational determinism. Hirschman's Exit, Voice and Loyalty and Leijonhufvud's (1973,1976) concept of the corridor have been important influences in this area of our work.

# CHAPTER 5. The Concept of Efficiency in Economics.

This chapter may be viewed as a somewhat self-contained essay but it has to be included as it expands some of the ideas in Chapter 4, (especially notions of subjective v. objective costs in economic decision-taking which are central to the understanding of slack) and sets the stage for the following two chapters. This concept occupies a hallowed position in the subject but now even the more advanced G. E. theorists are beginning to realise its deficiencies, speaking of efficiency relative to the avilable information. This makes policy-making by less than omniscient policy makers a tricky exercise (see Littlechild (1978) for some warnings on this) and requires us to devote some time to some of the modern 'Neo-Austrian' arguments of Lachman and Rothbard who hold a position which, if it were correct, would question the whole scientific basis of our subject. We will emphasise the theoretical difficulties caused by the incompletely specified problems that face decision-takers and the incompletely specified relations between market transactors (and will not be in complete agreement with Leibenstein's writings).

# CHAPTER 6. Competition Policy and the Rival SRPs.

# CHAPTER 7. Policy and the Deindustrialisation Debate.

If economics is supposed to be able to have any predictive value it must be of help in policy formation, if only in a negative way if it cannot offer general predictions and prescriptions. Different SRPs lead to different hypotheses and different policies. The policy-maker has to act ahead of results and policy-making is or should be an inductive activity; policies are or should be fashioned in the light of observations about how the world appears to operate. SRPs lead to hypotheses about

how the world should be behaving; if these are not confirmed then the logical basis for accepting policies stemming from these SRPs is doubtful and the SRPs will have to be modified in a progressive or degenerative way. We will argue that on competition policy (e.g. information agreements, mergers and Resale Price Maintenance) and on anti-Deindustrialisation policy (e.g. the merits of import controls, devaluation or micro-measures a la NEDO) the rival SRPs differ fundamentally. Moreover when we produce evidence to show that the hypothses underlying the orthodox SRPs are not unambiguously confirmed empirically we find in many cases that there is no sign of ad hoc adjustments indicative of Lakatosian degeneration. Instead the evidence is ignored (or not even sought in the first place before policies are advocated) or the theorists reduce the scope of their threatened SRPs, making no attempt to accommodate the new facts because to do so would involve ad hoc adjustments of such a kind as to turn their SRP into the rival SRP which is not under threat. (e.g. general equilibrium theorists have an SRP whose protective belt is being steadily stripped away, eventually to leave them with just an irrefutable hard core because it will no longer try to offer any predictions about the real world - c.f. Hahn's (1973) Economica review 'The Winter of our Discontent'). To the extent that we find such behaviour the history of economics may be better explained in Kuhnian of behavioural terms (the shedding of bits of the protective belt representing a lowering of aspirations instead of a willingness to make a strategic change and invest in the new research behaviour for which Lakatos' methodology would appear to offer objective support were it not for the sunk costs of, for example, investment in mathematical general equilibrium theory.)

During the course of chapter seven we will undertake the (unpopular in Cambridge) task of providing a critique of the who mix the cumulative causation theory (which we will show rests on the existence of ignorance and should be excluded from the orthodox SRP) with the single exit approach and head straight for the conclusion that without a change in U.K. trading arrangements the collapse of industry is inevitable. A multi-exit perspective on deindustrialisation will be presented which fits together cumulative causation, slack and the cause of strategic mistakes by firms and suggests alternative policies. This perspective will be illustrated with much empirical evidence which contradicts the single exit school and would tend to knock a lot of force from their conclusion that changing trade conditions are absolutely necessary. Not only may import controls Not be absolutely necessary but their imposition could remove the incentive for firms to change their 'business paradigms' - c.f. David Stout's writings at NEDO. This disagreement on policy represents a crisis in normal science and a 'crucial' decision for the British economy, yet subjectivity of data make prediction of direction difficult in which case the arguments have to turn on 'textural' tests (modified Lakatos) and/or belief (Loasby, Hutchison). Observation of the behaviour of the practitioners on either side of this crucial debate may enable us further to reach a conclusion on the progressiveness of Lakatos' MSRP as applied to the history of economics.

#### CHAPTER 8. Conclusion.

This chapter will bring together the arguments of the preceding chapters, weigh up the evidence and conclude.

If this proposal is accepted I hope to be able to submit by the end of 1980, preferably in September 1980. It may appear that I have proposed somthing which will turn out excessively long — I do not believe this to be the case (parts of it, especially parts of chapter seven already exist in draft form), but I am, of course, open to suggestions.

Peter E. Earl.

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