

SCHUMPETER ON COMPETITION

A RADICAL CONSERVATIVE'S CRITIQUE AND REVISION OF NEO-CLASSICAL ANALYSIS

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A Thesis Submitted in Partial Fulfillment of the Requirements  
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by

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The theory of a process does not belong in statics.

Thorstein Veblen

The danger is that the model limits our awareness of unexplored possibilities of conceptualization.

Abraham Kaplan

I can now rejoice even in the falsification of a cherished theory, because even this is a scientific success.

John Carew Eccles

## ABSTRACT

Thesis. There have been two basic concepts of competition in the history of economic analysis. The classical economists did not define competition but viewed it as a behavioural process. The neo-classical economists defined competition as a structure or situation by their model of perfect competition. Schumpeter, like the classical economists, entertained a behavioural-process conception. Given this different outlook, Schumpeter's work on competition can be viewed both as a critique of the neo-classical concept and as a revision of the neo-classical applied analysis of actually observed competition.

Chapter 1. The current state of economic thought is characterized by much semantical or terminological confusion due to the profusion of modifiers of the basic term, 'competition,' and to the failure to consistently maintain one of the two concepts mentioned. Part of the methodological difficulty is in deciding whether there is a true meaning of competition (Essentialism or Realism) or whether definitions in economic theory merely set out conventionally stipulated shorthand methods for referring to complexes of ideas (Conventionalism or Nominalism). A further difficulty is deciding, in either case, which definition is to be accepted and used consistently for the purposes of economic theory. In his stated methodology and in much of his appraisal of the neo-classical concept, Schumpeter reflected the Conventionalist attitude, but on other occasions, especially in his own analysis of competition, he reflected an Essentialist outlook; this ambivalence caused much tension to exist in his attitude toward economic

theory in general.

Chapter 2. Schumpeter had little to say about competition in classical thought other than that they did not define it and viewed it as the mere absence of monopoly. However, with an "absolutist" outlook on the development and progress of economic analysis, he tended to read thoughts of perfect competition into their words, even though the term 'perfect competition' entered economic thought only later in the neo-classical period. Schumpeter interpreted the neo-classical concept of competition as being refined and crystallized in the concept of perfect competition. His interpretation of their theory of perfect competition is reduced to a series of ~~axiom-like and theorem-like~~ statements. With his Conventionalist and absolutist outlook on economic analysis, Schumpeter overlooked the process-situation between the classical and neo-classical concepts, but in his criticism of the neo-classical concept he tended to identify this distinction in terms of the static-dynamic dichotomy.

Chapter 3. Schumpeter disputed the validity of the neo-classical concept principally on conceptual grounds: it failed to treat of what we ordinarily think of when we speak of competition. However, he defended the theory of perfect competition on Conventionalist grounds as a useful analytical device which displayed interesting, although hypothetical, properties for economic analysis. Thus its descriptive accuracy did not matter. On other occasions, though, he attacked the theory on conceptual, logical and empirical grounds and completely rejected it as a basis for arriving at public policy value judgements. His criticisms are built mainly around the static-dynamic dichotomy, and reveal an Essentialist attitude toward the nature of competition.

Chapter 4. The ambivalence and unresolved tension that are apparent in Schumpeter's appraisal of perfect competition are based mainly on methodological pronouncements about the status of theory. Thus Schumpeter's inconsistencies have to be accounted for in terms of his methodology. Schumpeter wanted both to achieve a degree of purity in economic theory that would guarantee the independent status of economics as an autonomous field of enquiry and, at the same time, to apply theory in a comprehensive, all-embracing account of social reality. Thus he was forced to admit that economic phenomena do not constitute a causally closed system but argued that they could be treated as if they did, for purposes of economic theory.

The result is that Schumpeter's methodology represent a curious and unsatisfactory combination of various schools of philosophical thought, ranging from Positivism and Conventionalism in a very weak form of Empiricism through to a rationalistic form of Anglo-American Idealism in which the coherence theory of truth and verification is the chief feature. These very different strands of thought cannot be reconciled, but Schumpeter's Idealist tendencies are the most apparent ones in his own original contribution to economic thought and is very closely related to his Essentialist outlook on the nature of definition and on the meaning of 'competition,' since both these sides to his thinking lay great stress on intuition or "Vision" as a source of knowledge and verification.

A major source of semantical confusion is identified and clarified in terms of the technical notions of statics, dynamics and equilibrium which play crucial roles in Schumpeter's scheme of things.

Chapter 5. Schumpeter's own conception of competition cannot

be given a precise definition, but it can be characterized broadly as a process of social interaction between independently acting individuals within an "action frame of reference." Competition has been likened to the notions of game, rivalry and struggle; Schumpeter's notion stands closest in meaning to struggle. Moreover, Schumpeter conceived of competition in such broad terms (as simply being competitive interaction) that it becomes, in his view of things, a virtually universal feature of human behaviour.

Schumpeter's conception, however, does leave some unresolved conceptual problems, some of which may well reduce to pseudo-problems if the conceptual predilections of orthodox neo-classicism are abandoned. Yet, a major problem of Schumpeter's conception would remain, that of distinguishing between "fair" and "unfair" patterns of competitive behaviour and of differentiating competition from pure conflict.

Chapter 6. Schumpeter's applied analysis of business enterprise in the capitalist epoch treats competition as a behavioural process in which business strategy is the organizing principle. Whereas the classical economists considered only pricing behaviour in the market-place in their treatment of competition, and the neo-classical economists limited behaviour even further by specifying price as a parameter, Schumpeter removed virtually all constraints in his notion of competitive behaviour, putting innovation at the center of attention and treating the entrepreneur as the central figure in business competition.

Nevertheless, Schumpeter retained much of the older classical and neo-classical terminology - firms, markets, industries, demand, profit-seeking, equilibrium, etcetera - but in many cases treats these older terms in fundamentally new ways. In this manner, his applied analysis of competitive behaviour stands neither as a complete endorse-

ment nor as a complete refutation but rather as a revision of neo-classical analysis.

Chapter 7. Schumpeter's depiction of competition in the process of creative destruction has been judged the main impetus behind the so-called "new competition" movement among behaviourists in the field of industrial organization, as opposed to the structuralist "workable competition" movement. The phrase "the new competition" is unfortunate in that it suggests an historical hypothesis that Schumpeter never advanced or defended: that perfect competition of the nineteenth century somehow metamorphosed into a new kind of competition in the twentieth. Schumpeter's conception of the meaning of the term 'competition' and his applied analysis in which that term occurred may have been "new" in the sense of differing from its neo-classical counterparts, but Schumpeter denied that perfect competition ever was historically or conceptually adequate and his own conception of competition was held to be relevant to all capitalist history.

Nor did Schumpeter predict the "decline of competition" but rather the disappearance of the traditional patterns of competitive behaviour along with the disappearance of the older institutions of competitive capitalism in its transition in trustified capitalism into socialism. By universalizing the concept of competition, Schumpeter did not commit the naturalistic fallacy by glamourizing competition; it was the leadership qualities of the entrepreneur, not the competitive process in which he was an active participant, that Schumpeter admired.

## PREFACE

This thesis was originally designed as a study of Schumpeter's polemic against U. S. antitrust policies as presented in his Capitalism, Socialism and Democracy. It was also intended, I must confess, as an exercise in reparation of an earlier oversight of Schumpeter's work on competition in an essay that I had prepared for a History of Economic Thought course.

As I proceeded to examine Schumpeter's writings in greater detail, I became increasingly fascinated by the conceptual aspects of his work on the notion of competition per se. By the time I had discovered McNulty's path-breaking article ("Economic Theory and the Meaning of Competition," Quarterly Journal of Economics, 1968), I had already formulated the major hypothesis of the present thesis, namely, that the neo-classical concept of competition was a structural or situational concept and that Schumpeter found it wanting precisely because he entertained a process concept of competition.

Besides confirming my initial suspicion and strengthening my assurance in the correctness of this interpretation, McNulty's article also sharpened my focus on things and broadened my perspective by bringing the earlier classical concept, a process concept as well, into the picture and placing a much greater historical perspective on the origins and character of Schumpeter's thinking. In this way, I am much indebted to McNulty.

However, my greatest debt is to my advisor, Professor Ralph F. Harris, not only for the benefit of his guidance in the structuring



of this thesis but also for his patience and understanding in seeing me through what was for me the long and difficult period during which I worked on it. However, this is not to imply that he endorses the views expressed in these pages, views for which, of course, I alone am responsible.

I would like to add here a short prefatory note about the text of this thesis in order to avoid or minimize confusion. Single and double quotation marks as well as italics abound in the text. The following are the rules of usage that I attempted to observe:

1. Single quotation marks ( ' ' ) indicate reference to a word or term, such as: The term 'cat' (and not the animal).
2. Italics ( \_\_\_\_\_ ) indicate either: (a) emphasis, in the usual manner, or (b) reference to a concept as distinct from the term which is used to express the meaning of the concept, such as: the concept competition, not the term 'competition.' The context makes it clear which use is intended.
3. Double quotation marks ( " " ) indicate either (a) a direct citation of an original passage, in the usual manner, or (b) an indirect reference to an idiomatic usage, such as: Schumpeter often wrote of the "limiting case" of perfect competition.

Lengthy quotations cited within the text present a possible source of confusion since their authors did not always follow the usage indicated here. However, in observance of standard practice, I have left those passages as they were in the original wherever possible.

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## Chapter 1

### INTRODUCTION

#### 1. Scope and Approach

In a recent survey of the changing conception of competition in the history of economic thought, P. J. McNulty assessed the contribution of Joseph Schumpeter thus: \*1

It is unfortunate that Schumpeter's defense of monopoly and big business has tended to overshadow his insights into the competitive process, insights which extended beyond those of even Chamberlin because they included an appreciation of the importance of changing methods of production and forms of industrial organization.

The broad purpose of this thesis is to redress the relative neglect that has been accorded to the more intellectually demanding aspects of Schumpeter's work on competition. The focus of this thesis, therefore, will be on Schumpeter's particular conception of competition per se, that is, his interpretation of the meaning and significance for economics of the generic term 'competition' and its role as a key theoretical concept in economic enquiry.

Some of Schumpeter's more controversial empirical claims have received considerable attention by economists during the last two decades. McNulty's judgement, for example, that "Schumpeter<sup>6</sup> was probably wrong that 'the large scale establishment ... has come to be the most powerful engine of progress' "<sup>2</sup> has been studied and argued

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\*Footnotes are located at the end of each chapter. Those for Chapter 1 are found on pp. 22-24.

at great length and is yet likely to be received with varied and heated reaction by economists at large.

In future, though, the student of the history of economic thought is likely to view this and other related empirical questions as part of a temporary issue of major but passing significance, and to look to the more intellectually demanding and scientifically contentious aspects of Schumpeter's work on competition, which changing forms of industrial organization will render increasingly more relevant to the study of economic behaviour. To date, however, this interest does not seem to have emerged from the literature on Schumpeter to any great extent; it is with the hope that such an interest will appear that this thesis is put forward.

While the controversial claims typically associated with the thinking of Schumpeter are not entirely ignored in this thesis, the principal purpose of the thesis is not to enquire as to the truth of these, Schumpeter's, views on current economic matters, but instead to examine and characterise<sup>2</sup> his general treatment of competition in and of itself as a theoretical concept in economic reasoning.

More specifically, the object of the thesis will be to develop and defend the hypothesis that Schumpeter's conception of competition reveals strong "classical" - as distinct here from "neo-classical" - elements. It will be argued that his particular conception of competition (often referred to in the literature as "Schumpeterian" in a manner of general imprecision and descriptive richness equal to such other phrases as "Marxian", "Walrasian", "Marshallian", "Keynesian", etcetera) bears a strong resemblance to that which emerges, however vaguely, from classical writings on

competition, but that his highly individualized thinking reveals an underlying and, for the most part, unresolved tension between what are essentially classical and neo-classical ways of viewing competition. This unresolved tension, the source of which is identified below, may have prevented Schumpeter from achieving any complete and final articulation of his concept of competition (which, in all fairness to him, he never attempted consciously to do), but it did not prevent him from achieving many important conceptual breakthroughs.

Argument along these lines entails, among other things, the following tasks: (1) to distinguish between the classical and neo-classical concepts of competition, (2) to indicate their place and to establish their importance in the thinking of Schumpeter, (3) to provide as clear and precise an account of Schumpeter's conception of competition as his original texts will permit, involving as it does a certain amount of inference, guess-work and interpretation, and (4) to account for the source of the tension characteristic of his thinking.

As this introductory statement might suggest, the subject matter of the thesis is primarily conceptual and methodological in nature in that it treats of the role of a theoretical concept in economic reasoning. As such it touches upon the more familiar themes of Schumpeter's work (innovation, the entrepreneur, big business, etcetera) only in the latter two chapters, and even there solely for the purpose of illustrating how his emergent conception of competition took shape in his non-theoretical or "applied" analysis of business behaviour.

The sub-title chosen for this thesis merits some explanation at this point. The rather paradoxical phrase "radical conservative" is not intended as an allusion to Schumpeter's political outlook, although

there is a legitimate and accurate sense in which that description can be so interpreted. Instead, the radicalism and conservatism which are inherent features of Schumpeter's thinking on competition refer here to his analytical style and outlook on the development of economic analysis. His thinking is "radical" in the same sense in which classical economic thought was radical, that is, concerned with the root meanings of economic concepts and thus with the "fundamental" or "ultimate" foundations of economic enquiry rather than with the type of technical refinement more commonly associated with neo-classical and current theoretical work. In this sense, Schumpeter had much in common with his Austrian predecessors, especially his teacher Bohm-Bawerk. The debate between Schumpeter, Bohm-Bawerk and others over the fundamental nature of capital is a case in point. Significant, too, is Schumpeter's attraction to Marx and such Marxian concerns as the dynamics of capitalist evolution and the interrelationship between capitalist economics and the socio-psychological "superstructure" of capitalist civilization. All of this is appropriately termed "radical".

In another very important way, though, Schumpeter's approach to economic analysis is quite conservative in the same sense, for example, as is Marshall's. Both took great pains to indicate how their own theories represented a compatible and consistent outgrowth or extension of an earlier orthodoxy. Both held that the development of economic science in each succeeding generation was evolutionary, having originated from roughly defined but absolute and universal principles of economics which had undergone a slow but steady analytical refinement. For Schumpeter, this meant conserving the best of his neo-classical forerunners, for Marshall that of his classical predecessors, especially

Ricardo. But this conservative bent often led them into rationalizing their own positions as lying firmly within the mainstream of economic analysis even when in fact this was not so. A telling example is Marshall's stated indebtedness to Ricardo's analytics, a connection which Schumpeter found difficult to accept.<sup>3</sup> Likewise, Schumpeter's gratitude to and admiration of Walras and his work are well advertised throughout Schumpeter's writings<sup>4</sup> but, as will be argued at a later point, Schumpeter's more immediate and obvious ties with Walras and neo-classical economists in general are really more of a purely verbal and superficial nature which, incidentally, have misled many historians in their assessment of Schumpeter's proper place in the history of economic thought.<sup>5</sup>

What is important to note here, however, is that in his diplomatic attempts to conserve what he believed to be the better elements of preceding schools of thought, Schumpeter often had to suppress or subordinate in the process the more highly individualized and original elements of his own thinking. The result is that Schumpeter very frequently tried to reconcile the irreconcilable, and a good case in point is his treatment of competition. The tension between classical and neo-classical outlook in Schumpeter's thinking, referred to earlier, can be attributed to this radical-conservative ambivalence.

With that in mind, the latter half of the sub-title becomes all the more significant. Schumpeter's work on competition can best be understood as a critique and revision of neo-classical analysis in spite of his classical affinities. While he never fully accepted neo-classical analysis of competition, neither did he wholly reject it but arrived at a sort of inconclusive compromise with it, as is to be noted especially



in the final pages of his last, unfinished work, his History of Economic Analysis.<sup>6</sup>

This approach to Schumpeter's work on competition (through his critique of the neo-classical position) is not only justified but almost necessitated textually, since so much of his written work on competition is inextricably connected to the neo-classical literature, either by way of direct criticism or by employment of neo-classical terminology. One is reminded here of Schumpeter's own dictum that "in economics ... modern problems, methods, and results cannot be fully understood without some knowledge of how economists have come to reason as they do."<sup>7</sup>

To conclude this section, a short word about each of the following: sources used, problems posed by Schumpeter's style, and the format of the thesis. First, regarding sources, an attempt was made to consult as much of Schumpeter's literary output as possible. Schumpeter wrote prolifically, from an early age of twenty-two to his death in 1950, a time-span of forty-five years. While he wrote of competition in numerous places and in a wide variety of contexts throughout his career, oddly enough competition is rarely the prime focus over any sustained portion of a single work. Hence much "pulling together" is required. Part II of his Capitalism, Socialism and Democracy<sup>8</sup> is the principal exception in this respect and so represents the single most important source for this thesis.

Of his other major publications, only three were found useful and were relied upon heavily: The Theory of Economic Development,<sup>9</sup> Business Cycles,<sup>10</sup> and History of Economic Analysis. In addition, many of his journal articles, most of which have been published collectively

in the volume entitled Essays of J. A. Schumpeter,<sup>11</sup> proved to be seminal works in the development of his thought. Of the remainder of his publications in English version, including principally Ten Great Economists, Economic Doctrine and Method<sup>12</sup> and Imperialism and Social Classes,<sup>13</sup> none proved to be (surprisingly so in some cases) very useful for the general topic of competition.

One gaping whole is left in this list of Schumpeter's literary output, namely, his early German publications which have not to date been translated. Chief among these is his first and lengthy book, Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie (Nature and Main Content of Theoretical Economics).<sup>14</sup> Some assistance in assessing this early period of Schumpeter's career was provided by Dr. E. Schneider's excellent article, "Schumpeter's Early German Work, 1906-1917"<sup>15</sup> but, for the most part, this thesis purports to be a study of Schumpeter's thinking only in his middle (1911-1939) and mature (1939-1950) periods.

Any social scientist of the stature of Schumpeter is bound to present his own, individually stylized, problems for the would-be analyst of his thought. With Schumpeter there are many such problems. First, there is the question of the consistency of his views over the course of his intellectual development. Seligman, for one, has attested to the "remarkable consistency ... [of] the conceptual basis of Schumpeter's thinking"<sup>16</sup> from the first to the last item on the long list of his writings. In their brief summary, The Schumpeterian System, Clemence and Doody stated that "such extraordinary consistency is almost unique in our science."<sup>17</sup> However true this may be for Schumpeter's conceptual framework and doctrinal system in general,

it certainly does not hold true for a substantial portion of his comments on competition. This fact is illustrated in Chapter 2 and is elaborated in Chapter 3 wherein a short summary is provided of his changing attitude to perfect competition.

A second source of difficulty was alluded to earlier. Rarely is competition the single or prime focus of Schumpeter's efforts; instead it is very frequently touched upon and woven into a complex pattern of thought. With his notable powers of synthesis - relating the individual parts to the whole rather than examining the parts in great analytical detail - Schumpeter presents a very real challenge to the analyst who would attempt to extract and logically structure his wide ranging observations on such a potentially detailed subject as competition. While this thesis is deliberately analytical in the sense indicated above (and hence the word 'analysis' being employed throughout instead of 'synthesis'), a study of Schumpeter's work on competition in its synthetic aspects would be just as challenging and rewarding.

The most frequent class of material to be dealt with by Schumpeter in conjunction with competition is not that collection of topics usually classified under the head "price theory" or "value theory" (as is typically the case in the neo-classical, and to a lesser extent the classical literature) but, rather, such characteristically Schumpeterian items as innovation, the entrepreneur, and technological change. As well, methodological commentary abounds. These two sets of related subject matter are accorded special consideration in Chapters 4 and 6 respectively.

Even in the book most notable for its separate and sustained

discussion of issues relating directly to the theme of competition, Capitalism, Socialism and Democracy, another theme which Schumpeter termed "the great theme of Capitalism and Socialism"<sup>18</sup> is, not surprisingly, predominant in that work and exerts a steady pull away from analysis of the competitive theme as such into other, broader fields of enquiry. This and other sources of distraction have been resisted as much as possible throughout the thesis, but the ubiquity and sheer irresistibility in Schumpeter's thinking of the "great theme" make themselves apparent especially in Chapters 6 and 7 of this thesis.

A third, and by no means final, source of difficulty confronting one in the attempt to distill Schumpeter's thinking on competition derives from his writing style and method of presenting logical argument. Schumpeter was more an artist than a logician. Although he makes much verbal appeal to "Logic" or "logical rigour", he in fact leaves much of the reasoning to the reader's better judgement, preferring a level of literary artistry<sup>19</sup> more suited to his involuted turn of mind and complex grammar; his argumentation tends to be somewhat erratic, fleeting from one level to another and from widely differing issues. Gottlieb<sup>20</sup> is unfair in labelling Schumpeter's method "casuistic"; Kessler, in an article appropriately entitled "The Synthetic Vision of Joseph Schumpeter", is more judicious in his appraisal of his subject's style. After having recognized Schumpeter's concern for "unflinching methodological purity", Kessler goes on to say:

Judged by his own purist standards, Schumpeter's contribution must be found wanting. Schumpeter rarely confined himself to "clear-cut issues of fact and analytic machinery". And his facts and analytic machinery are almost never clear cut.<sup>21</sup>

Kessler does, however, give Schumpeter his due in the following passage:<sup>22</sup>

Schumpeter is a "tough" thinker who refuses to define progress or even civilization in terms of a preferred value system. His writing is dense and difficult, but then so is his thought. But the difficulties are of a kind that systematic social thought demands and only rarely gets.

The following footnote, taken from a key theoretical passage from Business Cycles<sup>23</sup>, serves to indicate, albeit by way of exaggeration, the kind of oracular condescension and disdain for mundane logicity that characterizes so much of Schumpeter's writing:

This section contains arguments which will be found difficult precisely because all technical apparatus has been left out. Possibly the best advice to give the general reader is that he skip this section; but the writer hesitates to give that advice because the contents of the section are essential to the understanding of the phenomenon which are the object of our study. ... To the theorist apology is again due for the brevity of statement amounting to dogmatism, for failure to supply proofs, and for simplification verging on incorrectness.

In the same vein, many of his critical comments rest, sometimes precariously, on rather obscure methodological pronouncements which, more often than not, are not fully developed in the same text (or anywhere else, for that matter) as that in which his analysis of competition occurs. Many of these methodological pronouncements constitute enigmatic obiter dicta adding colour to his writing but also rendering his thinking all the more complex and formidable.

These are only some of the many qualities of Schumpeter's work that one must come to grips with in analysing and assessing his thought on competition.

Regarding the format of the thesis, the approach to Schumpeter's own conception of competition will be very roundabout. In Chapter 2, the classical and neo-classical concepts of competition are described and distinguished, emphasis being placed on the manner in which Schumpeter interpreted them. Chapter 3 consists of an analysis of his critique of the neo-classical concept. Because much of that critique rests on methodological premises, a full chapter (Chapter 4) is devoted to Schumpeter's methodology. Finally, in Chapter 5, the heart of the thesis, his conception is articulated, while in Chapter 6 his applied analysis of the competitive behaviour of business enterprise in the capitalist era is summarized. The final chapter treats of Schumpeter's reasons for believing that current patterns of competitive behaviour will not persist and of his predictions as to the future of competition in economic life.

Before this lengthy course of exposition is begun, identification of several major and underlying philosophical issues is required. This essentially preparatory material shall, therefore, fill out the remainder of this chapter. Seemingly contemporary in spirit, the ideas presented in that section are intimately related to the subsequent portions of the thesis.

## 2. Some Philosophical Issues

"Competition", writes Professor Stigler, "may be the spice of life, but in economics it has been more nearly the main dish."<sup>24</sup> And McNulty states that "there is probably no concept in all of economics that is at once more fundamental and pervasive yet less satisfactorily developed than the concept of competition."<sup>25</sup> These

two statements underscore a central theme of the thesis: the virtual universality (within the scope of economics) of the common-sense or "nonscientific" concept of competition, that is, the concept as it is used at the level of common or ordinary discourse, and the attendant ambiguity and obscurity surrounding the collective efforts of economists to define rigorously, or to analyse or to otherwise shed light upon, this same concept for the purposes of economic science.

It is true that many Principles of Economics text-books, for example, tend to convey an impression (and perhaps quite rightly so) of complacency amongst economists as a whole concerning the rigour, precision and undisputed primacy of certain economic models that make explicit reference to the concept of competition. Be that as it may, the following statement by one of those practising economists who has long been concerned with the adequacy of the concept in its modern formulation is a more accurate representation of the current state of affairs:

Theoretical thinking about competition is in a paradoxical state. The author assumes that there is something that deserves to be called a prevalent form of theoretical thinking; but if so, it appears to be prevalently used as a point of departure in an extremely literal sense - something from which nearly everyone departs.<sup>26</sup>

The paradoxical character of the theoretician's formulation of theories "about" competition, moreover, has a much more substantive aspect as is indicated by McNulty in this way:

It is one of the great paradoxes of economic science that every act of competition on the part of a businessman is evidence, in economic theory, of some degree of monopoly power, while the concepts of monopoly and perfect competition have this important common feature; both are situations in which the possibility of any competitive behaviour has been ruled out by definition.<sup>27</sup>

Arising from apparently conflicting notions of competition, this

paradoxical nature is further attested to by A. D. Neale in his survey of American anti-trust laws. He writes:

There are other verbal troubles that add to the misunderstanding. Under the 'perfect' or 'pure' competition of the models, for example, the individual entrepreneur is faced with a given price. In technical language, the demand-curve facing him is horizontal: at the going price he can sell all that he can produce but no effort of his in any direction will alter price. This position, however, would not be thought of as one of competition at all by the average businessman to whom competition cannot of its nature be passive. To him 'competing' is conceived in terms of improving his product relatively to rival products, showing and advertising it attractively, getting a well-trained sales-force to push it, judging just the right price at which to offer it. Yet all these exertions are regarded by the text-book as signs of monopoly elements in the market, at best of 'monopolistic competition'. In technical language again, the demand-curve facing the firm is downward sloping: to some degree the firm can select its own price. Its competitive activities are designed to maintain and increase the degree of its discretion (the 'monopoly element', in economic language) in pricing policy.

This complete reversal of ordinary language in economics, whereby competing in the lay sense is 'monopolistic' in the technical and 'perfect competition' in the technical sense involves complete passivity among sellers, is among the reasons for the businessman's suspicion that the policy recommendations of economists in this field do not always reflect the merits of the matter.<sup>28</sup>

Neale's comments point to one source of the semantic problems involved: the relationship of the generic term 'competition' standing alone, as it were, in its pristine simplicity to its more sophisticated theoretical descendants, the 'pure', 'perfect', 'imperfect', 'monopolistic' and other similarly modified versions of the term. In a now classic article, Henry L. Moore long ago identified this relationship as the source of difficulty which has long since plagued the semantics of competitive discourse. A passage from Moore's article (which is significantly enough entitled "Paradoxes of Competition") reads as follows:



In what respect is the idea of competition changed when the modifiers "perfect", "unlimited", "indefinite", "free", "pure", are added? If by these additions there is a change of meaning in the term, then, in cases in which the state of industry admits only of competition, what is the nature of the limitation of the applicability of propositions deduced under the hypothesis of perfect competition?<sup>29</sup>

While Moore's question is more important for the purposes of this discussion than is his answer, the latter is of interest and is as follows:

The almost invariable answer to this last question is that the imperfection of competition is simply a form of friction, producing, for the most part, a negligible variation from the standards that prevail in a régime of perfect competition. It is hoped that this paper may be a cause for a more careful scrutiny of this complacent answer.

The foregoing survey of comments by economists indicates that there exists a fair degree of confusion or disagreement as to the basic meaning of the term 'competition', however "rigorous" may be the various models of perfect competition, pure monopoly, etcetera. It is necessary to go outside the field of economics to adequately grasp the nature of the problem facing economists in this matter. Competition is an example of what would be termed an "open concept" by philosophers of science.<sup>30</sup> An open concept is a key technical or theoretical term which is incompletely defined due either to a lack of agreement or to a lack of knowledge as to its defining properties or characteristics. Defining characteristics are to be distinguished from what are termed "accompanying" characteristics, the latter referring to claims of an empirical nature about the concept or in which reference of some sort is made to the concept, but which in no way can be said to define the concept, partially or otherwise.

Now the problematic nature of open concepts arises from the

fact that disagreements or uncertainties invariably occur in the determination of which are the defining and which the accompanying characteristics of the concept. This crucial problem of distinguishing between definitional statements about the term or word (indicated by single quotation marks, as in "the term 'competition'") and empirical claims in which reference is made to the concept (indicated by italics, as in "the concept competition") can be illustrated by employing a famous example, the definition of 'perfect competition'. In her article, "What is Perfect Competition", Joan Robinson concisely restates the present theme and then provides her definition thus:

What do we mean by "perfect competition"? The phrase is made to cover so many separable ideas, and is used in so many distinct senses, that it has become almost valueless as a means of communication. It seems best therefore to begin with a definition. By perfect competition I propose to mean a state of affairs in which the demand for the output of an individual seller is perfectly elastic.<sup>31</sup>

Chamberlin, on the other hand, defines perfect (and pure) competition in terms of numbers of buyers and sellers and product homogeneity and, in contrast to Robinson, considers the perfect elasticity of demand condition not a defining feature of perfect competition but instead a consequence of the defining conditions, that is, a question of fact (not of definition) which, nevertheless, can be inferred as a theorem of the theory of perfect competition.<sup>32</sup> In the same way, the various features of efficiency and equity in the allocation of resources associated with the notion of perfect competition prove to be most difficult in classification into the separate categories of meaning, fact, and value. The same kind of problem would be associated with the simple (unmodified) term, 'competition', were it not for the fact

that economists have expended so little effort to define rigorously and to employ it in their models in favour of 'perfect competition.'

Once the "openness" of the concept competition is admitted, a further, awesome, question arises: Given the present lack of agreement as to the defining features of competition, can the term ever be defined in a complete and final manner (such as to resolve, for example, the paradoxes referred to earlier)? The underlying issue here is a familiar philosophical one, the so-called "realist-nominalist" or, to employ Popper's terminology,<sup>33</sup> the "Essentialist-Conventionalist" dispute. Cast in terms of competition itself, the issue might be soliloquized in this way:

Is there really such a thing as competition, the essence of which is to be expressed in its definition, or, do we simply have this term 'competition' (and its modified variants) which we are at liberty to define however we so choose and stipulate so long as we employ this nominal definition consistently and, as it were, by convention?

One of the many very general questions being posed here is this one: What is the correct criterion of adequacy of definitions, that is, the criterion or standard by which one judges the acceptability or tenability of any given definition? While it is accepted, generally speaking, that tautologies, for example, are judged logically true or false by reference to the rules of logical inference and that empirical claims are judged true or false by reference to sensate experience, that is, by observation of reality or (in common parlance) of "the facts", the proper criterion or criteria for definitional statements is by no means a settled matter. Certainly they are not logically true or false as are tautologies which are, as it were, true by definition and derived from definitions.

Conventionalists argue that there is no problem: either a

definitional statement is a claim about the actual usage of words, such as are the reportive or lexical definitions of dictionaries, and is thus an empirical claim of sorts after all and to be judged true or false by reference to the relevant facts; or, it is merely an arbitrary stipulation or supposition, a "let-us-define-'competition'-as" type of statement which is neither true nor false but rather, as a symbol for a set of properties, functions simply as a tool for convenience in communication and is to be judged as more or less useful than other such verbal tools for simplifying discussion.

The Essentialist accepts the fact, of course, that there are both reportive and stipulative definitions for words but argues that there is another kind of definition for concepts, the criterion of adequacy of which is not easily rendered precise but which invariably reduces to the much abused criterion of intuitive acceptability. An illustration of his line of argument might be:

We may arbitrarily define the term 'competition' as we please, and economists may very well use the term in a wide variety of ways, but we all know intuitively that the concept denoted by the term 'competition' is a particular type of social process (or something else as the case may be) and not something other than that. Therefore, our definition of competition (the concept) should express what competition actually is. In this way, definitions of concepts are either true or false.

The Essentialist's perennial problem is to explain the apparent existence of conflicting "intuitions" (and not the fact that many so-called "intuitions" - which are usually hunches or suspicions - have proved to be false in the past). Can conflicting intuitions exist or are they merely evidence of the imprecision and imperfection of the various languages in serving as a means of communication? This problem is especially apparent when one comes to ask for an intuitively

acceptable definition of the concept competition.

To conclude this section a short survey of the views of some economists on this matter will be provided. with the development of the concept of competition in mind.

Moore's article, cited above, presents a picture of the history of the term 'competition' in which there is a progressive attempt by the economic discipline to construct an increasingly precise definition of what was originally accepted in an undefined form - an intuitively accepted common-sense notion of competition.

Referring specifically to competition, Moore writes:

Economic terms seem to pass in their historical development through a series of stages which, without pretension to rigidity, may be described as follows: first, no definition is given, but it is assumed that every one has a sufficiently clear idea of the subject to make a formal definition unnecessary; second, a definition is attempted and a number of exceptional forms are noted; third, with further increase of data, the relative importance of the various forms change, confusion in discussion is introduced, logomachy takes the place of constructive investigation; fourth, a complete classification of the forms embraced under the original term is made, and problems with reference to these classes are investigated. The bewildering vagueness of economic theory is largely due to the fact that the terms used are in all of these stages of development.<sup>34</sup>

Moore finds no fixed, clear and unambiguous usage amongst his contemporaries but only the "bewildering vagueness of a fundamental term" whose meaning has changed not only through the years but even within self-contained essays wherein the "shifting meaning of the term" is a result of the use of hypotheses which are "unconsciously drawn into reasoning." Yet, in spite of his skeptical attitude regarding the discipline's efforts to achieve clarity and consistency, Moore affirms his Essentialist leaning when he confidently defines 'competition' as follows: "Every economic factor seeks a maximum net income. This is

the essential meaning of the term."<sup>35</sup>

It should be pointed out that Moore's article appeared in 1906. A much more recent survey by Stigler delivers quite a contrasting perspective. <sup>36</sup> His lengthy and well-documented paper arrives at an almost diametrically opposed set of conclusions to those of Moore.

Stigler believes that no concept in economics is ever "fully defined" in the sense that its meaning "under every conceivable circumstance is clear", thus rejecting the Essentialist position. But, applying the conventionalist criterion of pragmatic usefulness, he finds that the "complete formulation" of the concept of perfect competition by J. B. Clark and Frank Knight has proved to be a "tough and resilient concept" defined with "tolerable clarity" and a "model which can be used by practitioners in a great variety of theoretical researches, so that the foundations of the science need not be debated in every extension or application of theory"<sup>37</sup> - in short, a definition to which economists have ever increasingly reverted, with resulting returns of clarity and consensus.

Both Moore and Stigler exemplify writers who firmly project only one of the two schools of thought; the former is an Essentialist who believes that no consistent conventional usage has been established, while the latter is a Conventionalist, supporting the established nominal definition at the same time as he explicitly rejects the possibility of any essential meaning of the term 'competition.' A third and final example will illustrate the more common phenomenon of the unconscious intermingling of both standpoints.

G. Warren Nutter's article, "Monopoly, Bigness, and Progress,"<sup>38</sup> offers evidence of Conventionalist sympathies but appeals of an

Essentialist sort as well. One incisive passage merits careful scrutiny and will be examined closely, not in criticism but only to highlight Nutter's understandable ambivalence on this troublesome question. Nutter begins:

We may start with the notions of competition and monopoly, and we immediately encounter difficulties of language. There is little sense in quarreling over words when the important things to distinguish are concepts - that is, concepts relevant to the issues in controversy. ...

So far, both Conventionalists and Essentialists would applaud Nutter's concern for the relevant, but the Essentialists would be pleased especially with Nutter's recognition here of the distinction between words and concepts. He continues:

"Competition" and "monopoly" unfortunately mean many things to many people and in many different contexts. There is no point in trying to settle what they "really" mean, for they "really" mean everything that they are used to mean. ...

This is unmistakably a Conventionalist line of argument, but by asking the question "What do they really mean?", is Nutter talking here about the concepts or has he reverted to words?

... Nor is there much point in inventing a unique word for each usage, for this could go on endlessly. ... In any event, it makes little difference which terms are used in a discussion of specific issues, as long as they represent concepts relevant to the issues and as long as they are used unambiguously. ...

Again Nutter reveals his pragmatic and instrumentalist inclinations which are more in line with the Conventionalist outlook. He concludes with a tentative definition, reminiscent of both Chamberlin and Robinson, but raising serious doubts in the process:

Competition, as we ordinarily conceive of it, does normally lead to marginal-cost pricing. Short definitions are always faulty, but perhaps I can get by here with saying that competition is a set of conditions in the market place that causes demand curves for firms to be horizontal, over the normal course of events.<sup>39</sup>

By "competition, as we ordinarily conceive of it" is Nutter appealing to an intuitively understood, essential meaning of the concept, or, is he referring to a standardized usage of the term as indicated by stipulative definitions in the literature on competition? And, how can a definition be "faulty" unless there is a "correct" meaning to be assigned to the term? These questions only underscore the general inconclusiveness, to date, of the Conventionalist-Essentialist debate.

The reader by now no doubt will have asked himself whether Schumpeter took any position on this issue. In Chapter 4, the paradoxical answer will be given (parallelling the classical-neo-classical tension) that he invoked the Conventionalist philosophy when making explicit pronouncements on methodology but that in his actual analysis of competition Schumpeter was a classic example of an Essentialist.

The foregoing survey will render all the more significant the characterizations of classical and neo-classical competition to follow in the next chapter.



Notes to Chapter 1

<sup>1</sup>P. J. McNulty, "Economic Theory and the Meaning of Competition," Quarterly Journal of Economics, LXXXII (November, 1968), 654.

<sup>2</sup>ibid.

<sup>3</sup>Joseph Schumpeter, History of Economic Analysis (New York: Oxford University Press, 1954), pp. 474-5, 529, 837. See also his Ten Great Economists (New York: Oxford University Press, 1951), pp. 96-7.

<sup>4</sup>See, for example, Schumpeter's tributes to Walras in History of Economic Analysis, p. 827; "Marie Esprit Leon Walras (1834-1910)" in Ten Great Economists, pp. 74-79; and in his "The Common Sense of Econometrics," Econometrica, I (January, 1933), 9.

<sup>5</sup>A significant example is Ben B. Seligman, Main Currents in Modern Economics (New York: Free Press of Glencoe, 1962), wherein the author describes Schumpeter as "basically a kind of old-fashioned economist" (p. 696) for his alleged dependence on "pure" competition.

<sup>6</sup>See History of Economic Analysis, pp. 972ff., 1147 and 1150ff.

<sup>7</sup>ibid., p. 6.

<sup>8</sup>Joseph Schumpeter, Capitalism, Socialism and Democracy (3d ed.; New York: Harper Torchbooks, 1962), pp. 61-163.

<sup>9</sup>\_\_\_\_\_, The Theory of Economic Development, (tr. R. Opie (English ed.; New York: Galaxy Books, 1961)).

<sup>10</sup>\_\_\_\_\_, Business Cycles, 2 vols. (New York and London: McGraw-Hill, 1939).

<sup>11</sup>\_\_\_\_\_, Essays of J. A. Schumpeter, ed. Richard V. Clemence (Cambridge, Mass.: Addison-Wesley Press, 1951), cited hereafter as Essays.

<sup>12</sup>\_\_\_\_\_, Economic Doctrine and Method, tr. R. Aris (New York: Galaxy Books, 1967).

<sup>13</sup>\_\_\_\_\_, Imperialism and Social Classes, tr. Heinz Norden (Cleveland and New York: Meridian Books, 1955).

<sup>14</sup>\_\_\_\_\_, Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie (Munich and Leipzig: Duncker and Humblot, 1908). For a complete list of Schumpeter's untranslated German works see "Bibliography of the Writings of Joseph A. Schumpeter," compiled by E. B. Schumpeter, Quarterly Journal of Economics, LXIV (August, 1950), 373-384, reprinted in Essays, pp. 316-27.

<sup>15</sup>Erich Scheider, "Schumpeter's Early German Work, 1906-1917," tr. Heinz Norden, Review of Economics and Statistics, XXXIII (May, 1951), 104-08, reprinted in Schumpeter, Social Scientist, ed. Seymour E. Harris (Cambridge, Mass.: Harvard University Press, 1951), pp. 54-58.

<sup>16</sup>Seligman, op. cit., p. 699.

<sup>17</sup>Richard V. Clemence and Francis S. Doody, The Schumpeterian System (Cambridge, Mass.: Addison-Wesley Press, 1950), p. 1.

<sup>18</sup>Capitalism, Socialism and Democracy, p. 125 n. 7.

<sup>19</sup>Fritz Machlup, for one, pays Schumpeter a backhanded compliment for his literary "grandiosity" in his review article of Capitalism, Socialism and Democracy. See "Capitalism and Its Failure Appraised by Two Liberal Economists," American Economic Review, XXXIII (June, 1943), 301-20, especially 315.

<sup>20</sup>Manuel Gottlieb, "The Ideological Influence in Schumpeter's Thought," Zeitschrift fur Nationalokonomie, XIX (January, 1959), 36f.

<sup>21</sup>Martin Kessler, "The Synthetic Vision of Joseph Schumpeter," Review of Politics, XXIII (July, 1961), 334-35.

<sup>22</sup>ibid., 335-36.

<sup>23</sup>Business Cycles, vol. 1, p. 45 n.

<sup>24</sup>George J. Stigler, "Competition," International Encyclopedia of the Social Sciences (1968), III, 181.

<sup>25</sup>McNulty, "Economic Theory and the Meaning of Competition," p. 639.

<sup>26</sup>John Maurice Clark, Competition as a Dynamic Process (Washington: The Brookings Institution, 1961), p. 50.

<sup>27</sup>McNulty, op. cit., p. 641.

<sup>28</sup>A. D. Neale, The Anti-Trust Laws of the United States of America (Cambridge, Eng.: Cambridge University Press, 1962), pp. 479-80, italics added.

<sup>29</sup>Henry L. Moore, "Paradoxes of Competition," Quarterly Journal of Economics, XX (February, 1906), 211-12.

<sup>30</sup>See Arthur Pap, Semantics and Necessary Truth (New Haven and London: Yale University Press, 1958), pp. 306ff.

<sup>31</sup>Joan Robinson, "What is Perfect Competition," Quarterly Journal of Economics, XLIX (November, 1934), 104.

<sup>32</sup>E. H. Chamberlin, The Theory of Monopolistic Competition (8th ed.; Cambridge, Mass.: Harvard University Press, 1965), pp. 6, 7, 11 n. 2, 16-17.

<sup>33</sup>See Karl R. Popper, The Poverty of Historicism (3rd. ed.; New York and Evanston: Harper Torchbooks, 1964), pp. 26-34 and passim; The Logic of Scientific Discovery (rev. ed.; New York: Harper Torchbooks, 1965), passim; The Open Society and Its Enemies, Vol. II (4th. ed.; London: Routledge and Kegan Paul, 1962), pp. 9-21; and Conjectures and Refutations (New York: Harper Torchbooks, 1968), passim.

<sup>34</sup>Moore, "Paradoxes of Competition," p. 211.

<sup>35</sup>ibid., pp. 212-29.

<sup>36</sup>George J. Stigler, "Perfect Competition, Historically Contemplated," Journal of Political Economy, LXV (February, 1957), 1-17.

<sup>37</sup>ibid., pp. 1, 7, 10, 14, 17.

<sup>38</sup>G. Warren Nutter, "Monopoly, Bigness, and Progress," Journal of Political Economy, LXIV (December, 1956), 520-27, cited in Industrial Organization and Public Policy, ed. Werner Sichel (Boston: Houghton Mifflin, 1967), pp. 397-406.

<sup>39</sup>ibid., pp. 397-98.

## Chapter 2

### COMPETITION: THE CLASSICAL AND NEO-CLASSICAL CONCEPTS

#### 1. Competition in Classical Thought

This chapter and the next are presented in conformity with Schumpeter's tenet that "in practice we all start our own research from the work of our predecessors, that is, we hardly ever start from scratch." \*1 Emphasis is placed throughout on the manner in which Schumpeter himself interpreted the development of thought on competition.

Surprising it may seem, at first, that Schumpeter had very little to say about the treatment of competition by the classical school of economists, especially Adam Smith, in contrast to the neo-classical treatment about which he had a great deal to say. This is all the more surprising because the former school is often accredited with establishing the discipline of political economy on the basis of and by special reference to the concept of competition as a principal force governing the level of prices and thus the allocation of resources.<sup>2</sup>

Schumpeter's brevity is explained by the fact that the classical economists themselves had very little to say, in an explicit way, about the very concept itself (although much to say about the economic results of the market place associated with competitive behaviour). His observations about the classical notion of competition are limited, for the most part, to two sources: Capitalism, Socialism

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\*Footnotes for Chapter 2 are located on pp. 59-62.

and Democracy and History of Economic Analysis which shall be examined in turn.<sup>3</sup>

Regarding the identity or composition of that group of economists referred to variously as classic, classical and classicist, Schumpeter in Capitalism, Socialism and Democracy writes of the "so-called classical economists" being "practically of one mind" on the general topic of "competitive capitalism" and hence constituting a fairly cohesive and identifiable group to be studied collectively rather than individually.<sup>4</sup> Reference is made to Smith, Ricardo, Malthus, Senior and John Stuart Mill as the outstanding representatives of the group. Terminal dates for the classical period are 1776 and 1848.<sup>5</sup>

In keeping with the polemical tone of Capitalism, Socialism and Democracy, Schumpeter's observations on the classical economists' treatment of competition concern principally the evaluative or policy implications that they drew, rather than their conceptual and theoretical foundation. Schumpeter's comments can be summarized in the following manner: (1) The highlight of classical economics was the evaluative conclusion that a system of unfettered (*laissez-faire*) competition in the market place, based on the behavioural assumption of profit-seeking, was not against the proper interests of any special groups in society but was in the public interest. For this type of argument, Schumpeter employs such terms as "the classic proposition" and "maximum performance in the interest of all" (pp. 77, 95) but, as will be seen later in this chapter, he also introduces some typically neo-classical terminology into his discussion of classical work.

(2) Along with the rationale for unfettered market competition

in classical thinking came the almost universal condemnation of "monopoly" (emphatically not "big business" which, Schumpeter argues, had not yet arrived<sup>6</sup>). That condemnation, coupled with the illegitimate use of the term led to an abuse which so urked him, namely, "attributing to that sinister power ["monopoly"] practically everything [the English-speaking public] disliked about business."<sup>7</sup>

(3) The classical economists, according to Schumpeter, spoke and wrote in a "manly tone" and with a "responsible long-run view", by which he probably meant that they wrote of what they observed about them and tackled the great social issues of their time in a practical and common-sense manner, in contrast to their neo-classical successors.<sup>8</sup> This remark was no doubt prompted by the fact that had he been with them Schumpeter would have shared at least the classical economists' great faith in laissez faire, if not their opprobrium for monopoly.

(4) On the other hand, while they spoke in generalized terms, presumably advancing universal conclusions or natural laws about competition and monopoly, they arrived at their conclusions from a clearly English frame of reference and a clearly capitalist institutional setting, wearing, as Schumpeter put it, "bourgeois blinkers." Recognizing that their theoretical speculations were thus context-bound, Schumpeter nevertheless made light of their bias, calling on one of his many aphorisms and revealing his never too far removed apprehension of and defensive attitude toward socialist criticism:

A prejudiced man may yet be speaking the truth. Propositions developed from special cases may yet be generally valid. And the enemies and successors of the classics had and have only different but not fewer blinkers and preconceptions; they envisaged and envisage different but not less special cases.<sup>9</sup>

This special concern for universality and the usually context-bound

analysis that is purported to achieve it is an important property of Schumpeter's own outlook on competition and will be met again in Chapter 5.

(5) The chief drawback, according to Schumpeter, of the analysis of the classical economists was the lack of a rigorously constructed theoretical framework by which to demonstrate their belief in the beneficence of competition:

The modern student of their doctrines never ceases to wonder how it was possible for them to be satisfied with their arguments or to mistake these arguments for proofs; in the light of later analysis their theory was seen to be a house of cards,<sup>10</sup> whatever measure of truth there may have been in their vision.

In other words, they had the conceptual grasp (the "vision") to realize the significance of competition but did not construct a satisfactory theory of competition by which to support their conclusions, an accomplishment that their neo-classical descendants were eventually to claim. In the same way, Schumpeter states that the classical period produced no satisfactory theory of monopoly.<sup>11</sup>

A further remark on Schumpeter's discussion of classical work in Capitalism, Socialism and Democracy is called for here. He rightly implies a certain quantitative leaning in the thinking of classical economists by way of linking the severity of competition to the number of competitors in the field; however, he incorrectly associates their work with an essentially neo-classical term by referring to "perfect competition" in his discussion of the "classic proposition." At one point he states that the theoretical structure of Marshall and Wickseil conserved the "classic proposition that in the case of perfect competition the profit interest of the producer tends to maximize production"<sup>12</sup> while, at another point, he links "the generation which

flourished between Ricardo and Marshall - roughly J. S. Mill's generation in England ..." to "the old propositions about perfect competition."<sup>13</sup> The classical economists never employed the term 'perfect competition'<sup>14</sup> but rather the phrase 'free competition' which was not clearly distinguishable from the simple term 'competition' which they employed more frequently. Schumpeter's anachronistic reference would be harmless had the classical economists been entertaining roughly the same concept, if not the same term, as that of the neo-classical people. In the final section of this chapter it will be argued that they did not.

In his History of Economic Analysis, Schumpeter's range of comment on the classical treatment of competition differs from the evaluative emphasis in Capitalism, Socialism and Democracy, stressing somewhat more the conceptual and scientific aspects. But again his remarks are notably fragmentary.

Oddly enough, in the earlier work he felt no need to state explicitly a major assumption of the classical period, a claim that he identifies quite explicitly in the History, namely, that the "case" of free competition in the market place is the normal one.<sup>15</sup> However, this market norm was to have implied none of the specific structural features of the more refined concept of perfect competition. In this latter respect, the most telling remark that Schumpeter makes in the History is this one: that the classical notion of competition was an intuitively grasped, implicitly understood and not explicitly defined concept, deriving from both common discourse and previous theoretical use in economic literature, and employed in a loose, common-sense and non-technical manner. One is reminded here of Moore's previously cited



description of economic terms in the first stage of their development:

"no definition is given, but it is assumed that every one has a sufficiently clear idea of the subject to make a formal definition unnecessary."<sup>16</sup> In much the same vein, Schumpeter writes:

With [the classical economists], this competition was an institutional assumption rather than the result of certain market conditions. ...

(It is difficult to say precisely what Schumpeter meant here by "institutional assumption", possibly the presence of "free markets" and "free contracting" about which he had written in a passage just previous to the present one).

So firmly were they convinced that the competitive case was the obvious thing, familiar to all, that they did not bother to analyze its logical content. In fact, the concept was usually not even defined.<sup>18</sup>

This key passage warrants special attention and calls for several comments. First, by "analyze its logical content" Schumpeter probably meant "render an explicit or formal definition" or "provide a conceptual analysis," but he might also have meant something like "construct a mathematical model demonstrating the quantitative determination of price and output." About this we can not be certain, for he was wont to use the terms 'definition' and 'logical content' in an obscure manner, relating them both to the process of model-building.<sup>19</sup>

Second, it is unlikely that by "competitive case" Schumpeter meant "the perfectly competitive case" (although he may have !) for there follows the previously cited passage the statement that with the classical economists "[competition] just meant the absence of monopoly - which was considered as abnormal and was vigorously condemned, but was not properly defined either." Yet, one's already confused doubts

on this matter are not allayed by an over-all reading of the History. For, once again, Schumpeter associates the idea of perfect competition, however much in embryonic form, with the thinking of classical and even earlier writers. Of course, he does not attribute actual usage of the term to them, but the association of the idea is done in such a way that it is difficult to distinguish between the ideas of perfect competition and simply 'competition' (or 'free' competition) in his analysis of their work.

For example, Quesnay is credited with founding the "Maximum Doctrine of Perfect Competition."<sup>20</sup> Cournot was the first to "handle perfect or pure competition" although he did not "formulate in so many words, a correct definition."<sup>21</sup> For having stated that competition often "falls short of the maximum" J. S. Mill is alleged to have argued on the "hypothesis of perfect competition" even though he employed only the term 'free competition' much in the same manner as did Smith.<sup>22</sup> And, finally, Ricardo is rebuked for failing to specify the "conditions of perfect competition," the basic concept of which he was "perfectly aware" even though "not being in full possession of an explicit perfect-equilibrium concept."<sup>23</sup>

Schumpeter devotes little or no space in the History to a discussion of individual writers in terms of their conception and analysis of competition in general, although he does consider, of course, individual contributions in the fields of value theory and price theory wherein passing references are made to the "assumption" of competitive conditions. However, his observations on Adam Smith and J. S. Mill merit some attention.

Smith is especially significant for being the "prophet of

competition" in the words of J. M. Clark.<sup>24</sup> Schumpeter recognized Smith's importance in establishing the centrality of the notion of competition for economic thought but is begrudging in his appraisal of the quality of Smith's analytical work. His empirical strength and relevance to the issues of the times were acknowledged along with Mill's:

[MILL] was doing no more than what A. Smith had done, namely, describing with sober and somewhat platitudinous common sense that which stood before his eyes.<sup>25</sup>

But, whereas in Capitalism, Socialism and Democracy Schumpeter had castigated Smith for having used the term 'monopoly' in a rhetorical and abusive manner, in the History of Economic Analysis he was less concerned with Smith's politics than with his analytical achievement. He makes it quite clear that Smith's analytics were neither original nor impressive but that his synthetic vision was merely "effective" in reaching a wide audience on matters of deep public concern.<sup>26</sup> His Wealth of Nations was a "great performance all the same and fully deserved its success," but it did not contain a "single analytic idea, principle, or method that was entirely new in 1776." Smith's achievement was the popularization, not the discovery, of the principle that "free interaction of individuals produces not chaos but an orderly pattern." Boisguillebert "found in competition [the economic principle of order] quite as clearly as did A. Smith more than half a century later."<sup>27</sup>

Though [Boisguillebert's] conception of competitive 'proportionate equilibrium' was as definite as A. Smith's, it was not more so: it did not occur to him to define or to investigate its properties.

But, then, neither did Smith or his classical successors bother to

"define or investigate its properties." They advanced some important theorems but supplied few satisfactory proofs.<sup>28</sup> J. S. Mill is a good case in point:

Mill ... while expressing a conviction to the effect that 'only through the principle of competition [note: not perfect competition] has political economy any pretension to the character of a science - he does not think it necessary to state what competition is.<sup>29</sup>

The same is true for their handling of monopoly. In the case of Smith:

There is no theory of monopoly price beyond the meaningless (or even false) sentence that the 'price of monopoly is upon every occasion the highest which can be got,' whereas 'the price of free competition ... is the lowest which can be taken' in the long run - an important theorem though Smith does not seem to have had any notion of the difficulties of a satisfactory proof.<sup>30</sup>

In short, Schumpeter argued that the classical conception of competition was not rigorously articulated; instead, the classical contribution was its proper recognition (if not discovery) of the analytical importance of the concept to the science of economics. It was up to their neo-classical inheritors to explore more rigorously its properties. That period's conception of competition is treated next.

## 2. The Neo-classical Concept of Competition

First, a word about the scope and identity of the group of writers collectively known as the neo-classical economists. As with that of the classical period, Schumpeter wrote about the theoretical work of this period (which he dated 1870 to 1914 in his History) as if it constituted a fairly homogeneous whole, a unified and coherent way of looking at the economic universe. In Capitalism, Socialism and Democracy, he spoke of the "traditional theory" and of the "traditional

conception of the modus operandi of competition," oftentimes not indicating whether his remarks are directed solely to neo-classical writers or to more recent (post-1914) and contemporary sources as well.<sup>31</sup>

Since the basic conceptual framework is the chief concern here, this problem of vague reference does not much matter; accuracy in individual differences of technical detail counts for less than that common thread that allows one to discuss the thought of the neo-classical people as a distinct group. In fact, Schumpeter himself gives indication (in his polemical mood of Capitalism, Socialism and Democracy) that in many ways the neo-classical school of thought was a rather closed one. For example, non-price competition had to storm the "sacred" and "chosen precincts" of "traditional theory" to gain recognition.<sup>32</sup>

Schumpeter does acknowledge, of course, the various subtle differences of approach, style, range of interest, etcetera, amongst even the most technically narrow of neo-classical theorists, as to his belief in the significance of their shared outlook there is no doubt:

Even for the preceding period [that is, the classical period, 1790-1870] we have been able to discern a considerable amount of agreement as regards the essentials of economic analysis and, in fact, a kind of average or modal system of general economics, deviations from which were the less frequent the greater they were. With much more confidence can we aver for the period under survey [that is, the neo-classical period, 1870-1914] that there existed by about 1910, though not a unified science of economics, yet an engine of theoretical analysis whose basic features were the same everywhere. ... Nobody denies that, numerous differences in detail notwithstanding, Jevons, Menger, and Walras taught essentially the same doctrine.<sup>33</sup>

This section is intended to portray that "modal system of general economics" for the neo-classical period as it relates to competition.

Different emphasis, however, is placed on the various and many

individuals comprising the neo-classical school. In Capitalism, Socialism and Democracy, prominence is given to Marshall and Wicksell. Schumpeter refers obliquely to the "Marshall-Wicksell analysis" twice and again in the History of Economic Analysis.<sup>34</sup> In addition, he gave the spotlight to Walras "on purely scientific grounds" and to three American economists, J. B. Clark, Irving Fisher, and F. W. Taussig. Of course, this list of six was by no means meant to be complete, and notably absent from special mention in Capitalism, Socialism and Democracy (and relatively so as well in his more comprehensive History) are two groups of economists: the Austrians, Wieser, Menger, and Bohm-Bawerk, and the English marginalists, Jevons, Edgeworth, and Wicksteed, all of whom are accorded more extensive individual treatment under other topics, such as production and distribution theory, in the History.

Two other important inclusions under Schumpeter's list of neo-classical people are "fringe" cases: Cournot, a sort of neo-classical precursor, and Chamberlin, in whose work neo-classical competition theory was to have reached a new peak.<sup>35</sup>

Before Schumpeter's treatment of the neo-classical concept of competition can be examined properly, a troublesome but crucial terminological problem must be dealt with. With the preceding classical period there was no such problem created by the introduction of the modified variant, 'free competition', because both this term and the simple 'competition' were not defined but were employed interchangeably and were understood implicitly and vaguely on the basis of common, ordinary discourse. With the neo-classical term, 'perfect competition', as well as with such variants as Cournot's 'illimited competition', this was certainly not the case.

In History of Economic Analysis, Schumpeter ascribes the introduction of the term and concept, pure competition, to Chamberlin in 1932,<sup>36</sup> but he does not point out that Chamberlin distinguished 'pure' from 'perfect' and was not responsible for the introduction of the term 'perfect competition.' Schumpeter, himself, employs the two terms interchangeably, and sometimes indistinguishably from the simple 'competition.' He does not anywhere indicate the origins of the term 'perfect competition.'

A survey of the literature would probably show that the earliest explicit reference to the term 'perfect competition' was by F. Y. Edgeworth who wrote, in 1881, of a "perfect field of competition" in his Mathematical Psychics and indexed the reference as "PERFECT (Competition)."<sup>37</sup> The term turns up occasionally thereafter but does not seem to have attracted much extended usage until the 1930s when both Chamberlin and Robinson introduced its discomfoting alternatives, 'monopolistic' and 'imperfect competition.' For example, Marshall in his eighth edition of Principles of Economics (1920) was yet employing simply 'competition' and 'free competition' as had the classical economists.<sup>38</sup>

McNulty attributes the introduction of the idea of perfect competition to Cournot,<sup>39</sup> but, of course, he did not use the term. Stigler credits Edgeworth with the first attempt at "systematic and rigorous definition of perfect competition"<sup>40</sup> and Edgeworth did use the term. It should be emphasized that the introduction of the idea of perfect competition need not coincide with the appearance of the term itself. Moreover, since one is dealing here with an open concept (see Chapter 1, pp. 14-15) of an abstract and highly esoteric nature, it is

probably futile trying to pin down the precise appearance of the concept into economic thinking. The idea was nascent several decades before its appearance and common usage which dates from the 1870s, Cournot being an exceptional forerunner in this instance. Referring to the period 1870 to 1914, Schumpeter wrote:

The all-round use of the level of scientific rigor produced if not the term yet, the substance of what we now call pure or perfect competition.<sup>41</sup>

Therefore, following the practice of Schumpeter and most everyone else, this thesis shall employ the term 'perfect competition' as being synonymous with 'the neo-classical concept of competition' (or just simply 'neo-classical competition'), even though in many cases this usage is textually inaccurate.

Now, this terminological excursion has prepared the way for posing what could be termed Moore's Question: In what way does the concept of perfect competition relate to (or differ from) the simpler notion of competition? The answer provided here will be Schumpeter's, although his is quite orthodox.

The neo-classicists treated perfect competition as a theoretical and definitional refinement of competition which, in effect, thus became an impure, imperfect, and non-theoretical notion and which found its purification or idealization in perfect competition by having its imperfect, impure or non-competitive elements, as it were, extracted in the process of refinement. The neo-classical achievement as ~~an~~ <sup>DISTINGUISHED</sup> from classical analysis, Schumpeter argues, consisted in this process of refining and rigorously analyzing the modus operandi of competition, if not the very meaning of the concept itself:



The great merit that must nevertheless be put to their credit is that they complemented this vision [ of the classical concept of competition ] by an analysis that was far superior to that of the 'classics'. As we shall see, they defined competition and analyzed its modus operandi with ever increasing success.<sup>42</sup>

There is, however, a certain problem with the manner in which Schumpeter uses "defined competition" here and elsewhere. Certainly, he is in error if he means that they rendered a verbal definition of competition, for this the neo-classical people did not do. What they did do was to construct a so-called "model" of perfect competition, and it is clear from the context of his History that this is what Schumpeter meant by "defined." This model presented an explanation for price and output formation in a certain competitive situation or "case" (as he often wrote) in equilibrium. Various "conditions" (which together were often said to be the case of perfect competition, by later interpreters of the neo-classical literature) were invariably assumed in the model.

Be that as it may, there are difficulties in trying to construe such models as defining devices, principally because they blur the distinction between the defining properties of perfect competition and empirical claims about the actual or hypothetical workings of perfectly competitive markets. In the philosophy of science, such theoretical models are sometimes said to "implicitly define" the concepts they employ, but this turns out to be an illogical claim.<sup>43</sup> According to this unsound line of reasoning, perfect competition is said to exist when a certain set of conditions (such as perfect knowledge, etcetera) is satisfied, it remains to be seen whether such a set of conditions, necessary and sufficient for the working of a perfectly competitive market, constitute<sup>s</sup> the defining properties of perfect competition, that is, constitutes what perfect competition is. However, neither Schumpeter

nor the neo-classical economists themselves entertained such difficulties consciously in their publications.

In any event, Schumpeter considered these models as heuristic devices which present "the generalized picture of the essential features" of economic concepts,<sup>44</sup> and which represent "limiting cases" that "stand out ... from all the infinite variety of market patterns ... by virtue of certain properties"<sup>45</sup> and by which the neo-classical economists attempted to crystallize out the essential features of ordinarily observed competition from the totality of the economic situation, containing as it does both competitive and non-competitive elements.

Whatever its definitional status, the model of perfect competition was judged by the neo-classical school, according to Schumpeter, empirically as the "normal case" of reality or, at least, an idealization of those competitive tendencies that were judged to be the normal case.<sup>46</sup> This empirical claim, however indefinite its exact nature, was attributed not only to the most empirically-minded of the group, Marshall, who was "bent on salvaging every bit of real life he could possibly leave in," but also to the most theoretically abstract and empirically removed, Walras, who was "bent on scraping off everything he did not consider essential to his theoretical schema."<sup>47</sup>

A further question of status concerns the neo-classical view as to the evaluative status of the model. As Joan Robinson, Gunnar Myrdal and I. M. D. Little, among others, have pointed out,<sup>48</sup> words such as 'perfect', 'model', 'equilibrium', etcetera, contain an evaluative connotation. Schumpeter left no doubt for his readers that the neo-classical economists, as a whole, favoured laissez-faire

policies and thus considered the model of perfect competition at the very least desirable, if not ideally desirable, by such criteria as total production and the allocation of resources. On the other hand, he does not clearly distinguish between their value judgements and their empirical (non-evaluative) judgements, perhaps an impossible task. An odd rationale is imputed to explain their political outlook:

While not all of them were uncritical eulogists of competition (see below sec. 5), nearly all of them were apt to yield to the specific bias of the economic theorist that has nothing to do with political preference, the bias for easily manageable patterns.<sup>49</sup>

In other words, it was as if they lauded perfect competition on political grounds mainly because it was conducive to a theoretically precise handling. In section 5, as promised in the above quote, he merely repeats that not all of the neo-classical people were "unquestioning addicts of laissez-faire," nor were they all "unconditional eulogists of pure competition."<sup>50</sup> The most that can be said, in conclusion, is that Schumpeter believed that neo-classical economics on the whole provided qualified support of competition as idealized in the model of perfect competition.

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So far, attention has been drawn only to the rather obscure status of the model of perfect competition and its relationship to the more primitive term, 'competition.' To understand the nature of the neo-classical concept of competition, one must, of course, proceed by way of analyzing the concept of perfect competition. What can be said about the content of this concept as articulated by its model, again in the light that Schumpeter saw it?

Such a question leads one to that activity known in current

academic circles as "enumerating the assumptions of the model," a ritualistic incantation which even the pure theorist, Stigler, terms "dreadful."<sup>51</sup> The trend of assumption-listing reached an early climax in Frank Knight's classic of 1921, Risk, Uncertainty and Profit,<sup>52</sup> the climax consisting of a list of eleven assumptions requiring five pages of enumeration and which, as Stigler noted,<sup>53</sup> "did most to drive home to economists generally the austere nature of the rigorously defined concept" of perfect competition. Strangely enough, nowhere in the writings of Schumpeter is there mention of this notable high point in the history of perfect competition.

Schumpeter wrote of the content of the model of perfect competition in numerous places throughout his literary output and, for the most part, in a consistent manner. Therefore, in the summary to follow, his characterization of the model is described irrespective of the various sources cited. (This contrasts to his critique of the model, discussed in the following chapter.)

An attempt was made to formally re-construct (in verbal terms only) the model of perfect competition as Schumpeter viewed it, using his theoretical categories. In brief, these categories are:<sup>54</sup> (1) concepts, and (2) relations between concepts, these latter being propositions codified and structured into two groups: (3) axioms (or "hypotheses", "assumptions", or even "principles"), that is, propositions that we "take for granted" and (4) theorems<sup>e</sup>, that is, propositions that are "established by admissible procedure" or logically inferred from the set of axioms. Together, these comprise models which are "simplifying schemata ... that are intended to portray certain aspects of reality."

This attempt at formal re-construction proved not to be feasible due to the fact that Schumpeter himself is not sufficiently explicit as to which are theorems and which are axioms in his description of the model. Other such difficulties abound. For example, it is difficult oftentimes to discern which propositions about perfect competition are intended to be ascribed to the neo-classical school and which propositions are those about perfect competition that Schumpeter advanced himself. Then, again, Schumpeter often cited a methodological principle which he did not observe regularly in practice himself. For example, in a footnote to his History of Economic Analysis, he warns of "the necessity of keeping distinct the properties that define competition, the properties that define equilibrium, and the properties that define competitive equilibrium."<sup>55</sup> Yet, no account is taken of this warning in the previous and ensuing discussion.

(It might be added parenthetically here that there is another rather fundamental reason why it is difficult to construe the model of perfect competition as a theory with an axiom-theorem structure. There is a class of propositions, or "assumptions," essential to the model, which are not easily construed as axioms (that is, propositions we "take for granted" according to Schumpeter), namely, the conditionals (the 'if's of the 'if-then' inferences) which refer to non-generalized, existential conditions that must be satisfied if the results of the model are to follow. Examples of these are the perfect knowledge and large numbers conditions, discussed below. Because they have the effect of rendering the model a "limiting case", as Schumpeter was wont to point out,<sup>56</sup> one wonders how the model was ever given a theoretical status.)

Despite these obstacles, it is nevertheless feasible to

set out Schumpeter's interpretation of the neo-classical model in terms of "axiom-like" and "theorem-like" propositions.

The most axiom-like proposition underlying the model that Schumpeter identified is the behavioural premise that firms are motivated by the objective of maximizing profits (or, equivalently, net advantage, utility, monetary gain or some other quantitative concept).<sup>57</sup> But of all the axiom-like conditions, the single most important one seems to have been what is usually referred to as the "large numbers" condition. In his Encyclopaedia Britannica article, "Capitalism," he offered the following rendering of the condition:

If in all markets of products and services sellers and buyers be so numerous that none of them is able to influence price perceptibly by his own individual action (hypothesis of perfect competition) ... then it can be proved that ... [etcetera]<sup>58</sup>

In fact, a proposition or theorem that is derived from the large numbers condition in corollary-like fashion is often cited (by Robinson, for example) as the defining condition of perfect competition: "prices of all products and 'factors' cannot be perceptibly influenced by the individual household, and hence may be treated as given (as parameters)"<sup>59</sup> but Schumpeter was not inclined to view this theorem as a defining condition.

Another axiom-like assertion that Schumpeter made about perfect competition, which comes closest of all to being clearly a definitional statement about competition as such, is the behavioural premise that firms act "independently," that is, "there is no concerted action."<sup>60</sup> But, not unlike most analyses of competition, there is little, if any, amplification of the exact meaning of this condition in his writing.

To this point, the list of axiom-like statements that Schumpeter

ascribed to the model of perfect competition are very orthodox in nature. The next one is more highly individualized, revealing the kind of emphasis that he sought in his own thinking on competition. The "Principle of Excluded Strategy" that he attributed to the model was not only an indirect way of saying that perfect competition ruled out non-price competition, but also a general description of the severe limitations placed upon the behaviour of firms envisaged by the model: "firms have no choice but to adapt the quantities of commodities and services they wish to buy or to sell to the prices that rule."<sup>61</sup> Elsewhere, Schumpeter made explicit the product homogeneity condition, implicit already in the above principle, as an axiom of perfect competition,<sup>62</sup> rounding out the list of those conditions that he felt with certainty belonged in the model as the neo-classical economists themselves constructed it.

Some doubt must accompany the inclusion of two other conditions among this list. These two conditions served to explain the "friction" in the functioning of real markets that the neo-classical economists were to have observed. (In Business Cycles, Schumpeter himself frequently referred to such "friction" as "rigidity" and even "sloppiness" in the functioning of markets.<sup>63</sup>) These two conditions are what would be termed nowadays as the "perfect knowledge" (or "market omniscience") and "resources mobility" (or "freedom of entry and exit") conditions. That he was hesitant to include these two conditions in the neo-classical model proper (that is, not in later formulations of the model) is evidenced by the following passage from the History of Economic Analysis:

It has been held ... that Walras, and the theorists of that epoch generally, intended to make 'omniscience' and ideally rational and prompt reaction attributes of pure competition; deviations from this pattern would then find room in the spacious folds of an entity called 'friction' which would thus emerge as a helpmate of pure competition with the assignment to pick up whatever the latter proved incapable of handling. It is submitted, however, that there is no point in overloading pure competition like this, and that it is quite possible to separate, in interpreting the writers of that epoch, their concept of pure competition ... from any further assumptions that they may have made, in general or for particular purposes, about knowledge, promptness, and rationality of action.<sup>64</sup>

It was probably in this vein that Schumpeter suggested, in Capitalism, Socialism and Democracy, that Marshall and Wicksell (among others) did not "explicitly [state] or even clearly [see]"<sup>65</sup> all of the conditions "that must be fulfilled in order to produce perfect competition."<sup>65</sup> Schumpeter no doubt had in mind here the possibility of dynamic instability arising from the absence of these two conditions.

The remaining propositions that Schumpeter associated, in one way or another, with the model of perfect competition are more clearly construed as theorems or theorem-like propositions deduced from the set of axioms listed above. Most of these theorems are of a quantitative nature and will be outlined briefly and only in those verbal terms that Schumpeter chose to employ himself.

The most important theorem<sup>e</sup> or conclusion drawn from the model was, in Schumpeter's opinion, the greatest theoretical achievement of the neo-classical school, namely, the proof that under the conditions of perfect competition, fully satisfied, there is (or would be, hypothetically) a set of determinate equations describing the prices and quantities of all goods and services in equilibrium due to their simultaneous interdependence. In Capitalism, Socialism and Democracy, there is only indirect reference to this theorem through mention of the



indeterminateness of oligopoly, but in virtually every other discussion of neo-classical competition it plays a central role. In fact, Schumpeter was obsessed by the question of the mathematical determinateness of general equilibrium much as were several of the neo-classical economists themselves.

The remaining theorems relate to the various features of that equilibrium situation. The principal ones mentioned by Schumpeter are These: (1) Profits of an abnormal nature vanish in equilibrium;<sup>66</sup> (2) Prices of the same products produced by different firms in the same industry are the same (Jevons' Law of Indifference);<sup>67</sup> (3) resources in all industries are ideally allocated and total output maximized (in some aggregative sense) according to the usual marginal conditions. These plainly evaluative conclusions are invariably qualified by the condition that income distribution is given;<sup>68</sup> (4) All resources, including labour, are fully employed.<sup>69</sup>

Another inference which Schumpeter seems to attribute to later interpretations of perfect competition, if not to the neo-classical economists themselves whom, he admits, did not advance any growth theories,<sup>70</sup> was the growth principle that a continued state of the perfectly competitive equilibrium results in a maximum output over time, that is, leads to maximum growth.<sup>71</sup> It is to be emphasized that this inference was alleged by Schumpeter in a very indirect manner and is neither elaborated upon nor clearly attributed to the neo-classical school itself.

This very short summary of what is a very technically complex subject has already obscured to some extent the broad conceptual perspective that is the objective of the thesis. Therefore, this section

will be concluded on a very general note.

Schumpeter's characterization and interpretation of the classical and neo-classical concepts, as presented in this chapter, are relatively orthodox and standardized, accurately reflecting the literature of both periods, for the most part. Yet, it remains to be seen what the ontological status of competition is, that is, what kind of thing competition is, despite the fact that the neo-classical economists went to no end to refine and rigorously analyze the modus operandi of competition.

The ontological question is treated in the following section wherein the classical and neo-classical concepts are distinguished on a more fundamental plane.

### 3. The Classical and Neo-classical Concepts Contrasted

A major premise upon which this thesis rests is that there is a fundamental conceptual gulf separating the classical and neo-classical schools of thought on the topic of competition. It will be best to broach this question at this point. Before Schumpeter's position with respect to this gulf is examined, two surveys of the subject cited earlier, one by Stigler and one by McNulty, will be examined once more to clear the ground.

Stigler's approach embraces what A. Chalk terms an "absolutist" conception of the history of economic theory, that is, which "explains the evolution of economic theory as a largely autonomous, self-contained process that has unfolded in accordance with an inner developmental logic peculiar to the discipline."<sup>72</sup> Thus, Stigler attributes a nascent, implicit concept of perfect competition to the thinking of classical

writers, much as did Schumpeter, and therefore tends to minimize the distinction between competition and perfect competition. Stigler implies that competition received its first systematic analysis by Adam Smith, and that thereafter his implicit notion of perfect competition emerged gradually from his common-sense notion of competition in the writings of the neo-classical period. Although he points out that the concept was not precise in Smith's mind, Stigler nevertheless identifies five conditions implicit in Smith's thinking, warning, however, that "the modern economist has a strong tendency to read more into such statements than they meant to Smith and his contemporaries."<sup>73</sup> A steady line of development is then depicted, starting with Smith through Cournot and the first generation of neo-classicists (Jevons, Marshall, et al) and on to the most rigorous formulation to date by Frank Knight.

The classical-neo-classical distinction is thus conceived as one of degree, not of kind. As stated earlier, Stigler believes that the concept can never be defined completely because the theory of perfect competition is "open-ended" and ever responding to changing problems and circumstances.<sup>74</sup>

Stigler, however, does not broach the issue of the ontological status of competition directly. Instead, many casual references are made throughout the survey to what competition is. To illustrate, a list of these references (by Stigler himself and by the writers he cites) will be given, in the order in which they first appear and with emphasis placed on the key concept of each: "rivalry," a "process responding to a new force," a "method of reaching a new equilibrium," the "striving of rivals to gain advantages," a "state of free competition," a "force," (several times), a "basic form of market organization," that "situation

in which  $p$  does not vary with  $q$ ," and, finally, the "absence of monopoly power in a market." This list is fairly representative of the candidates most often put forward as the prime ontological category of competition.

McNulty is more explicit about these categories in his survey, arriving at an almost diametrically opposed conclusion to that of Stigler concerning the conceptual basis of classical and neo-classical thought. He maintains that a basic conceptual change came about during the transition from the classical to the neo-classical period such that the notion of competition entertained by the classical school was all but ruled out by the neo-classical concept of perfect competition.<sup>75</sup> Since a large portion of McNulty's argumentation corresponds closely to several of the principal hypotheses of this thesis, much benefit will be had by examining McNulty's main argument in detail.

First, McNulty agrees with Stigler that Smith is to be credited for having established competition as "literally a general organizing principle of economic society and of economic analysis" comparable to Newton's contribution to physics and astronomy through the principle of gravity,<sup>76</sup> but he disputes Stigler's inference that Smith in some way introduced or originated the scientific use of the concept, by pointing to the analytical work of earlier economists (as did Schumpeter) such as Cantillon, Turgot and others; Smith gave the concept a scientific status but contributed little, if anything, to its meaning, employing the term much as did his predecessors on a common-sense basis.<sup>77</sup>

McNulty seizes upon the concepts of structure and behaviour to distinguish the classical from the neo-classical concepts. The

classical concept is described as a behavioural concept, referring to human behaviour in the form of market activity, a "disequilibrium concept of market activity," although such other terms as "market process" and "ordering force" are also used. On the other hand, the neo-classical concept is characterized as a structural or situational concept, an "assumed" or "idealized state of affairs," a "particular market structure," an "equilibrium situation."<sup>78</sup>

With this, McNulty concludes that:

The concept of competition upon which nineteenth-century economists came to rely so heavily was not the concept which had earlier been employed by Adam Smith. On the contrary, the process of analytical refinement that began with Cournot ... involved a basic conceptual change.

Although the classical economists thus viewed competition as exclusively a market process, the neoclassical development of the concept of perfect competition as itself a market structure nonetheless represented a sharp discontinuity in the development of social thought.<sup>79</sup>

But McNulty goes further than merely arguing that the two concepts were different; they were "incompatible in a fundamental sense, reflecting precisely the difference between a condition of equilibrium and the behavioural pattern leading to it."<sup>80</sup> This incompatibility is demonstrated by reference to their differing treatment of pricing. In classical competition, price was a variable, whereas in the later period it became a parameter. Therefore, McNulty concludes, "the single activity which best characterized the meaning of competition in classical economics - price cutting by an individual firm in order to get rid of excess supplies - becomes the one activity impossible under perfect competition."<sup>81</sup>

Amplifying this incompatibility which rested on the neo-classical notion of a perfectly elastic demand curve, McNulty

wrote further:

The concept of competition originating with Cournot, on the other hand, is totally devoid of behavioural content. This is because Cournot's focus was entirely on the effects, rather than the actual workings, of competition. ... It was not a definition of the behavioural process of competing but, rather, a definition of competition as a state in which that process had run its limits.<sup>82</sup>

It may well be excessive to claim that the two concepts are incompatible, but McNulty has nevertheless identified and clearly articulated an important conceptual distinction which serves admirably to differentiate what are certainly the differing outlooks of the two schools.

Was Schumpeter aware of this conceptual distinction? And, did he admit of its relevance to the classical-neo-classical distinction? Or, to put it another way, would he have accepted McNulty's case, were it put before him today?

Unfortunately, there are no unequivocal answers to these questions. Yet, the little evidence there is does provide some important clues to the understanding of his thinking.

On the one hand, Schumpeter did not, of course, literally identify the process-situation (or structure-behaviour) distinction in print, nor is it likely that he consciously entertained the possibilities in the terms in which McNulty thought of them. Moreover, Schumpeter certainly reflected the "absolutist" approach to the history of economic analysis as did Stigler. On that ground, he might have rejected McNulty's claims out of hand. As mentioned earlier, Schumpeter did not hesitate to attribute the concept of perfect competition to classical writers and was not adverse to reading neo-classical thoughts into the statements of classical figures. For example, Schumpeter presumes that

J. S. Mill's famous remark that "only through the principle of competition has political economy any pretension to the character of a science" means that "there is more of determinateness about prices and quantities of commodities in the case of competition than there is in other cases."<sup>83</sup>

The view that Schumpeter would have rejected McNulty's position is supported further by the following passage from the

History of Economic Analysis:

Now, it is perfectly obvious that all the leaders of that time, such as Jevons, Walras, Menger, Marshall, Wicksell, Clark, and so on, visualized the economic process much as had J. S. Mill or even A. Smith; that is to say, they added nothing to the ideas of the preceding period concerning what it is that happens in the economic process and how, in a general way, this process works out; or to put the same thing differently, they saw the subject matter of economic analysis, the sum total of things that are to be explained, much as Smith or Mill had seen them, and all these efforts aimed at explaining them more satisfactorily. No conceptual creation of the period points to a new fact or a new slant. This may be illustrated by their treatment of competition.<sup>84</sup>

Yet, it should be pointed out that in this passage no attention is paid to the issue of "conceptual creation" in the realm of competitive theory, but rather to empirical facts about competition, such as the alleged normality of the competitive case.

On the other hand, not all the evidence points to an absolutist interpretation, especially if one is prepared to make a certain inference. This latter involves the acceptance of the "static-dynamic" distinction as a tolerable approximation of the "process-situation" distinction.<sup>85</sup> Now, with Schumpeter the static-dynamic distinction represented a crucial issue and played a leading role both in his assessment of neo-classical competition and in his own thinking on the nature of competition. For this reason, he was very much alive

to the fact that the neo-classical analytical framework, based as it was on the concept of perfect competition, was static.

As for the classical school, it is difficult to determine whether Schumpeter considered the classical analysis to be, on strictly technical grounds, static, dynamic, or both; and, therefore, this question will not be pursued here.<sup>86</sup> In addition, his few specific remarks concerning classical competition provide no clue. All that can be said is that, on a more general plane, Schumpeter was inclined to equate "dynamics" with the study of economic development and business cycles.<sup>87</sup> In Capitalism, Socialism and Democracy, he contrasted their "long-run view" with "modern hysterics"<sup>88</sup> and, in History of Economic Analysis, he devotes much space to a discussion of "The 'Classic' Conception of Economic Development" and of "The 'Classic' Schema of the Economic Process" in marked contrast to the neo-classical period in which the heading "Equilibrium Analysis" dominates. Thus, there are shreds of evidence that he considered the classical school more concerned with dynamics (and hence with processes) than the neo-classical.

(In The Theory of Economic Development, Schumpeter dynamized the static Walrasian general equilibrium system into the dynamic notion of the "circular flow," an idea which preceded classical thought but was still traceable there.<sup>89</sup> Later, in Chapter 6, it will be argued that Schumpeter's own notion, the process of creative destruction, was an attempt to synthesize the classical-disequilibrium-process concept of competition with the neo-classical-equilibrium-situation concept of competition, but this is to anticipate.)

One further example will be cited to show that Schumpeter may well have been aware of the process-situation distinction inherent in



the two schools of thought. The differing interpretations that the classical and neo-classical groups put on the relationship of monopoly to competition brings out into the open all the more visibly that crucial distinction between structure and behaviour.

In the classical literature, 'monopoly' was not treated as being the opposite in meaning to 'competition.' Instead, monopoly was considered the situation existing when there was an absence of any possibility of competitive behaviour due to the fact that, by strict definition, there was only one seller in the market.<sup>90</sup> Hence, as McNulty has pointed out with reference to Smith, Ricardo and Mill, the classical writers considered what today are termed duopoly and oligopoly as competitive situations, not as near-monopoly situations. Employing Smith as an example, McNulty writes:

As far as the concept of competition is related to market structure, we should have to say that Smith, by suggesting that the individual seller could sell more by lowering price and less by raising it, presented a theory of imperfect competition. But, in fact, Smith's use of the term seems to have been largely independent of market structure. Of duopoly, he wrote: "If ... capital [in the amount required to satisfy the demand for groceries] is divided between two different grocers, their competition will tend to make both of them sell cheaper" (Smith, 1937, p. 342). Although Smith specified that competition would be the more active, the greater was the number of competitors, the essence of competition in duopoly was evidently what it was in any other market structure, namely, the attempt to undersell one's rival in the market by lowering price.<sup>91</sup>

Of course, Smith recognized the ever-present possibility of collusion and its greater probability with fewness of competitors, but this had nothing to do with his understanding of the meaning of 'competition.'

On the other hand, the neo-classicists entertained another conception which construed monopoly and competition, in their pure forms, as polar extremes, as if the extreme edges of a spectrum such

that all other possible cases could be considered a mixture of these two pure elements, shades of grey, so to speak, being the pale analytical reflection of the colours of reality. Out of this grew the typically neo-classical activity of constructing intermediate models of duopoly, oligopoly, bilateral monopoly, and eventually "monopolistic" and "imperfect" competition. In this respect, both Cournot and Chamberlin were neo-classical analysts par excellence.

Moreover, from neo-classical analysis there emerged the tendency to view any imperfections of the market as sources of monopoly or monopolistic elements in what would otherwise be a perfectly competitive situation. This view finds its current expression in the definition of perfect competition as the absence of monopoly power in the market.<sup>92</sup> As Stigler points out, the merging of the concepts of competition and market which originated in neo-classical thought, and probably stemming from Jevons' tendency to equate "perfectly free competition" with "the theoretical conception of a perfect market,"<sup>93</sup> was unfortunate; for, in their own terms, a market may be "perfect and monopolistic or imperfect and competitive."<sup>94</sup> In hitting upon this confusion, Stigler does not seem to have realized, though, that the neo-classical concept of competition as a situation permitted them to cast monopoly and competition into the same ontological category, state of affairs or situation, whereas the classical people did not think in those terms. It is interesting to note, in this respect, that with the state of monopoly there is the corresponding process of monopolization, and similarly oligopolization with oligopoly by extension; whereas, with competition (having the verbal form '-tion' commonly associated with "process" words) there is no distinct cognate word for the idea of

a competitive situation, and hence the ease with which the one term, 'competition,' came to be used to refer to both a process and a situation or state of affairs.

Now, once again, how well does Schumpeter's interpretation of classical and neo-classical analysis of monopoly fit into the preceding conceptual schema? And, once more, the answer is that the evidence is inconclusive but does provide some support for believing that he was at least partially aware of the conceptual distinctions at issue. For example, he recognized that 'monopoly' was not defined in classical thought but that competition "just meant the absence of monopoly" and that the classical period produced no theory (or model) of monopoly pricing.<sup>95</sup>

As for his interpretation of the neo-classical treatment of monopoly, Schumpeter's argument in History of Economic Analysis is so subtle and involuted that he expressed the fear that "the reader [might] feel that I am labouring to convey a distinction without a difference."<sup>96</sup> In spite of this difficulty, Schumpeter's argument is incisive and very relevant to the issue at hand.

Under the major heading, "The Competitive Hypothesis and the Theory of Monopoly," Cournot and Walras especially are treated as if epitomizing the neo-classical method of reducing theories to simplified models, by way of heroic assumptions, and thus dichotomizing the concepts of competition and monopoly into pure forms or "limiting cases." In the same way, Chamberlin and Robinson are depicted as carrying this approach one major step forward by blending the two pure forms into a "hybrid" or intermediate form, monopolistic or imperfect competition, albeit with the added return of realism, yet essentially within the neo-classical

frame of reference, that is, with the same concepts and techniques or "box of tools."

The approach of Marshall, on the other hand, is cast up in a different light, more akin to the classical approach even though he is perhaps the leading figure in the neo-classical period. Schumpeter describes Marshall as the Patron Saint of Chamberlin and Robinson for having led them in the direction of a more realistic analysis. However, as Schumpeter points out correctly, Marshall did not dichotomize monopoly and competition into pure forms but, like the classical economists, did not even define them rigorously. (As a matter of fact, Marshall supplied a typically classical definition of competition and retained the use of 'free competition.'<sup>97</sup>)

Lest the reader think this brief summary of Schumpeter's argument inaccurate, false or misleading, the highlights of the text referred to is reproduced here:

Just as Walras, more than any other of the leaders, was bent on scraping off everything he did not consider essential to his theoretical schema, so Marshall, following the English tradition, was bent on salvaging every bit of real life he could possibly leave in. As regards the case in hand, we find that he did not attempt to beat out the logic of competition to its thinnest leaf. On the first pages of his Principles he emphasized economic freedom rather than competition and refrained from defining the latter rigorously. Moreover, throughout the Principles, he paid much attention to the problems of individual firms - the manner in which they conquer their Special Markets within which to maneuver, the manner in which they lose them again, and certain consequences that follow therefrom. It is submitted that there is more in this than mere dislike of naked abstraction. There is awareness of that set of problems that later on developed into the theory of monopolistic (Chamberlin) or imperfect (Robinson) competition, whose patron saint Marshall may indeed be said to have been. But there is also a subtle difference in attitude toward these problems between him and the modern exponents of this theory that is not easy to convey.

Schumpeter's explanation of this difference continues as follows:

If we are of the opinion, on the one hand, that from all the infinite variety of market patterns pure or perfect competition and pure or perfect monopoly stand out by virtue of certain properties - of which the most important is that both cases lend themselves to treatment by means of relatively simple and (in general) uniquely determined rational schemata - and, on the other hand, that the large majority of cases that occur in practice are nothing but mixtures and hybrids of these two, then it seems natural to accept pure monopoly and pure competition as the two genuine or fundamental patterns and to proceed by investigating how their hybrids work out. This renders the attitude of the theorists of monopolistic or imperfect competition. But instead of considering the hybrid cases as deviations from, or adulterations of, the fundamental ones we may also look upon the hybrids as fundamental and on pure monopoly and pure competition as limiting cases in which the content of actual business behaviour has been refined away. This is much more like the line that Marshall took.<sup>98</sup>

Thus, by piecing together various shreads of evidence, one can make a case, however circumstantial, that Schumpeter was not far from identifying the process-situation distinction that McNulty was later to render so explicit.

Moreover, it is argued in the following chapter that Schumpeter disputed the validity of the neo-classical treatment of competition mainly on conceptual, rather than factual or logical grounds. In so doing, he rejected the distinctly neo-classical premise that competition is a particular kind of situation, to be contrasted to monopoly and to be handled within a static framework.

Notes to Chapter 2

<sup>1</sup>Joseph Schumpeter, History of Economic Analysis (New York: Oxford University Press, 1954), p. 41. See above, pp. 5-6.

<sup>2</sup>See, for example, G. J. Stigler, "Perfect Competition, Historically Contemplated," Journal of Political Economy, LXV (February, 1957), 1-2; and J. M. Clark, Competition as a Dynamic Process (Washington: Brookings Institution, 1961), p. 24. For a dissenting view on the classical economists' claim to originality in the use of the concept, see P. J. McNulty, "A Note on the History of Perfect Competition," Journal of Political Economy, LXXV (August, 1967), 396, and by the same author, "Economic Theory and the Meaning of Competition," Quarterly Journal of Economics, LXXXII (November, 1968), 646-7, as well as Schumpeter himself in History of Economic Analysis, pp. 184-5, 216. Of course, neither Schumpeter or McNulty dispute the fact that the classical period firmly established the principle.

<sup>3</sup>Schumpeter, Capitalism, Socialism and Democracy (3d. ed.; New York: Harper Torchbooks, 1962), ch. 6, and History of Economic Analysis, Pt. III, ch. 5.

<sup>4</sup>Capitalism, Socialism and Democracy, p. 75.

<sup>5</sup>ibid., p. 75n. In History of Economic Analysis, he employs 1790 and 1870 for Pt. III (the 'classic' period). Elsewhere, Schumpeter referred to the "classical period of English economics, 1776-1848," (Essays of J. A. Schumpeter, ed. Richard V. Clemence (Cambridge, Mass.: Addison-Wesley Press, 1951), p. 143.)

<sup>6</sup>Capitalism, Socialism and Democracy, p. 100 and n.

<sup>7</sup>ibid., p. 100.

<sup>8</sup>ibid., p. 76.

<sup>9</sup>ibid., p. 75.

<sup>10</sup>ibid., p. 76.

<sup>11</sup>ibid., p. 100 n. 17, italics in original.

<sup>12</sup>ibid., p. 77.

<sup>13</sup>ibid., p. 103.

<sup>14</sup>See below, pp. 35-37, for the introduction of the term into the literature.

<sup>15</sup>History of Economic Analysis, p. 545.

<sup>16</sup>See above, p. 18.

<sup>17</sup>History of Economic Analysis, p. 545.

<sup>18</sup>ibid.

<sup>19</sup>See the following section, pp. 38-39 for a discussion of models and their relationship to definition.

<sup>20</sup>History of Economic Analysis, p. 233.

<sup>21</sup>ibid., pp. 545n., 959.

<sup>22</sup>History of Economic Analysis, p. 546. See also J. S. Mill, Principles of Political Economy, ed. Sir W. J. Ashley (7th. ed., London, 1871), Book II, ch. 4, para. 3.

<sup>23</sup>History of Economic Analysis, p. 592.

<sup>24</sup>Clark, op. cit., p. 24.

<sup>25</sup>History of Economic Analysis, p. 545.

<sup>26</sup>See ibid., pp. 181-94 for Schumpeter's assessment of Smith's contribution.

<sup>27</sup>ibid., pp. 184-5, 216.

<sup>28</sup>ibid., p. 189.

<sup>29</sup>ibid., p. 545n.

<sup>30</sup>ibid., p. 189.

<sup>31</sup>Capitalism, Socialism and Democracy, pp. 84, 103. <sup>32</sup>ibid., p. 84.

<sup>33</sup>History of Economic Analysis, p. 952.

<sup>34</sup>ibid., p. 1142, and Capitalism, Socialism and Democracy, pp. 77-8.

<sup>35</sup>History of Economic Analysis, p. 982.

<sup>36</sup>ibid., p. 973n.

<sup>37</sup>F. Y. Edgeworth, Mathematical Psychics (London: Kegan Paul, 1881), pp. 18, 150. Ten years earlier, W. Stanley Jevons wrote of "perfectly free competition" and "perfect market" in The Theory of Political Economy (London and New York: MacMillan, 1871).

<sup>38</sup>Alfred Marshall, Principles of Economics (8th. ed., London: MacMillan Papermacs, 1949). See, for example, pp. 4-10, 454-8.

<sup>39</sup>McNulty, "Economic Theory and the Meaning of Competition," p. 640.

<sup>40</sup>Stigler, "Perfect Competition, Historically Contemplated," p. 6.

<sup>41</sup>History of Economic Analysis, p. 973.

<sup>42</sup>ibid., p. 892, italics added.

<sup>43</sup>See Arthur Pap, Semantics and Necessary Truth (New Haven: and London: Yale University Press, 1958), ch. 8.

<sup>44</sup>Capitalism, Socialism and Democracy, p. 73.

<sup>45</sup>History of Economic Analysis, p. 975.

<sup>46</sup>ibid., pp. 892, 972, and Capitalism, Socialism and Democracy, p. 78.

<sup>47</sup>History of Economic Analysis, pp. 974, 1142.

<sup>48</sup>See Joan Robinson, Economic Philosophy (Chicago: Aldine, 1963), p. 14; I. M. D. Little, A Critique of Welfare Economics (2d. ed., Oxford: Oxford University Press, 1957), ch. 5; and Gunnar Myrdal, The Political Element in the Development of Economic Theory, tr. Paul Streeten (London: Routledge and Kegan Paul, 1953), pp. 19-20 et passim.

<sup>49</sup>History of Economic Analysis, p. 972      <sup>50</sup>ibid., p. 985.

<sup>51</sup>Stigler, op. cit., p. 14n.

<sup>52</sup>Frank H. Knight, Risk, Uncertainty and Profit (4th. ed., New York: Harper Torchbooks, 1965), pp. 76-80.

<sup>53</sup>Stigler, op. cit., p. 11.

<sup>54</sup>History of Economic Analysis, p. 15.      <sup>55</sup>ibid., p. 978 n. 18.

<sup>56</sup>ibid., p. 975.      <sup>57</sup>ibid., p. 973.

<sup>58</sup>Encyclopaedia Britannica(1946), IV, cited in Essays, p. 194.

<sup>59</sup>History of Economic Analysis, p. 972. See also Capitalism, Socialism and Democracy, p. 78.

<sup>60</sup>Joseph Schumpeter, Business Cycles (New York and London: McGraw-Hill, 1939), I, 46.

<sup>61</sup>History of Economic Analysis, p. 972.

<sup>62</sup>Business Cycles, I, 60.

<sup>63</sup>See, for example, ibid., pp. 44, 50, 66.

<sup>64</sup>History of Economic Analysis, p. 974.

<sup>65</sup>Capitalism, Socialism and Democracy, p. 78.

<sup>66</sup>Essays, p. 194.

<sup>67</sup>History of Economic Analysis, p. 973.

<sup>68</sup>Capitalism, Socialism and Democracy, pp. 78, 103; Essays, pp. 121-2, 194.

<sup>69</sup>ibid., p. 194.

<sup>70</sup>History of Economic Analysis, pp. 892, 920.

<sup>71</sup>Capitalism, Socialism and Democracy, p. 83.

<sup>72</sup>A. Chalk, "Relativist and Absolutist Approches to the History of Economic Theory," South Western Social Science Quarterly, XLVIII (June, 1967), 5.



<sup>73</sup>Stigler, op. cit., p. 2.

<sup>74</sup>ibid., p. 14.

<sup>75</sup>McNulty, "Economic Theory," p. 649.

<sup>76</sup>ibid., p. 646.

<sup>77</sup>ibid., p. 647, and McNulty, "A Note," pp. 395-6.

<sup>78</sup>ibid., p. 398, and McNulty, "Economic Theory," pp. 643, 645, 649.

<sup>79</sup>ibid., p. 649, and McNulty, "A Note," p. 397.

<sup>80</sup>McNulty, "Economic Theory," p. 649.

<sup>81</sup>ibid.

<sup>82</sup>McNulty, "A Note," p. 398.

<sup>83</sup>History of Economic Analysis, p. 545n. <sup>84</sup>ibid., p. 892, italics added.

<sup>85</sup>The static-dynamic distinction is treated further, in relation to the process-situation distinction below, Chapter 5.

<sup>86</sup>For Schumpeter's technical discussion of statics and dynamics in classical thought, see History of Economic Analysis, pp. 417, 563, 570. His own use of these technical notions is discussed below, Chapter 4.

<sup>87</sup>See, for example, his The Theory of Economic Development, tr. R. Opie (English ed., New York: Galaxy Books, 1961), p. 64 and n.

<sup>88</sup>Capitalism, Socialism and Democracy, p. 76.

<sup>89</sup>History of Economic Analysis, p. 564. <sup>90</sup>ibid., p. 154 and n. 12.

<sup>91</sup>McNulty, "A Note," p. 397. Reference is to Smith's Wealth of Nations, ed. Edwin Cannan (5th. ed.; New York: Modern Library, 1937). See also McNulty, "Economic Theory," p. 644 on this matter.

<sup>92</sup>This is Stigler's suggestion (op. cit., p. 14).

<sup>93</sup>See Jevons, op. cit., p. 86.

<sup>94</sup>Stigler, op. cit., p. 6.

<sup>95</sup>History of Economic Analysis, pp. 189, 309, 545-6, and Capitalism, Socialism and Democracy, p. 100 n. 17.

<sup>96</sup>History of Economic Analysis, p. 975.

<sup>97</sup>Marshall, very much in classical vein, writes: "The strict meaning of competition seems to be the racing of one person against another" (op. cit., p. 4). For references to Marshall's use of 'competition' and 'free competition' see note 38 above.

<sup>98</sup>History of Economic Analysis, pp. 974-5, italics added.

## Chapter 3

### SCHUMPETER'S CRITIQUE OF NEO-CLASSICAL COMPETITION

#### 1. Schumpeter's Ambivalent Attitude

Schumpeter's interpretation of the nature of the neo-classical concept of perfect competition remained relatively fixed throughout his literary career. This is not surprising, especially in view of his very early acquaintance with and admiration for the work of Walras and of his knowledge of the history of economic thought in general.<sup>\*1</sup> The same cannot be said of his critical evaluation of that concept or of the main theorems derived from the model of perfect competition.

Throughout his writings, Schumpeter revealed a kind of love-hate attitude toward that distinctly neo-classical creation, an attitude which epitomizes in many ways the radical-conservative tensions that characterize his thinking.

On the one hand, he nearly worshipped the neo-classical achievement of a general equilibrium system - based, as it usually was, on the assumption of perfect competition - with all the adoration and enthusiasm of a keen neo-classical proponent. More apparent in his early period (1905-1911), a residue of this youthful optimism, and even "complacency" as he put it himself,<sup>2</sup> is to be noted in one of his last articles, his famous presidential address to the American Economic Association in 1948, entitled "Science and Ideology," in which he claimed that the marginal productivity analysis (upon which

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\*Footnotes for Chapter 3 are located on pp. 93-97.

the model of perfect competition is built) is "compatible with any vision of economic reality that anyone ever had."<sup>3</sup>

More specifically, he looked to the model, especially in its Walrasian formulation, as the "Magna Carta" of economics viewed as an "autonomous science" ensuring that its subject matter was "a cosmos and not a chaos."<sup>4</sup> Walrasian general equilibrium constituted the "Magna Charta [sic] of exact economics" guaranteeing the "logical autonomy" of the field of economics.<sup>5</sup> In his review of Joan Robinson's The Economics of Imperfect Competition, he described the theory of perfect competition as "a useful and almost indispensable background with which to compare, and therefore by which to understand, any other situation, however far removed it may be from it"<sup>6</sup> - surely the classic (or, rather, "neo-classic") justification of the theory's widespread acceptance.

Although this faith in the heuristic value of the theory was retained in the end (in his last statement on competition, the History of Economic Analysis), the 'almost' italicized in the previous passage apparently contained some ominous implications, for, on other occasions, Schumpeter deplored this same theory for what many economists did with it, or perhaps better what it did to them, in their analytical and particularly their policy work. This side of Schumpeter's ambivalent attitude has been shared by others, too, and is summed up excellently by J. M. Clark thus:

As to the conclusions drawn from the precisionist models, the theorists may be said to be the prisoners of their own techniques and tools of analysis.<sup>7</sup>

It is significant to note here that Schumpeter had sympathy for Clark's search for a more "workable" concept of competition.<sup>8</sup>

In his well known analysis of "competitive capitalism" in Capitalism, Socialism and Democracy, Schumpeter subjected the neo-classical concept of perfect competition to one of the severest critiques it has ever received from the hands of an avowed conservative. Such was the extent of his criticism that a recent survey, for example, listed Schumpeter along with Veblen, Tawney, the Webbs, and Moore among the most vigorous and articulate critics of neo-classical economics.<sup>9</sup>

The significance of this "bloodless concept of perfect competition," Schumpeter argued, is based on a theorem (of output maximization) which reduced on inspection to the "triviality" that "human action, as far as it is rational, will always try to make the best of any given situation;" thus, the theorem was judged to be "almost, though not quite, irrelevant" to the appraisal of competitive enterprise.<sup>10</sup>

In a similarly uncharacteristic mood of frank and sometimes venomous criticism which pervades the pages of Capitalism, Socialism and Democracy, Schumpeter wrote of "an entirely imaginary golden age of perfect competition [which] has at no time been more of a reality than it is at present."<sup>11</sup> And, in that same article, "Science and Ideology," in which he had extolled the analytical virtues of marginalist theory, he wrote in a sarcastic and disparaging tone about the "magic wand of pure competition" as if it were a false panacea for the economic ills of the world.<sup>12</sup>

Yet, in the same treatise in which he lashed out at neo-classical economics as he had never done before and was never to do again, Schumpeter felt it sufficiently significant to stress that, according to his understanding of the functioning of competitive

enterprise, long-run behavioural and performance patterns very similar to those envisaged by the model of perfect competition will in many cases emerge from imperfect markets.<sup>13</sup>

The task of accounting for these apparent inconsistencies will be left for the following chapter on methodology. To conclude this section, a short sketch will be made of the development of Schumpeter's attitude toward perfect competition throughout his career, leaving the details of his critique for the next two sections.

In his earliest works (of those that are now translated), there is no evidence of Schumpeter's attitude toward the status of perfect competition other than his wholehearted approval of Walras' general equilibrium system. The question of the empirical validity of the model had not yet emerged from the highly technical literature of that period, and, for that matter, the term 'perfect competition' itself had not yet achieved much currency until the 1930s. In Economic Doctrine and Method, Schumpeter's first survey of the history of economic thought, the chief focus is on value theory and only a few incidental references to "free competition" are to be found.<sup>14</sup>

In The Theory of Economic Development, a model of the economic process is constructed on the assumption of "free competition," but no special attention is given to its exact character other than its determinateness.<sup>15</sup> Some of the trappings of neo-classical thinking are there (such as the concern for general interdependence and determinateness), but the treatment of competition is remarkably classical in nature and foreshadows his more fully developed conceptualizations of competition to come years later. As Chamberlin correctly points out:

There is in fact surprisingly little insistence in the Theory of Economic Development on the competitive nature of the circular flow, and no statement that I can find that it is necessarily characterized by "perfect competition" (the word "pure" had not yet appeared.<sup>16</sup>

However, in his first article to appear in English, "On the Concept of Social Value" (1909), Schumpeter verifies that he was, at the very least, aware of the term 'perfect competition,' but his single reference to it is only incidental, revealing only that he accepted the current claims about income distribution under a "régime of perfect competition."<sup>17</sup>

From the time of the publication of his The Theory of Economic Development in 1911, then, there is a long pause until 1928 during which he did not broach the subject of competition (other than his revision of his 1911 work). In 1927, the issue of perfect versus monopolistic competition arose with the appearance of Chamberlin's doctoral dissertation, the contents of which Schumpeter was certainly aware in 1928.<sup>18</sup> Until that time, Schumpeter had little reason either to attack or defend perfect competition, merely accepting it on its own terms.

From then until the late 1930s, Schumpeter was definitely on the defensive. His articles published during this period, as well as Business Cycles, begun in the early 1930s and completed in 1938, reveal time and again his obsession with the question of indeterminateness in non-perfectly competitive cases.<sup>19</sup> Business Cycles, in its original conception, is probably the most neo-classical in outlook of all Schumpeter's works. His initial model is built on the assumption of perfect competition and throughout his exposition there is an extended defense of his use of the assumption and all the attendant problems of

determinateness.<sup>20</sup> Yet, toward the completion of this monumental work, Schumpeter began to have doubts about the adequacy of his theoretical orientation but could not revise his argument at that point. In a footnote, he revealed his dilemma:

The professional reader, in turn, will take offense at this simplification. In particular, he will find that some tools used by the writer are antiquated and that in many points recent progress of analysis has not been sufficiently taken into account. This will be done in another book which, in a wider frame, will among other things overhaul the purely theoretic parts of the present argument. Here, no other course seemed open to the writer than the one he has taken.<sup>21</sup>

Obviously, by "another book" Schumpeter is referring here to Capitalism, Socialism and Democracy, the ideas of which had been occupying his mind during the last few years of completion of Business Cycles and portions of which had been written as early as 1935.<sup>22</sup> The ideas of this later work were too radically different to be effectively incorporated into the argument of Business Cycles.

Thus, until Capitalism, Socialism and Democracy, Schumpeter's attitude toward perfect competition could be described as orthodox, conservative and within the neo-classical tradition, with the single qualification that he recognized the empirical weakness of the model. Capitalism, Socialism and Democracy changed all of this. It is from here that the bulk of his critique of neo-classical competition derives, and it is here that Schumpeter is at his most "Schumpeterian." Yet, this work does not differ in conceptual basis all that much from his earlier masterpiece, The Theory of Economic Development. In fact, judged by the remainder of his work, it is Business Cycles which appears to be an aberration among the catalogue of Schumpeter's works. So concerned was he about the "scientific status" of his model (that is, its determinate-

ness) in Business Cycles that he took it upon himself, on that occasion only, to defend even the empirical relevance of perfect competition.<sup>23</sup> Capitalism, Socialism and Democracy must have come as a great liberating effort, releasing him, so to speak, from those neo-classical shackles the burden of which he felt so obliged to labor under in Business Cycles.

In his last major statement on competition, the History of Economic Analysis, Schumpeter offers a rather reserved, hesitant, and qualified assessment of the model of perfect competition, emphasizing once more the heuristic value of the model for purposes of "pure" theory. However, he concludes his discussion by posing a rhetorical question which leaves little doubt that, in the end, he rejected the conceptual adequacy of the neo-classical treatment of competition.<sup>24</sup>

With that brief sketch of the development of Schumpeter's thinking over a period of roughly four and one half decades, it is now possible to examine in greater detail the substance of his critique, without reference to this historical dimension of his thought. The favourable aspects of that critical evaluation of perfect competition are treated first.

## 2. The Conventionalist Defense

The chief virtue, in fact, practically the only merit of the model that Schumpeter appealed to in defense of perfect competition, derived from that essentially methodological proposition that placed the scientific status of economics on the existence of a determinate general equilibrium. In this respect, Schumpeter wrote of the contribution of Walras in these terms:



So far as pure theory is concerned, Walras is in my opinion the greatest of all economists. His system of economic equilibrium, uniting, as it does, the quality of 'revolutionary' creativeness with the quality of classic synthesis, is the only work by an economist that will stand comparison with the achievements of theoretical physics. ... It is the outstanding landmark on the road that economics travels toward the status of a rigorous or exact science.<sup>25</sup>

On another occasion, he wrote:

For any science or part of a science, the first task always consists in establishing the logical autonomy of its field, or rather the conditions under which there is logical autonomy. In economics this involves the question of determinateness of equilibrium.<sup>26</sup>

Schumpeter's rationale for the necessity of the determinateness of equilibrium to the science of economics is treated further in Chapter 4. What matters here is the role that perfect competition played in that argument. Prior to 1928, Schumpeter gives no indication of the importance of perfect competition for the determinateness of general equilibrium. For example, in the second edition of The Theory of Economic Development (1926), no mention is made of the problem of determinateness (that is, the possibility of there being none) or of the cruciality of perfect competition to it even though Schumpeter discusses the Walrasian notion of equilibrium and dynamizes it into the "circular flow" for his own purposes.<sup>27</sup> However, with Chamberlin's re-introduction of oligopoly models into the literature (stemming from Cournot ultimately), Schumpeter began to pay attention to such problems. In his article, "The Instability of Capitalism" (1928), he began to find it necessary to re-affirm such things as that:

Although illustrations of this and other cases [where equilibrium cannot be said to be determinate] abound, the determinateness of static equilibrium under competitive conditions is yet a broad basic fact.<sup>28</sup>

Later in the same article, he speaks of the theoretic importance of the

"competitive hypothesis" which is "very much in the nature of a crutch" in delivering determinateness.<sup>29</sup> The same concern is evident in his 1934 review of Joan Robinson's book, although at this point 'competitive' is distinguished from 'perfectly competitive.'<sup>30</sup>

It was not until Business Cycles, though, that Schumpeter made it explicit that it was only in the case of perfect competition that the existence of a perfect or determinate equilibrium could be guaranteed:

It is ... possible to prove beyond reasonable doubt and with but unimportant qualifications that there exists a uniquely determined equilibrium state of the economic system in the special case which, following usage, we shall call the case of perfect competition.<sup>31</sup>

In History of Economic Analysis, in an extended discussion of the equilibrium concept, no indication is made that determinateness is an exclusive property of perfect competition, although that property is re-affirmed as being its most important analytical feature.<sup>32</sup>

To someone not familiar with Schumpeter's writings, it might come as a surprise that with all of this concern for determinateness nowhere in print did he attempt to demonstrate his claims by the use of mathematical models. The fact that this sort of technical exercise was not Schumpeter's preoccupation is of more than passing significance and will be commented upon further in Chapter 6.

Be that as it may, the fact that perfect competition guaranteed determinate equilibrium was not the only one that Schumpeter cited in its favour. In addition, perfect competition was said to have certain interesting analytical properties. This line of defense often arose in connection with what he termed, in Business Cycles, the "existence theorem."<sup>33</sup> A criticism frequently directed toward the model

of perfect competition is that the equilibrium state that it depicts is never realized, that is, that it never exists. This might be called the "gratuitous criticism" because of its frequency and patently obvious nature. Schumpeter's defense of the equilibrium concept against this criticism, by interpreting equilibrium as a tendency, is dealt with briefly in the following chapter. More specifically, Schumpeter's defense of perfect competition in this respect is most revealing.

During the period 1928-1934, Schumpeter's comments were like these:

It cannot be repeated too often that the case of perfect competition owes the fundamental importance which it always had and still has in economic theory to certain properties characteristic of it and neither to any tendency in the facts to conform to it nor any "desirability" of the state of things it depicts. ... By virtue of those properties, the theory of perfect competition still remains a useful and almost indispensable background with which to compare, and therefore by which to understand, any other situation, however far removed it may be from it.<sup>34</sup>

The importance of the competitive case is not dependent on any hypothesis about its being the rule in real life, but rests with certain properties of it which would make it a useful starting point of analysis even if reality had never displayed any approximate instance of it.<sup>35</sup>

The diagnostic value of the theory of free competition in the pure sense is, however, not impaired by these considerations. It is still worth while not only to work it out but to present it in a simplified form to the public because it shows where the sources of trouble do not lie and therefore by implication where we are to look for them.<sup>36</sup>

By thus pointing to the usefulness, and not the truthfulness, of the model of perfect competition, Schumpeter was very clearly appealing to a Conventionalist defense of perfect competition. The term 'Conventionalist' was first met in the first chapter of this thesis in connection with the function of words and definitions. However, the

term 'Conventionalism' has an historical background in the philosophy of science and was first associated with the French mathematician and physicist, Henri Poincaré (1854-1912), the writings of whom Schumpeter was certainly aware.<sup>38</sup> Similar to American pragmatism, Conventionalism construes scientific theories not in terms of truth-claims but rather as "tools" or conventions which are employed in the pursuit of truth. Thus they are to be judged by their usefulness.

The Conventionalist character of Schumpeter's defense of perfect competition is most evident in the troubled first pages of Business Cycles. In another one of those illuminating footnotes of that monument to neo-classical economics, Schumpeter argued:

The importance of the case [of perfect competition] does not, of course, rest with the frequency of its occurrence in actual life. A system satisfying its conditions in all its parts has probably never existed. ... But even if there were no practical instances of the case, it would still retain scientific importance as an instrument for proving that purely economic logic is capable of determining uniquely purely economic values, and that the case in which this holds true is endowed with interesting properties - such as zero profits, optimum output in the sense of output up to the point of minimum unit cost, equality of factor prices and physical marginal product times price of product, and so on. ...

At this point, one might ask why the model and its properties are so interesting if they are not realized or actualized. Schumpeter provides an answer which, again, points to the Conventionalist character of the model, as he interpreted its function:

... But in this book the concept would not have been mentioned if it were to serve a purpose no more concrete. The case does serve primarily as a steppingstone from which to proceed to more lifelike patterns.<sup>39</sup>

With that purpose in mind, he proceeds to build an initial model (or, as he puts it, a "first approximation"), based on the assumption of perfect competition, describes its properties, and then attempts to

make it more lifelike by "dropping" (in some obscure way) the assumption of perfect competition for the more realistic assumptions of imperfect competition. What are the consequences of this momentous step?

Propositions and proofs will be less stringent, zones of indeterminateness will emerge, sequences of events will be less prompt, and buffers will be inserted between the parts of our mechanism so that its gears will be slower to mesh. [etcetera] ... But this is all.<sup>40</sup>

In other words, the model of perfect competition is a tolerable approximation for understanding the competitive phenomena that Schumpeter wishes to account for. Not only is Schumpeter's reasoning here a purely verbal "proof" of what must be an extremely complex set of relationships (again revealing his disdain for the actual mundane work of providing the logical groundwork for his theorems) but also his conclusion here is contradicted elsewhere in his writings, as will become apparent shortly in the next section.<sup>41</sup>

The purpose of pointing out this inconsistency is not in some way to "get" Schumpeter, for, even though there are perfectionists in the world, there are no perfect human beings just as there is no such thing in the world as perfect competition. Rather, the purpose is to show that Schumpeter did recognize the fragility of his argument in Business Cycles and that he did recognize that he was arguing a very weak case in that volume, as is demonstrated by his statements on other occasions.

In this way, Business Cycles could be said to be Schumpeter's weakest performance, despite the many years he put into the factual research on the cycle for that work. In a sense, Business Cycles represents the culmination in that decade of years during which he fought desperately to defend neo-classical competition against his own

better judgement. Capitalism, Socialism and Democracy was written as a violent reaction to that period of diplomatic conservatism. That critique will now be examined.

### 3. The Essentialist Attack

Schumpeter's analysis of competitive capitalism in its dynamic aspects, in Part II of Capitalism, Socialism and Democracy, is justly famous, and for that reason alone need not be re-considered here as a point of reference. In view of the fact that his central concern in that work is for the broad issues of comparative economic systems and that his method is a highly synthetic one, integrating many separate themes into one theme, it will be necessary to carry out many somewhat artificial extractions from his main argument about the nature of capitalism in order to get at his evaluation of perfect competition.

Schumpeter's critical comments fall under several distinct logical or epistemic categories, and it is useful to examine his criticisms separately under those categories. His criticisms can be classified as follows:

- (1) those concerning the validity of the logical inferences derived in the theory of perfect competition. (Such validity is a purely logical relationship between the premises and conclusions, irrespective of the empirical truth of either these same premises or conclusions. Hence, an argument may be valid and yet not sound if either or both the premises and conclusions are empirically false.)
- (2) those concerning the empirical truth of the axioms and theorems of the theory (that is, the premises and conclusions).
- (3) those concerning the acceptability of the evaluative claims (value judgements) drawn from the theory regarding the desirability of perfect competition.
- (4) those concerning the conceptual adequacy of the model (that is, the clarity of meaning and empirical relevance of the model's terms of reference to the economic phenomena that the model is designed to explain, describe, predict or otherwise account for).

These four classes of criticism will be treated in turn.

First, regarding the logical validity of the inferences drawn in the theory, Schumpeter is only mildly critical, judging most of the main theorems to be logically valid inferences. In fact, at one point in his argument, he finds the theory all too logical in some aspects, at the risk of being a set of tautologies and hence non-informative. In what must be one of his most famous footnotes, he points to the mathematical technique of maximizing a variable, given a set of constraints, by stating that "proof of the principle [of output maximization] itself requires assumptions which reduce it to little more than a truism."<sup>42</sup> In the same vein, Schumpeter questions the neo-classical treatment of economic rationality. Referring to perfect competition, he states that:

The theorem that competitive industry tends to produce a state of maximum satisfaction of wants ... is readily seen to boil down to the triviality that, whatever the data and in particular the institutional arrangements of a society may be, human action, as far as it is rational, will always try to make the best of any given situation. In fact it boils down to a definition of rational action.<sup>43</sup>

This seemingly wholesale indictment of marginal utility analysis, though, could not have bulked large in the critical mind of Schumpeter, for it rates only footnote treatment in Capitalism, Socialism and Democracy and certainly does not reflect the general outlook of History of Economic Analysis to follow.

One other kind of question concerning logic raised in his critique of 1942 brings the static nature of the theory into focus. Even though their theory was static, the neo-classical economists apparently believed that equilibrium was not only determinate but was also stable and promptly established, in the absence of outside

disturbances. At least, so would Schumpeter have his reader believe in Capitalism, Socialism and Democracy, for, in taking into account such dynamic factors as lagged adjustments due to imperfect knowledge and less than perfectly prompt reactions in the market, the achievement of stable equilibrium becomes less than certain. He writes:

Once equilibrium has been destroyed by some disturbance, the process of establishing a new one is not so sure and prompt as the old theory of perfect competition made it out to be; and the possibility that the very struggle for adjustment might lead such a system farther away from instead of nearer to a new equilibrium.<sup>44</sup>

It is difficult to determine precisely what Schumpeter's criticism is here, because if it was admittedly static in nature, how could the theory account for dynamic features? Moreover, if the model was set up as a hypothetical ideal on the basis of "perfection", are these so-called imperfections that Schumpeter points to in the real world validly considered as part of the model that the neo-classical economists were working with? Schumpeter's question of logical validity here is really, then, a conceptual and methodological one: Can competition be treated in theory as static? or else it amounts to the empirical criticism that the conditions of perfect competition are never realized and hence the model is empirically irrelevant. Yet, Schumpeter had already defended the model against this criticism earlier!

Of course, Schumpeter was also quick to point out that equilibrium was rarely a possibility in fact, because oligopoly was both a prevalent form of industrial organization and theoretically indeterminate.<sup>45</sup> But this too only amounted to another version of the "gratuitous criticism" that he had dispensed with earlier. Schumpeter, then, cannot have it both ways. By pointing to these dynamic features



of the real world, either (1) he was accusing the neo-classical people of constructing a static model and then drawing (invalidly) dynamic inferences from it, and implying in the process that they ought to have analyzed competition within a dynamic framework, or (2) he was denying his own claim, made several times before,<sup>46</sup> that the model of perfect competition was "a useful starting point of analysis," a useful and almost indispensable background," an "instrument for proving that purely economic logic is capable of determining uniquely purely economic values," etcetera. More likely, he was now (1942) claiming both of these things. The ultimate point at issue here concerns that ever so complex question of the meaning and purpose (in economic theory) of the static-dynamic distinction. This issue appears once again in the fourth class of criticism ("conceptual adequacy of the model") and an attempt is made in the following chapter to sort out Schumpeter's views on the interpretation of the static-dynamic distinction.

The second class of criticisms, those concerning the empirical truthfulness of the model's premises and conclusions, brings into focus once more the "existence theorem" and its associated "gratuitous criticism." This is so because criticism along these lines never gets beyond issues of the existence of the conditions of the model. Another type of empirical claim, that concerning the causal connections of the phenomena of perfect competition (such as the behavioural motivations that account for the way that people behave), never receives attention from Schumpeter because those phenomena that the theory is intended to account for are not claimed to exist anyway. (It should be added, though, that Schumpeter seemed to have no qualms about the neo-classical choice of behavioural premises - profit maximization.)

Other than on one occasion, in Business Cycles, Schumpeter made it clear that he rejected perfect competition as a descriptive norm for reality. In Capitalism, Socialism and Democracy, he wrote: "it is quite clear that perfect competition has at no time been more of a reality than it is at present."<sup>47</sup> On another occasion, he stated that it could not exist "under modern conditions of large scale production."<sup>48</sup> In 1930, he had already suggested that intermediate cases between pure competition and pure monopoly comprised "practically the whole of the reality of markets."<sup>49</sup> Later, in History of Economic Analysis, he held it to be a principal tenet of neo-classical economics that perfect competition was the normal case and criticized them for having "overrated the range of application of such an analysis."<sup>50</sup>

Now, even if perfect competition were not the norm, are there any cases for which it could be considered an approximation, and, if so, does it test out well? Schumpeter's courageous claim in Business Cycles that, for the period under study:-

[Perfect competition] affords a sufficiently close approximation to reality in many cases and that in others the actual patterns, although not fulfilling requirements, yet work in a way not fundamentally differing from the working of perfect competition.<sup>51</sup>

is difficult to reconcile with the argument of Capitalism, Socialism and Democracy as well as with the following two statements, made in 1934:

Things look still worse as soon as we realize that the case of free [he means "perfect"] competition cannot be looked upon as an approximation, and that it becomes a distortion of what it is meant to describe if its assumptions are not fulfilled exactly.<sup>52</sup>

It is not true that what can be proved for the case of perfect competition holds approximately for the case of imperfect competition, as the older theory uncritically assumed.<sup>53</sup>

The attitude of the latter two quotes is re-affirmed in Capitalism, Socialism and Democracy wherein he cites examples of "more or less perfectly competitive industries" (that is, those that satisfy the large-numbers condition) whose dynamic instabilities "show up glaring weaknesses in the mechanism of perfect competition."<sup>54</sup> In fact, at one point he turns the neo-classical theory on its head by declaring that "in many cases" that are very much unlike the perfectly competitive case, competition of a kind other than that envisaged by the model of perfect competition will "in the long run enforce behaviour very similar to the perfectly competitive pattern."<sup>55</sup> And in a nearby footnote he observes that many cases of imperfect competition, not all, approximate the results of perfect competition.<sup>56</sup> It is clear from the context in which these latter two comments appear that he is not attesting to the validity of the model of perfect competition after all, nor is he claiming that it accurately approximates any substantial portion of reality. Quite to the contrary, he is arguing that forms of competition not envisaged by perfect competition can be just as effective in disciplining behaviour and can result in economic performance superior to that claimed by perfect competition. What he means by "behaviour very similar to the perfectly competitive pattern" is not clear, but in all probability he is cashing in on the favourable evaluative connotations long associated with the term 'perfect competition.'

True to his ambivalent attitude toward perfect competition, these claims as to the non-existence of the conditions of perfect competition may or may not be considered criticisms of the theory. According to his earlier Conventionalist defense, these claims would be

considered harmless, but according to empirical evidence of the functioning of certain "more or less competitive industries", even the usefulness of the model, as a starting point for the analysis of more lifelike patterns, is cast in doubt.

The third type of criticism, that concerning the tenability of the evaluative inferences drawn from the theory, bulks large throughout Capitalism, Socialism and Democracy, for that book is very "political," albeit in a very subtle way, its author's claims to the contrary notwithstanding.<sup>57</sup> The message throughout is very definite: perfect competition is not the ideal of economic performance that the neo-classical people would have us believe.<sup>58</sup>

Schumpeter's argument is based on two pillars, one a value premise, the other a broad empirical claim. The value premise is that the most important criterion for assessing the performance of competitive enterprise is total output.<sup>59</sup> This choice of value premise is, of course, open to question, but Schumpeter seems not to have taken much cognizance of the fact and thus treats such other major alternatives as equity in the distribution of income very lightly.

His broad empirical claim is very well known and need not be elaborated upon at length. It is that innovation (or technological change) is the most important source of economic growth. While he agrees with the logic of the static maximization of output theorem for perfect competition, Schumpeter brings into analytical focus the dynamic features of competitive capitalism in order to "dim the halo that once surrounded perfect competition."<sup>60</sup>

In an often-quoted passage, Schumpeter observes:

First, since we are dealing with a process whose every element takes considerable time in revealing its true features and ultimate effects, there is no point in appraising the performance of that process ex visu of a given point of time; we must judge its performance over time, as it unfolds through decades or centuries. A system - any system, economic or other - that at every given point of time utilizes its possibilities to the best advantage may yet in the long run be inferior to a system that does so at no given point of time, because the latter's failure to do so may be a condition for the level or speed of long-run performance.<sup>61</sup>

Now, Schumpeter is going too far when he says that we must judge performance over decades or centuries, but the possibility presented at the end of this passage is of great interest. Schumpeter reveals here his skeptical attitude toward treating competition statically, as is further evidenced in another footnote:

Capitalist reality is first and last a process of change. In appraising the performance of competitive enterprise, the question whether it would or would not tend to maximize production in a perfectly equilibrated stationary condition of the economic process is hence almost, though not quite irrelevant.<sup>62</sup>

By claiming further that large-scale organization is technologically superior to small-scale, and that large-scale organization is incompatible with perfect competition in the modern world (through the constraint that market size places on the number of minimally efficient firms that can operate simultaneously in any one industry), Schumpeter concludes that "perfect competition is not only impossible but inferior, and has no title to being set up as a model of ideal efficiency."<sup>63</sup> Numerous empirical studies have been carried out to refute this grand claim and, on the whole, the literature is as yet inconclusive.<sup>64</sup> However, a few of Schumpeter's examples will be cited to show the very long-run perspective that he had in mind in putting forward his hypothesis.

His principal stratagem is to point to those industries

which most closely approximate perfect competition by the large-numbers condition:

The perfectly competitive arrangement displays wastes of its own. The firm of the type that is compatible with perfect competition is in many cases inferior in internal, especially technological, efficiency. ... In the last resort, American agriculture, English coal mining, the English textile industry are costing consumers much more and are affecting total output much more injuriously than they would if controlled, each of them, by a dozen good brains.<sup>65</sup>

The development of the automobile, rayon and aluminum industries during the twentieth century is cited to demonstrate that superior performance can be the case in the initial and lasting absence of, and even with the gradual disappearance of, the large-numbers condition of perfect competition.<sup>66</sup> Finally, the agricultural sector is cited as an instance where much of the progress is accounted for not by the competitive sector itself but by the large-scale, imperfectly competitive suppliers of agricultural machinery.<sup>67</sup>

Since this thesis is not intended as an empirical ~~study~~<sup>STUDY</sup>, it would be inappropriate to either defend or try to refute Schumpeter's central thesis. Therefore, comment on this, Schumpeter's, line of criticism of perfect competition will be limited to the repetition of three reservations made earlier. One, studies have been inconclusive as to the tenability of Schumpeter's main empirical claims. Two, Schumpeter's insistence on only a very long-run perspective in assessing industrial performance may be inordinate. Three, his choice of criteria for assessing performance is open to question.

To conclude this class of criticism, it might be added that Schumpeter attributed one other major oversight to the neo-classical treatment of perfect competition in holding it out as a model of ideal

efficiency. Alluded to earlier as a matter of logic, this was the observation that a high probability of chronic instability is associated with approximately perfectly competitive industries, especially during depressions, due to the fact that not all conditions of perfection (for example, perfect knowledge and perfectly prompt reactions) are ever satisfied.<sup>68</sup>

In short, then, it was principally on the basis of two dynamic aspects of the functioning of actual markets, namely, growth and stability, that Schumpeter spoke later in 1949 of the "futility of the hallowed ideal of pure competition."<sup>69</sup>

There now remains the fourth and most devastating class of criticism of perfect competition, and for this thesis the most significant - namely, that concerning the conceptual adequacy of the model. That Schumpeter was concerned with conceptual adequacy is evident throughout his literary work; often this type of question was cast in terms of "perspective," or Schumpeter's favorite word "vision." In the critique of Capitalism, Socialism and Democracy, Schumpeter referred to conceptual adequacy in this way:

The reader will recall my emphasis on the distinction between one's theory and one's vision in the case of Marx. It is however always important to remember that the ability to see things in their correct perspective may be, and often is, divorced from the ability to reason correctly and *visa versa*. That is why a man may be a very good theorist and yet talk absolute nonsense whenever confronted with the task of diagnosing a concrete pattern as a whole.<sup>70</sup>

Conceptual adequacy relates to both the activity of defining the concepts used in the theory (or, alternatively, of employing the terms comprising the theory in an intelligible manner) and of selecting factual material highlighting those aspects of reality that seem most relevant to the subject at hand. Therefore, how one conceives of

competition will be reflected by two types of claims: definitional and empirical, which, as was argued in Chapter 1, are especially difficult to distinguish in the case of open concepts. Schumpeter's criticisms of the conceptual adequacy of the model of perfect competition will, therefore, inevitably contain references to both meaning and factual relevance.

Now, throughout his critique of perfect competition and of the "plausible capitalism" that the neo-classical economists drew from it, Schumpeter repeatedly refers to the "essence" of competition and of capitalism that the neo-classicists either misconstrued or overlooked. The term 'essence' and its cognates are perhaps the most frequently used of those crucial terms that comprise the Schumpeterian vocabulary. (Interestingly enough, 'pure' and its cognates are very close behind.) For Schumpeter, 'essence' meant virtually the same thing as 'defining features.' For example, on one occasion, he likened the essence of a phenomenon to its "nature."<sup>71</sup> And, in Capitalism, Socialism and Democracy, he observed that "analysis has distilled what is technically called a 'model' of capitalist reality, i.e., a generalized picture of its essential features."<sup>72</sup>

However, there is an intermingling of both meaning and fact in the way that Schumpeter employs the term. This intermingling can be illustrated by an example which very closely parallels the example given in Chapter 1 of the difficulty in distinguishing definitional from factual claims about perfect competition.<sup>73</sup> Schumpeter writes: "The very essence of monopolistic competition is in the fact that the price at which a quantity can be sold at any time is a function of the behaviour of the firm itself ... and of all the other firms in the



field." Is this statement true "by definition" or by observation of the "facts"?

To return to the critique of perfect competition, Schumpeter's attack can validly be termed an Essentialist attack in that he argued that perfect competition did not adequately account for the "essence" of the simpler concept of competition.

The manner in which Schumpeter carried out this Essentialist attack will be demonstrated in the remainder of this chapter.

Schumpeter's Essentialist attack can be analyzed into three elements; yet, all of them are intimately and ultimately related to one another by the fact that Schumpeter conceived of competition as a process, not a situation. These three elements of criticism are:

- (1) Neo-classical perfect competition is an equilibrium concept, taking no account of the disequilibrating tendencies of competition.
- (2) Neo-classical perfect competition is a structural rather than a behavioural concept.
- (3) The neo-classical method of treating perfect competition is static rather than dynamic.

Each of these criticisms will be treated in turn.

Schumpeter occasionally spoke of equilibrium as if it involved the passage of time, but, for the most part, he spoke of it as if it meant a set of circumstances at a given moment of time, that is, as if it were a situation or state of affairs. Thus, he refers<sup>74</sup> to the "state of equilibrium," an "equilibrium position," and the "pure theory of static equilibrium." Albeit, in Business Cycles, he does construe it as a "tendency" but still it is a tendency "to move toward a state of equilibrium."<sup>75</sup>

That Schumpeter interpreted the neo-classical theory of

perfect competition as an equilibrium theory only is without doubt. That he criticized that theory for overlooking matters relating to disequilibrating tendencies is evident from such broad statements in Capitalism, Socialism and Democracy as this:

In other words, the problem that is usually being visualized is how capitalism administers existing structures, whereas the relevant problem is how it creates and destroys them. As long as this is not recognized, the investigator does a meaningless job.<sup>76</sup>

Schumpeter is criticizing neo-classical theory here for being both static and solely an equilibrium theory. However, he was inclined to underplay the latter feature, for he recognized that equilibrating tendencies were one half of the problem and that constructing a model to demonstrate those tendencies was a technically difficult problem that the neo-classical economists tackled rather successfully. The importance that Schumpeter attached equally to both sets of tendencies in his own work on competition is an indirect indication of this kind of limitation that he attributed to the neo-classical schema.

In the same way, that is, on the grounds of technical difficulty, Schumpeter was inclined to foregive the neo-classical people for working almost exclusively within a static framework. Even so, he did point to the conceptual implications of their doing so. In the following passage, Schumpeter had in mind not only the neo-classical economists proper but also those in current work who reflected the neo-classical outlook:

Economists who, ex visu of a point of time, look for example at the behaviour of an oligopolist industry ... accept the data of the momentary situation as if there were no past or future to it and think that they have understood what there is to understand ... [but] every piece of business strategy acquires its true significance only against the background of that process and within the situation created by it.<sup>77</sup>

Later, in History of Economic Analysis, Schumpeter was again to point out the general lack of dynamics in neo-classical economics but he de-emphasized the fact, preferring in that volume to stress their positive achievements in constructing static equilibrium models.<sup>78</sup>

The most explicit and persistent aspect of his Essentialist attack, very evident in both Capitalism, Socialism and Democracy and History of Economic Analysis, relates to the structural-behavioural distinction. Now, both Chamberlin and Schumpeter attributed much importance to product differentiation in their study of competition. In his memorial article to Schumpeter, Chamberlin recognized that Schumpeter had been moving toward a dynamic approach to competition but felt that their two respective approaches were quite compatible and could not, therefore, understand Schumpeter's rejection of the "monopolistic competition" approach. Chamberlin writes:

In spite of many - and important - differences between his system and my own, the two systems have always seemed to me essentially harmonious in the sense that their differences could easily be resolved, and that a marriage between them would be most fruitful, at least in congenial day-to-day living, and possibly even in the production of economically handsome offspring.<sup>79</sup>

Chamberlin seems not to have realized that their systems were founded on different concepts of competition, and that Schumpeter rejected not only the neo-classical concept of perfect competition but also the "neo-neo-classical" concept of monopolistic competition for virtually the same reason: both were structural concepts. This fact is very clearly set out in Capitalism, Socialism and Democracy thus:

The first thing to go is the traditional conception of the modus operandi of competition. Economists are at long last emerging from the stage in which price competition was all they saw. As soon as quality competition and sales effort are admitted into the sacred precincts of theory, the price variable

is ousted from its dominant position [that is, as in monopolistic competition]. However, it is still competition within a rigid pattern of invariant conditions, methods of production and forms of industrial organization in particular, that practically monopolizes attention. But in capitalist reality as distinguished from its textbook picture, it is not that kind of competition which counts.<sup>80</sup>

It will be recalled that McNulty, in his survey of competition in the history of economic thought, argued that the neo-classical concept was defined as "a hypothetically realized situation in which business rivalry, or competition in the Smithian sense, was ruled out by definition" and that the "single activity which best characterized the meaning of competition in classical economics - price cutting - becomes the one activity impossible under perfect competition."<sup>81</sup> Virtually the same type of reasoning is found in Schumpeter's critique, except that the frame of reference is even larger:

The introduction of new methods of production and new commodities is hardly conceivable with perfect - and perfectly prompt - competition from the start. And this means that the bulk of what we call economic progress is incompatible with it. As a matter of fact, perfect competition is and always has been temporarily suspended whenever anything new is being introduced ... even in otherwise perfectly competitive conditions.<sup>82</sup>

As Schumpeter puts it, perfect competition leaves no room for competitive strategy, and it is that strategy when put into effect that constitutes the very essence of competition:

Now a theoretical construction which neglects this essential element of the case neglects all that is most typically capitalist about it; even if correct in logic ... , it is like Hamlet without the Danish prince.<sup>83</sup>

However, Schumpeter's most mature and persuasive articulation of his Essentialist attack is to be found in the last pages of History of Economic Analysis. This last parting shot at the neo-classical concept has not received very much attention by reviewers of the book

or by the economic profession at large, no doubt for a variety of reasons the most probable of which is that it is not well advertised in the book but is hidden amongst his otherwise technical and congratulatory comments on neo-classical equilibrium topics.

That Schumpeter recognized neo-classical competition as a structural concept is, in a sense, formally articulated in his so-called "Principle of Excluded Strategy," which reduces to the condition that "firms have no choice but to adapt the quantities of commodities and services they wish to buy or sell to the prices that rule."<sup>85</sup> By specifying only adaptation to given costs, prices and technology, perfect competition thus ruled out not only product competition but also most possible forms of price or cost competition, that is, those founded on changes in technology. Yet, one might argue that some behaviour is contemplated in perfect competition, even if only a restricted, passive adaptation to given conditions. Apparently not, according to Schumpeter who chose to look upon both "pure monopoly and pure competition as limiting cases in which the content of actual business behaviour has been refined away."<sup>86</sup>

The passage that follows this latter statement is perhaps the most important set of statements that Schumpeter ever had to say about competition and, therefore, should and will be scrutinized most meticulously here and in later chapters.

Beginning with a fear referred to earlier in this thesis, Schumpeter continues in this way:

Should the reader feel that I am labouring to convey a distinction without a difference, he is requested to ask himself whether the definition of pure competition that has been given above really fits what we mean when talking about competitive business. ...

By posing that rhetorical question, Schumpeter is appealing to the criterion of intuitive adequacy (as reflected in ordinary discourse) in finding that the neo-classical concept is conceptually inadequate. This criterion, it was mentioned in Chapter 1, is very characteristic of an Essentialist outlook on the status of definitions, namely, that definitions of concepts can be considered true or false. This outlook is evidenced further by Schumpeter's question that follows. In this second rhetorical question, he is appealing to intuitive insight to support his claim about the ontological status of competition, about the "correct" definition of 'competition,' or about the real nature or meaning of the concept competition. He asks:

Is it not a fact that what we mean is the scheme of motives, decisions, and actions imposed upon a business firm by the necessity of doing things better or at any rate more successfully than the fellow next door; ...

and continues by asserting the absence of this meaning in the neo-classical concept of perfect competition:

... and that this pattern of behaviour would be entirely absent both in the cases of pure monopoly and pure competition, which therefore seem to have more claim to being called degenerate than to being called fundamental cases?<sup>87</sup>

In a concluding footnote, he identifies the type of conceptual error involved in the neo-classical process of "rigorously refining" the vague classical concept of competition into perfect competition. Schumpeter's choice of terms again confirms his Essentialist outlook:

The moral of this story is, of course [!], that dissecting a phenomenon into logical components and working out the pure logic of each may cause us to lose the phenomenon in the attempt to understand it: the essence of a chemical compound may be in the compound and not in any or all of its elements.<sup>88</sup>

It might be inferred plausibly from this that the "compound", competition, is a behavioural process (or series of events) and that the "elements,"

which the neo-classical economists mistook for the compound itself, are those states or conditions by which the neo-classical people constructed their static equilibrium theory, mistakenly believing that they had properly defined the compound in the process. Of course, this is an analogy and all analogies are but partial truths which break down when pushed too far; yet, the analogy is simple enough to express adequately the kind of conceptual error that Schumpeter attributed to the neo-classical school.

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To summarize, Schumpeter's critique of neo-classical competition has been articulated and analyzed into its Conventionalist and Essentialist aspects. Are these separate components of his critique mutually consistent or are they incompatible? If compatible, how can these apparently conflicting sides of Schumpeter's ambivalent attitude be reconciled with one another? If incompatible, how does one account for Schumpeter's fundamental inconsistency?

It will have become obvious by now that most of Schumpeter's points are methodological rather than factual or logical in nature. Questions such as those above will be treated in the following, transitional, chapter on Schumpeter's methodology in which the bridge connecting his critique with his own thinking on the nature of competition will be constructed.

Notes to Chapter 3

<sup>1</sup>One of Schumpeter's first major publications was the historical survey Epochen der Dogmen- und Methodengeschichte, whose published English title is Economic Doctrine and Method, (Tubingen: J. C. B. Mohr, 1914). Heinz Norden renders a more literal translation thus: Epochs in the History of Doctrines and Methods [of Economics]. (See E. Schneider, "Schumpeter's Early German Work, 1906-1917," tr. H. Norden, in Schumpeter, Social Scientist, ed. Seymour E. Harris (Cambridge, Mass.: Harvard University Press, 1951), p. 57).

<sup>2</sup>Schumpeter, "Science and Ideology," Essays of J. A. Schumpeter, ed. Richard V. Clemence (Cambridge, Mass.: Addison-Wesley, 1951), p. 267.

<sup>3</sup>ibid., p. 274

<sup>4</sup>Business Cycles (New York: McGraw-Hill, 1939), I, 41.

<sup>5</sup>History of Economic Analysis (New York: Oxford University Press, 1954), p. 968, and Essays, p. 126.

<sup>6</sup>ibid., p. 125, italics added.

<sup>7</sup>J. M. Clark, Competition as a Dynamic Process (Washington: Brookings Institution, 1961), p. 54.

<sup>8</sup>See History of Economic Analysis, p. 975.

<sup>9</sup>G. L. Nordquist, "The Break-up of the Maximization Principle," Quarterly Review of Economics and Business, V (Fall, 1965), 34.

<sup>10</sup>Capitalism, Socialism and Democracy (3d. ed., New York: Harper Torchbooks, 1962), pp. 77n. and 183.

<sup>11</sup>ibid., p. 81.

<sup>12</sup>Essays, p. 280.

<sup>13</sup>Capitalism, Socialism and Democracy, pp. 82n. and 85.

<sup>14</sup>See Economic Doctrine and Method, tr. R. Aris (New York: Galaxy Books, 1967), pp. 60, 188, 189.

<sup>15</sup>The Theory of Economic Development, tr. R. Opie (English ed.; New York: Galaxy Books, 1961), pp. 5, 30, 40n., 41. The English edition was made from the second (German) edition of 1926, and was first published in 1934. Chamberlin states that the footnote on p. 40 was added in 1934 to the English translation. Since that footnote contains the only reference to determinateness in that edition, we can therefore assume that Schumpeter did not have the question of determinateness in mind in his 1926 edition. See Chamberlin, "The Impact of Recent Monopoly Theory on the Schumpeterian System," Schumpeter, Social Scientist, p. 84.

<sup>16</sup>ibid., p. 83.



<sup>17</sup>"On the Concept of Social Value," Essays, p. 15.

<sup>18</sup>Chamberlin's thesis, eventually to be published in revised form as The Theory of Monopolistic Competition (1st ed., Cambridge, Mass.: Harvard University Press, 1933), was written at Harvard under the direction of Professor Allyn Young and was submitted in April, 1927 and thereafter consulted widely in unpublished form. Schumpeter was a visiting professor at Harvard during 1927 (see Schumpeter, Social Scientist, p. x) and made reference to the unpublished thesis in his 1928 article, "The Instability of Capitalism," (Essays, p. 56n.). Moreover, Schumpeter is acknowledged in the Preface to the first edition of Chamberlin's book for "advice and suggestions," but his name does not appear in Chamberlin's Appendix H of the eighth edition in which he discusses the ultimate origins and influences contributing to his thesis. From this evidence, it is uncertain whether Schumpeter contributed directly to Chamberlin's original thesis while at Harvard. For details, see the eighth edition, pp. xii, 292ff.

<sup>19</sup>See, for example, "The Instability of Capitalism," (1928) Essays, pp. 50f., 55ff.; his preface to F. Zeuthen, Problems of Monopoly and Economic Warfare (1930) (New York: A. M. Kelley Reprints, 1968), pp. x-xii; "The Nature and Necessity of a Price System," (1934) Essays, pp. 121-4; and "Review of Robinson's Economics of Imperfect Competition," (1934) Essays, p. 126.

<sup>20</sup>Business Cycles, I, 46 and most of ch. 2.      <sup>21</sup>ibid., p. 36n.

<sup>22</sup>Capitalism, Socialism and Democracy, pp. xiv, 163 n.1.

<sup>23</sup>Business Cycles, I, 42 n.2.

<sup>24</sup>See below, pp. 89-91, and History of Economic Analysis, p. 975.

<sup>25</sup>ibid., p. 827.

<sup>26</sup>Essays, p. 126.

<sup>27</sup>The Theory of Economic Development, chs. 1-2, especially pp. 62ff. For the question of the appearance of determinateness, see note 15.

<sup>28</sup>Essays, pp. 50-51.

<sup>29</sup>ibid., p. 55.

<sup>30</sup>ibid., pp. 126, 131.

<sup>31</sup>Business Cycles, I, 46.

<sup>32</sup>History of Economic Analysis, pp. 967-71, 975.

<sup>33</sup>Business Cycles, I, 47.

<sup>34</sup>Essays, p. 125, italics added.

<sup>35</sup>"Preface" to Zeuthen, op. cit., p. ix, italics added.

<sup>36</sup>Essays, p. 123.

<sup>37</sup>See above, pp. 16ff.

<sup>38</sup>John Passmore, A Hundred Years of Philosophy (Penguin Books, 1968), pp. 326-27. For Schumpeter's knowledge of Poincaré, see History of Economic Analysis, pp. 15, 828, 1055.

<sup>39</sup>Business Cycles, I, 46 n.2, italics added.

<sup>40</sup>ibid., I, 160. Elsewhere in the same volume (p. 65), he wrote:

Since in practice almost every firm either actually produces, or at very short notice is able to produce, any of a wide variety of commodities or qualities, some of which are, as a rule, almost perfect substitutes for the products of its competitors, its price and quantity adjustments will not in general differ fundamentally from those that it would have to make under conditions of perfect competition. That is to say, if we do insist on using the language of the theory of monopolistic competition, the demand curves for the products of individual firms will, in general and in the long run, display a high elasticity, though not the infinite one of the pure logic of competition. And this, in turn, will enforce approximate realization of the results of perfect competition that follow from it.

<sup>41</sup>See below, p. 79.

<sup>42</sup>Capitalism, Socialism and Democracy, p. 77 n. 2.

<sup>43</sup>ibid., italics added.

<sup>44</sup>ibid., p. 103, italics added.

<sup>45</sup>ibid., p. 79. See also ibid., p. 194.

<sup>46</sup>See above, pp. 72-73.

<sup>47</sup>Capitalism, Socialism and Democracy, p. 81.

<sup>48</sup>Essays, p. 122.

<sup>49</sup>"Preface" to Zeuthen, op. cit., p. ix.

<sup>50</sup>History of Economic Analysis, p. 972.

<sup>51</sup>Business Cycles, I, 46 n. 2. See also note 40.

<sup>52</sup>Essays, p. 126, italics added.

<sup>53</sup>ibid., p. 122.

<sup>54</sup>Capitalism, Socialism and Democracy, pp. 103-04, 194.

<sup>55</sup>ibid., p. 85.

<sup>56</sup>ibid., p. 83n.

<sup>57</sup>In the preface to the second edition of Capitalism, Socialism and Democracy (1947), he complains: "I thought I had taken every care to make it quite clear that this is not a political book and that I did not wish to advocate anything."

<sup>58</sup>ibid., especially pp. 78, 106.

<sup>59</sup>ibid., p. 63.

<sup>60</sup>ibid., p. 103.

<sup>61</sup>ibid., p. 83, italics added.

<sup>62</sup>ibid., p. 77 n. 5, italics added.

<sup>63</sup>ibid., p. 106.

<sup>64</sup>The literature, both theoretical and empirical, on the relationships between (1) firm size, (2) technical progress, and (3) industrial concentration is now very extensive. It was not, prior to 1942 and Schumpeter's provocative thesis literally provoked much of the ensuing study of the subject, as is attested to by most of the writers in this field. There is yet much agreement over the empirical details in all their ramifications, but there seems to be a growing consensus that Schumpeter's thesis, while not totally wrong, is much too over-simplified. Of the numerous empirical studies to date, perhaps the best to cite here are: National Bureau of Economic Research, The Rate and Direction of Inventive Activity, vol. 13, Special Conference Series (Princeton: Princeton University Press, 1962); and Edwin Mansfield, The Economics of Technological Change (New York: W. W. Norton, 1968).

<sup>65</sup>Capitalism, Socialism and Democracy, p. 106.

<sup>66</sup>ibid., pp. 90n, 101 n. 20.

<sup>67</sup>ibid., p. 82.

<sup>68</sup>ibid., pp. 103-04, 194.

<sup>69</sup>Essays, p. 280.

<sup>70</sup>Capitalism, Socialism and Democracy, p. 76n.

<sup>71</sup>Essays, p. 22n.

<sup>72</sup>Capitalism, Socialism and Democracy, p. 73.

<sup>73</sup>See above, p. 15. Schumpeter's quote is from Business Cycles, I, 64, italics added.

<sup>74</sup>See, respectively, Business Cycles, I, 42, 47, 56; The Theory of Economic Development, p. 62; History of Economic Analysis, p. 972.

<sup>75</sup>Business Cycles, I, 47.

<sup>76</sup>Capitalism, Socialism and Democracy, p. 84. <sup>77</sup>ibid., pp. 83-4.

<sup>78</sup>History of Economic Analysis, pp. 920, 966-7.

<sup>79</sup>Chamberlin, "The Impact of Recent Monopoly Theory on the Schumpeterian System," Schumpeter, Social Scientist, p. 88.

<sup>80</sup>Capitalism, Socialism and Democracy, p. 84, italics added.

<sup>81</sup>McNulty, "A Note on the History of Perfect Competition," Journal of Political Economy, LXXV (August, 1967), 398, and by the same author "Economic Theory and the Meaning of Competition," Quarterly Journal of Economics, LXXXII (November, 1968), 649. See also above, pp. 49-51.

<sup>82</sup>Capitalism, Socialism and Democracy, p. 105, italics added.

<sup>83</sup>ibid., p. 86.

<sup>84</sup>The passage referred to (History of Economic Analysis, pp. 974-5) is tucked away inconspicuously in the middle of his extensive and very technical discussion of his chapter, "Equilibrium Analysis."

<sup>85</sup>History of Economic Analysis, p. 972.      <sup>86</sup>ibid., p. 975.

<sup>87</sup>ibid., italics added.

<sup>88</sup>ibid., p. 975n., italics added.

## Chapter 4

### SCHUMPETER'S METHODOLOGY

#### 1. Pure Theory and Grand Analysis

Schumpeter had a great deal to say about methodology; in fact, almost too much. Most of his methodological pronouncements are to be found as mere obiter dicta, conveniently interspersed throughout his other work to support his analysis as needed, and rarely were they developed for their own sake in a comprehensive manner. Ironically, Schumpeter often wrote of his reluctance to become involved in methodological controversy, an outlook probably reflecting both his exasperation caused by the pointlessness of the Methodenstreit, which raged furiously between the Historicist and Austrian schools towards the end of the century, and his disappointment at the lack of success of his first and only treatise on method, Das Wesen (1908), in which he tried to reconcile those two divergent schools of thought.\*<sup>1</sup>

On more than one occasion did he "renounce completely ... the armor of methodological commentaries."<sup>2</sup> Yet, despite this reluctance, he could not resist the temptation and, at almost every turn, resorted to them. Machlup noted, in this respect, that:-

Schumpeter spoke sometimes of the sterility of methodological debates, and once he wrote: "Not the first, but the last chapter of a system should deal with its methodology." Yet his very first article as well as his first book were on the methodology of economics; and indeed almost everything he ever wrote contained general methodological discussions or comments.<sup>3</sup>

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\*Footnotes for Chapter 4 are located on pp. 143-48.

In his final work, History of Economic Analysis, Schumpeter turned once more to methodology, restating his views in an extended fashion throughout Part I, "Scope and Method," stating his "last word" on the subject several times thereafter in the same work.

All of this might suggest that Schumpeter advanced a well-developed and coherent position on methodology, but, unfortunately, such is not the case. Instead, during his career, he embraced at one time or other numerous positions which, at best, could be said to be difficult to reconcile. This does not mean that he changed his mind, as one is always entitled to do. Key passages from Das Wesen are remarkably similar to those in History of Economic Analysis,<sup>4</sup> and several themes can be found throughout his methodological commentaries. It does mean, however, that Schumpeter could articulate two or more conflicting interpretations in the same work.

In his article, "Schumpeter's Economic Methodology," Fritz Machlup correctly diagnoses this tendency as "methodological tolerance," but he mistakes Schumpeter's conciliatoriness and his "rejection of absolutism in economic methodology" for a "superior understanding of general epistemology and scientific method" when, in fact, it is a "weak eclecticism" that Machlup refuses to attribute to him.<sup>5</sup>

Schumpeter's tolerance appears to have been motivated by the desire for economists to achieve a basic consensus on the fundamental nature of their field such as he believed to be the case in physics. (Schumpeter reflected a widespread tendency among mathematical economists to view physics as the paradigm of all sciences, economics included, and in his earlier years he even believed that economics was closer,

methodologically, to the physical sciences than to the other social sciences.<sup>6)</sup> But Schumpeter's desire for consensus often led him into the diplomatic role of attempting to reconcile opposing schools of thought. His early experience with the Methodenstreit is a case in point. The most notable example, however, is his review of Mitchell's Business Cycles in which he tried diligently, with the utmost in tact and courtesy being accorded to both sides, to reconcile the extreme descriptive empiricism of Mitchell with the abstract theorizing of the neo-classical school.<sup>7</sup> Schumpeter's search for harmony in the economic profession is very much in evidence in the "absolutist"<sup>8</sup> interpretations of his History of Economic Analysis.

Moreover, Schumpeter's desire for consensus and peaceful co-existence between the various branches of economics was rooted in his concern for the separate status of economics as a distinct science. Hence, his emphasis on general equilibrium as the Magna Carta of economics, its assurance of logical autonomy, and his efforts to define 'economics' and to establish the boundary between pure economics and applied analysis, as discussed below. Schumpeter defined economics as a particular field of knowledge, but he was prone to equate it all the same with activity of a distinct group of specialists, set off from the common man by their familiarity with the technique of economics.<sup>9</sup>

So concerned was he for the professional status of economics, that his outlook on the establishment of methodological canons came close to being one of weak relativism in which mere agreement amongst economists, rather than a sound intellectual demonstration, was the determining factor.<sup>10</sup> "Science is technique," he proclaimed,<sup>11</sup> and tended to treat methodology as if it were a matter of technique.

In his appraisal of Schumpeter's methodology, Machlup took no account of a well-established distinction between 'methodology' and 'method,' a distinction which on a later occasion he drew as follows:

I have an opportunity to make another plea for sanity in the use of language. ... I refer, of course, to the misuse of the word "methodology" when actually "method" or "technique" is meant.

Methodology ... is a branch of philosophy or of logic. ... Semiliterates adopt the word when they are concerned neither with philosophy nor with logic, but simply with methods. Instead of "statistical techniques" they would say "statistical methodology" and instead of "research methods" they love to say "research methodology." They do not understand that the same method may be justified on very different methodological grounds, and that from the same methodological position one may defend different methods of research.<sup>12</sup>

With this in mind, could Machlup or anyone else possibly conceive of suggesting that Schumpeter was "semi-literate"? It goes without saying that Schumpeter was extremely literate and possessed an encyclopedic knowledge of the history of economic thought which, in all likelihood, will not be equalled. Yet, it is simply a fact that Schumpeter was essentially a literary economist and not a logician. This explains the fact that he could be very widely read on matters of economic methodology and not perceive the basic contradictions between opposing positions.

Thus, the basic tension underlying Schumpeter's outlook on neo-classical competition can be traced to the conflicting methodological arguments that he, at one time or another or simultaneously, appealed to. The tension is rooted deeper still in his two primary objectives which he found very difficult to reconcile for his own purposes: One was his concern for establishing the logical autonomy of economics; the other, his desire for a comprehensive, almost all-encompassing account of economic reality in its historical context.



In this way, Schumpeter was truly obsessed with the twin problems of (1) drawing the boundary line between what is "purely economic" and "non-economic," and (2) integrating purely economic analysis with other historical facts, not in an inter-disciplinary fashion (for that would indirectly threaten the separate status of economics), but rather in an "applied" analysis of economic phenomena in a total sense of pursuing causal chains to their links with non-economic factors.

It is not surprising, then, that Schumpeter's work on economic theory and applied analysis is a curious amalgam of "pure theory" (as he was fond of calling it) and "grand analysis," as his applied analysis might be termed. On the one hand, he opened his Theory of Economic Development with the portentous statement that "the social process is really one indivisible whole", claiming on that basis that "the argument of the book forms one connected whole."<sup>13</sup> On the other hand, he stressed that the "fundamental problem of all economic theory is always to show that economic life is not chaotic but proceeds according to certain rules which may be formulated in a general way," that is, that "economic events have a logic all their own."<sup>14</sup>

On the one hand, he would say at the end of his career that were he to choose all over again between economic history, statistics or theory he would choose the first, for "the subject matter of economics is essentially a unique process in historic time."<sup>15</sup> On the other hand, he wrote in 1946:

The highest ambition an economist can entertain who believes in the scientific character of economics would be fulfilled as soon as he succeeded in constructing a simple model displaying all the essential features of the economic process by means of a reasonably small number of equations connecting a reasonably small number of variables.<sup>16</sup>

Schumpeter looked to simplicity as the criterion for an ideal pure theory of economics, but sought complexity in accounting for the total reality of economic phenomena. How did he try to reconcile these two contrasting (if not conflicting) viewpoints? His reasoning can be summarized very concisely this way: In reality, the subject matter of economics (that is, the actual phenomena in the world which economists study) does not constitute a causally closed system, being an integral part of a total social system, but for the purposes of pure theory it can be treated as if it were such a closed system.

That rationale serves to explain the paradox that on matters of pure theory Schumpeter could be the most inveterate conservative, while at the same time on matters of applied analysis he could be astoundingly radical (as in Capitalism, Socialism and Democracy).

However, Schumpeter's rationale leaves two questions to be answered: What are the "purposes of pure theory" and how can the subject matter be treated "as if" it were a closed system when, admittedly, it is not?

To tackle both of these questions, one must determine what Schumpeter thought the status of economic theory to be. This is attempted in the following section, where the Conventionalist-Essentialist ambivalence arises once more. The picture is, however, complicated by the appearance of several other strands of philosophical thought.

## 2. The Status of Theory

At least two basic questions can be raised in regard to the status of theory.<sup>17</sup> First, there is the ontological question: What is theory? Or, What is the nature of theory? Then, there is the epistemological question: How do we know that or verify that a theory is tenable or not? That is, how are theories established or refuted?

Directed to Schumpeter's methodology, these questions can be given neither brief nor unequivocal answers, for there are to be found in Schumpeter's commentary many contrasting and confusing statements. This conclusion has been corroborated by Hans Aufrecht in his lengthy and detailed article, "The Methodology of Schumpeter's History of Economic Analysis,"<sup>18</sup> although the emphasis of that study is along lines somewhat different to the ones to be pursued here.

Many, in fact nearly all, of the major philosophical schools of thought of the twentieth century can be found, in varying degrees of importance, in Schumpeter's reasoning. Chief among these are two streams: the Anglo-American version of Idealism and the Conventionalism of Poincaré which, in turn, is intellectually very closely related to the Instrumentalism of Dewey and American Pragmatism in general. In addition, much weaker traces of both British Empiricism and Viennese Logical Empiricism (or Logical Positivism) can be detected. Yet, in contrast to Schumpeter's claim as to the empirical nature of economic science, it is surprising how little those two forms of empiricism influenced his thinking along methodological lines.<sup>19</sup>

In order to cut through this tangled maze, it will be very useful to begin in terms of three theories of truth and verification,

which, in many ways, correspond closely to the types of issues raised by Schumpeter's methodology. This can be done with the minimum of philosophical terminology and in a fairly concise manner. The brevity of the following summaries does some violence to the complexity of each of the theories involved, but it must and will suffice for a treatment of Schumpeter's work. The three theories and their main philosophical affiliations, then, are as follows:<sup>20</sup>

#### Correspondence Theory

This is also known as the "objective" theory of truth, and is widely accepted as the common-sense interpretation (even by those who reject it on other grounds), and is associated with both British and Logical Empiricism. It maintains that truth is a relation of correspondence (agreement or "fitting") between (1) propositions (statements, claims) about the world and (2) phenomena in the world which are referred by the propositions. Thus, statements are said to be true if they "fit the facts" and are verified principally by observation.

#### Coherence Theory

This is associated with Idealism, maintaining that truth is a relation of coherence (consistency) solely between statements. A set of statements are said to be true if they "cohere" with one another. It emphasizes intuition (intellectual insight) in the conceptualizing of observations into a logically consistent framework. Thus, intuitive acceptability and logical consistency are the chief criteria for verification.

#### Pragmatic Theory

Associated with both American and European Pragmatism and indirectly with Conventionalism, it maintains that truth is the property of beliefs which makes them useful. A belief is true if there are useful consequences (or "cash value" to use James's famous term) in acting upon it. It stresses prediction, experimentation and "workability" or practicality in acting upon beliefs which are assumed to be true as working hypotheses, as the criteria of verification.

The purpose of the examination to follow is not to assess the over-all cogency of Schumpeter's methodology by appealing to the relative merits of these theories and the degree to which Schumpeter

based his case on any one of them. Instead, it is to show that his methodology is an amalgam of all those separate and competing schools of philosophy mentioned above.

His History of Economic Analysis is the principal reference, but other works are cited. This does not unjustly bring together elements of his thought from different periods of time because all of those elements are to be found in the History. Even so, a brief sketch of his intellectual development along these lines might be useful. In Das Wesen, he first embraced a form of Conventionalism, with traces of Logical Positivism and Idealism also being found there. During the long period of defense of perfect competition (1928 to 1939), his Conventionalist leanings are, of course, most evident. Capitalism, Socialism and Democracy contains no methodological commentary. History of Economic Analysis displays all of the aforementioned influences, but both an Idealist (Essentialist) and Conventionalist viewpoint are expressed very forcefully.

The following analysis will be lengthy, difficult and, at times very unsatisfying. The kind of conclusions that will be striven for are answers to these kinds of questions: Do theories (according to Schumpeter) advance truth-claims? If so, what kind (merely logical, empirical, or otherwise)? And, how are they verified (by reasoning alone, by prediction and observation, etcetera)? The analysis begins on a familiar Conventionalist note, moves through some ambiguously answered Empiricist questions, and arrives finally at a full-blown Idealist theory of theories.

Now, to the question "What are theories?" Schumpeter gave at least one persistent answer throughout his career. Theories are

analytical "tools," or devices, instruments, gadgets, that is, creations of the analyst's discretion and designed for a particular purpose.<sup>21</sup> It should be noted, in this respect, that Schumpeter treated 'theory' as synonymous with 'model' and 'analysis,' 'theorizing' with 'model-building,' and 'analytical' with 'scientific.'<sup>22</sup>

Schumpeter's favorite analogy was theory as an "engine of analysis," and he spoke of "Mrs. Robinson's unsurpassably felicitous phrase, economic theory is a box of tools" very often.<sup>23</sup> Expanding on the metaphor, he wrote:

Economic theory is ... a box of analytic tools. And these tools are not a heap of disconnected elements but form an engine. This engine grinds out results, within wide limits, no matter what the concrete problem is that is fed into it. ... Hence the engine, within those wide limits, may be constructed once for all to stand ready for use whenever needed for an indefinite variety of purposes.<sup>24</sup>

Analogy is not analysis and, as the philosopher Morris Cohen has pointed out, "metaphoric expressions are harmless if we fully recognize that they are not literal truths."<sup>25</sup> What Schumpeter tried to emphasize was that theories are arbitrary creations. In Das Wesen he wrote:

What a theorist aims at with a theory is a question which is always decisive for its understanding. We do not tire of emphasizing that every theory is a creature of arbitrariness - artificially made for a definite purpose - and it is clear that it can be fully understood only from the standpoint of this purpose.<sup>26</sup>

And, in History of Economic Analysis, he repeated that "in strict logic they are arbitrary creations of the analyst."<sup>27</sup> Thus, economic theory is "such a simple and harmless sort of thing."<sup>28</sup>

Yet, at the same time, he did insist that theory had purpose and, therefore, could be deemed "useful," and thereupon cited a

well-known simile of Poincaré, without reconciling arbitrariness with specific usefulness:

Tailors can cut suits as they please; but of course they try to cut them to fit their customers.<sup>29</sup>

Perhaps Schumpeter's reference to arbitrariness was not well-chosen and there is no real inconsistency here. At any rate, Schumpeter's Conventionalism is readily apparent here. Are then theories those working hypotheses which, according to the Pragmatic theory of truth, are verified as useful, and hence true, by their workability and by their success as predictions?

Although he judged theory by its usefulness, Schumpeter did not accept the Pragmatic criterion, for time and again he would caution that the business of the theorist was totally separate from "direct practical aim" and the "burning questions of the day."<sup>30</sup> Moreover, in Business Cycles, he argued that prediction was not the criterion of verification.<sup>31</sup> In this way, Schumpeter pointed not to the practical usefulness of theory but to its intellectual usefulness in aiding "understanding" of economic phenomena.<sup>32</sup> For example, he cited Marshall's position to the effect that "economic theory is not universal truth but 'machinery of universal application in the discovery of a certain class of truths.'"<sup>33</sup>

Thus, it might seem that Schumpeter argued that theory advanced no truth-claims at all. He did offer four definitions of science, all of which referred to "knowledge;" yet, this might be reconciled with the "no truth-claim" interpretation by distinguishing between two kinds of knowing: "knowing that ..." and "knowing how ... ." In the latter sense of knowing, Schumpeter spoke of science as "tooled know-

ledge, that is, being defined by the criterion of using special techniques,"<sup>34</sup> and, on another occasion, he even equated economic theory with refined technique.<sup>35</sup>

To this point, Schumpeter's rationale appears at least internally consistent, even if not convincing or persuasive. There are, however, two serious problems with this interpretation to be accounted for. First, it must yet be shown how theories are useful, that is, what function they serve, before they can be said to be verifiable. In other words, however reluctant Schumpeter may have been to do so, he must commit himself in some way as to how his theories can be either established or refuted. Second, Schumpeter said a great deal more about theories which indicate that they do, in fact, make truth-claims of a sort. The question of function or usefulness is treated first and leads eventually to the question of truth-claims.

Schumpeter was never very explicit about the purpose that theory was to serve; one has to hunt beyond his formal statements on methodology to find clues. Nevertheless, one source of usefulness is cited within the body of his methodological commentary in History of Economic Analysis which is, as far as it goes, quite consistent with his Conventionalist outlook. He appeals to the dictum of the celebrated Austrian physicist-philosopher, Ernst Mach, to the effect that every theoretical science is a device for effecting a tremendous amount of economy of mental effort in dealing with the study of phenomena which are inherently complex.<sup>36</sup> Simplification is thus one purpose of theory, and in this way one would point to the favourable taxonomic features of theory, that is, its ability to structure facts in an orderly and intelligible classification scheme. In other contexts, Schumpeter



implied as much, in fact, even more than this and in such a way that this type of usefulness stands closer to a coherence theory of truth rather than a Conventionalist rationale of theory. This is especially so when Schumpeter discusses the relationship between theory and facts. That same relationship also brings into focus another aspect of the usefulness of theory that, on occasion, Schumpeter pointed to. This was the heuristic value of theory.

With the heuristic value of theory in mind, he argued that theorizing consisted of two "different though inseparable activities," the first being the construction of theoretical models, the second consisting in "hunting for further empirical data (facts) with which we enrich and check the ones originally perceived."<sup>37</sup> In this sense, he described theory as an "instrument of research,"<sup>38</sup> and as a "way of handling a given set of facts for given purposes."<sup>39</sup>

However, beyond suggesting lines of research, the relationship between theory and facts was a reciprocal one: the facts also invite revision of theories:

It stands to reason that these two activities are not independent of one another but that there must be an incessant give and take between them. Attempts at conceptualization invite the hunt for further facts and the new facts discovered must themselves be inserted and conceptualized. In an endless sequence both activities improve, deepen, and correct the original vision and also each other's results.<sup>40</sup>

"Factual" and "theoretical" research ... go on in an endless chain of give and take, the facts suggesting new analytic instruments (theories) and these in turn carrying us toward the recognition of new facts.<sup>41</sup>

Now, this reciprocal relationship might suggest but does not necessarily imply a correspondence theory of truth; new facts may only point up the inadequacy of a theory as a taxonomic device, without

implying in the process that the theory in question advances any truth-claims. Yet, the relationship does seem to point to the Empiricist criterion of verification, namely, observation of "the facts."

Several passages from History of Economic Analysis tend to support this suspicion. For example, referring to "'empirical' or 'positive' science," he writes:

Its rules of procedure ... reduce the facts we are invited to accept on scientific grounds [his emphasis] to the narrower category of 'facts verifiable by observation or experiment'; and they reduce the range of admissible methods to 'logical inference from verifiable facts.' Henceforth we shall put ourselves on this standpoint of empirical science, at least so far as its principles are recognized in economics.<sup>42</sup>

Later, he writes of factual and theoretical work "testing one another" and of economic theory, like any other theory, being "founded upon observation."<sup>43</sup> But in that same work he gave other indications of rejecting the Empiricist criterion.<sup>44</sup> In Business Cycles, this rejection was quite explicit. Instead of an inaccurate summary, the relevant passages from his text are re-produced here:

We cannot enter here into the epistemological problem of the relation between "theory" and "facts." ... [But] the term verification does not accurately describe that relation. ... Facts ... cannot be said to fill quite satisfactorily the function that theorists usually assign to them - the function of verification. For there is, along with Nonsense Induction, such a thing as Spurious Verification. ... No statistical finding can either prove or disprove a proposition which we have reason to believe by virtue of simpler and more fundamental facts.<sup>45</sup>

Passages in History of Economic Analysis, to be treated presently, leave it clear that Schumpeter by no means meant to limit this statement to business-cycle theory only and that by "more fundamental facts" he meant not the facts of observation but, rather, those of introspection.

In spite of all of this evidence, there are passages which

do suggest that Schumpeter thought in terms of a correspondence theory of truth with regard to theory. In Das Wesen, he wrote:

To be sure, neither our 'assumptions' nor our 'laws' lie in the real world of phenomena. ... But this does not preclude them from fitting the facts. How can this be? Simply because in constructing our schema we proceeded, no doubt arbitrarily, but reasonably in that we designed the schema with the facts in mind. ... On the one hand, our theory is in essence arbitrary, and on this are based its system, its rigor, and its exactness; on the other hand, it fits the phenomena and is conditioned by them, and this alone gives it content and significance. [his emphasis]<sup>46</sup>

With the same idea in mind, one might also point to Schumpeter's appeal to Poincaré's simile, cited earlier, of the tailor fitting the suit (theory) to the man (facts). However, this "fitting" could also be construed simply as the taxonomic character of theory, without any suggestion of truth-claims other than the "true fit" of the theoretical classification scheme to the phenomena observed.

Thus far, it seems a very ambiguous kind of "standpoint of empirical science" that Schumpeter chose: not only did it rule out verification by observation but also no definite indication has been given that theory advances any truth-claims at all, let alone those based on the "objective" or correspondence theory of truth. According to the interpretation presented so far, Schumpeter could claim that "there is not and there cannot be any fundamental opposition between 'theory' and 'fact finding'"<sup>47</sup> solely on the basis that theories were instruments used in the process of fact finding. That "epistemological problem of the relation between 'theory' and 'facts'" has yet to be solved in Schumpeter's methodology. The clue to its solution is in the different kinds of facts and the different ways that we come to "know" the facts that Schumpeter had in mind.

In order to approach that solution, the evidence that suggests

that Schumpeter did believe that theory did advance truth-claims must be brought under scrutiny.

Now, in this respect, Schumpeter encountered a great deal of difficulty in accounting for what he termed "explanatory hypotheses." On several occasions, he insisted that the framing of such hypotheses, contrary to a widespread belief amongst economists, was neither the sole nor main business of the theorist and was subordinate to the instrumental function of theory.<sup>48</sup> Yet, even in the interpretation of theories as models, in the instrumental sense, Schumpeter admitted that explanatory hypotheses entered as axioms in the axiom-theorem set that constituted the theory; such axioms were truth-claims, for they were "propositions" about the relations between concepts.<sup>49</sup>

To confirm that he did believe theories advanced truth-claims, Schumpeter pointed to at least two other functions of theory; these were the functions of description and explanation. Regarding the former, Schumpeter stated that models were "intended to portray certain aspects of reality and take some others for granted."<sup>50</sup> Quite clearly, then, theory was not intended as a total representation of reality but had a selective purpose.

Were this descriptive function to leave any doubt about the claim to truthfulness made by theory, Schumpeter's comments on the explanatory function would soon remove that doubt. At one point in his History of Economic Analysis, he as much as defines "Scientific or Analytic Economics" as "the stock of facts and methods that economists collect with the purpose of explaining the phenomena of economic life,"<sup>51</sup> [his emphasis]. At another point, he expels any doubt that "explaining" applies to theory:

In research work we sometimes speak of rationalization when we mean the attempt to link a set of empirical findings to some theoretical principle that is to explain them. Thus, we say that we rationalize observed business behaviour by the principle of profit maximization.<sup>52</sup>

This might suggest further that these axioms, or explanatory hypotheses, are tested and verified by their "fitting the facts" in a correspondence-theory sense, but apparently not so, for they are said to "be formulating the logic of the situation and a result that is true, just as in a rule of general logic, independently of whether or not anyone ever acts in conformity to [them]."<sup>53</sup> Thus, he terms these axioms "logical norms or ideals," and unlike another class of economic statements, they are not based directly upon observation. Instead, they are "induced" or "suggested" by observation, but are still "arbitrary creations of the analyst" which, nevertheless, make claims about economic reality in as much as "the facts observed enter theory as hypotheses or assumptions or 'restrictions,' that is to say, as generalized statements induced or suggested by observation."<sup>54</sup>

In short, just what kind of truth-claims are these axioms which are, at one and the same time, logical in nature, about reality and yet not verifiable by observation? All of the remaining comments on methodology in this section will point to these axioms as being a form of intuitive knowledge about economic reality and, as such, judged according to the Idealist's coherence theory and criterion of truth.

Now, two sources of knowledge and two corresponding types of truths are recognized, in the Western rational-empiricist tradition, as coming firmly within the boundaries of empirical science, namely, reason (and logical truths) and observation or perception (and empirical

truths). The status of a third source of knowledge has long been a bone of contention: intuition or man's "inner eye." The nature of the truths to be associated with intuition has also been a source of much controversy. Idealism, on the one hand, stresses this third cognitive faculty while, on the other, most versions of rational-empiricism either reject it or minimize its importance. In this sense, Schumpeter stood firmly in the Idealist tradition.

(It might be pointed out, parenthetically, that the issue of the status of intuitive knowledge in many ways reduces, formally, to the Conventionalist-Essentialist debate over the status of definitions as outlined in Chapter 1. The Idealist is, in this sense, of an Essentialist outlook, while most versions of rational-empiricism take a Conventionalist or Nominalist standpoint.<sup>55</sup>)

Schumpeter's appeal to intuition as the main source of knowledge for theoretical economics became explicit only during the latter years of his life when he began to grapple with the problem of ideology. In History of Economic Analysis, he enunciates virtually the same position as he took in his article, "Science and Ideology," which, of course, was written during the same period as was the History. Ideology is not a subject for this thesis, but his remarks pertaining to it relate very closely to the question of intuition. First, the flavour of Schumpeter's intuitional approach can be sensed by a brief glance at his 1949 article.

Initially, Schumpeter reveals a skeptical attitude toward Mannheim's solution, in Ideology and Utopia, to the problem of discovering the "objective truth" in the social sciences through a study of the sociology of knowledge and the subsequent elimination of

ideological bias. However, Schumpeter does not thereby embrace a relativist position regarding truth in the social sciences: he was a "realist," all the same, notwithstanding his Idealist tendencies, for he did believe in an objective truth. He merely rejected Mannheim's solution and his criterion of truth, namely, that which is to be found in the "investigation of the object" itself.<sup>56</sup> Schumpeter's own position on the nature and criterion of truth as enunciated in the pages of "Science and Ideology" is as difficult to articulate as is that of the coherence theory of the Idealist tradition, for they amount to one and the same thing. Rather than paraphrasing, key passages are re-produced here:

Scientific procedure ... starts from the perception of a set of related phenomena which we wish to analyze and ends up - for the time being - with a scientific model in which these phenomena are conceptualized and the relations between them explicitly formulated, either as assumptions or as propositions (theorems). ... That perception of a set of related phenomena is a pre-scientific act. It must be performed in order to give to our minds something to do scientific work on - to indicate an object of research - but it is not scientific in itself. But though prescientific, it is not preanalytic ["prescientific cognitive" as at the end of this quotation]. ...

This mixture of perceptions and prescientific analysis we shall call the research worker's Vision or Intuition. In practice, of course, we hardly ever start from scratch so that the pre-scientific act of vision is not entirely our own. We start from the work of our predecessors, etcetera ... . In this case our vision will also contain at least some of the results of previous scientific analysis. ...

Since normally this vision is then subjected to scientific treatment, it is being either verified or destroyed by analysis. ... This [scientific] treatment itself is under objective control in the sense that it is always possible to establish whether a given statement, in reference to a given state of knowledge, is provable, refutable, or neither. [that is, the coherence criterion of truth as consistency between a set of statements]. ...

There is little comfort in postulating, as has been done sometimes, the existence of detached minds that are immune to ideological bias ... . There is more comfort in the observation that no economic ideology lasts forever. ... Since this [prescientific cognitive act which we have called vision] induces fact finding and

analysis and since these tend to destroy whatever will not stand their tests, no economic ideology could survive indefinitely even in a stationary world. As time wears on and these tests are being perfected, they do their work more quickly and more effectively.

That prescientific cognitive act which is the source of our ideologies is also the prerequisite of our scientific work. No new departure in any science is possible without it.<sup>57</sup>

Schumpeter's restatement of this position in his History of Economic Analysis is remarkably similar but more elaborate and a trifle more intelligible. In addition to the traditional sources of knowledge, he argues, economics enjoys a further "source of information," namely, man's "extensive knowledge of the meanings of economic actions" (his emphasis) whose existence "can hardly be denied."<sup>58</sup> This source is identified not only with knowledge of the psychic processes which motivate man, he continues, but also another kind of knowledge: a type of knowledge which is "more akin to logic." His example of this kind of knowledge, the marginal conditions of profit maximization under pure competition, suggests that he had in mind knowledge of the logical truth of inferences drawn from formal definitions of concepts. This Essentialist interpretation serves to explain why he could view the axioms of economic theory (including such formal definitions of concepts) as being logical in part, about reality and yet not refutable by direct reference to the facts.

Schumpeter attempts, at one point, to give these axioms or "logical norms" an empirical interpretation:

It would no doubt be possible to assimilate both types of theory by interpreting the logical norms also as 'purifying' generalizations from observational data, if need be, from observations that are subconsciously stored up by common experience.

Whatever that may mean, he abandons this empirical interpretation for a frankly intuitive one:



On the whole, however, it seems better not to do so but to recognize frankly that we have, or think we have, the ability to understand meanings and to represent the implications of these meanings by appropriately constructed schemata.<sup>59</sup>

First of all, the term 'meanings' in this passage can be interpreted very plausibly as 'concepts' since there is a sense in which concepts are merely meanings. Second, did Schumpeter realize that he was admitting into scientific analysis what can only be called "a priori knowledge"? A priori knowledge has long been understood as a kind of intuitive, introspective apprehension of the necessary relations or connections between concepts. Further passages from History of Economic Analysis show that Schumpeter entertained this possibility very seriously. Two widely separate passages are cited:

In every scientific venture, the thing that comes first is Vision. That is to say, before embarking upon analytic work of any kind we must first single out the set of phenomena we wish to investigate, and acquire 'intuitively' a preliminary notion of how they hang together or, in other words, of what appear from our standpoint to be their fundamental properties. ... Model building [constitutes] conscious attempts at systematization of concepts and relations.<sup>60</sup>

Our individual must first recognize the phenomena on which he is going to work and he must recognize them as being somehow connected with one another and distinct from others. This recognition is a cognitive act. But it forms no part of the analytic work. On the contrary, it supplies the object or material on which analysis works and is therefore a prerequisite of it. The analytic work itself then consists of two different though inseparable activities. The one consists in conceptualizing the contents of the vision. By this we mean the fixing of its elements into precise concepts that receive labels or names in order to retain their identity, and <sup>61</sup>in establishing relations (theorums or propositions) between them.

That second activity referred to in this last passage, namely, that fact-finding and the incessant "give and take" between theory and fact as mentioned earlier in this section, can now readily be interpreted in terms of a coherence theory of truth and a coherence criterion (or criteria) of verification.

In Schumpeter's methodology, intuitions about concepts and their relations are not held out dogmatically as being necessarily true in their present formulation. Their verbalization or "conceptualization," as he referred to it, was always open to revision, not to outright refutation by the facts themselves. Observation of phenomena, that is, fact-finding was only an indirect source of verification and hence he did not appeal to a correspondence theory of truth. Instead, because people "see" things differently, but nevertheless see the same real phenomena, conflicts arise between their different conceptualizations. It is this lack of coherence between the separate sets of statements of different observers that constitutes the criterion of verification. In this regard, it will be recalled that the objectivity of science that he appealed to in "Science and Ideology" stemmed not from the observation of the facts, but from the fact that "it is always possible to establish whether a given statement, in reference to a given state of knowledge, is provable, refutable, or neither."<sup>62</sup> And that given state of knowledge is founded, especially in its theoretical aspects, on intuition or "Vision."

Schumpeter may well have been aware of the idea of the "openness" of concepts that renders it difficult to distinguish definitional from factual statements about concepts as a source of the common occurrence, for on one occasion, using a very infelicitous terminology, he wrote:

On the one hand, theory itself is only a way of describing facts; on the other hand, any descriptive [factual?] unity may, by some progress of analysis, turn into a logical [definitional?] unity any moment - in fact, the frontier between the two continually shifts in the progress of science.<sup>63</sup>

The interpretation of the theory underlying Schumpeter's

thinking as a coherence theory of truth and verification serves to "explain away" so many of the apparent inconsistencies found in his text, if not all of them. For example, it explains why Schumpeter could insist that theory was founded on observation of and "conditioned by," "induced by," or "suggested by" the facts even though the facts did not suffice to verify or refute any theoretical claims.

Moreover, it serves to explain Schumpeter's particular interpretation of the status of science and the nature of scientific progress. He attributed the status of economics as a science to the "cohesion" amongst a special group of specially trained professional people, and where a science is defined variously as "any kind of knowledge that has been the object of conscious efforts to improve it," and as "any field of knowledge that has developed specialized techniques of fact-finding and of interpretation or inference (analysis)."<sup>64</sup>

Similarly, the progress of science manifests itself in the revising and broadening of earlier conceptual frameworks and derives not so much from the discovery of new facts but from clearer conceptual grasp, realized through intuition:

Intuitive perception of novel aspects is indeed never absent so long as a science is really alive. But vision of the kind that produces novel methods or propositions or else leads to the discovery of novel facts - which then enter science in the form of new hypotheses or restrictions - only adds to and perhaps partly displaces existing scientific structures, the bulk of which is handed from generation to generation as a matter of course.<sup>65</sup>

Within the limits set by the special discipline of economics, Schumpeter shared the Idealists' desire for a "unified conceptual synthesis" and, above all, a "coherent interpretation of reality."<sup>66</sup> Thus, he stressed the logicity and interdependence of the Walrasian general equilibrium system as a model for economics to work from, and

in his own applied analysis he sought a comprehensive, all-encompassing integration or synthesis of all fields of economics in order to explain the phenomena that he was studying. Among the many difficulties accompanying this Idealist outlook, Copleston notes the marked tendency to assimilate causal relations with the logical relationship of implication or entailment.<sup>67</sup> This tendency is to be found in Schumpeter's work as well, as discussed in the following section, especially in regard to the distinction between functional relationships between variables of a mathematical system and the causal relations between events of a social system. However, the confusion is rooted in the handling of concepts and their relations, as is suggested by the following passage from an article in 1927:

If we find, by analysis, a cause adequate to produce the phenomenon without extraneous influences - though such influences may be operating in each case - we are justified in accepting this cause as an explanation of what we may call the "essence" or "nature" of the phenomenon.<sup>68</sup>

In his study of Essentialism, Popper has characterized the approach to scientific knowledge through the analysis of the essences of concepts as a search for "ultimate explanations," but more importantly, he identified one of the possible reasons for the perplexity that is associated with the intuitive claims that are derived from the knowledge of concepts:

There is, however, a deep analogy between meaning and truth; and there is a philosophical view - I have called it 'essentialism' - which tries to link meaning and truth so closely that the temptation to treat both in the same way becomes almost irresistible.<sup>69</sup>

Popper suggests that Essentialists tend to equate the original meaning of a term with the so-called "true meaning" of that term.

This penchant is found very much in Schumpeter's thinking, his concern

for and insistence upon using the term 'monopoly' in its original sense as 'single seller' being a case in point. The tendency in Schumpeter's thinking for truth to be derived from definition is evident in this passage, for example:

Since the economic system cannot be treated as a set of undefined things, we must in fact first define what its elements ... are to mean before we can formulate the exact problem of their determination in terms of certain properties of the functions (relations) which this meaning involves. Then follows logically the proof that the problem can in fact be solved (proof of the existence of a solution) and, finally, the investigation into the 'laws' that the solution reveals (the properties of the solution). When we have done all this, we say that we have 'explained' or 'understood' whatever the element or elements we wished to 'explain' or 'understand.'<sup>70</sup>

Consistent in part with his Idealist outlook, Schumpeter's Essentialism is founded on two pillars, the need to define concepts in a precise way and the appeal to common sense as a guide.

Repeatedly, in each of his major works, Schumpeter made this appeal to the "voice of common sense," and more than once did he define both theory and science as "refined and sytematized common sense."<sup>71</sup> In History of Economic Analysis, he suggested that science's dependence on common sense was probably greater in economics than in any other field:

Economics constitutes a particularly difficult case, because common-sense knowledge goes in this field much farther relatively to such scientific knowledge as we have been able to achieve, than does common-sense knowledge in almost any other field. ... The scientific achievement is so modest, and common-sense and scientific knowledge are logically such close neighbors in this case, that any assertion about the precise point at which the one turned into the other must of necessity remain arbitrary.<sup>72</sup>

On the whole, Schumpeter's comments suggest that common sense knowledge was the repository of intuitive insight, but, moreover, he seemed to point to common sense as the source of original meaning of terms that entered into economics and therefore was additionally a

source of reference and a guide to thought shared by all:

Early economic analysis started from notions evolved by common experience of everyday life, proceeding to greater precision and refinement of these notions as time went on.<sup>73</sup>

Now, to the extent that both Essentialism and Idealism aimed for coherence of views between different analysts as a source of a test on the objectivity of each other's work, they were mutually compatible. However, Schumpeter's ambivalence to perfect competition points to a source of conflict between these two strands of his thinking, for, as a matter of fact, analysts' verbalizations of their intuitions do not always agree with one another. On both Conventionalist and Idealist grounds, Schumpeter wanted to accept the theory of perfect competition, either in its present or somewhat revised form, but on Essentialist grounds, he could not accept it. Conventionalism pointed to its analytical "usefulness," Idealism to the coherence of views among some analysts' thinking, while Essentialism pointed to its intuitive weaknesses. In his most critical moments in Capitalism, Socialism and Democracy, Schumpeter seemed to go so far as to even deny its Conventionalist usefulness and its Idealist coherence with other aspects of reality, as depicted in their linguistic formulation.

In short, while the interpretation of Schumpeter's methodology in terms of a coherence theory of truth and verification serves well to explain away many of the apparent inconsistencies in his thought, it cannot fully reconcile all of his Conventionalist, Essentialist and rather ambiguous Empiricist tendencies. The grand irony of all of this analysis stems from his rather obscure appeal to Empiricist tenets. ("Henceforth we shall put ourselves on this standpoint of empirical science," that is, on the basis of "facts verifiable by

observation or experiment," as cited above.<sup>74</sup>) For, certainly with his emphasis on intuition, Schumpeter did not stand firmly in the tradition of British Empiricism or Logical Positivism or the Conventionalism of Poincaré. Poincaré emphasized that scientific theories made no truth-claims at all, intuitive or otherwise, whereas it was this very source of knowledge, intuition, that Logical Positivists reacted so violently against for being, in their eyes, "mystical," "metaphysical," "aprioristic," even "meaningless" and hence unverifiable; they recognized only logical and empirical truths and held that all other claims to knowledge were mere metaphysical speculation.

Thus, there is more than an element of truth in Aufrecht's conclusion that Schumpeter's treatment of philosophers is very often an "amazing mixture of conceit and superficiality. ... Schumpeter often passes rash judgements on complex philosophical issues and on their historical interrelationship or lack of interrelationship." Aufrecht continues: "He thus displays an unfortunate propensity to misunderstand philosophers and the impact of philosophical thought on social science, in general, and on economics in particular."<sup>75</sup>

However, Gottlieb is unfair and goes too far when he describes Schumpeter's method as casuistic:

The Austrian milieu gave Schumpeter more than a conservative leaning. It also passed on that casuistic method which was designed by Menger and elaborated by Bohm and Wieser. The method spurned numerical measurement, stressed bold theoretic refinement, relied on introspection and sought to elucidate the "final cause" or ultimate "nature" of its object. The method was repugnant to mathematical modes of thought since it involved recourse to a dialectic enquiry into some generalized "essence" which had little in common with Pareto's "repeated uniformities." The dialectic mode of enquiry which "touches abstract and concrete in the same flight of thought" can yield superb insights. But it is a dangerous mode of enquiry since in it thought is untrammelled by the restraints of formal logic and weaves its way in a world of

its own creation not subject to rigorous methodological control.

The constructive as well as the dangerous potential of the Austrian method were given their fullest development in Schumpeter. He had a natural gift for theory. After a short flirtation with positivistic modes of enquiry, he soon picked up the casuistic method. With it he invariably searched for the deepest core of meaning in and fundamental cause of a subject. He came to put his trust in "bold and unsafe mental experiments." He insisted that a proposition believed true by virtue of "simpler and fundamental facts" cannot be statistically disproved. He could travel tantalizingly through both sides of an argument and cover up his tracks. Hence his "analytic skeleton does not grin at you" and even in "boldest rushes he never left his flanks quite unguarded." Perhaps certain characteristics of style were developed to give more scope for this analytic method: a dashing quality, a flair for imagery, rich metaphor, disconcerting discontinuities.<sup>76</sup>

A man's stated methodology need not be an accurate description of his methods of reasoning in applied analysis, and Schumpeter's stated methodology certainly does not do justice to his analytical accomplishments in applied fields. While much of what Gottlieb writes is true, Schumpeter certainly did not "spurn" facts, as Gottlieb would have his reader believe, nor was his method casuistic. Schumpeter was not content with sophistical quibbling but attempted to come to grips with the subject matter in the manner for which he was best equipped, namely, by conceptual analysis.

Notwithstanding that, Schumpeter might well be turning over in his grave at the "accusation" of being Idealist (among other things). Yet, his rather neutral, almost defensive comments on Hegel's philosophy, for example, does little to dispel this "charge," as it were.

Perhaps the analytical "picking apart" of Schumpeter's methodology in this section appears unjustly critical and rather presumptuous (although Schumpeter's texts have been quoted and are waiting for a better interpretation). This process was necessary, however, in order to account for his ambivalent attitude toward



the neo-classical theory of perfect competition and to prepare the way for an account of his own thinking on the nature of competition.

In any case, this section might well end on a note favourable to Schumpeter. Even though many of his words sound oracular, he quite explicitly and modestly denied that he made any claims to, as he termed it, "professorial omniscience," and at the same time he claimed no "absolute validity" for his methodological views.<sup>78</sup> Above all, he did not claim that his own "Vision" or intuition was perfect or infallible, but like all others was subject to critical appraisal and revision or correction by others.

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The concluding section of this chapter treats of matters which are, in many ways, of only a technical and not a methodological nature. They are treated here both because they represent a systematic source of confusion which stems from methodological and terminological problems and because they relate in a crucial way to the topic of competition.

### 3. Statics, Dynamics and Equilibrium

The issue of statics and dynamics arose in Chapter 3 with Schumpeter's Essentialist criticism of the theory of perfect competition. He found it wanting because it was "static" in nature, but there was some difficulty in determining exactly what Schumpeter's criticism amounted to.<sup>79</sup> The uncertainty that characterizes his critique on this matter stems from the vague, ambiguous and oftentimes equivocal manner in which Schumpeter employed his terms.

It is regrettable that the semantics of 'statics,' 'dynamics,' and 'equilibrium' must be broached one more time, for it is a subject

which has received an inordinate amount of attention by economists and is yet shrouded in mystery. Schumpeter is not alone amongst economists in his obscurantist use of these terms. For concepts that have found their principal use in physics and whose meanings are so very often interpreted by economists via physical analogies (oscillations, swinging pendulums, etcetera), the physicist must be dismayed by what can only be termed obscurantist spatio-temporal isomorphism that characterizes much of the typical explanation of statics, dynamics and equilibrium in economics. (Consider, for example, the description of an economy as if an object "moving towards a position of equilibrium.")

Regrettable though it may be, the tackling of this semantic problem is nevertheless necessary in interpreting Schumpeter's work on competition, for the terms are used in a crucial way. Significant is the fact that C. E. Russett, in her study of The Concept of Equilibrium in American Social Thought, points to Schumpeter's Business Cycles as "one of the most forceful arguments favouring the centrality of equilibrium theory for the student of economics." She also wrote:

Equilibrium, despite its familiar sound, was and is an elusive concept because it can be variously defined. On the one hand it implies a state of balance or adjustment among a number of conflicting forces . . . . On the other hand it can refer to a process as well as a point, as exemplified by the growth of a baby or the path of a pencil rolling on a plane surface. Equilibria may be categorized as static or dynamic; as stable, neutral, or unstable; as stationary or moving. And agreement is not always forthcoming even as to the content of these categories.<sup>80</sup>

The following digression (not to be associated with Russett's work in particular) may help to clarify the ensuing discussion by identifying four frequent sources of systematic ambiguity in the use of the terms 'static' and 'dynamic.' These four sources can be summarized briefly as follows:

1. Novel versus Repetitious Change: The very notion of time implies change of some sort because time is inconceivable without the occurrence of events. But economists choose to distinguish between merely repetitious (or quantitative, circular, cumulative) change and qualitative change, that is, involving novel aspects. In a trivial sense, then, any economy which exists for more than a moment of time changes in some way, whether novel or repetitious. However, economists tend to construe a "static" economy (in the Clarkian sense, outlined below) as being somehow "changeless."

2. Causal versus Mathematical System: Empirical science is founded on the assumption that causal systems of relations subsist between phenomena (be they objects, events, processes or states), such that these phenomena can be "explained" in terms of those causal systems. However, mathematical systems of equations which express logical relations between abstract numbers (variables) are often used to represent (or re-present) those causal relations between the "concrete" phenomena of the world.

There is a relation of correspondence of a sort between these two kinds of systems, but the mathematical propositions are logical and hence "timeless" like all other logical truths, even if the numbers are given time-subscripts. The meaning of these subscripts is quite independent from the question of the logical truth of the mathematical propositions expressed, and interpretation of their meaning is quite incidental and subsequent to logical proof of the propositions expressed.

3. Momentary versus Non-momentary States: Static states are sometimes referred to in equilibrium analysis as if they were not momentary but existed over a period of time, but usually in the more rigorous mathematical representations (in Frischian terms, outlined below) they are treated as if momentary, instantaneous, or "timeless" (that is, at one moment of time, in contrast to logical truth's timelessness). In mathematical terms, this is usually done by setting the time period to the limit of zero, treating all variables as if at a given moment of time and then dropping time-subscripts.

4. Stock versus Flow Concepts: In economics, stock concepts (such as inventory, that is, literally objects) are distinguished from flow concepts which are either distinct processes such as production or related series of events such as sales. But flow concepts are often treated in mathematical terms as rates per unit of time and then "for purposes of static analysis" the time period is set to a mathematically construed limit of zero such that these same flow concepts are treated as if somehow momentary, timeless or instantaneous. This thinking of causal sequences in mathematical terms alone makes this conceptually disastrous operation seem harmless, even though it treats processes as if they were either objects, single events or momentary states.

Now, one of the problems posed by Schumpeter's work lies in the fact that throughout his career he entertained three different

notions about the static-dynamic dichotomy. One was of his own making, while two others he used were eventually to gain the upper hand in the economic literature. In the first edition of The Theory of Economic Development, Schumpeter rendered his most intelligible and consistent account of the dichotomy by employing his own personally devised definitions, before the terms 'static' and 'dynamic' had gained much currency in economic thought. After 1912, though, the versions which are usually attributed to J. B. Clark and Ragnar Frisch eventually became very popular. Under their influence, Schumpeter decided to dispense with his original interpretation in his subsequent publications, including the second edition of his 1912 masterpiece.<sup>81</sup>

Unfortunately, though, his original meanings remained in an indefinite and confusing manner, intermingled as it were with both the Clarkian and Frischian versions. Since both the latter versions are still in the ascendancy in economics, it will be useful to identify them first, before examining Schumpeter's.

Clark's original version in his The Distribution of Wealth (1899), as elaborated in his Essentials of Economic Theory (1907), is not entirely free of ambiguity itself but rests mainly on the distinction between novel and repetitious change, as outlined above. Thus, 'static' is to be predicated of economies which experience no novel or qualitative change, 'dynamic' of those that do. Of course, he admitted that in fact there were no actual static economies: "A static state, however, is imaginary. All natural societies are dynamic." But he used the terms in a loose, relative way such that the American economy, characterized by rapid and novel change, was dynamic, whereas the "sluggish societies of Asia" were more accurately described as

being static.<sup>82</sup> This usage is still very much in evidence today. It should be noted that Clark's terms both apply to economies during a period of time; static is not momentary.

Frisch's mathematical interpretation of 'static' and 'dynamic' in 1933 changed all of this. His version points to the distinction between momentariness and the elapse of time, but his mathematical interpretation embodies the common confusion between causal and logical system and the attendant ambiguity in the reference to 'system.' Thus, static analysis involves the use of a system of equations, the variables of which are of the "instantaneous" variety. Dynamic analysis is then interpreted as the study of the interrelationship over time of a series of such static instances. Frisch writes:

This must be done by an essentially dynamic theory, that is to say, by a theory that explains how one situation grows out of the foregoing. In this type of analysis we consider not only a set of magnitudes in a given point of time and study the interrelations between them, but we consider the magnitudes of certain variables in different points of time, and we introduce certain equations which embrace at the same time several of these magnitudes belonging to different instants. This is the essential characteristic of a dynamic theory. Only by a theory of this type can we explain how one situation grows out of the foregoing.<sup>83</sup>

These two versions differ in one very important way. Clark's terms apply very plausibly to actual economic systems, whereas Frisch's are more readily applied to systems of equations. In Clark's version, it is very meaningful to speak of a 'static economy' but in the Frischian version it is not.

In this respect, Schumpeter's original interpretation is much more like Clark's than Frisch's because both Schumpeter's and Clark's 'static' refer to economies which exist through time. However, Schumpeter's and Clark's versions do differ in one important respect,

and that difference is exemplified by their contrasting use of a third term, 'stationary,' to be discussed shortly.

Schumpeter's distinction of static from dynamic rests on the idea of their being two sources of change relevant to the study of economic systems. One was the economic per se, the other non-economic. Schumpeter could distinguish these according to his definition of economics in terms of a certain type of conduct. In the opening page of The Theory of Economic Development, Schumpeter defines 'economic' in these terms:

The social process is really one indivisible whole. Out of its great stream the classifying hand of the investigator artificially extracts economic facts. The designation of a fact as economic already involves an abstraction, the first of the many forced upon us by the technical conditions of mentally copying reality. A fact is never exclusively or purely economic ... Nevertheless, we speak of economic facts in science just as in ordinary life, and with the same right. ...

Social facts are, at least immediately, results of human conduct, economic facts results of economic conduct. And the latter may be defined as conduct directed towards the acquisition of goods. In this sense we also speak of an economic motive to action, of economic forces in social and economic life, and so forth. ... The field of economic facts is thus first of all delimited by the concept of economic conduct.<sup>84</sup>

Whatever the merits of this or any such definition of 'economic,' it nevertheless permitted Schumpeter to speak of innovation as an economic or internal source of change for an economic system and of such things as wars, natural disasters, etcetera as "external factors" or "data." Schumpeter's designation of factors, such as growth and population changes as external, may be cause for much dispute, but for the purposes at hand this is irrelevant.<sup>85</sup>

Given this definition, Schumpeter's interpretation of the static-dynamic dichotomy was as follows: Statics or static analysis was the study of an economic system's tendencies toward equilibrium

or, if it was already equilibrated, to maintain that equilibrium. Static analysis was to include consideration of external factors and the system's reactions to them. Dynamics or dynamic analysis was the study of a system's tendencies to change (in the qualitative sense) due to internal factors. Schumpeter clarified his distinction further by equating statics to the study of the circular flow (the equilibrating tendencies of an economy) and dynamics to the study of economic development (the disequilibrating tendencies of an economy to change in the qualitative sense). In more concrete terms, he likened the distinction to that between management (statics) and innovation (dynamics).<sup>86</sup>

This initial task of merely distinguishing between these three separate sets of meanings given to the static-dynamic dichotomy by Schumpeter, Clark and Frisch has been a difficult semantic exercise in itself, although not an impossible one to perform. But as if that were not enough, Schumpeter employed the related term, 'equilibrium,' in such different ways as to thoroughly compound this semantic puzzle almost beyond the point of solution.

To come right to the point: Did Schumpeter argue that the concept of equilibrium, as it applied to competition theory, implies passage of time in order to account adequately for competition as a process and not a state at a given moment of time? At best, and in most general terms, Schumpeter's writings provide a rather ambiguous answer. Certainly, Schumpeter provided no single, adequate definition of equilibrium that would settle this matter beyond a doubt. His texts, as a whole, suggest the following answer: If 'equilibrium' is predicated of an actual (causal) economic system, then it must imply

the passage of time. If predicated of a system of equations, it need not imply passage of time, although it can according to the manner in which the variables of the equations are interpreted. That is, 'equilibrium' in the mathematical sense only could be treated as if momentary.

Schumpeter's Conventionalist leanings are clearly apparent here. This "as if" technique was mentioned earlier in connection with the "openness" or "closedness" of the economic system in a causal sense. Schumpeter attributed this Conventionalist strategem, or the ab ovo method, as he termed it, significantly enough to Walras, and its cruciality to Walras' static equilibrium method should be obvious.<sup>87</sup>

Static analysis, in the Frischian sense, has been justified on at least two grounds: (1) that actual economic causal systems are, in fact, instantaneous or momentary, or

(2) even if not, it is technically convenient to treat them as if they were, without a great deal of loss of "realism."

Like the majority of economists, Schumpeter rejected the first argument but accepted the second, with qualifications. Even if dynamic analysis is technically more difficult to handle, it is conceptually preferable. In History of Economic Analysis, he wrote:

The necessity of developing a dynamic theory rests upon three facts: (1) It is obvious that most quantities demanded and offered ... as well as prices and incomes are in reality related to other economic quantities that belong not to the same moment but to the past and to the expected future. It is particularly obvious that monopolists want to maximize gains not for the moment but over a stretch of time. (2) It is not so obvious but it is nevertheless true that this makes a great deal of difference to results. If we drop the hypothesis that each element of the economy depends only on the other elements as they are at the same point of time, quite different results and quite new phenomena emerge. ... (3) Finally, the task of developing a dynamic theory is very difficult and cannot be accomplished simply by adding dynamic qualifications to static theory. It requires



new techniques and raises fundamental problems of its own. An example of the new techniques required is the theory of difference equations. An example of the new fundamental problems is economic equilibrium, which, if considered from a dynamic standpoint, appears in a new light.<sup>88</sup>

The relevance of the last passage to Schumpeter's critique of perfect competition is evident. In Capitalism, Socialism and Democracy, Schumpeter's recognition that competition was a process and as such could be treated more satisfactorily by dynamic analysis is all the more evident. The following passage illustrates, but also alludes to a further source of ambiguity in Schumpeter's writing, namely, dynamic analysis as mere method or technique and dynamic analysis as causal explanation of actual economic phenomena:

The defining feature of dynamic theory has nothing to do with the nature of the economic reality to which it is applied. It is a general method of analysis rather than a study of a particular process. We can use it in order to analyze a stationary economy, just as an evolving one can be analyzed by means of the methods of statics ("comparative statics"). Hence dynamic theory need not take, and as a matter of fact has not taken, any special cognizance of the process of creative destruction which we have taken to be the essence of capitalism. It is no doubt better equipped than is static theory to deal with many questions of mechanism that arise in the analysis of that process. But it is not an analysis of that process itself, and it treats the resulting individual disturbances of given states and structures just as it treats other disturbances. To judge the functioning of perfect competition from the standpoint of capitalist evolution is therefore not the same thing as judging it from the standpoint of dynamic theory.<sup>89</sup>

It is clear that Schumpeter interpreted neo-classical static equilibrium as being static in the Frischian sense.<sup>90</sup> It is not always clear, but generally so, that Schumpeter treated equilibrium in his own analysis of competition as if it entailed the passage of time and, in fact, it seems to amount to little more than the simple, common-sense description of economic events during a period of time in which an economy is relatively stable. In The Theory of Economic Development,

this is made clear by his identifying the circular flow idea with equilibrium which, though static in his own original sense, is certainly dynamic in the Frischian sense, as the very words 'circular' and 'flow' would seem to suggest. Schumpeter did describe the circular flow system as a "downright changeless system," but it is obvious that by "changeless" he meant "repetitious change only," for he refers to "the circular flow of the economic periods."<sup>91</sup> Because of these terminological traps, Schumpeter's circular flow idea has been misleadingly described as static in the same context as Walras' general equilibrium idea. Yet, as was mentioned earlier,<sup>92</sup> Schumpeter actually dynamized the static Walrasian schema, in the Frischian sense, by interpreting Walras' instantaneous rates as constant flows over a period of time.

In Business Cycles, Schumpeter's explanation of the idea of equilibrium is, at times, simply incomprehensible, based as it is on numerous analogical references, such as the following: "points," "zones," "positions," and "neighborhoods of equilibrium;" the "tendency," "struggle," and "progress" of a system to "move toward a state of equilibrium," and the associated "friction," "rigidity," "stickiness," and even "sloppiness" of the movement toward this position, that is, the system's "adjustment" toward equilibrium. Because of this, "actual states can conveniently be defined by their distance from it." Furthermore, the term "neighborhoods of equilibrium ... must not be understood in its mathematical sense."<sup>93</sup>

Business Cycles was the first occasion that he had referred to Frisch's notion of dynamics,<sup>94</sup> and Frisch's influence is to be noted throughout the discussion of equilibrium in that work. For example, at one point Schumpeter remarks that "so far we have been

using the concept of general or Walrasian equilibrium," but on the same page he indicates that equilibrium can be either static or dynamic according to the mathematical formulation employed, for in some cases "stationary flow and equilibrium are analytically equivalent," (his emphasis).<sup>95</sup> Throughout much of his analysis that follows on the business cycle, Schumpeter seems to treat equilibrium as if it were simply his earlier circular flow notion of equilibrium.

In Capitalism, Socialism and Democracy, equilibrium is referred to only once and in an unimportant manner. In this work, Schumpeter preferred the more concrete and common-sensical notions of stability and instability when referring, for example, to the question of indeterminateness.

History of Economic Analysis represents Schumpeter's most Frischian treatment of statics, dynamics and equilibrium, in that equilibrium can be either static or dynamic. He defines the first pair of terms as follows:

By static analysis we mean a method of dealing with economic phenomena that tries to establish relations between elements of the economic system - prices and quantities of commodities - all of which have the same time subscript, that is to say, refer to the same point of time. ... But the elements of the economic system that interact at a given point of time are evidently the result of preceding configurations; ... Hence we are led to take into account past and (expected) future values of our variables, lags, sequences, rates of change, cumulative magnitudes, expectations, and so on. The methods that aim at doing this constitute economic dynamics.

We call a relation static if it connects economic quantities that refer to the same point of time. ... We call a relation dynamic if it connects economic quantities that refer to different points of time.<sup>96</sup>

To this point, Schumpeter's presentation may seem to have achieved a consistent and unambiguous status. There are, however, at

least two further sources of ambiguity and confusion that arise in his subsequent discussion. Both of these stem from his Conventionalist decision to define 'statics' and 'dynamics' as methods rather than in terms of truth-claims. First, Schumpeter's references to relations and systems is ambiguous in the Frischian way, that is, they sometimes mean causal (phenomenal) and sometimes mathematical (logical) systems of relations but never unambiguously both, in terms of some sort of correspondence theory of truth. This ambiguity is to be noted, for example, in his very definition of equilibrium:

If the relations which are derived from our survey of the 'meaning' of a phenomenon are such as to determine a set of values of the variables that will display no tendency to vary under the sole influence of the facts included in those relations per se, we speak of equilibrium: we say that those relations define equilibrium conditions or an equilibrium position of the system and that there exists a set of values of the variables that satisfies equilibrium conditions.<sup>97</sup>

Does this definition mean that 'equilibrium' is to refer to a system of relations subsisting between phenomena only, between abstract numbers only, or between both in the sense of propositions "fitting" the facts according to a correspondence theory of truth?

The crux of the matter begins to come into sight when one considers the second type of ambiguity, Schumpeter's use of the terms 'static' and 'dynamic analysis.' Does analysis refer to mathematical operations or to causal explanation of economic phenomena?

To some extent, Schumpeter managed to avoid what for him was this dilemma, and he did so by referring to dynamic theory and the evolutionary reality that it attempts to explain. Thus, to a certain extent, he implied that 'static' and 'dynamic' did not refer to phenomena but only to abstract numbers. Clark's contrasting use of

the phrase 'stationary state' brought this implication to the surface.

Clark treated 'stationary' as synonymous with 'static.'  
Schumpeter also used 'stationary' as synonymous with Clark's meaning of 'static,' but not with his own meaning of 'static' as used in The Theory of Economic Development, for that 'static' did encompass qualitative or novel changes brought about solely by external factors. The confusion created by this altogether unfortunate choice of terminology forced Schumpeter to make the following clarifying note in The Theory of Economic Development:

It has been objected against the first edition that it sometimes defines "statics" as a theoretical construction, sometimes as the picture of an actual state of economic life. I believe that the present exposition gives no ground for this opinion. "Static" theory does not assume a stationary economy; it also treats of the effects of changes in data. In itself, therefore, there is no necessary connection between static theory and stationary reality. Only in so far as one can exhibit the fundamental form of the economic course of events with the maximum simplicity in an unchanging economy does this assumption recommend itself to theory.<sup>98</sup>

But even the last statement of this passage leaves the ambiguity of reference open.

In History of Economic Analysis, Schumpeter tried to solve his dilemma by stating that 'statics' and 'dynamics' were "method(s) or mental attitude(s) of the analyst" which relate to imaginary states that occur in "theoretic time" in contrast to 'stationary' and 'evolutionary states' which were actual states that occur in "historic time."<sup>99</sup> As meaningful as this might seem, it does not distinguish between logical and causal relations but rather between actual and hypothetical relations between phenomena, both referring to causal systems of relations.

This latter attempt by Schumpeter to clarify the distinctions

that he thought were so important to make vividly points to the crux of the whole matter.

Schumpeter could not make up his mind whether the purpose of economic theory was to provide merely some sort of "functional" explanation of economic phenomena or an outright causal explanation. The following passage, from Capitalism, Socialism and Democracy tends to suggest that dynamic analysis was analysis of causes connecting actual events:

Dynamic analysis is the analysis of sequences in time. In explaining why a certain economic quantity, for instance a price, is what we find it to be at a given moment, it takes into consideration not only the state of other economic quantities at the same moment, as static theory does, but also their state at preceding points of time, and the expectations about future values.<sup>100</sup>

Whether actual or hypothetical, that is, whether "theoretic" or "historic time" is involved here, 'analysis' points to causal connections.

What, then, was Schumpeter's formal view on the methodological status of scientific explanation. In Das Wesen, his brief encounter with Logical Positivism was reflected in his rejection of the notions of cause and effect as being metaphysical and thus outside the proper bounds of science. Instead, functional explanation in terms of mathematical interdependence had "a content which is clear and unambiguous while the concept of causation has not."<sup>101</sup>

In 1911, Schumpeter withdrew his earlier "epistemological indictment" of causality in The Theory of Economic Development where he chose to speak of "causal links that connect economic with non-economic data." Thus, the explanatory purpose of economics was expressed in these terms:

When we succeed in finding a definite causal relation between two phenomena, our problem is solved if the one which plays the "causal" rôle is non-economic. We have then accomplished what we, as economists, are capable of in the case in question, and we must give place to other disciplines.<sup>102</sup>

Yet, in that same volume there are traces of Walrasian functionalism which Schumpeter hinted at in stressing the complexity and mutual interdependence of economic events:

This concatenation and mutual dependence of the quantities of which the economic cosmos consists are always visible, in whichever of the possible directions one may choose to move. Wherever one breaks in and wherever one turns from this point, one must always, perhaps after a great but finite number of steps, return to the starting point. The analysis neither comes to a natural full stop nor stumbles upon a cause, that is an element which does more to determine other elements than it is by them determined.<sup>103</sup>

Were there any lingering doubts about this latter passage, Schumpeter's very much more explicit comments in Business Cycles may yet not dispel them. There, he wrote of the question of causes as the "Fundamental Question" that economic theory must come to grips with. However, there is a reluctance to embrace the concept of causation without qualification. Appealing to the common-sense notion only, Schumpeter writes:

There is, of course, a strong argument against using that questionable term ['cause'] at all. We shall speak of causes in a common-sense way, which, it is believed, is not subject to epistemological indictment. If a definition be thought desirable, we may say that we mean by causes of a phenomenon a set of circumstances without which it would not present itself. We might define them as "necessary and sufficient conditions" but the greater precision only opens up new difficulties.<sup>104</sup>

There is a further and rather curious aspect of this question about causal and logical (mathematical) relations that arose in the interval between 1911 and 1939. In 1927, Chamberlin shook up the theoretical world by claiming that monopolistic competition was widespread and indeterminate as well. From 1928 onward, Schumpeter's works

seem to imply the non sequitur that if there exists no determinate set of equations for the price and quantity variables for a theoretically hypothetical firm or industry, then actual firms and industries that conform to (or approximate) the theoretical patterns will, in fact, tend to be unstable. The ambiguity surrounding Schumpeter's use of the term 'system' prevents one from being certain about this categorical confusion of logical and causal entailment, but statements such as the following give that impression:

Within our meaning of terms, determinateness spells economic stability under static [his original 'static'] conditions, although, of course, these two things do not coincide logically and always require separate proof.<sup>105</sup>

But Chamberlin's own exposition itself tends to equate determinateness of price with stability, although, it should be added, he was dealing only with hypothetical cases and not analyzing actual firm and industry behaviour.<sup>106</sup> Yet, Chamberlin's reaction to Schumpeter's never-ending concern for finding determinateness is instructive, coming from the man who was instrumental in re-vitalizing the possibility that poses such grave problems for mathematical economists. Referring to Schumpeter's Business Cycles, Chamberlin wrote:

Even supposing that a case can be made for a generally determinate system which is sufficient "for our purpose," or "for most practical purposes," it remains true in Schumpeter's own words that "the first and foremost task of economic analysis is to explore the properties of that system" [from Business Cycles, p. 41, Chamberlin's emphasis]. ... It must seek out the indeterminate as well as the determinate, and carefully avoid the tempting expedient, currently so popular with the mathematicians, of adjusting the formulation of its problem with the objective of assuring a determinate answer.<sup>107</sup>

In short, Schumpeter's merging of meaning with truth, logic with cause, is epitomized in his concern for assuring determinateness.

In Capitalism, Socialism and Democracy, the question of the



role of causality in scientific or theoretical explanation does not arise, but as treated in Chapter 3 Schumpeter did recognize there that in fact, if not even in strict logic of economic models, industries that approximated perfectly competitive conditions could yet display actual instabilities of their own.<sup>108</sup>

In History of Economic Analysis, the question of causal versus functional explanation does not arise in these explicit terms, the general tone is one favouring the functionalism of general equilibrium analysis. On the other hand, Schumpeter does state his belief in the place of a psychological element in economic explanation which suggests a re-affirmation of faith in causality.<sup>109</sup> Moreover, he cites a rule of thumb that is very reminiscent of his earlier discussion of causal links in The Theory of Economic Development:

To use a felicitous phrase: economic analysis deals with the questions how people behave at any time and what the economic effects are they produce by so behaving; economic sociology deals with the question how they came to behave as they do.<sup>110</sup>

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To conclude this chapter, it can be said that Schumpeter has not fared well at all in this discussion of his methodology. The problem was not that he was a poor logician or methodologist, for so often these matters were not really crucial to the claims that Schumpeter wanted to establish. Instead, the problem was that he had so much to say about methodology but said it in a very casual, offhand and confusing way, and the air of confidence that so characterized his methodological pronouncements hardly does justice to the highly complex nature of the issues that he touched upon.

Be that as it may, the stated methodology does not in itself detract from the analytical insights and accomplishments along other

lines, such as his critique of neo-classical competition and his own analysis of competitive behaviour. Yet, a full appreciation of his work in these other fields necessitated the lengthy and difficult exercise that constitutes this chapter.

With all of the preparations of the first four chapters made, it is now, at last, possible to outline Schumpeter's own conception of competition. That in turn prepares the way for a study of Schumpeter's applied analysis of Chapter 6.

#### Notes to Chapter 4

<sup>1</sup>References to Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie (Munich and Leipzig: Duncker & Humblot, 1908) are derived from the three articles by Schneider, Machlup and Stolper in the memorial volume Schumpeter, Social Scientist, ed. S. E. Harris (Cambridge, Mass.: Harvard University Press, 1951). For Schumpeter's views on the Methodenstreit, see History of Economic Analysis (New York: Oxford University Press, 1954), pp. 814-15.

<sup>2</sup>The Theory of Economic Development, tr. R. Opie (English ed.; New York: Galaxy Books, 1967), p. 4. See also ibid., p. x, as well as History of Economic Analysis, pp. 16, 814 n. 1, and Essays of J. A. Schumpeter, ed. R. V. Clemence (Cambridge, Mass.: Addison-Wesley Press, 1951), pp. 74, 100.

<sup>3</sup>Machlup, "Schumpeter's Economic Methodology," Schumpeter, Social Scientist, p. 95.

<sup>4</sup>Compare passages cited below, p. 107, for example.

<sup>5</sup>Machlup, op. cit., pp. 95-6. In the same volume, several of Schumpeter's biographers point to his tolerant and eclectic attitudes. For example, Stolper writes of his "open-mindedness and tolerance toward other men's ideas, his willingness and ability to see every point of view," (p. 102), and Haberler writes of his "tolerance" and "quite unusual capacity for understanding the minds and views of others," (pp. 24, 46). His attitude toward Keynesian economics is one very notable exception to all of this.

<sup>6</sup>Machlup, op. cit., p. 96. For references to physics as the paradigm for economics, see History of Economic Analysis, pp. 6, 15, 16, 1141; Business Cycles (New York: McGraw-Hill, 1939), I, 32. For example, in History he writes: "Nor is economics as a whole a

a science if we make the use of methods similar to those of mathematical physics the defining characteristic (definiens) of science." (p. 6) Later, he dissociates himself from what F. A. Hayek has termed Scientism (which Schumpeter interprets as "the uncritical copying of the methods of mathematical physics," p. 17), but on the following page, he defends the use of analogy to physics and emphasizes the common features of physics and economics. (p. 18)

<sup>7</sup>"Review of Mitchell's Business Cycles," Essays, pp. 73-95. See especially p. 78.

<sup>8</sup>See above, pp. 47-8, for the meaning and discussion of the term, 'absolutist.'

<sup>9</sup>For definitions of economic science, see History of Economic Analysis, pp. 6-11. See also pp. 26, 45.

<sup>10</sup>In History of Economic Analysis, he writes: "Evidently, the mere possibility of such a difference of opinion on what constitutes valid proof suffices to show, among other things, that our own rules cannot be accepted as the last word on scientific procedure." (p. 8 n. 2)

<sup>11</sup>"Science and Ideology," Essays, p. 268.

<sup>12</sup>Machlup, "Problems of Methodology: Introductory Remarks," American Economic Review, LIII (May, 1963), 208.

<sup>13</sup>The Theory of Economic Development, pp. xi, 3.

<sup>14</sup>"Die neuere Wirtschaftstheorie in den Vereinigten Staaten," as cited in W. F. Stolper, "Reflections on Schumpeter's Writings," Schumpeter, Social Scientist, p. 106, and The Theory of Economic Development, p. 22.

<sup>15</sup>History of Economic Analysis, p. 12.

<sup>16</sup>Essays, p. 208.

<sup>17</sup>One might want to add a third question, namely, what is (are) the function(s) or Purpose(s) of theory. This consideration is treated below, pp. 107-14 passim.

<sup>18</sup>H. Aufricht, "The Methodology of Schumpeter's History of Economic Analysis," Zeitschrift für Nationalökonomie, XVIII (December, 1958), 384-441, 388-401 and 408-11 in particular.

<sup>19</sup>ibid., pp. 389-90, 409-10.

<sup>20</sup>For a useful short summary of the three theories, see J. H. Randall, Jr. and Justus Buchler, Philosophy (New York: Barnes & Noble, 1965), ch. XI. For more comprehensive surveys, see T. E. Hill, Contemporary Theories of Knowledge (New York: Ronald Press, 1961) and John Passmore, A Hundred Years of Philosophy (Penguin Books, 1968).

<sup>21</sup>History of Economic Analysis, pp. 15, 1141; Essays, pp. 77, 267, 272; and Business Cycles, I, 31-2.

<sup>22</sup>Aufricht, op. cit., p. 388; History of Economic Analysis, pp. 15, 23 n. 1, 562.

<sup>23</sup>Essays, pp. 77, 106; History of Economic Analysis, pp. 16, 954 n. 2. See also ibid., p. 15.

<sup>24</sup>ibid., p. 474.

<sup>25</sup>Morris R. Cohen, Reason and Nature: The Meaning of Scientific Method (2d. ed., New York: Free Press Paperback, 1964), p. 61.

<sup>26</sup>Das Wesen, pp. 221-2, cited in Stolper, op. cit., p. 102.

<sup>27</sup>History of Economic Analysis, p. 15.      <sup>28</sup>ibid., p. 18.

<sup>29</sup>ibid., p. 15n.

<sup>30</sup>Essays, p. 101. See also ibid., p. 268; Business Cycles, I, vi; and History of Economic Analysis, pp. 10-11, 19.

<sup>31</sup>See Business Cycles, I, 32-33.

<sup>32</sup>For Schumpeter's emphasis on "understanding" before "peddling political recipes" see especially, Business Cycles, I, vi; and also History of Economic Analysis, pp. 11, 31 and his Preface to the Second Edition, Capitalism, Socialism and Democracy (3rd. ed.; New York: Harper Torchbooks, 1962), p. xi.

<sup>33</sup>History of Economic Analysis, p. 954 n. 2.      <sup>34</sup>ibid., p. 7.

<sup>35</sup>Essays, p. 106.

<sup>36</sup>History of Economic Analysis, p. 16 and n.      <sup>37</sup>ibid., p. 45.

<sup>38</sup>ibid., p. 1141. For example, in Essays, he describes the demand curve as "the beacon to all work in the field." (p. 80)

<sup>39</sup>Essays, p. 79.

<sup>40</sup>History of Economic Analysis, p. 45. See also p. 562.

<sup>41</sup>Essays, p. 272.

<sup>42</sup>History of Economic Analysis, p. 8.      <sup>43</sup>ibid., pp. 42, 576.

<sup>44</sup>See, for example, his discussion of theorems as "logical norms" below, p. 114, and in History of Economic Analysis, p. 17.

<sup>45</sup>Business Cycles, I, 31-33.

<sup>46</sup>Das Wesen, pp. 527, 533 as cited in Machlup, "Schumpeter's Economic Methodology," pp. 97-8.

<sup>47</sup>History of Economic Analysis, p. 45.

<sup>48</sup>See Business Cycles, I, 31; History of Economic Analysis, p. 15; and Essays, p. 267.

<sup>49</sup>History of Economic Analysis, p. 15.

<sup>50</sup>ibid.; also in Essays, Schumpeter stated that, in one sense, "theory itself is only a way of describing facts." (p. 53 n. 1)

<sup>51</sup>History of Economic Analysis, p. 1141. <sup>52</sup>ibid., p. 34 n.2, italics added.

<sup>53</sup>ibid., p. 17, italics added. <sup>54</sup>ibid., pp. 15, 17, 576-7.

<sup>55</sup>Of course, one can toy endlessly with philosophical labels when the main things to keep in mind are arguments. But, to indulge further in this game of labelling, Schumpeter inherited both the Realist and Idealist aspects of Plato's Essentialism and thus can be described further as a Conceptual Realist! Stolper (op. cit., p. 108) was quite correct in including Plato among the real ancestors of Schumpeter, and this affinity is especially noticeable in Schumpeter's political outlook.

<sup>56</sup>Karl Mannheim, Ideology and Utopia, trs. L. Wirth and E. Shils (New York: Harvest Books, 1936), p. 5 and passim. For Schumpeter's reaction, see "Science and Ideology," Essays, pp. 270ff. and History of Economic Analysis, pp. 36-7.

<sup>57</sup>Essays, pp. 272-3, 280-1.

<sup>58</sup>History of Economic Analysis, p. 16. <sup>59</sup>ibid., p. 17, italics added.

<sup>60</sup>ibid., pp. 561-2.

<sup>61</sup>ibid., p. 45.

<sup>62</sup>Essays, p. 273, as cited above, p. 116. <sup>63</sup>ibid., p. 53 n. 1.

<sup>64</sup>History of Economic Analysis, pp. 7, 45.

<sup>65</sup>ibid., pp. 45-6, italics added.

<sup>66</sup>F. Copleston, A History of Philosophy (New York: Image Books, 1965), vol. VII, pt. I, 16, 20.

<sup>67</sup>ibid., p. 23.

<sup>68</sup>Essays, p. 22n.

<sup>69</sup>Popper, Conjectures and Refutations (2d. ed.; New York and Evanston: Harper Torchbooks, 1968), p. 19.

<sup>70</sup>History of Economic Analysis, p. 968.

<sup>71</sup>For example, see ibid., p. 7; The Theory of Economic Development, p. x; Essays, p. 74; Business Cycles, I, v, 19, 26-30; and Capitalism, Socialism and Democracy, pp. 73, 91.

<sup>72</sup>History of Economic Analysis, p. 9.

<sup>73</sup>Essays, p. 248.

<sup>74</sup>History of Economic Analysis, p. 8, as cited above, p. 111.

<sup>75</sup>Aufricht, op. cit., p. 408.

<sup>76</sup>M. Gottlieb, "The Ideological Influence in Schumpeter's Thought," Zeitschrift fur Nationalokonomie, XIX (January, 1959), 36-7. Please note that most of the quoted references in this passage are footnoted in the original, either to Schumpeter's work or to that of his critiques.

<sup>77</sup>For Schumpeter's comments on Hegel, see History of Economic Analysis, pp. 413-15, especially 436-7. In his more "positivistic" period during his work on Das Wesen, he wrote that Schmollers' connection with Hegel (about which Schmoller talked) was "not really compatible with the principle of the empirical and exact investigation of the facts, which was stressed so often by the representatives of the historical school," (1912), Economic Doctrine and Method, tr. R. Aris (New York: Galaxy Books, 1967), pp. 160-1n. It may be significant that this connection is not mentioned in the later History.

<sup>78</sup>History of Economic Analysis, p. 9 and n.

<sup>79</sup>See above, pp. 77-8.

<sup>80</sup>Cynthia Eagle Russett, The Concept of Equilibrium in American Social Thought (New York and London: Yale University Press, 1966), pp. 2, 5, italics added.

<sup>81</sup>The Theory of Economic Development, pp. 60n., 64n., 82-3n.

<sup>82</sup>J. B. Clark, Essentials of Economic Theory (New York: MacMillan, 1909), pp. 195ff., and The Distribution of Wealth (New York: MacMillan, 1914), pp. 29ff. and 58ff.

<sup>83</sup>Ragnar Frisch, "Propagation Problems in Dynamic Economics," from Economic Essays in Honor of Gustav Cassel (London: George Allen & Unwin, 1933), cited in American Economic Association, Readings in Business Cycles, eds. R. A. Gordon and L. B. Klein (Homewood, Ill.: Richard D. Irwin, 1965), pp. 155-6. See also by Frisch, "On the Notion of Equilibrium and Disequilibrium," Review of Economic Studies, III (February, 1936), 100-05.

<sup>84</sup>Theory of Economic Development, p. 3, italics added.

<sup>85</sup>For his classification of external and internal factors, see Business Cycles, ch. 1.

<sup>86</sup>The Theory of Economic Development, pp. 82-3.

<sup>87</sup>ibid., p. 10. In connection with economics judged "as if" a closed system, see above, p. 103.

<sup>88</sup>History of Economic Analysis, p. 1141.

<sup>89</sup>Capitalism, Socialism and Democracy, p. 104n.

<sup>90</sup>In History of Economic Analysis, his reference to the neo-classical theory as a "pure theory of static equilibrium" (p. 972) follows shortly after his enunciation of Frischian terminology (p. 963).

<sup>91</sup>The Theory of Economic Development, pp. 6, 9.

<sup>92</sup>See above, p. 53.

<sup>93</sup>For these and other analogies, see Business Cycles, ch. 2.

<sup>94</sup>ibid., I, 48.      <sup>95</sup>ibid., p. 42 and n., his emphasis.

<sup>96</sup>History of Economic Analysis, pp. 963, 1142.

<sup>97</sup>ibid., p. 969. See also p. 971 for the same ambiguity.

<sup>98</sup>The Theory of Economic Development, pp. 82-3n.

<sup>99</sup>History of Economic Analysis, pp. 964, 1160.

<sup>100</sup>Capitalism, Socialism and Democracy, p. 103. See also Essays, p. 59.

<sup>101</sup>Das Wesen, p. 47, cited in Machlup, op. cit., p. 97.

<sup>102</sup>Theory of Economic Development, pp. 4-5.      <sup>103</sup>ibid., pp. 7-8.

<sup>104</sup>Business Cycles, I, 33-4n. 2.

<sup>105</sup>Essays, p. 58 n. 2. See also Capitalism, Socialism and Democracy, pp. 79-80.

<sup>106</sup>See Chamberlin's The Theory of Monopolistic Competition (8th ed.; Cambridge, Mass.: Harvard University Press), ch. 3 and his index (under "Stability of Prices. See Determinateness of Price,").

<sup>107</sup>See Chamberlin, "The Impact of Recent Monopoly Theory on the Schumpeterian System," in Schumpeter, Social Scientist, pp. 84-5, his emphasis.

<sup>108</sup>See above, p. 84.

<sup>109</sup>History of Economic Analysis, p. 27.      <sup>110</sup>ibid., p. 21.

## Chapter 5

### THE SCHUMPETERIAN CONCEPTION OF COMPETITION

#### 1. The Essentialist Emphasis

This chapter consists of an interpretation and critique of the Essentialist side of Schumpeter's thinking on competition. It is an attempt to identify the "essential" or defining features of competition as Schumpeter employed the concept. Therefore, to the extent that this is possible, the chapter examines the meaning that he attached to the term rather than the truth-claims he advanced about actual competitive behaviour.\*1

In one sense, then, this chapter treats of the "essential Schumpeter," not so much because it emphasizes the Essentialist side of his thinking, but because it emphasizes his positive contribution to the history of economic thought and not merely his reflections upon previous work. In his Essentialist moments, Schumpeter was at his most daring, and his individuality revealed how much he reflected and differed from the classical and neo-classical traditions. Some might contend that his conservatism, his Conventionalism, is also part of the essential Schumpeter, but if so it will not bulk large in the long run judgement of his work.

As much as possible, the arguments and conclusions of this

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\*Footnotes for Chapter 5 are located on pp. 177-8.



chapter are derived directly from Schumpeter's text. However, it is to be frankly admitted that the chapter is a personal impression, that is, much more so than the others because the element of choice looms larger here than elsewhere: both in assigning the importance to be attached to the highly various comments that Schumpeter made pertaining to competition, and in deciding on which interpretation to make when Schumpeter's words suggest significant alternatives.

Moreover, even though textual references are made, the basic lines that the interpretation follows are drawn more with the general reaction to his several works as a whole than to any specific passages in themselves. Undoubtedly, then, others will arrive at different conclusions, for Schumpeter's work, ambivalent and multifaceted as it is, affords much room for differing interpretations.<sup>2</sup>

In the very special and limited sense that he attached to the word 'theory,' this chapter could be said to constitute an exercise in the first step of theorizing. In History of Economic Analysis,<sup>3</sup> Schumpeter described analytic work as consisting of two different though inseparable activities: "conceptualizing" one's intuitions and "hunting for further empirical data (facts)." The first activity, in turn, consisted of two steps: identifying concepts by verbalizing their defining features and giving the concepts labels, and establishing relations (theorems or propositions) between those concepts. Only the first of these two steps is attempted in this chapter because only one concept is the object of attention. Of course, according to Schumpeter, intuition would also enter into this activity at the ground level; however, he considered "intuiting" as pre "prescientific" (or "preanalytic") but not "pre-cognitive."<sup>4</sup>

Now, in connection with this matter of intuition, it would be preposterous to try to "read into Schumpeter's mind" by reading his text. Furthermore, Schumpeter offered no explicit definition or account of his concept of competition as such. (Some reasons to explain this latter fact are outlined below). Therefore, there was some difficulty in deciding upon the most appropriate title for this chapter. "Schumpeter's Concept of Competition" was originally considered. However, there is some doubt as to which term best describes the subject matter of this chapter: 'concept,' 'conception,' or 'conceptualization.'

Regarding the first, Schumpeter certainly did entertain a concept of competition which differed, for example, from the one that the neo-classical school entertained, and yet the term 'concept' suggests the sort of precision that would allow one to state outright what that concept was, whereas this chapter provides only a general, vague impression. On the other hand, Schumpeter's oft-used theoretical term 'conceptualization' suggests a formal exercise of constructing an axiom-theorum set for a group of concepts in such a way that the concept of competition would be integrated into a body of theory.

The term 'conception' does, however, express the vagueness and impressionistic quality of this chapter, and suggests further that quality of gradually coming into being that so characterizes the general drift of Schumpeter's thought: the very "classical" notion of competition in The Theory of Economic Development, the desperate defense of neo-classical orthodoxy in his Essays and Business Cycles, and the subsequent Essentialist reaction of Capitalism, Socialism and Democracy, followed by a final, reserved Essentialist statement in History of

Economic Analysis. Similarly, the adjective 'Schumpeterian' suggests the general impression that his writings leave, rather than implying that he himself explicitly outlined and defended a definition of competition.

The fact that he did not provide such a definition may be the cause for some questioning of the validity of the present exercise of extracting from his work the defining elements. Yet, the effort is justified, even if only to differentiate him from the classical and neo-classical economists. But the further question arises: If Schumpeter stressed definition in theory and identified competition as a key concept in economic theory, why did he not attempt his own definition of the concept?

Of course, Schumpeter's inherent conservatism may have posed a dilemma, between professional coherence and intuitive satisfaction, that he could not fully resolve. But, in another way, Schumpeter did not see it as his job to formalize in a logical manner; he was more intent on synthesizing and integrating various portions of economic theory into his "grand analysis" of capitalist reality. Thus, while he did not enunciate in definite terms his particular concept of competition, that concept is nevertheless appealed to throughout virtually all of his applied analysis. One gets the best glimpse of his use of the concept in applied analysis in Capitalism, Socialism and Democracy, wherein Schumpeter was the least inhibited by his sense of professional loyalty and duty to the cause of (orthodox) economic theory. For that reason, this work is relied upon the most of any of his works in this chapter.

The all-pervasiveness of competition in Schumpeter's work,

as exemplified by its role in his theories of business cycles, economic development, and even democracy, points to a significant quality of Schumpeter's work: his constant search for concepts of universal application. Several of his colleagues, reviewers and critics have taken note of this quality. For example, Haberler refers to it on at least four separate occasions in his memoir, in terms such as the following:

The wide range and complexity of Schumpeter's scientific work reflects accurately the universality and complexity of his mind. ... The complexity, diversity and universality of Schumpeter's mind is the key to a proper understanding of the man and his work.<sup>5</sup>

In his unsympathetic appraisal of Schumpeter's work, Seligman commented on this quality as follows:

While he had an extraordinary grasp of the methods, views, and limitations of virtually all theories, his expressed preference was for those that sought an everlasting universality.<sup>6</sup>

And, in a lighter vein, in his review of Das Wesen, Alvin S. Johnson spoke of Schumpeter's work as conveying the "conviction that this is 'the very purest of pure economics.'"<sup>7</sup>

This question of universality will be re-considered at the end of this chapter; it only need be said here that Schumpeter attached the quality of universal applicability to competition than perhaps almost any other concept employed in economics, and this accounts for the general remoteness to economics per se, in search of that "generalizing abstraction" of which Schumpeter wrote,<sup>8</sup> to be noticed in the remainder of this chapter.

## 2. The Defining Elements: Competition as a Social Process

One method of defining a concept, the Aristotelian one, is to define it per genus et differentiam, that is, as a particular sub-category of a broader category. For example, one defines horse as a particular kind of mammal, mammal as a particular kind of animal, and so on. It will be useful to proceed with Schumpeter's conception of competition in this manner, beginning with the most general category and continuing along increasingly specific lines, with progressive refinement, as far as Schumpeter's text will reasonably permit.

Schumpeter leaves little doubt that he conceived of competition as a particular kind of social process. Process represents the key category as a starting point, for Schumpeter already had rejected as conceptually inadequate the neo-classical treatment of competition as if a state or situation. There is some reason for believing that the classical economists conceived of competition as a process too, although such other possibilities as force suggest themselves. In any case, Schumpeter gave no indication of accepting the force interpretation.

What evidence is there that Schumpeter conceived of competition as a social process and what are the implications, conceptual or logical, of his doing so? These two questions will be considered in turn.

In Capitalism, Socialism and Democracy, 'process' is the most frequently employed key terms. For example, Schumpeter emphasizes that capitalism is a process of evolutionary (qualitative) change in which competition is an essential kind of behaviour described in the "process of creative destruction."<sup>9</sup> Competitive behaviour is referred to variously as a "process of qualitative change" and a "process of

industrial mutation."<sup>10</sup> One passing reference is made to "competitive situation" but the context makes it clear that such a situation is only a component part of a process, a static "snapshot" as it were.<sup>11</sup> This latter interpretation seems all the more plausible in view of even Schumpeter's Conventionalist interpretation of statics and dynamics as methods or apparatuses of economic enquiry, for dynamics, in the Frischian sense, is "better equipped in the analysis of that process," whereas it is not simply "statics" that can also be used, but "comparative statics," that is, analyzing competition not as a static situation but as a series of situations.<sup>12</sup>

Schumpeter also makes a few analogical references to competition as a "mechanism," an "organism" and a "biological mutation," all of which may seem to construe competition not as an occurring process but as an existing object of some sort.<sup>13</sup> Of course, these are intended in a figurative, not a literal, sense. However, one might ask further whether Schumpeter is conceiving of competition in an analogical manner of yet greater subtlety in construing competition as a process, for process like equilibrium might appear to appeal in a more fundamental way to biology and mechanics. This line of questioning is pursued in the final section of this chapter.

What evidence is there that Schumpeter viewed competition as a social process? Initially, one is reminded of Schumpeter's claims in The Theory of Economic Development that "the social process is really one indivisible whole," that no facts are exclusively or purely economic, that 'economic' is defined as a sub-category of 'social' in terms of a particular type of conduct (directed towards the acquisition of goods), and that an "economic" explanation is constructed when the chain of causal "links" (to employ Schumpeter's metaphor) is to the

link that connects the economic with the non-economic.<sup>14</sup> That he also thought of competition as a theoretical concept whose applicability extended far beyond the disciplinary boundaries of economics into such fields as political science, sociology and cultural anthropology is made abundantly clear by his analysis of capitalist civilization in Capitalism, Socialism and Democracy. Some parallels between economic competition in the market place and political competition in the framework of democracy will be drawn later in this chapter.<sup>15</sup> Even in Business Cycles, Schumpeter makes a brief allusion to the broadly social nature of competition. Referring to the role of leadership and innovation that characterizes both economic and political competition, he writes in a footnote:

That is more than an illustrative analogy. The writer believes, although he cannot stay to show, that the theory here expounded is but a special case, adapted to the economic sphere, of a much larger theory which applies to change in all spheres of social life, science and art included.<sup>16</sup>

What are the implications of conceiving of competition both as a process and a social phenomenon? First, in terms of the basic categories of economic phenomena and in terms of the broadest meaning that can be given to the word 'process,' competition would seem to consist of a series or sequence of causally related events. Causal relationship rules out merely randomly chosen series of events and suggests further that the relationship is not just one of the meaning that one gives to each of the events in isolation of one another. The category of event implies that competition consists of economic behaviour rather than economic situations. Moreover, sequence implies passage of time, the separate but related events occurring at different moments (although, presumably, some of the events could occur at the

same time, without eliminating the temporal-sequence dimension of competition).

There is good reason to believe that Schumpeter gave this kind of interpretation to the term 'process' as related to competition, for he described dynamic analysis as "analysis of sequences in time,"<sup>17</sup> and, in another context, described competitive behaviour as "an endless sequence of moves and countermoves."<sup>18</sup> However, there is also some reason to believe that Schumpeter equated "series of events" to "series of states or situations," that is, as if the two could be considered as analytically equivalent. This question is pursued further in the final section.<sup>19</sup>

The modifier 'social' at once broadens and limits the scope of competition. First, it broadens it beyond the economic boundaries within which economists usually (and justifiably) choose to define it. The implications of Schumpeter's work, however, suggest that in order to define 'economic competition' one must define it as a particular kind or form of the broader notion referred to by the simpler term 'competition.' Along with that, there are problems of differentiating economic from non-economic behaviour, and of deciding whether and how to treat economic behaviour as a closed system if, in fact, it is not such a closed system as Schumpeter argues.

On the other hand, the modifier limits the proper application of the term 'competition' to social spheres of human existence and thus rules out, for example, biological and naturalistic interpretations of competition. In this way, it would be rather difficult to construe competition along classical (that is, Smithian) lines as belonging to



some kind of "natural law" of economics. In this way, Smith's concept of competition has been likened to a Newton's Law of Economic Force of Gravity, impelling social atoms called human beings to behave in a certain way as if unconsciously or against their will, led by an "unseen hand." Certainly Schumpeter points to a more rationalistic interpretation of competitive behaviour, rejecting naturalistic or animistic interpretations. For the most part, Schumpeter seemed to have embraced teleological explanation as being quite the proper purpose of economic theory in explaining competitive behaviour, as is argued in the following section.

Thus far, then, the social process conception of competition is rather vague but has the compensating virtues of great generality (appropriate to Schumpeter's view of theory) and greater intuitive plausibility (at least to Schumpeter) than does the neo-classical situation concept of competition. The task now is to try to refine the notion into more explicit terms such that competition can be differentiated from and understood as a separate kind of social process from other such processes.

### 3. Competitive Interaction

Schumpeter's conception of competition can be interpreted most plausibly as a particular kind of interaction between individuals. In his 1909 article, "On the Concept of Social Value," he outlined what today would be termed an "action frame of reference" for understanding economic behaviour, and, in the year previous to that, in Das Wesen he introduced his notion of "methodological individualism" which he was to distinguish from "political" or "sociological individualism." These terms require only brief explanation.

Methodological individualism is based on the two premises that (1) some of the behaviour of human beings constitutes rational, purposeful action (rather than merely acts which may or may not be purposeful and consciously "done"), and (2) it makes sense to speak of such action only in terms of individuals, not in terms of such abstract social entities as "the state," "the firm," etcetera, unless it is meant to refer, in a shorthand manner, to the separate action of several individuals acting together. Schumpeter's methodological individualism was a reaction against the tendency to reify abstract entities and to personify them in the process - what he called "methodological collectivism." This was not to be confused with what he termed "political individualism," a political philosophy which maintains that each individual ought to play an active part in the political processes.

Methodological individualism by no means entails viewing social behaviour solely in individual terms; it merely posits individual action as the starting point from which individual and group interaction can be understood. As he put it in Das Wesen, it means that "in the description of certain economic processes one had better begin with the actions of individuals."<sup>20</sup> Social (including economic) processes are then understood as "mutual interaction" among individuals, that is, the separate actions of individuals are "interdependent and govern each other."<sup>21</sup>

This action frame of reference is frankly teleological in outlook, that is, it is designed to explain observed behaviour partly by reference to the purposes or reasons that people have for doing the things that they do. Rationality is thus a crucial concept here.

Given his action frame of reference, what kind of interaction is the competitive process? Thus far, the analysis of Schumpeter's conception of competition has rested fairly securely on strong and direct textual evidence. Beyond this, the analysis depends heavily on a good deal of guess-work and a few shreds of definite evidence.

First of all, implicit in Schumpeter's thinking is the idea that in order to be competitive, interaction between individuals must have some "focus" or "identity" beyond a mere causal connection, that is, individuals who are said to be competing must share similar or closely related goals and their actions must therefore have some common point of reference; yet, judging from his treatment of market competition, Schumpeter is much less demanding on this quality of focus than, say, the neo-classical economists, for Schumpeter emphasized the importance of inter-industry as well as intra-industry competition.

Second, the action of competing individuals must be independent or non-co-operative to a degree. Therefore, because they share related goals but pursue them independently, they are competitive in that they are working against each other rather than working for one another's goals. Thus, Schumpeter's individualist conception can be extended to describe competition between separate groups of individuals (such as are commonly conceived in neo-classical terms under the name of the "firm"), by combining (1) internal co-operation and organization within a given group and (2) external competition between separate groups.

However, this distinction between working for and against in the ideas of competition and co-operation is not quite absolute in nature, but rather a difference in degree, for Schumpeter recognizes

that in all competitive behaviour there is an element of co-operation in the form of rule-following, whether tacit or explicit. This notion is commonly termed the "competitive ethic." It rules out as being unfair certain types of action. In this way, competition can be construed as a hybrid of pure conflict (total absence of rules) and pure co-operation (total absence of conflict). But, generally speaking, Schumpeter underplayed the role of rule-following in competitive behaviour and gave the impression that such rules were at best very vague and always in flux due to the continual appearance of new actual and possible modes of behaviour. In fact, in all his writings, only three references, all of a very incidental nature, can be found for this recognition of the competitive ethic.

In Business Cycles, again in an unobtrusive footnote, he states that changes in the "rules of the game" be called structural changes in his theory of business cycles, although he does not press or elaborate upon the point.<sup>22</sup> In a later article, "The Creative Response in Economic History," he suggests that the idea of a competitive ethic may not be analytically precise enough to distinguish between fair and unfair profits since the former "shade off into gains from purposive restriction of competition and create difficulties of diagnosis that are sometimes insurmountable."<sup>23</sup> However, in Capitalism, Socialism and Democracy, he gives indication of retaining the notion of rule-following when, in speaking of competitive behaviour in the democratic process, he states: "As in the economic field, some restrictions are implicit in the legal and moral principles of the community."<sup>24</sup> In the same volume, Schumpeter complicates the picture considerably by introducing another term to refer to this rule-

following behaviour; referring to the behaviour of firms which, in current terminology would be referred to as oligopolists, he writes:

Among themselves, the three concerns behave in a way which should be called corespective rather than competitive: they refrain from certain aggressive devices.<sup>25</sup>

As will be argued in the final section, this new term (which, incidentally, he never again uses) poses grave conceptual difficulties in distinguishing between legitimate competitive behaviour (according to some given ethic) and tacitly collusive behaviour. In any case, Schumpeter certainly envisages a greater range of behaviour falling under the category of competition than does the neo-classical concept, and this in itself may suggest that Schumpeter's conception of competition was closer to the pure conflict end of the conflict-co-operation spectrum than was the neo-classical. Yet, this is rather difficult to defend in view of his apparent toleration of much so-called restrictive behaviour by business (as discussed in Chapter 6) at the same time that he admitted much in the way of aggressive tactics under the heading of fair competition.

That apparent source of ambivalence is partly due to the ambiguity concerning the question: From whose viewpoint is the ethic or set of standards to be interpreted? It also arises from the fact that, unlike the neo-classical economists, Schumpeter stressed inter-industry competition rather than intra-industry competition. In short, while the neo-classical presentation may seem very rigorous in separating competitive from non-competitive behaviour by defining away all forms of behaviour other than passive price-setting and defining competition in structural terms (without any reference to a competitive ethic other than that concerning collusion), on the other hand,

Schumpeter's conception is more realistic about behaviour at the cost of being explicitly vague about the problem of rule-following. He had criticized the neo-classical presentation for being too rigidly structured and hence analytically useless,<sup>26</sup> but his own presentation seems to suffer from a lack of sufficient precision, a result of his frank and open attempt to realistically recognize the complexity of actual competitive behaviour.

If, at this point, Schumpeter's conception of competition still is lacking in sufficient clarity to be distinguished from other concepts, two other methods of presentation may sharpen the picture. The first is to describe his conception by reference to some familiar analogies. These are the analogies that are drawn between competition and the concepts of rivalry, game and struggle. All three have certain properties in common with one another and with competition, but neither all three together nor any one alone will serve as a paradigm of Schumpeter's conception of competition.

Rivalry is perhaps the most frequently employed concept to explain the nature of competition, connoting the striving of two or more persons or individuals for the same goal, the achievement of which by one normally implies the exclusion of such achievement by the others. Rivalry perhaps best describes the classical economists' behavioural concept of competition, but it received its clearest treatment by Marshall, who stated that "the strict meaning of competition seems to be the racing of one person against another."<sup>27</sup>

However, rivalry is too limited a concept to fit the Schumpeterian presentation of competition, partly because it implies the idea of finality, of "winners" and "losers" and partly because it

implies too much precision as to the composition of those competing and too much in the way of group awareness as to its own composition. For Schumpeter, the new entrant, the unexpected change in the whole structure of a competitive situation, is of the essence in the process of competition.

Similarly, the game suffers from this deficiency even though in recent years it has served as the paradigm for some very significant theoretical work. More than rivalry, the game connotes rule-following, rule-enforcement (either by competitors themselves or by an outside agency), rather precise group identity and the idea of finality in an eventual outcome, whereas Schumpeter's conception of competition suggests a continuous, ongoing process. However, the game does provide one concept that Schumpeter made much use of, namely, the idea of a competitive strategy, especially in the case of economic behaviour of business enterprise. While the notion of the game may point to several features of competitive business in an economy, such as the United States, which is characterized by much legal enforcement of competitive rules, it too is far too "over-structured" to fit Schumpeter's conception well. One is reminded here of Schumpeter's criticism of neo-classical analysis and its extensions in modern work:

It is still competition within a rigid pattern of invariant conditions, methods of production, and forms of industrial organization, that practically monopolizes attention.<sup>28</sup>

The third concept, struggle, probably most closely approximates Schumpeter's views on the nature of competition. Though itself analytically vague, struggle allows for some marginal recognition of rules but emphasizes the idea of resort to a wide variety of behavioural patterns

uninhibited by a rigidly defined, recognized or enforced set of rules. In its extreme form, struggle is virtually identical to pure conflict, but even then it allows for the possibility of the making and breaking of alliances, the sort of possibility that Schumpeter would have recognized in the competitive re-organizations of industries in response, for example, to the appearance of new competing industries. The language of warfare is to be noted throughout Capitalism, Socialism and Democracy in reference to competitive behaviour. A sampling would run as follows: an "indefinite state of warfare" (p. 79); "aggressors wielding the really effective weapon of competition" (p. 89); "attack and defense" and "retreat" (pp. 89-90); and the "struggle for adjustment" (p. 103). The familiar economic term "cutthroat competition" may well apply to Schumpeter's conception, if interpreted in a mild, civilized (that is, rule-following) sense, for Schumpeter does, after all, recognize that competitors always refrain from certain types of aggressive activity. Otherwise it would be indistinguishable from pure conflict.

The parallels that Schumpeter draws between two sets of institutional arrangements, the political institutions of democracy and the economic institutions of the market place, may also serve to indicate his conception of competition and its relevance to fields outside economics.

Just as market exchange serves as one method of bringing about economic results, democratic elections of leaders serve as a method for carrying on political activity.<sup>29</sup> Whereas the goal of economic activity is material wealth, the goal of political behaviour is power. Therefore, Schumpeter defines the democratic method as a



"competitive struggles for the people's vote" and as "competition for leadership."<sup>30</sup> Elections and electioneering correspond to marketing activity and market exchange; votes replace money as the medium and measure of power. Despite the individualistic premises about action, such activity can serve social ends which cannot be understood solely by reference to the competitive action of each individual in isolation. The following passage points out this systematic aspect of Schumpeter's as well as drawing several parallels between the economic and the political:

In observing human societies we do not as a rule find it difficult to specify, at least in a rough common-sense manner, the various ends that the societies under study struggle to attain. These ends may be said to provide the rationale or meaning of corresponding individual activities. But it does not follow that the social meaning of a type of activity will necessarily provide the motive power, hence the explanation of the latter. If it does not, a theory that contents itself with an analysis of the social end or need to be served cannot be accepted as an adequate account of the activities that serve it.

For instance, the reason why there is such a thing as economic activity is of course that people want to eat, to clothe themselves and so on. To provide the means to satisfy those wants is the social end or meaning of production. Nevertheless we all agree that this proposition would make a most unrealistic starting point for a theory of economic activity in commercial society and that we shall do much better if we start from propositions about profits. Similarly, the social meaning or function of parliamentary activity is no doubt to turn out legislation and, in part, administrative measures. But in order to understand how democratic politics serve this social end, we must start from the competitive struggle for power and office and realize that the social function is fulfilled, as it were, incidentally - in the same sense as production is incidental to the making of profits.<sup>31</sup>

According to the effective maintenance of representative leadership, democracy will be more or less like autocracy (just as, one might add, in the neo-classical structural approach competition varies between perfection and monopoly), because "the democratic method of government shades off into the autocratic one by imperceptible steps."<sup>32</sup>

With that in mind, Schumpeter tends to contemplate quite a variety of strategies and behavioural patterns within the realm of politics, with some vague rules, not always observed, which distinguish legitimate from illegitimate tactics, as judged from the point of view of the society in question.<sup>33</sup> Yet, in spite of the struggle for power, such political competition is never lacking. Just as no market power of an enterprise is absolute in the economic sphere, so too in the political sphere "no leadership is absolute."<sup>34</sup> Thus, whatever the political or economic system, some competition is ever-present, suggesting its universality in all interpersonal relationships:

In economic life competition is never completely lacking, but hardly ever is it perfect. Similarly, in political life there is always some competition.<sup>35</sup>

Linking essences to universals, Schumpeter concludes that the "competitive element" is the "essence of democracy" in the same way that competitive enterprise is the essence of capitalism.<sup>36</sup>

However valid or illuminating this parallelism between the economic and political spheres may be, it is, of course, the economic sphere that is of greater importance in this thesis. In the final section of this chapter, it is to the question of the adequacy of the Schumpeterian conception of competition for economic analysis that the conclusions of this chapter are addressed to.

#### 4. Some Unresolved Issues

The <sup>f</sup>relections of this section are not intended so much as direct criticism of the Schumpeterian conception of competition, as interpreted in the previous pages, but rather as recognition of some of the difficulties one might encounter in attempting to advance and such a conception as the basis for economic theory. Thus, the comments

to follow point not only to possible conceptual inadequacies of the Schumpeterian presentation of competition but also to the possible difficulties that one might encounter in attempting to reconcile the Schumpeterian conception with current orthodox theory in economics. And one should keep an open mind as to which of these bodies of thought are on the right track.

First, one relatively harmless criticism can be dispensed with, the charge of analogical reasoning. It might be argued that while Schumpeter's conception contrasts with the "mechanistic" conception of competition that the neo-classicists appealed to, his own account of competition as a process is itself founded upon an analogy: process is fundamentally a physical (including chemical and biological) notion referring to physical changes that single objects (such as organisms) or sets of contiguous objects (such as chemicals when put in solution) undergo, and for that reason process is not the correct genus of competition. Whether or not process is thus rooted in the natural and not the social sciences, one could save the Schumpeterian conception from this charge simply by replacing the term 'process' with the even simpler terms 'series of causally related events' in the definition of competition. One might also argue that to speak of 'social processes' makes a good deal more sense than to speak of 'social mechanisms' and that, therefore, process, even if an analogy, is a better analogy for competition than is mechanism.

A second type of difficulty raised by the Schumpeterian conception could be termed the "focus-identity" problem. Competition is conceived as a series or sequence of events; yet, the series has no clear identity, no discrete "starting point" nor conclusion, but refers

to the tangled, seamless web, so to speak, of personal interrelationships of the utmost complexity. Moreover, without further specification, such a process lacks any clear focus, say, as between economic and political behaviour, for, as Schumpeter argued, causal linkages between social events in reality "cross" the scientist's imagined disciplinary boundaries. All of this might seem harmless if competition were to be treated merely as one type of social interaction (among others), and Schumpeter was quite insistent on pointing out the mutual interdependence of all social events. Moreover, his solution to the problem of disciplinary boundaries, as discussed earlier, was simply to define 'economic' in terms of a particular type of motivation behind conduct.<sup>37</sup>

However, economists traditionally have treated economic competition as if it were quite clearly focused, discrete and final: models of competitive behaviour in the market place depict a "solution" or "result" of such behaviour, usually by reference to "equilibrium." In this sense, the game analogy runs deep in economic thought, going back at least as far as Adam Smith who first wrote of competition, in Wealth of Nations, as "a competition."

When the quantity of any commodity which is brought to market falls short of the effectual demand, all those who are willing to pay the whole value ... cannot be supplied with the quantity which they want. Rather than want it altogether, some of them will be willing to give more. A competition will immediately begin among them, and the market price will rise more or less above the natural price, according as either the greatness of the deficiency, or the wealth and wanton luxury of the competitors, happen to animate more or less the eagerness of the competition.<sup>38</sup>

In other words, traditional economics has been involved with the task of systematically integrating the notion of competition with pricing and other aspects of market behaviour. It is very difficult to so integrate Schumpeter's conception with traditional forms of theory. The

fact is that Schumpeter himself never tried to construct any "pure theory" on the basis of his conception of competition, in his Essentialist moods, but contented himself with applied analysis. In his Conventionalist moods, on the other hand, he seemed to accept as expedient the rigidities of neo-classical models, probably indicating the conceptual and theoretical gulf that separated these two conceptions of competition. Does the "focus-identity" problem lie with the Schumpeterian or neo-classical conceptions of competition?

A further problem of the Schumpeterian conception ( and of the neo-classical version too, although in a different way) centers on its rather imprecise way of handling the question of rules, the existence of which distinguishes competition from pure conflict and the observance of which distinguishes fair from unfair competitive tactics, Schumpeter's analysis in Capitalism, Socialism and Democracy suggests that he viewed much of what is commonly considered tacit collusion (or "conscious parallelism of action") as being not inconsistent with the idea of fair competition, that is, "corespective." In other words, he did not view the deliberate avoidance of competition between firms of the same industry as constituting a violation of the competitive ethic. Yet, orthodox theory and Schumpeter's conception both construe independent behaviour by competitors as the sine qua non of competition.

There are really two related questions at issue here: What does 'independent' mean? And, What set of rules define the competitive ethic? Regarding the first, Schumpeter felt that conscious awareness by competitors of each other's actions was quite consistent with the idea of a rational competitive strategy. On the other hand, neo-classical thinking stressed the relative anonymity of each individual competitor

in perfect competition, and from this idea of the powerlessness of each perfect competitor came the idea that the conscious interdependence of oligopolists constituted a "non-competitive" (monopolistic) element or imperfection of competition. Neither approach clarifies the meaning of 'independent.' Which is the correct approach?

Regarding the second aspect, Schumpeter attempted to maintain his scientific and ethically neutral posture by refraining from offering any account of the content of the competitive ethic. Instead, he interpreted this in an ethically detached and relativistic way, that is, for each case from the point of view of the society and individuals comprising it. In this way, as in his analysis of competitive behaviour in a democracy, he wanted to avoid any appeal to what he termed an "unrealistic ideal." Moreover, he referred to this approach as being "strikingly analogous to the economic phenomena we label 'unfair' or 'fraudulent' competition or restraint of competition."<sup>39</sup> On the other hand, the neo-classicists only considered collusion as a source of unfair competition and thus did not really grapple with the problem of the competitive ethic.

However, the question is not so much that of avoiding implicit value judgements, as Schumpeter wanted to do, but rather to be able to distinguish conceptually between fair and unfair, and between pure conflict and competition. Is Schumpeter's socially relativist and ethically neutral approach the proper scientific one?

A fourth type of difficulty is raised by the Schumpeterian conception of competition: If it is a sequence of events, then it is rather difficult to integrate competition into (or to interpret competition in terms of) the traditional systems of mathematical logic

employed in economic theory. And this most economic theorists seem intent to do. If the Frischian dichotomy of static and dynamic analysis is judged relevant to the type of theory that makes reference to the notion of competition, then any such theory that was based on the Schumpeterian conception would have to be dynamic to be conceptually adequate. Yet, even this is not as easy as it may sound, for the mathematical techniques commonly employed in economics, as well as the economic concepts that have a numerical property, are not readily interpreted in terms of sequences of events. Schumpeter apparently felt that Frischian dynamic analysis could be construed as dealing with series of situations, without loss of conceptual adequacy, such that the traditional calculus of continuous functions and limits could be used effectively.<sup>40</sup> As pointed out earlier,<sup>41</sup> this method treats flow concepts as if they were stock concepts by construing them as a series of instantaneous magnitudes of some sort. The method may or may not be conceptually satisfying, and time-period analysis is almost as artificial and mathematically expedient a method of interpreting such dynamic analysis as the "series of static states" approach.

If, in economic theory, numerical laws are to be associated with competition, then Schumpeter's conception would seem to call for a new type of calculus more appropriate to the process nature of competition.

A fifth set of difficulties arises from the fact that Schumpeter held out competition as being of universal applicability, in varying degrees, throughout the universe of social existence. The difficulties here, however, are not merely conceptual in nature but also take on both an empirical and evaluative complexion.

The fact that Schumpeter viewed competitive behaviour as a universal phenomenon has already been shown in connection with his analysis of political behaviour. The following passage from History of Economic Analysis indicates its equivalent status in economics. The economic notion of price was universalized by Schumpeter, too, when he defined it as a "coefficient of choice" in his article, "The Nature and Necessity of a Price System."<sup>42</sup> Notice, too, in the following passage how Schumpeter appeals to the coherence theory of verification as the basis of objectivity in economic theory and to the dialectical process amongst professional economists (certainly not a Hegelian dialectic but a steadily progressive one) as the form that scientific progress takes:

From earliest times until today, analytic economists have been interested, more or less, in the analysis of the phenomenon that we call competitive price. When the modern student meets the phenomenon on an advanced level of his study, for instance in the books of Hicks or Samuelson, he is introduced to a number of concepts and problems that may seem to him difficult at first, and would certainly have been completely un-understandable [sic] to so relatively recent an author as John Stuart Mill. But the student will also discover before long that a new apparatus poses and solves problems for which the older authors could hardly have found answers even if they had been aware of them. This defines in a common-sense and at any rate a perfectly unambiguous manner, in what sense there has been 'scientific progress' between Mill and Samuelson. ... Now our ability to speak of progress in these cases is obviously due to the fact that there is a widely accepted standard, confined, of course, to a group of professionals, that enables us to array different theories of competitive price in a series, each member of which can be unambiguously labeled superior to the preceding one.<sup>43</sup>

In other words, while the concept of competition is universal, it is also subject to a continual need for theoretical refinement. Schumpeter's universalist appeal is bound to illicit at least four types of objections.



First, there are those who will point to the predominantly English schools of classical and neo-classical economics as examples of attempts to construct theory on presumably universal foundations, which time has shown to be not so very universal but rather very English in outlook. Is not Schumpeter's, and in fact all, attempts to construct theory in the social sciences by appeal to universality doomed from the start by this kind of cultural relativity and self-delusion, just as the appeal to intuitive or a priori truth is usually based on some conceptually given way of looking at the world? This kind of question from the social relativists is not easily answered in any totally satisfactory manner. Certainly, Schumpeter did not claim to have found universal truth but, all the same, his efforts were in the direction of finding it.

A second type of objection is similar to the first, but it stresses not that human beings are culturally incapable of objectively grasping universal truths but rather that it is pointless to even search for them since all events are unique. This second class of would-be objectors to Schumpeter's universalism would point to his own contention that "the subject matter of economics is essentially a unique process in historic time"<sup>44</sup> with the result that:

The historical or 'evolutionary' nature of the economic process unquestionably limits the scope of general concepts and of general relations between them ('economic laws') that economists may be able to formulate.<sup>45</sup>

Yet, this did not prevent Schumpeter from endorsing Marshall's claim that economic theory had "universal application in the discovery of a certain class of truths."<sup>46</sup> Schumpeter seemed to be arguing that while economists had not yet and probably never would discover universal truth and even though historic events are unique, it is worth

searching for universal truth in the sense that all events have certain universal features about them, despite widely differing contexts:

It is true that 'economic laws' are much less stable than are the laws of any physical science, that they work out differently in different institutional conditions, and that neglect of this fact has been responsible for many an aberration.<sup>47</sup>

In philosophical terms, Schumpeter thus seemed to give a rather Platonic interpretation to his "essences" as is indicated briefly in the accompanying footnote.<sup>48</sup> In any case, he who would try to defend the Schumpeterian outlook must face this sort of criticism.

A third type of objection might be described as ideological, although perhaps 'empirical' is the appropriate adjective. Those of a socialist persuasion might object to Schumpeter's claim that competition is never entirely absent in social life, especially in the economic sphere, even with the very broad meaning that Schumpeter attaches to the notion. They might argue that a socialist society without any competition is an ideal possible of realization, and that Schumpeter's attempted universalization of the concept is only a rationalization of the capitalist ethos. Whether based on ideology or not, there is an element of doubt in the claim that competition can never be entirely absent, even if consciously suspended for a temporary period. This type of possibility brings into question the proper range of context that must be considered in deciding whether or not competition can be said to occur. In any case, does this possibility invalidate Schumpeter's universalist claim? Of course, one simply could reject his defining terms and thus eliminate the claim altogether, but this is an entirely different type of objection.

A fourth type of objection is similar to and might follow from the third in that the evaluative implications of Schumpeter's universalism are questioned. It might be argued that by treating competition as universal and hence, in some way, inevitable, Schumpeter might tend to commit the naturalistic fallacy, that is, the kind of invalid inference that runs from "universal" to "inevitable" to "natural" and finally to "good." In other words, by arguing for its universality and in conjunction with other attitudes Schumpeter might imply certain value judgements about the social beneficence of competition.

Appraisal of Schumpeter's position in regard to this charge requires further knowledge of his analytical work, in particular his applied analysis of competition within a capitalist setting. This aspect of Schumpeter's work on competition is treated in the next chapter. In the final chapter, the question of the naturalistic fallacy is examined in the light of that applied analysis.

Notes to Chapter 5

<sup>1</sup>Of course, with open concepts such as competition, this distinction between meaning and truth is very difficult to make. For example, is the universal character that Schumpeter attributed to competition (see pp. 153, 172-76) an empirical claim about competition or is it solely a result of the manner in which he defines (however vaguely) the term 'competition'?

<sup>2</sup>Seligman, for example, was misled by Schumpeter's Conventionalist statements into the conclusion that he based his doctrinal system on pure competition. [See Seligman's Main Currents in Modern Economics (New York: Free Press of Glencoe, 1963), p. 696.] This is a very mistaken interpretation.

<sup>3</sup>History of Economic Analysis (New York: Oxford University Press, 1954), p. 45.

<sup>4</sup>ibid., p. 41 and Essays of J. A. Schumpeter, ed. R. V. Clemence (Cambridge, Mass.: Addison-Wesley Press, 1951), pp. 272, 281.

<sup>5</sup>G. Haberler, "Joseph Alois Schumpeter, 1883-1950," in Schumpeter, Social Scientist, ed. S. E. Harris (Cambridge, Mass.: Harvard University Press, 1951), pp. 44-45.

<sup>6</sup>Seligman, op. cit., p. 712.

<sup>7</sup>Alvin S. Johnson, "Abstract Economics According to Schumpeter," Journal of Political Economy, XVII (June, 1909), 363.

<sup>8</sup>History of Economic Analysis, p. 16.

<sup>9</sup>Key statements in Capitalism, Socialism and Democracy (3rd. ed.; New York: Harper Torchbooks, 1962) are: "Capitalist reality is first and last a process of change" (77 n. 1); "The essential point to grasp is that in dealing with capitalism we are dealing with an evolutionary process" (p. 82); and "[The] Process of Creative Destruction is the essential fact about capitalism." (p. 83)

<sup>10</sup>ibid., p. 83.

<sup>11</sup>ibid., p. 85.

<sup>12</sup>ibid., p. 104n.

<sup>13</sup>ibid., pp. 68, 83, 101, 104.

<sup>14</sup>The Theory of Economic Development, tr. R. Opie (English ed.; New York: Galaxy Books, 1961), pp. 3-5.

<sup>15</sup>See pp. 165-67.

<sup>16</sup>Business Cycles (New York: McGraw-Hill, 1939), I, 97 n. 2.

<sup>17</sup>Capitalism, Socialism and Democracy, p. 103.

<sup>18</sup>ibid., p. 79.

<sup>19</sup>See pp. 171-2 and note 40 below.

<sup>20</sup>Das Wesen und der Hauptinhalt der theoretischen National-  
ökonomie (Munich and Leipzig: Duncker & Humblot, 1908), p. 90, cited  
in Machlup, "Schumpeter's Economic Methodology," Schumpeter, Social  
Scientist, p. 100. Machlup believes that Schumpeter introduced the  
term in this book.

<sup>21</sup>Essays, pp. 6-7.

<sup>22</sup>Business Cycles, I, 11n.

<sup>23</sup>Essays, p. 222.

<sup>24</sup>Capitalism, Socialism and Democracy, p. 271 n. 5.

<sup>25</sup>ibid., p. 90n.

<sup>26</sup>ibid., p. 84.

<sup>27</sup>Alfred Marshall, Principles of Economics (8th ed.; London:  
Papermacs, 1966), p. 4.

<sup>28</sup>Capitalism, Socialism and Democracy, p. 84.

<sup>29</sup>ibid., p. 269.

<sup>30</sup>ibid., pp. 269, 271, 282.

<sup>31</sup>ibid., p. 282.

<sup>32</sup>ibid., p. 271.

<sup>33</sup>ibid., p. 271.

<sup>34</sup>ibid., p. 280.

<sup>35</sup>ibid., p. 271, italics added.

<sup>36</sup>ibid., p. 280.

<sup>37</sup>See above, p. 131.

<sup>38</sup>Adam Smith, The Wealth of Nations, ed. E. Cannan (New York:  
Modern Library, 1937), p. 56.

<sup>39</sup>Capitalism, Socialism and Democracy, p. 271.

<sup>40</sup>For Schumpeter's interpretation of Frischian dynamics as  
a series of static states, see ibid., pp. 103, 104n.

<sup>41</sup>See above, p. 128.

<sup>42</sup>Essays, p. 119.

<sup>43</sup>History of Economic Analysis, pp. 39-40.

<sup>44</sup>ibid., p. 12.

<sup>45</sup>ibid., p. 34.

<sup>46</sup>ibid., p. 954 n. 2.

<sup>47</sup>ibid., p. 34.

<sup>48</sup>Schumpeter spoke of "essences" as if they were "meanings"  
much like Plato's abstract universal entities, the "ideas" that exist  
independently of minds and in a different way from the concrete objects  
that exemplify them (although Plato had difficulty in accounting for  
the sort of existence of his Ideas). In this way, Schumpeter's outlook  
is plausibly described as Conceptual Realism, a version of Idealism.

## Chapter 6

### THE PROCESS OF CREATIVE DESTRUCTION

#### 1. Applied Analysis

Compared to the universal aspirations of the previous chapter, the subject matter is of a rather restricted scope, that is, more restricted than the earlier neo-classical theorists of perfect competition would have one to believe.

Schumpeter's often abused term, "the process of creative destruction," designates in an approximate but accurate way his analysis of the competitive behaviour of business enterprise in what he refers to dogmatically as the "capitalist" epoch. In Capitalism, Socialism and Democracy where the term was first employed, the geographical range of the analysis is left to the reader's imagination, but there as elsewhere he leaves the distinct impression that he had in mind both a European and North American frame of reference. In the same way, the time span encompassed by his analysis is rather vaguely specified but, again in a very approximate manner, his concept of "competitive capitalism" straddles the nineteenth and the first half of the twentieth centuries.\*1

Thus context-bound by both time and place (however vaguely at the edges), his analysis is an "applied" one, not a theoretical exercise in the sense in which he wrote of "pure theory." Yet, within

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\*Footnotes for Chapter 6 are located on pp. 215-19.

those limits, his analysis does have some claim to generality, for Schumpeter contends that the process of creative destruction is "the essential fact about capitalism."<sup>2</sup> For this reason, his analysis might better be termed a "theory of the middle range" in the sense in which the sociologist, R. K. Merton, has used the term.<sup>3</sup>

Strictly speaking, the process of creative destruction does not deal with economic competition in all its actual contexts (such as between employer and employee, between individuals working in the same organization, or between officials of different economic institutions other than enterprises). It treats only of the competitive behaviour of business leaders of privately owned enterprises in their "market" activities. In this way, it is roughly equivalent in extent to the scope of the neo-classicists' market analysis of firms.

Now, since the analysis is thus temporally and spatially context-bound in the range of its intended application, it would be a mistake to judge its validity by reference to the facts of another time or place. On the other hand, Schumpeter did venture some rather controversial predictions for the oncoming stage of capitalism (as he termed it, "Trustified Capitalism"), based on his investigation of the preceding era of capitalism. Many of these predictions are relevant to the present times. However these current (post 1945) trends and Schumpeter's predictions of them stand apart from his historical analysis of "competitive capitalism" and must be kept separate for purposes of appraisal. Therefore, Schumpeter's predictions as to the future of competitive behaviour are treated separately in Chapter 7.

In a further sense, Schumpeter's process of creative destruction is more than just an analysis of business competition. It

fairly well describes his broader analysis of capitalist economic development and the business cycle or, as he put it, the "evolutionary process of capitalism."<sup>4</sup> Granted that Schumpeter employed the term 'creative destruction' only in Capitalism, Socialism and Democracy, it is nevertheless intimately related to his treatment of cycles and development in that book, a treatment which very closely resembles his earlier work in Business Cycles and The Theory of Economic Development. Therefore, Seligman, for example, is perhaps textually misleading when he refers to Schumpeter's earlier work on cycles and development by the term 'creative destruction,' but the association is in a very real sense accurate.<sup>5</sup>

For this reason, in what follows some reference to Schumpeter's other work is almost unavoidable. However, it is kept to a minimum, with the emphasis being placed on its relationship to competition.

## 2. Innovation and the "Perennial Gale"

In some of the most flourid pages of Capitalism, Socialism and Democracy, the process of creative destruction is described as a process of "incessant," "qualitative," and "evolutionary" change in the economic sphere of life, that is, in the production and distribution of material goods.<sup>6</sup> Being a qualitative process, it is more than just mere growth, the accumulation of wealth through merely repetitive productive activity such as would characterize a "stationary" economy. And, being evolutionary, it cannot be understood by reference to any "laws of history," for it is a unique (non-repetitive) series of events continuously unfolding.<sup>7</sup>

Moreover, the process is not merely evolutionary but is "dynamic" in Schumpeter's original sense, that is, it entails economic



change from within its own system, as well as reacting to external (non-economic) sources of change. Thus, that very elusive and profound, but much over-worked, notion of change lies at the very heart of Schumpeter's analysis.

Stolper writes:

It seems that a really great man in our field is known chiefly by one contribution which may or may not be his main achievement. As Malthus suggests "population" and Ricardo "rent" or perhaps the "law of comparative advantage," so "economic development," "innovation," and "entrepreneur" are the catch words associated with Schumpeter.<sup>8</sup>

Notice that each of these three terms, as Schumpeter employed them, hinge on the notion of purely economic change. The entrepreneur is the agent of change, innovation the act of changing, and development the long-run result of change. Both innovation and the entrepreneur bulk large in Schumpeter's account of competitive behaviour.

In Business Cycles, Schumpeter defined innovation in simple but sweeping terms: "any 'doing things differently' in the realm of economic life."<sup>9</sup> There as elsewhere, he typically listed four or five basic categories of innovation: the introduction of new products, production processes (including distribution or marketing methods), new forms of industrial organization, the discovery of new markets (presumably new classes of buyers or new regions), and discovery of new sources of supply.<sup>10</sup> Such innovative activity constitutes the main form of competitive behaviour, although not all.

At one point, he gave innovation a peculiarly neo-classical interpretation, as the "setting up of a new production function,"<sup>11</sup> no doubt analytically pleasing in sound but hardly broad enough to encompass the full range of meaning that he wished to give to the term. From the list given above, it seems that he envisaged not only changes

in production (technological change in the form of new products and processes) but also institutional changes (new forms of organization) and socio-cultural changes (new habits of consumption).

Two basic features of the process of creative destruction merit some emphasis here. First, it describes "purely economic" change only, the purity deriving from the manner in which Schumpeter defined 'economic' and the range of activity he subsumed under the adjective 'innovative.' At one point, he wrote:

Innovation is readily seen to be a distinct internal factor of change. It is ~~an~~ internal factor because the turning of existing factors of production to new uses is a purely economic process and, in capitalist society, purely a matter of business behaviour.<sup>12</sup>

It should not be concluded from this, however, that Schumpeter was interested only in economic change, nor that he recognized only economic sources of change. He notes, for example, that "business behaviour may, of course, be molded not only by general environmental conditions but also by the specific action of other social organs, governments for instance."<sup>13</sup> It simply means that these other factors are taken into account apart from the process of creative destruction.

Furthermore, Schumpeter again reveals his penchant for the general or universal in relation to this process and its principal manifestation, innovative activity. In Capitalism, Socialism and Democracy, he writes: "Improvement in the quality of products is hence a practically universal feature of the development of individual concerns and of industries."<sup>14</sup>

A concluding comment is appropriate here in regard to the particular perspective that Schumpeter creates. This incessant change that so characterizes economic life in competitive capitalism is

held out as a "perennial gale," not a "perennial lull" of creative destruction.<sup>15</sup> In a conservative tradition, Schumpeter requires that this process be seen only in an extremely long-run manner, through "decades and even centuries."<sup>16</sup> Otherwise, its essence is lost. It is as if he were asking the analyst to take a movie reel of a century of capitalist history and view it at a speed fifty or a hundred times faster than its original rate in order to grasp the essence of the process.

It might be asked: Is Schumpeter correct in demanding only this perspective? Is he not thus exaggerating the role of change and ignoring the role of the permanent, the stable features of economic life? One might argue that much of what is called "change" is merely a steady stream of superficial modifications, or, to use the current phrase, whose paradoxical qualities are often overlooked, "constant change?" Does Schumpeter not glamourize the very notion of change?

This problem of gaining a proper perspective on things is virtually insoluble because there is no absolute criterion by which one can measure the rate of change which is, after all, a qualitative thing in Schumpeter's analysis. In this matter, one is faced with imponderables, much like trying to reconcile Schumpeter's emphasis on both the uniqueness of history and the universality of theory.

However, on a more solid footing, the issue reduces then to one of determining how Schumpeter depicted this perennial gale in relation to competitive behaviour. This is done first by reference to Schumpeter's treatment of business strategy, then to the business cycle context in which such strategy is formulated and put into effect, and finally to a closer examination of entrepreneurial behaviour.

### 3. Business Strategy

In the process of creative destruction, competition is envisaged as only one kind of interaction between firms (that is, between the individuals running the firms), but it is probably the most important kind of interaction, being the combination of independent and causally interdependent action, as outlined in the previous chapter.

It will be recalled from Chapter 3 that in his critique of neo-classical competition Schumpeter reduced his own conception of competition to "a scheme of motives, decisions, and actions."<sup>17</sup> These three components of competition coalesce, in a sense, into what Schumpeter repeatedly refers to as "strategy." The three components break down conveniently into two basic categories: motives are the behavioural premises imputed to businessmen for explanatory purposes (the "why" of behaviour), actions taken together constitute the behavioural patterns as observed (the "what" of behaviour), while decisions, depending upon how one interprets them, straddles the two categories. The latter will be considered in turn.

First, regarding the motives of those guiding the affairs of firms, Schumpeter accepted the simple assumption of the neo-classical school, for purposes of economic analysis, that the chief motivation was the pursuit of profits. Schumpeter was less insistent on the more specific claim of profit maximization. However, he clearly rejected a simplistic model of the homo oeconomicus of the hedonist and utilitarian schools of thought, claiming instead that the specifically economic aspect of an individual's total motivational system represented only one segment (to revert to his metaphor) of an

endless chain of causal links that go into the total make-up of each individual.<sup>18</sup> Therefore, although he limited his explanation of economic behaviour to this one motive, profit-seeking, Schumpeter does take into account the effects of changing sociological patterns in his analysis of the transition of capitalism into socialism, with consequent economic implications. This sociological orientation to the explanation of economic behaviour will be touched upon in the section on entrepreneurial behaviour below, and will be met again in the final chapter. For the moment, it suffices to say that within the process of creative destruction, Schumpeter identified profit-seeking as the key motivational factor.

Where Schumpeter did part company with his neo-classical predecessors was on the matter of behavioural patterns to be subsumed under the analysis of competition. While he accepted the importance of explaining pricing behaviour, he did not share with the neo-classical economists their obsession with price-quantity analysis which represented virtually the only dimension of competitive behaviour that they recognized in theory. Schumpeter's criticisms of this narrow and rigid approach represent some of the most memorable passages of Capitalism, Socialism and Democracy and have been cited elsewhere in this thesis.<sup>19</sup> Rejecting this "bias for easily manageable patterns" and the resultant "Principle of Excluded Strategy"<sup>20</sup> Schumpeter went far beyond the theory of monopolistic competition in the way of releasing the rigidifying ceteris paribus assumptions of neo-classical theory. (It should be added, though, that he was not theorizing but applying theory and it remains to be seen how rigid his own theory would have been.)

In his theory of monopolistic competition, Chamberlin had gone a long way in officially recognizing the role of advertising and product differentiation as a legitimate part of competitive behaviour for the purposes of economic theory. Yet, Chamberlin retained a value--theory approach to competition built on price-quantity diagrams which expressed the equilibrium "results" of firm behaviour (which behaviour lurked, as it were, behind the diagrams). Schumpeter's account of actual competitive behaviour (which admittedly Chamberlin's account was not) completely dispensed with ceteris paribus constraints on behavioural patterns. Competitive strategy simply included all that businessmen thought of and did do in their market behaviour. Thus, the usual distinction between "price competition" and "non-price competition" is simply inadequate in describing Schumpeter's account of competitive behaviour. The distinction between "product competition" and "non-product competition" would be no less relevant. Competitive strategy in Schumpeter's analysis is co-extensive with all decisions and actions of businessmen in their interaction with each other in the market place.

In this way, Schumpeter emphasizes not only pricing, product and marketing decisions but also the investment decision which so often accompanies major innovational actions.<sup>21</sup> In this latter respect, the business cycle context looms large, since both the cycle and investment entailed credit creation (capital mobilization) and such "dynamic" considerations as uncertainty and lagged reactions and their implications.

In his characterization of business strategy, Schumpeter made much use of a certain dichotomy which can best be described as a distinction between (1) those business actions which initiate change

and (2) those actions which merely adjust or adapt to the former. In another way, this dichotomy is often likened to the distinction between "aggressive" or offensive strategy and restrictive or defensive strategy. In game theory, this might be equated to the distinction between risk-taking and risk-averting behaviour. A further analytical analogy suggests itself, in terms of Schumpeter's mode of speaking, namely, the analogy to the equilibrating and dis-equilibrating tendencies of competitive behaviour as they function in his account of the business cycle. In one of his most brilliant articles, Schumpeter described this analytically significant distinction in terms of "creative" and "adaptive" responses, linking the creative to the innovative activity of business leaders and the adaptive to the administrative or managerial function of leadership.<sup>22</sup>

Schumpeter's choice of terminology in 'creative' and 'adaptive' was perhaps unfortunate in that it tends to ascribe a rather more positive evaluative connotation to the former, while the latter term has a more neutral value, appropriate to a scientific approach. With that one qualification, the dichotomy is both meaningful and very significant in Schumpeter's analysis, pointing to two contrasting sides of human nature: the need for discovery, change, and satisfaction of curiosity on the one hand, and the need for security, order and a degree of certainty in the conduct of economic affairs on the other. As it turns out, Schumpeter tended to glamourize the former at the expense of the latter in his characterization of the entrepreneur.

This description of business strategy in and of itself, though, does not convey the essence of competitive behaviour in the process of creative destruction. To do so, the cyclical nature of the

business environment must be brought into focus.

#### 4. The Business Cycle Context

In Capitalism, Socialism and Democracy, Schumpeter passes the remark that theorists have the habit of relegating all of the realities of business behaviour to books and courses on business cycles.<sup>23</sup> That remark is indicative of the significance he attached to the role of the business cycle in determining the pattern of business behaviour. In the same volume, he wrote: "Every piece of business strategy acquires its true significance only against the background of that process [of creative destruction],"<sup>24</sup> and that process was not merely an incessant, perennial gale, it was also cyclical and inherently unstable.

While Schumpeter's theory of the capitalist business cycle does make reference to economic aggregates for a total economy such as define the total activity of its business community viewed as a whole, his argument nevertheless is essentially micro-economic in basis (in the same sense in which Walrasian general equilibrium is micro-economic), resting on the analysis of individual firms and markets. Schumpeter required many pages to unravel in all its detail his multi-faceted theory of the cycle, but its principal contours and the role of competition in bringing about the cycle can be briefly described.

Initially, during a period of relative stability (or in approximate equilibrium, as Schumpeter would have put it), prices are steady, and planning and calculating changes (innovations) are facilitated. In their search for profits, the more adventurous of



business leaders will undertake major innovations, involving investment and capital mobilization. This initial "wave" of innovation will not only bolster lagging expectations caused by the previous cyclical slump, it will also induce both adaptive and retaliatory moves from competitors and also will induce further economic activity in related fields (Schumpeter implicitly appealed to the Keynesian idea of a multiplier effect).

However, this second wave of innovation has an increasingly de-stabilizing effect on prices, thus leading to miscalculation, declining profits, business failures, tightening of credit, and the eventual postponement of further innovational activity. The resultant slackening off of business activity and slump eventually leads back to a period of stability (equilibrium), at which point competitive behaviour initiates a new cycle all over again.<sup>25</sup>

Of course, much more could be said in elaboration of this theory and in criticism of its logical and empirical shortcomings.<sup>26</sup> It need only be said, however, that competitive activity, both innovative and adaptive, represents the prime cause of the cycle, and that the cycle is internally (endogenously) created, fluctuating from one equilibrium state to another.

Given this background, Schumpeter characterizes typical patterns of business behaviour in Capitalism, Socialism and Democracy in terms of a polemic against U. S. antitrust policy. With his main thesis that "the large scale establishment ... has come to be the most powerful engine of ... progress"<sup>27</sup> Schumpeter contended that "there is no general case for indiscriminate 'trust-busting' or for prosecution of everything that qualifies as a restraint of trade."<sup>91</sup> In his defense of this argument, much appeal is made to the cyclical nature of the

perennial gale and the competitive behaviour that underlies it. A few of Schumpeter's many supporting arguments for his thesis will be given to illustrate.

Claiming that the competition that really "counts" is the competition from "the new commodity, the new technology, ... competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations,"<sup>29</sup> he views the mere threat of innovation as a factor inducing both aggressive and protective competitive strategy in anticipation of possible threatening moves by others. This is so because of the expectations of future change based on a long experience of such change in the past. This ever-present threat is commonly labelled in current terminology as "potential" competition, although Schumpeter never employed this rather obscure term himself. Instead, he wrote in the following manner:

Competition of the kind we now have in mind acts not only when in being but also when it is merely an ever-present threat. It disciplines before it attacks. The businessman feels himself to be in a competitive situation even if he is alone in his field.<sup>30</sup>

In fact, he felt that the mere threat of competition was more significant than the actual existence of competitors! In the case of retail trade, he argued that:-

The competition that matters arises not from additional shops of the same type, but from the department store, the chain store, the mail-order house and the supermarket.<sup>31</sup>

Thus, inter-industry competition was judged to be far more important than intra-industry competition in determining business strategy.

The uncertainty of the perennial gale of innovation elicits both aggressive and protective behaviour, such as the patents, labels

and copyrights that inevitably accompany every successful innovation. Research activity underscores this inseparable blend of aggressive and protective (or creative and adaptive) motivation behind all innovative activity:

The first thing a modern concern does as soon as it feels that it can afford it is to establish a research department every member of which knows that his bread and butter depends on his success in devising improvements.<sup>32</sup>

This appeal to "potential" competition permitted Schumpeter to defend firms operating in industries with statistically high concentration ratios from the charge of oligopolistic behaviour, just as his appeal to the dynamics of competition, in the cycle context, permitted him to defend certain restrictive business practices from the charge of being monopolistic.

Schumpeter's treatment of restrictive practices is to industrial behaviour what his treatment of "potential" competition is to industrial structure. It is interesting to note how he dealt with the terms 'monopoly' and 'monopolistic' in regard to this traditional distinction between structure and behaviour. Monopoly is a structural concept (that is, high industrial concentration or, in purest form, the total domination of an industry by one firm). Yet, Schumpeter entitled his chapter on restrictive practices "Monopolistic Practices." He explained this apparent inconsistency as follows:

I have entitled this chapter as I did because most of it deals with the facts and problems that common parlance [that is, in the anti-trust field and amongst economists] associates with monopoly or monopolistic practice. So far I have as much as possible refrained from using those terms.<sup>33</sup>

Schumpeter's preference was for the behavioural term 'restrictive'. Referring to monopoly in its traditional sense as "Single Seller," he

insisted further that "there is, so it seems, no point in calling anything a monopoly to which that theory does not apply."<sup>34</sup> "Why then all this talk about monopoly?" he asked, arguing that "pure cases of long-run monopoly must be of the rarest occurrence and that even tolerable approximations to the requirements of the concept must be still rarer than are case of perfect competition." Moreover, even those monopolists would be subject to the same kind of competitive pressure from other quarters as are non-monopolists.<sup>35</sup> And, finally, he protested against current American practice to treat 'monopoly' as synonymous with 'any large-scale business.'<sup>36</sup>

Given the de-stabilizing tendencies of competitive behaviour, Schumpeter argued further that many restrictive practices, in the long run, led to better industrial performance - faster growth in total output and a faster rate of technological change. Since business investment is always made in a climate of uncertainty, certain "safeguarding activities" (such as patents, secrecy of new processes, long-run contracts) do much to "steady the ship," "alleviate temporary difficulties" and thus make it possible for a greater number and range of innovations to be carried out.<sup>37</sup>

At the same time, the continuous appearance on innovations by other firms "reduces the long-run scope and importance of practices that aim, through restricting output, at conserving established positions."<sup>38</sup> Thus, competition is both the accelerator and brake of the capitalist vehicle of progress:

There is no more of paradox in this than there is in saying that motorcars are traveling faster than they otherwise would because they are provided with brakes.<sup>39</sup>

Restrictive practices thus allow for both "orderly advance" and "orderly

retreat" in dying industries, subduing the de-stabilizing impact of innovational activity. Because this line of argument is founded on the uncertainty of the dynamics of competition, some analysts have dubbed the type of efficiency that Schumpeter was alluding to as "dynamic efficiency."<sup>40</sup>

In the same way, Schumpeter devotes much space to the defense of short-run price rigidity (stability), with the proviso that such rigidity is "essentially a short-run phenomenon. There are no major instances of long-run rigidity of prices." Schumpeter's reasoning is concisely stated in the following passage:

What the business strategy in question really aims at - all, in any case, that it can achieve - is to avoid seasonal, random and cyclical fluctuations in prices and to move only in response to the more fundamental changes in the conditions that underlie those fluctuations.<sup>41</sup>

Schumpeter's polemical analysis, brilliant though it is in its presentation, is hardly free of empirical and logical shortcomings. He himself, perhaps inadvertently, points to one fundamental flaw in the conception of competition underlying his argument. This flaw was touched upon in the previous chapter.<sup>42</sup> While certain of the restrictive practices have this beneficial aspect (according to Schumpeter's value premises), others "have that injurious effect on the long-run development of output which is uncritically attributed to all of them."<sup>43</sup> Granted that his polemic was against indiscriminate trust-busting, Schumpeter's conception all the same does not provide a criterion by which to distinguish between those practices that are and those that are not conducive to efficiency in the long-run. He is more inclined to judge each case on its own merits without appealing to any general rule, judging the whole matter an "extremely delicate

problem."<sup>44</sup> However, in all fairness to him, it should be pointed out that this problem has long been the major challenge to those working in the anti-trust field and probably never will be solved to every one's satisfaction.

Schumpeter's applied analysis is rounded out in the next section in which the entrepreneurial function brings psychological, sociological and institutional factors to the fore.

### 5. The Entrepreneurial Function

Schumpeter's third trademark, the entrepreneur, is an integral part of his analysis of competition in the process of creative destruction. Entrepreneurs are the central figures or actors, the agents of change, in this process as those individuals making the key decisions affecting business activity, just as innovation represents the principal manifestation of that activity. Moreover, Schumpeter tended to identify the changing pattern of competitive behaviour with the changing role of the entrepreneur in the modern business organization. On the whole, then, Schumpeter's applied analysis of competitive interaction amounts to a study of the behaviour of entrepreneurs.

Schumpeter was obviously troubled by the task of defining and identifying that group of individuals to be called entrepreneurs, judged by the amount of space he devoted to it. One thing is certain: he identified them by the economic function they performed, that of carrying out or initiating innovations, such that 'entrepreneur' is virtually synonymous with 'innovator'.<sup>45</sup> He once described this function rather pompously as "getting things done"<sup>46</sup> but the point he

tried to emphasize was the leadership function of the entrepreneur: not the discovery of new opportunities but the making of top level decisions that initiate innovative action.<sup>47</sup> That there is no precise dividing line between innovative or entrepreneurial and mere managerial or administrative decision-making he admitted, but he appealed to the creative-adaptive distinction as a guide.<sup>48</sup>

Many other distinguishing characteristics are cited in a negative way: entrepreneurs are as such not inventors, new possibilities always being abundant and presented to them by others;<sup>49</sup> Nor do they form either a distinct social class or a professional group.<sup>50</sup> Moreover, the economic function of risk-taking belongs not to the entrepreneur as such but to the capitalist (bankers, stockholders, and financiers), although the two functions might be performed by one and the same person.<sup>51</sup>

Schumpeter's presentation leaves no doubt that he did not intend "the entrepreneur" to be an "ideal type" form of abstraction in the Weberian mode or as in the earlier mode of speaking of a so-called "homo oeconomicus," even though his frequent use of the singular forms 'he' and 'the entrepreneur' tend to create this false impression.<sup>52</sup> Instead of the entrepreneur as an abstraction, entrepreneurs are presented as concrete individuals, whether they be employer or employee, owner or manager of the enterprises they lead.<sup>53</sup> Schumpeter broke with tradition by differentiating the entrepreneurial function from Say's classical "administrative" and Marshall's neo-classical "managerial" function, but Schumpeter observed both earlier traditions by separating entrepreneur from capitalist.<sup>54</sup>

There are several historically dated characteristics that

Schumpeter associated with the entrepreneur and the institutional environment in which he functioned, revealing a rather European outlook. Two stand out in particular: first, entrepreneurs are found generally, though not always, amongst the owners of enterprises, and, second, they are generally the founders of the enterprises that they head.<sup>55</sup> Schumpeter made these two claims, however, with a very long time perspective in mind, spanning the nineteenth century at least. They follow from two institutional facts: the predominance of small-scale enterprise and the rather rapid rise and decline of most firms. Moreover, two further historical generalizations serve to support his thesis: first, the association of major innovations with the appearance, as he put it, of "New Men" and "New Firms"<sup>56</sup> and, second, the linkage of entrepreneurial behaviour to ownership of enterprise through the alleged motivation of the entrepreneur to found a family "dynasty."<sup>57</sup>

Now, apart from the question of their historical accuracy, these claims would seem to be very outdated now, especially in a North American context, even for the first half of the twentieth century which Schumpeter had an opportunity to survey. The fact is that Schumpeter did recognize, as early as the 1920s, the modern trend toward permanence of large-scale corporations, the attendant separation of control from ownership, and the blurring of the entrepreneurial function in what he termed the trend toward the "automatisation" of change. This process of transformation of "competitive capitalism" into (as he put it) "trustified capitalism" with in the final chapter. The point here is that Schumpeter's thesis about the entrepreneur in competitive capitalism is an historical one,



not a theoretical one, and therefore must be judged by reference to the time period he had in mind, however vaguely it may have been specified, and not by reference solely to trends that began to emerge by the turn of the present century.

Schumpeter's entrepreneur has been depicted by many as a sort of economic "hero." For example, Joan Robinson writes:

Schumpeter's innovating entrepreneur, the benefactor of mankind, is the same character as Marx's Moneybags. Only the adjectives are different.<sup>58</sup>

Now, Schumpeter was quite sensitive to this sort of criticism, that of glorifying the entrepreneur and thus casting in doubt his claims to a scientifically detached objectivity and neutrality. In the second edition of The Theory of Economic Development, he complained:

Our analysis of the rôle of the entrepreneur does not involve any "glorification" ... as some readers of the first edition of this book seemed to think. We do hold that entrepreneurs have an economic function as distinguished from, say, robbers. But we neither style every entrepreneur a genius or a benefactor to humanity, nor do we wish to express any opinion about the comparative merits of the social organization in which he plays his rôle, or about the question whether what he does could not be effected more cheaply or efficiently in other ways.<sup>59</sup>

Again in 1928, he insisted that entrepreneurial leadership "does not imply any glorification."<sup>60</sup> Throughout most of his career, Schumpeter passionately wished to dissociate himself from any preconceived value judgements in economic theory and analysis, as is illustrated by the following discussion of the entrepreneur:

This case emphasizes the desirability, present also in others, of divesting our idea of entrepreneurial performance of any preconceived value judgement. Whether a given entrepreneurial success benefits or injures society or a particular group within society is a question that must be decided on the merits of each case.<sup>61</sup>

However, towards the end of his career, his thinking on the

matter of scientific neutrality (if not objectivity) underwent some modification, if not total conversion, as is evidenced in his claim as to the inevitability of "ideological bias" in all scientific work. For example, in his presidential address, "Science and Ideology," he re-affirmed his belief in objectivity through fact-finding and professional scrutiny by others in the field but was prepared to admit an ideological element in theory in any case. Writing specifically about the entrepreneur, he remarked:

At present there is, as has been stated above, a whole range of differences of opinion on this subject that extends from a complete or almost complete denial of any importance to be attached to the quality of leading personnel to the equally reckless assertion that the creative individual is nothing less than everything. It need hardly be pointed out that most of these opinions carry the stamp of ideological preconception. It is no doubt part of our work to put provable results into the place of such ideologies. The fundamental question is one of fact, but the necessity of a theoretical schema to start with is nevertheless obvious.<sup>62</sup>

Despite Schumpeter's quite legitimate and accurate claim to factual relevance and objectivity (even if not neutrality), one can readily understand why the impression of glorification emerges from a reading of his work on the entrepreneur. It arises not only from the mere fact that the entrepreneur is depicted as the key initiator of all purely economic change but also from the fact that Schumpeter places such behaviour in a particular sociological setting. The "non-economic" elements of his account of entrepreneurial behaviour can be classed conveniently under three headings: (1) the environment in which the entrepreneur functions, (2) the principal motivations underlying entrepreneurial behaviour, and (3) the typical character and personality traits that were associated with entrepreneurs.

(1) A seemingly plausible claim to make would be to say that

Schumpeter's entrepreneur epitomizes the ethos of capitalist civilization, such that in the entrepreneur are concentrated all those characteristics that define the capitalist life-style. There is an element of truth in this contention but it is misleading all the same. More accurately, Schumpeter would argue that the entrepreneur epitomizes one aspect of that ethos, business leadership, and as such is a deviation from the norm in one direction only. He is depicted as functioning in a social and economic environment characterized not only by uncertainty (created by unending change) but also by a general resistance to change. Because the entrepreneur is thus depicted as in the minority and at the vanguard of change, analysts such as Sievers have elected to call Schumpeter's social outlook or philosophy an "elitist" one.<sup>64</sup>

Schumpeter was wont to venture the rather audacious claim that the vast majority of the population of capitalist civilization was basically conservative, that is, governed by habit and routine and fearful of initiating major change, while only a small minority was alleged to be sufficiently perceptive to discern new opportunities of an economically feasible nature and sufficiently predisposed to act upon them. Thus, entrepreneurial "talent" was a scarce resource.

To do something new is very much more difficult than to do something that belongs to the realm of routine. ... Most people feel an inhibition when the possibility of treading a new path offers itself.<sup>65</sup>

To act with confidence beyond the range of familiar beacons and to overcome that resistance requires aptitudes that are present in only a small fraction of the population and that define the entrepreneurial type as well as the entrepreneurial function.<sup>66</sup>

In an era which boasts of very rapid technological change and which in many ways glorifies change itself, this elitist outlook

might seem quite strange. Again, however, Schumpeter had an historical perspective in mind, reaching back at least a century and a half, which is the proper frame of reference for judging the validity of his argument. Moreover, there is reason to believe that he would have revised this minority view of entrepreneurial behaviour in the current era in terms of the "automatisation" of change.<sup>67</sup>

(2) That Schumpeter rejected a simple hedonist or utilitarian interpretation of economic behaviour has been mentioned earlier. This fact is most clearly illustrated in the case of the motivations that Schumpeter postulated for the entrepreneur. First, there is no doubt that economic motives (hinging on the definitional "pursuit of material goods") are applicable, but even the pursuit of wealth is given a peculiarly sociological twist; the entrepreneur's "will to conquer" and his impulse to "succeed for the sake of success itself" have an economic manifestation simply because in capitalist society "prizes and penalties are measured in pecuniary terms. Going up and down means making and losing money."<sup>68</sup> Although the fundamental economic motive is necessary to life itself, this sociological connection is still relative only to a capitalist society.

A second set of motives, related to the materialist motive defining economic behaviour in general but itself more purely psychological in nature, Schumpeter describes as "ubiquitous," that is, the motives deriving from the "joy of getting things done, of creating, or simply exercising one's energy and ingenuity."<sup>69</sup> Having the virtue of attributing to human motivation the complexity it no doubt entails, this characterization of the entrepreneur unfortunately leaves the erroneous impression that these motives are somehow peculiar to the

entrepreneurial type alone, or, at least, that it is in the entrepreneur that these motives find their clearest expression or most successful sublimation.

A third major class of motives offered by Schumpeter again reveal an essentially sociological character: those stemming from the entrepreneur's will to found a private dynasty or kingdom (as he put it) based on the bourgeois institution of the family.<sup>70</sup> This kind of motive, Schumpeter asserts, is the only one of the three listed that is dependent upon the existence of capitalist society, particularly in regard to private property.<sup>71</sup> The first two classes of motivation would not of themselves serve to distinguish the capitalist system's entrepreneur from the more general class of leader-types in the economic sphere of life, irrespective of the institutional context. For this reason, the decline in importance of the two institutions of private property and the family bulk large in both the gradual transformation of capitalism into socialism and the accompanying obsolescence of the entrepreneurial function that Schumpeter predicted in Capitalism, Socialism and Democracy.<sup>72</sup>

(3) It is Schumpeter's portrait of the typical personality and character traits of the entrepreneur that accounts for that almost irresistible temptation to construe his analysis as a glorification. Ironically enough, Schumpeter attempted to emphasize the anti-heroic character of capitalist civilization in contrast to earlier periods in history.<sup>73</sup> Almost as if to deny the charge of glorification, he claimed that "the entrepreneurial kind of leadership ... has none of that glamour which characterizes other kinds of leadership."<sup>74</sup> Whether intentionally or not, Schumpeter's own presentation seems to over-

compensate for this self-avowed deficiency in recognition by others of the entrepreneurial contribution.

The personal qualities typically cited no doubt have an objective validity. What creates the impression of glamour is (a) the isolated treatment of the entrepreneurial type apart from the population of economic actors at large, and (b) the particular choice of qualities to be highlighted and the emotive power of the words chosen to describe those qualities.

Since change in the economic sphere becomes his central focus in the analysis of competition and since the entrepreneur is the agent of change it is not surprising that most of the attention is directed to one portion of the population, but the impression is left that the remainder of the population is characterized by mediocrity. Two sets of qualities of the entrepreneur stand out in particular: foresight and the ability to perceive the best opportunities for making profits (not discovering them), and the initiative, energy, will power, authority and ability to convince others (especially the financial community) to undertake new ventures.<sup>75</sup> Schumpeter's chosen term for these qualities was 'leadership.' Few terms are chosen to suggest negative or unfavourable qualities. Lack of originality and lack of acute intellect are hinted at very indirectly.<sup>76</sup>

In Chapter 5, it was stated that Schumpeter's conception of competition was built on the basis of Methodological Individualism.<sup>77</sup> Schumpeter's applied analysis tends to reveal another kind of thinking that could be called 'individualist,' although not to be confused with any political philosophy of individualism. Quite to the contrary, Schumpeter's attention to the "rugged individualism" of the entrepreneur

who dominates his picture of competitive behaviour reflects Schumpeter's aristocratic, elitist and, in many ways, basically feudalistic outlook on social structure, rather than any democratic or equalitarian sympathies.

Thus, the impression is left that traditional patterns of competitive behaviour between leaders of firms in the capitalist setting can only be the case where one entrepreneur alone leads a given firm. Schumpeter's repeated references to the entrepreneur in the singular support the suspicion that, in the Schumpeterian scheme of things, there was and could be only one entrepreneur per firm. "Who, in a given case, is the entrepreneur?" he asks, and answers that the difficulty of finding out "what person" fills the function arises not from the vagueness of the definition, but because "nobody is an entrepreneur all the time, and nobody can ever be only an entrepreneur." Continuing in the singular, he writes:

A man who carries out a "new combination" will unavoidably have to perform current nonentrepreneurial work ... . Nevertheless, we have little difficulty in identifying entrepreneurship in the times of competitive capitalism. The really, the entrepreneur will there be found among the heads of firms, mostly among the owners. Generally, he will be the founder of a firm and of an industrial family as well. In the times of giant concerns the question is often who is the leading man or who really won a given battle. The leading man may, but need not, hold or acquire the position that is officially the leading one. [...etcetera] 78

Moreover, he seemed to feel that entrepreneurial behaviour was incompatible with teamwork. On two separate occasions, he linked the decline of the entrepreneurial function with the rise of "teams of trained specialists."<sup>79</sup> In Capitalism, Socialism and Democracy, he argued that traditional patterns of competitive behaviour were disappearing in the transition of competitive capitalism into

trustified capitalism on the road to socialism, and one of the prime manifestations of that transition was the obsolescence of the entrepreneurial function. Thus, "economic progress tends to become depersonalized and automatized. Bureau and committee work tends to replace individual action."<sup>80</sup> Is Schumpeter here reneging his methodological individualism, or merely conflating it with the non-methodological and largely sentimental appeal to that notion of "rugged individualism"? Elsewhere he wrote:

Innovation is, in this case [of Trustified Capitalism], not any more embodied typically in new firms but goes on, within the big units now existing, largely independently of individual persons. ... Progress becomes 'automatised', increasingly impersonal and decreasingly a matter of leadership and individual initiative.<sup>81</sup>

In the following chapter, it is argued that Schumpeter was not forecasting the disappearance of competition in economic life but, instead, was pointing to the changing patterns of competitive behaviour that would accompany the decline of the entrepreneurial function.

However, before that predictive aspect of his analysis is investigated, some summing up of his historical work in relation to the neo-classical tradition is appropriately undertaken at this point.

## 6. Creative Destruction as a Revision of Neo-classical Analysis

Thus far, Schumpeter's critical and defensive comments towards neo-classical theory and his own (radically Essentialist) conception have been indicated, but what relation does his applied analysis, or "theory of the middle range," bear to neo-classical work of the equivalent level of general analysis?

The material selected for this chapter, up to this point, has been chosen deliberately to indicate the most original aspects of



Schumpeter's applied analysis of competition in the capitalist setting and that analysis spans the nineteenth century, the period in which neo-classicism emerged. The fact is that in many ways Schumpeter's process of creative destruction is a revision of the account of actual competitive behaviour that the neo-classical people gave in their model of perfect competition.

Schumpeter was radically different conceptually in viewing competition as a process and in admitting a far greater range of competitive strategy into his account, and yet for the most part he clung to the neo-classical terminology, so much so that many commentators have mistaken this for a wholesale acceptance of pure competition. For example, Schumpeter writes of firms, markets, industries, demand, profit-seeking, even equilibrium - surely neo-classical terminology. But Seligman was misled by these superficial neo-classical trappings when he concluded:

Despite his acknowledgement of the importance of advertising and product differentiation, his own doctrinal system was based essentially on "pure" competition.<sup>82</sup>

This is simply not true. Similarly, Chamberlin pointed out that in The Theory of Economic Development (Schumpeter's most original work and a masterpiece of "classical" qualities) in no way did he specify conditions of perfect or pure competition but was primarily interested in the circular flow of economic life and its dynamic disturbances,<sup>83</sup> yet, placing greater emphasis on his "neo-classical" defence in Business Cycles, both he and S. E. Harris concluded in effect that "his static system was essentially one of pure competition."<sup>84</sup> If Schumpeter had a "static system" at all, it could only have been in the original sense of his "static" circular flow which has already been shown to

be dynamic in the Frischian sense of involving passage of time.<sup>85</sup> Both Chamberlin and Harris were labouring under orthodox neo-classical predilections, for both of them seemed to think that if Schumpeter did not accept and endorse monopolistic competition (which, as it turns out, Schumpeter rejected for being too restrictive and rigid and which he far transcended in his own conception), then the only available alternative conceptual framework was that of perfect or pure competition! Yet, Schumpeter considered all of these as "limiting cases" of a far more general concept of competition.

Even Clemence and Doody, in their otherwise excellent summary, The Schumpeterian System, fell into the semantic trap of pure competition, basing their conclusion on the initial model of the cycle as outlined in Business Cycles, and agreeing with Chamberlin that the only alternative of pure competition was monopolistic competition.<sup>86</sup>

The fact is that Schumpeter did very often use the neo-classical terminology, and moreover his own analysis of competition often follows closely behind his assessment of neo-classical work, but what he added to economic thought as an original contribution depends very little on a previous understanding of neoclassical work. The way he employed the same terms but with different implications is illustrative of how he revised the neo-classical analysis. For example, the notion of an industry is much the same in Schumpeter's as in neo-classical work, but it is much less crucial. Defined by technology, it is not the prime focus of competitive interaction, if a focus at all, as it is in neo-classical theory. Inter-industry competition is that which "counts."

Moreover, Schumpeter like Marshall (who was very unlike his fellow neo-classicists in this respect) emphasized understanding of individual firm behaviour rather than industry behaviour as such. This aspect is brought out well in his mode of treating the idea of "market demand." More often than not, it is spoken of as if a possession of an individual firm, not as belonging to an industry as a whole. In addition, it is not passively presented to each firm as if determined by the principle of consumer sovereignty. In different places, he writes of the individual firm "creating its own market" and of the "tendency of firms to secure institutional protection for their special markets," of the defensive strategy of firms who "largely create what they exploit" but who must employ "safeguarding activities" in order to "defend their market against competition."<sup>87</sup>

In other words, unlike neo-classical theory, demand in the Schumpeterian scheme of things was not determined independently by buyers and then passively accepted by sellers; it was actively built up by each firm in its competitive drive for profits. In a very unneo-classical fashion, Schumpeter rejected the notion of consumer sovereignty, and in fact anticipated Galbraith's "revised sequence" analysis by several decades when he wrote in 1928:

Innovations in the economic system do not as a rule take place in such a way that first new wants arise spontaneously in consumers and then the productive apparatus swings around through their pressure. We do not deny the presence of this nexus. It is, however, the producer who as a rule initiates economic change, and consumers are educated by him if necessary; they are, as it were, taught to want new things, or things which differ in some respect or other from those which they have been in the habit of using. Therefore, while it is permissible and even necessary to consider consumers wants as an independent and indeed the fundamental force in a theory of the circular flow [that is, roughly equivalent to equilibrium theory], we must take a different attitude as soon as we analyse change.<sup>88</sup>

This is a perfect example of the manner in which Schumpeter neither totally rejected nor endorsed but "revised" neo-classical analysis.

An even more instructive example of Schumpeter's retention of a neo-classical term and his subsequent revision of its use is the case of equilibrium. In all his writings, including Capitalism, Socialism and Democracy, Schumpeter believed that some aspects of business behaviour reveal a tendency toward equilibrium. It is instructive to note that nowhere does Schumpeter construct a model or theoretical apparatus to describe that equilibrium but merely appeals verbally to neo-classical tradition. Equilibrium, then, in Schumpeter's schema is little more than a period of stability, and references to the "marginal conditions" of equilibrium are little more than incidental to his analysis as such.<sup>89</sup>

However, there is a fundamental difference in the way he and neo-classical analysts treated equilibrium. In neo-classical theory, equilibrium once attained would be stable. In this sense, the model gave the "result" or "solution" of competitive behaviour in the equilibrium state, and all observed change was accounted for by external or exogenous factors. The economic system was said to be self-equilibrating and stable.

In the Schumpeterian scheme, competitive behaviour had two opposing tendencies such that the system fluctuated from equilibrium to equilibrium over the course of the business cycle. Such instability was <sup>ENDOGENOUS</sup> ~~exogenous~~; the system generated its own fluctuations due to the very process of competition itself. In short, Schumpeter's treatment of the same concept is almost radically opposed to neo-classical

thinking; one might even say "Marxian" here. But it is a revision in that it retains an original concept or thesis and alters it in some fundamental way.

One might ask even further: Did Schumpeter stand firmly in the marginalist-quantitative tradition of neo-classicism? Once again, one must distinguish here between what he said of others' work and what he himself actually added to economic thought in his own work. Certainly, he added nothing to neo-classical analysis as such, that is no marginal or quantitative theorems. At best he merely re-affirmed his faith in the older ones; at worst, he actually detracted from that body of doctrines through his conceptual and systematizing efforts, as in his "trivialization" of the maximum output thesis and his emphasis on the dynamic or growth aspect of total output.<sup>90</sup>

His own contribution to economic thought stands apart from neo-classical tradition, but was it basically consistent or inconsistent, dependent upon or independent of that earlier tradition? This is not a psychological question as to whether it influenced his thinking processes, for obviously it did in one way or another. This is a question addressed to the results of his work, not how he got them. There would be much disagreement amongst economists as to whether his own system depends on neo-classical thought, for, even though he did not use their techniques, he appealed verbally to them for support of his own conclusions and in so doing he employed their terminology, if not their concepts. It is submitted here that most, if not all, of his work on competition is quite intelligible independently of any reference to neo-classical thinking. Schumpeter's verbal appeal to marginalist reasoning on closer inspection appears more and more like

so much unnecessary, even excess, baggage in his own conceptual box of tools, there perhaps out of an inborn conservatism, perhaps as elegant lacing designed to create a favourable impression by mere association. In other words, Schumpeter's own analysis can take it or leave it. In this respect, Schumpeter was truly a literary economist more in the tradition and style of the historical and sociological economists, the grand systematizers like Weber and Marx, even though his doctrinal base may have differed.

Yet, time and again, Schumpeter defended the sort of mathematical technique as epitomized by neo-classical marginalism. He was editor of the Review of Economics and Statistics, one of the founders of the Econometric Society, and its president from 1937 to 1941. In the first number of Econometrica (January, 1933), he wrote in eulogistic terms of the past contributions of the mathematical method in economics and declared that economics more than any other discipline, even those of the physical sciences, was founded on the study of quantities by its very nature.<sup>91</sup>

Be that as it may, on other occasions Schumpeter's remarks could be equally deprecatory: "There is no warrant for the view that what we cannot measure does, therefore, not exist" and "economists are prone to treat as nonexistent what is not quantifiable and sometimes even what is not measureable."<sup>92</sup> Towards the end of his career he began to turn away from neo-classical faith in mathematical method to the study of economic history and in History of Economic Analysis he stated at the outset: "I wish to state right now that if, starting my work in economics afresh, I were told that I could study only one of the three [fields of economic history, theory and statistics]

but could have my choice, it would be economic history that I should choose." Thus, even though History of Economic Analysis stands as a monument of Schumpeter's conservatism and loyalty to neo-classical pure economics, he knew himself where his real abilities and achievements lay.<sup>93</sup>

Several of his colleagues and close friends could not help noticing the great irony that while Schumpeter was a sort of self-proclaimed Spokesman for mathematical economics he was never a practitioner. Samuelson wisely observes that he was the "Patron of mathematical economists," not a fellow member of that group.<sup>94</sup> Samuelson writes in half-admiring, half-jesting tones of Schumpeter's mathematical "inferiority complex," his admiration for mathematical technique, his fascination with and his self-admitted lack of facility with those same techniques:

I think to the end he regarded it as a slightly mystical fact that a mixed-difference-differential equation of the Frisch-Tinbergen type involves complex exponentials which in a miraculous manner give rise to sinusoidal periodicities.<sup>95</sup>

But Samuelson also notes that in the end Schumpeter was to advance the view, for example, that "mathematical models in business-cycle research have been relatively sterile."<sup>96</sup>

S. E. Harris writes in the same way:

To econometrics and monopolistic competition, he paid lip service. His attitude toward mathematical economics and econometrics puzzled his friends. In many statements, he insisted that mathematics and econometrics were the path of the future. Yet, though he worked on his mathematics, he never put it to use in his writings. Unlike his hopeful announcements about the contributions of mathematics in his first writings in 1906, in his latest he expressed doubts.

Professor Tinbergen, also puzzled by the differences between his avowals of faith and his practice, shows that Schumpeter was not only critical of econometrics but his treatment was even alien to it; and perhaps that he did not even understand the econometric models.<sup>97</sup>

In that same volume, Schumpeter, Social Scientist, however, another outstanding econometrician, Ragnar Frisch, pointed to the trouble spot that partially accounts for Schumpeter's ambivalent attitude. Frisch rejects the interpretation that Schumpeter was the "Moses who was called upon to lead his people to the land of promise - econometrics - and who should be allowed to see it but should not be allowed to enter into it himself." In the construction of economic theory, Frisch admits that mathematics is only a tool which, necessary though it may be, <sup>CANNOT</sup> ~~can~~ replace intuition. Schumpeter, he adds, excelled in the art of intuition.<sup>98</sup> It might be added to that that Schumpeter probably rejected the models that he did on grounds on intuitive or conceptual inadequacy.

Thus, on close inspection, not a great deal of neo-classical doctrine about competition is left as it was by Schumpeter. In fact, Schumpeter came to almost diametrically opposed conclusions regarding the relationship between industrial structure, behaviour and performance. How could it be said, then, that Schumpeter was an old-fashioned economist who based his doctrinal system on pure competition?

In trying to reconcile Schumpeter's with the neo-classical analysis of competition, one might try to argue that it is invalid to compare Schumpeter's applied analysis of creative destruction with the neo-classical pure theory of perfect competition. Yet, the neo-classical economists did hold out the model as a norm of the reality they observed. Moreover, Schumpeter held out his analysis as valid in the same broad way, as a norm, for all of competitive capitalist history and that included history of the time period in which the neo-classical people observed and wrote about the reality they saw. Therefore, there



is validity in the comparison between their applied analyses.

However, there is one major difference. The neo-classical people can be said to have had a pure theory of competition (in the form of their model of perfect competition). Schumpeter, though, had no pure theory of competition. He had a conception of what competition is, that is, what the term 'competition' means. And, with that conception, he incorporated his study of actual competitive behaviour into his systematic account of the capitalist process in history, in both its developmental and cyclical aspects. Given his behavioural conception of competition, it is rather difficult to visualize what a pure theory of competition could be. Given his lack of constraints, what systematic relationships could be identified beyond those that merely define what 'competition' means? At any rate, it is safe to say that the pure theory would not have been a structural model such as was perfect competition.

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The following chapter presents some concluding perspectives which serve to place Schumpeter's ~~work~~ on competition in a more contemporary light.

Notes to Chapter 6

<sup>1</sup>In Capitalism, Socialism and Democracy (3rd. ed.; New York: Harper Torchbooks, 1962), Schumpeter cited data from 1870 (p. 64) but had a longer time span in mind than that. In Business Cycles (New York: McGraw-Hill, 1939), he dates the origins of capitalism as far back as the element of credit creation but provides no date for this (I, 224). His analysis there of the capitalist business cycle begins ostensibly in 1786 or 1787 (p. 220). In his article, "The Instability of Capitalism," (1928), he places the beginning of the prevalence of capitalist methods at the middle of the eighteenth century, and in his later Encyclopaedia Britannica article, "Capitalism," (1946), he indicates several phases of capitalist development reaching further back in time than that. [See Essays of J. A. Schumpeter, ed. R. V. Clemence (Cambridge, Mass.: Addison-Wesley, 1951), pp. 48, 184.]

In his article, "Capitalism in the Postwar World," he gave the obvious reason for the difficulty of setting a precise date: "No social system is ever pure either in its economic or in its political aspects." (ibid., p. 171)

<sup>2</sup>Capitalism, Socialism and Democracy, p. 83. See also Essays, p. 218, and Business Cycles, I, 87.

<sup>3</sup>Merton first suggested the term, "theory of the middle range," in 1947 in contrast to Talcott Parsons' "general theory." Merton suggested that general theory consist of "variables of a high order of abstraction" while middle range theory consist of "abstractions not so far removed from the data of sociological observation." See R. K. Merton, "The Role-Set: Problems in Sociological Theory," British Journal of Sociology, VIII (March, 1959), 108, and T. Parsons, "General Theory in Sociology," in Sociology Today: Problems and Prospects, ed. Merton et al. (New York: Basic Books, 1959), p. 3 and n.

<sup>4</sup>Capitalism, Socialism and Democracy, p. 82.

<sup>5</sup>Seligman, Main Currents in Modern Economics (New York: Free Press of Glencoe, 1963), p. 703.

<sup>6</sup>Capitalism, Socialism and Democracy, pp. 83-4.

<sup>7</sup>In "The Creative Response in Economic History," Schumpeter rules out the historicist (determinist) credo of Marxism (Essays, pp. 216-7).

<sup>8</sup>Stelper, "Reflections on Schumpeter's Writings," Schumpeter, Social Scientist, ed. S. E. Harris (Cambridge, Mass.: Harvard University Press, 1951). p. 102.

<sup>9</sup>Business Cycles, I, 84.

<sup>10</sup>The Theory of Economic Development, tr. R. Aris (English ed., New York: Galaxy Books, 1961), p. 66, and Capitalism, Socialism and Democracy, pp. 83, 84, 132.

- 11 Business Cycles, I, 87.      12 ibid., p. 86      13 ibid., p. 86n. 1.
- 14 Capitalism, Socialism and Democracy, p. 92.
- 15 ibid., p. 84.      16 ibid., p. 83.
- 17 From History of Economic Analysis (New York: Oxford University Press, 1954), p. 975. See above, p. 91.
- 18 The Theory of Economic Development, pp. 3-11.
- 19 See above, pp. 87-89, as well as Capitalism, Socialism and Democracy, pp. 83-4.
- 20 History of Economic Analysis, pp. 972-3.
- 21 See especially Capitalism, Socialism and Democracy, pp. 88ff.
- 22 Essays, pp. 217ff.
- 23 Capitalism, Socialism and Democracy, p. 91.      24 ibid., p. 83.
- 25 For a description of his cycle theory, see The Theory of Economic Development, ch. 6, and Business Cycles, I, ch. 3.
- 26 Even though his cycle theory in Business Cycles has been for the most part neglected by theorists, it has nevertheless been criticised for many logical and empirical weaknesses, especially in regard to his rather cavalier treatment of economic aggregates. It is interesting to note in this respect that his theory is far too complex to be reduced to a set of mathematical relationships. Schumpeter was drawn in two directions, one the neo-classical one toward analysis of individual markets and firms, the other to the sort of aggregate analysis of Keynes. However, there is a certain lack of resolve of these two pulls; he remained to the end a vociferous critic of Keynesian analysis.
- 27 Capitalism, Socialism and Democracy, p. 106. For discussion of this thesis, see above pp. 82-3 and footnote 64, p. 96.
- 28 ibid., p. 91.      29 ibid., p. 84.      30 ibid., p. 85.
- 31 ibid., p. 85.      32 ibid., p. 96.
- 33 ibid., p. 98, italics added.      34 ibid., p. 99.
- 35 ibid., pp. 99ff. For example, he writes: "A monopoly position is in general no cushion to sleep on. As it can be gained, so it can be retained only by alertness and energy." (p. 102)
- 36 ibid., p. 100.      37 ibid., pp. 87-8.
- 38 ibid., p. 87.      39 ibid., p. 88.

<sup>40</sup>See, for example, Markham's interesting interpretation in his "Goals for Industrial Organization: A Theoretical Analysis," in The American Economy, ed. J. Markham (New York: George Braziller, 1963), pp. 34-42.

<sup>41</sup>Capitalism, Socialism and Democracy, p. 93.

<sup>42</sup>See above, pp. 161-3, 170-1.

<sup>43</sup>Capitalism, Socialism and Democracy, p. 91. <sup>44</sup>ibid.

<sup>45</sup>ibid., p. 132; The Theory of Economic Development, p. 74; and Business Cycles, I, 102.

<sup>46</sup>Capitalism, Socialism and Democracy, p. 132.

<sup>47</sup>Business Cycles, I, 88.

<sup>48</sup>Essays, p. 253.

<sup>49</sup>ibid., p. 211, and The Theory of Economic Development, p. 88.

<sup>50</sup>ibid., p. 78, and Business Cycles, I, 104.

<sup>51</sup>ibid.; The Theory of Economic Development, pp. 75, 89, 137, and Essays, p. 218.

<sup>52</sup>The Theory of Economic Development, pp. 89-92.

<sup>53</sup>ibid., pp. 74, 77; Business Cycles, I, 103.

<sup>54</sup>The Theory of Economic Development, p. 77; Essays, pp. 249-53.

<sup>55</sup>Business Cycles, I, 103.

<sup>56</sup>ibid., pp. 94, 96; Essays, p. 70; The Theory of Economic Development, pp. 66, 136.

<sup>57</sup>ibid., p. 93.

<sup>58</sup>Joan Robinson, Economic Philosophy (Chicago: Aldine, 1962), p. 41.

<sup>59</sup>The Theory of Economic Development, p. 90n.

<sup>60</sup>Essays, p. 65 n. 1. <sup>61</sup>ibid., p. 220. <sup>62</sup>ibid., p. 256.

<sup>63</sup>ibid., p. 132; The Theory of Economic Development, p. 86; Business Cycles, I, 99f., and Capitalism, Socialism and Democracy, p. 132.

<sup>64</sup>A. M. Sievers, Revolution, Evolution and the Economic Order (Englewood Cliffs, N. J.: Spectrum Books, 1962), pp. 53ff.

<sup>65</sup>Business Cycles, I, 99-100.

- <sup>66</sup>Capitalism, Socialism and Democracy, p. 132, italics added.
- <sup>67</sup>Essays, p. 71; The Theory of Economic Development, p. 155.
- <sup>68</sup>ibid., p. 93, and Capitalism, Socialism and Democracy, p. 73.
- <sup>69</sup>The Theory of Economic Development, p. 93.
- <sup>70</sup>ibid., and Capitalism, Socialism and Democracy, pp. 157-60.
- <sup>71</sup>The Theory of Economic Development, p. 94.
- <sup>72</sup>See especially ch. 12 of Capitalism, Socialism and Democracy.
- <sup>73</sup>ibid., p. 127.
- <sup>74</sup>The Theory of Economic Development, p. 89.
- <sup>75</sup>ibid., pp. 75, 88; Essays, p. 224.
- <sup>76</sup>The Theory of Economic Development, p. 88.
- <sup>77</sup>See above, pp. 158-9.
- <sup>78</sup>Business Cycles, I, 103, italics added.
- <sup>79</sup>Essays, p. 224; Capitalism, Socialism and Democracy, p. 132.
- <sup>80</sup>ibid., p. 133.
- <sup>81</sup>Essays, pp. 70-1, italics added.
- <sup>82</sup>Seligman, op. cit., p. 696.
- <sup>83</sup>Chamberlin, "The Impact of Recent Monopoly Theory on the Schumpeterian System," Schumpeter, Social Scientist, p. 103.
- <sup>84</sup>S. E. Harris, "Introductory Remarks," ibid., p. 3.
- <sup>85</sup>See above, pp. 131-2, 135.
- <sup>86</sup>R. V. Clemence and F. S. Doody, The Schumpeterian System (Cambridge, Mass.: Addison-Wesley, 1950), pp. 30-3, 24.
- <sup>87</sup>Capitalism, Socialism and Democracy, pp. 88, 99, 101; Essays, p. 65; Business Cycles, I, 65;
- <sup>88</sup>The Theory of Economic Development, p. 65.
- <sup>89</sup>It might be argued that his evaluative premise of total output for appraising industrial performance was based on marginal concepts, but in any case he stressed total output over time. The general effect is thus to depreciate static marginalist analysis.

<sup>90</sup>See above, p. 76 and Capitalism, Socialism and Democracy, p. 77 n. 5.

<sup>91</sup>"The Common Sense of Econometrics," Essays, p. 100.

<sup>92</sup>ibid., p. 231 n. 6, and Business Cycles, I, 6.

<sup>93</sup>History of Economic Analysis, p. 12.

<sup>94</sup>Samuelson, "Schumpeter as a Teacher and Economic Theorist," Schumpeter, Social Scientist, p. 50.

<sup>95</sup>ibid., p. 49.

<sup>96</sup>ibid.; Samuelson was referring to Schumpeter's "The Historical Approach to the Analysis of Business Cycles," Essays, pp.308-15.

<sup>97</sup>Harris, op. cit., p. 3.

<sup>98</sup>Frisch, "Some Personal Reminiscences on a Great Man," Schumpeter, Social Scientist, p. 9.

## Chapter 7

### SOME CONCLUDING PERSPECTIVES

#### 1. Schumpeter and the "New" Competition?

During the early 1950s, Schumpeter's name came to be associated with the phrase, "the new competition," partly on the basis of his emphasis on innovation, but mostly because of his defence of big business in Capitalism, Socialism and Democracy. In its weakest sense, the phrase evokes images of a particular pattern of competitive behaviour of the type Schumpeter had described; in its strongest sense, the phrase serves to express, for many people, a certain attitude towards antitrust enforcement in the United States, an attitude which might almost be called a political philosophy in the defense of big business. E. S. Mason, for example, has referred to this attitude or philosophy as "the apologetics of managerialism."<sup>\*1</sup>

In the same way, several other writers (F. L. Allen, J. D. Glover, A. D. H. Kaplan, D. E. Lilienthal, et al)<sup>2</sup> who wrote in defense of "bigness" shortly after Schumpeter's work, in the early 1950s, were also linked to the phrase, "the new competition," and increasingly were mentioned in the same breath as Schumpeter; they have even been called "Schumpeterians."<sup>3</sup> Like Schumpeter's, their attitude toward competition and the assessment of industrial performance is a behavioural one, in contrast to the structuralist approach associated with such phrases as "workable" or "effective competition." The latter,

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\*Footnotes for Chapter 7 are located on pp. 240-42.

now in the ascendancy in American economics and endorsed by such workers in the field of industrial organization as J. Bain and J. M. Clark and most economic theorists, stresses the need to approximate the conditions of perfect competition as a norm for assessing industrial performance.<sup>4</sup>

Mason did a valuable service for economic theorists and researchers in industrial organization by first drawing the distinction between industrial structure and behaviour,<sup>5</sup> and in that process he clearly pointed to Schumpeter's role in advancing a behaviouralist approach in his review article, "The New Competition,"<sup>6</sup> (1953). Elsewhere, Mason clearly linked Schumpeter's name to the "new competition," writing: "Almost everything that has been and can be said in praise of the 'new competition' was said first - and much better - by Schumpeter."<sup>7</sup> This statement is substantially true, but actually the idea and the phrase were first popularised in 1912 by Arthur Jerome Eddy in his The New Competition, a veritable political tract immediately accepted by some of the business community to rationalize the recent trust and merger movement.<sup>8</sup>

No saner or sounder assessment of the strengths and limitations of Schumpeter's practical inferences about competition, business and industrial performance can be found than Mason's. However, Mason's association of Schumpeter to "new competition" was perhaps unfortunate, for the term inevitably suggests an historical hypothesis that Schumpeter never defended, which Mason never attributed to him, but which serves to obscure or undermine the conceptual insight and originality of Schumpeter's writings. It must be emphasized that the claim about the actual historical pattern of competitive behaviour as observed



is an empirical claim, whereas the claim about the nature of competition in the sense of its essence, that is, what the term 'competition' means (in the literal sense of 'meaning') is not an empirical claim, at least in the sense that it can be verified directly by reference to the facts of history. For Schumpeter, it was an intuitive judgement as to what 'competition' means, what we mean when we say 'competition.' In other words it was a definitional claim.

The object of the following comments is to relate Schumpeter's thinking to the "new competition" by maintaining this distinction. The crude historical hypothesis that Schumpeter never advanced and which Mason never attributed to him but which inevitably will suggest itself by the phrase "new competition" is somewhat as follows:

During the nineteenth century of competitive capitalism, with the predominance of small-scale enterprise, perfect competition was somehow an adequate "concept" of competition. However, with the rise of large-scale capitalism in the twentieth century, that older "concept" (as well as theory) of perfect competition was no longer adequate and should be replaced by the "new competition" among big businesses in the process of creative destruction, in which innovation of all sorts plays the crucial role in contrast to the old "large numbers" competition of perfect competition.

This is but a crude caricature, but images of this sort are invoked by the use of the phrase "new competition" in reference to Schumpeter's work on innovation, creative destruction, and large-scale enterprise. The above is a virtually complete misconstrual of Schumpeter's work.

First, Schumpeter never suggested for a moment that perfect competition was adequate as a theory or concept of competition for the nineteenth century any more than for the twentieth.<sup>9</sup> As a concept, perfect competition is not incompatible with large-scale enterprise conceptually. Instead, the relationship between the size of markets and technically minimum efficient size of firm under modern conditions renders the large

numbers condition economically and technologically unattainable.<sup>11</sup> But even this empirical claim about what is possible about the conditions of the model of perfect competition in no way suggests by itself that perfect competition was conceptually adequate for the nineteenth century. Historical, empirical claims do not support or refute definitions directly.

Second, Schumpeter's applied analysis, his historical claim, was that creative destruction, based principally on innovation, was the essence of capitalism, both in the nineteenth and twentieth centuries. Mason was correct to point out that in the transition from competitive to trustified capitalism, Schumpeter pointed to a major change in the empirical, historical trends of actual competitive behaviour, namely, that in the nineteenth century innovation was typically the product of "new" and presumably small firms whereas in the twentieth century it typically issues forth from large-scale, existing and virtually permanent enterprises.<sup>11</sup> However, this was an empirical claim, having nothing to do with the very meaning that Schumpeter attached to the term 'competition.' Creative destruction, just as the existence of capitalism, is a contingent claim verified by the facts of history. The meaning of 'competition' as a process of interaction (rather than a certain kind of situation) does not depend in any way on historical contingencies.

Third, therefore, Schumpeter rejected perfect competition as conceptually inadequate per se, and not just for this or that time period. His own behavioural conception of competition was simply an alternative to the structural one of perfect competition. In this sense, the phrase "new competition" is rather misleading, unless it means

elliptically either "a new conception of competition (per se)" or "a new analysis of actual competitive behaviour in the capitalist epoch" where "new" means an alternative to either the old concept of competition as perfect competition, or the old analysis of actual competition in the capitalist epoch in terms of the model of perfect competition. In short, the phrase "new competition" is very infelicitous.

What Mason meant to refer to were Schumpeter's empirical and evaluative claims about the relationship of certain types of industrial behaviour and structure to performance. While Mason was perhaps the first to draw the distinctions between industrial behaviour, structure and performance, and the first to recognize that Schumpeter's approach to matters of industrial organization was essentially behavioural in contrast to the structural approach of "workable competition," Mason was not especially concerned with Schumpeter's conception of competition as such, but rather with the cogency of his behavioural polemic against the current structuralist emphasis in setting performance standards in the anti-trust field.

But even so, Mason's appraisal is brilliant and, perhaps unwittingly, draws out the differing nature of Schumpeter's behavioural conception to the structural conception of perfect competition. He describes Capitalism, Socialism and Democracy as Schumpeter's "parting shot at antitrust policy" of "indiscriminate" and "vindictive" enforcement, as a "a fairly familiar European reaction" which reveals a "distinctly aristocratic view of the distribution of talent in the economy and in society" as well as his "annoyance with professional colleagues who attempt to apply an economic analysis based on simple 'models' to the complicated world of reality."<sup>12</sup> Thus, Mason argues,

Schumpeter advanced a "powerful attack on the limitations of static economic analysis as an intellectual foundation for a public anti-monopoly policy" in which he had "denie[d] completely the significance for public policy purposes of any standard of evaluation derived from pure competition, marginal cost-price relationships, or other formulations of static economic analysis."<sup>13</sup> Instead, he had argued that business behaviour (innovative activity) and not structure (number of competitors, condition of entry to an industry) more effectively ensured good performance and that large-scale enterprise and fewness of firms per industry were not incompatible with "effective" competition.<sup>14</sup>

Mason's interpretation and assessment of Schumpeter's work is, for the most part, in accord with that of the preceding chapters of this thesis. For example, Mason seems to agree with Schumpeter's main historical claim about creative destruction when he (Mason) writes that "it is true that innovation in products and processes is of the essence of competition," and, moreover, that Schumpeter's critique of perfect competition was "highly salutary and profoundly correct" but that his empirical claims about structure-behaviour-performance relationships were exaggerated and over-simplified.<sup>15</sup> Because of his vagueness concerning the competitive ethic and the distinctions between independent, interdependent, collusive and co-respective behaviour, Schumpeter does not, according to Mason, "give us much help in determining what business practices or strategies might be expected to produce expansive rather than restrictive results."<sup>16</sup> And, his emphasis on very long-run perspectives in assessing performance is "clearly an invitation to non-enforcement" of any competitive rules.<sup>17</sup> In short, Mason concludes:

Although Schumpeter assures us that what he is opposed to is not every antimonopoly policy but only certain kinds, he does not offer much guidance to a sensible policy.<sup>18</sup>

Mason's criticism here is valid even though Schumpeter many times reminded his reader that he was not intending to propose any policy. A polemic of other policies is itself not immune from criticism. However, Mason's analysis and final assessment of Schumpeter's behavioural approach to the study of competition is itself based on a concern with an idea, that of "market power," which derives its theoretical significance from the neo-classical structuralist conception of competition as perfect competition and which finds its current application in the field of policy in the structuralist norm of effective or workable competition.

In many ways, Mason's analysis in terms of "power" is very incisive but it blurs Schumpeter's contention that competition was behaviour. Mason's argument is as follows: Schumpeter attacked two common (one might say "neo-classical") premises: (1) that "market power is the proper object of attack since power means the ability to exploit" and (2) that "the preservation of competition, meaning the exclusions of positions of market power, will assure the efficient use of resources." Schumpeter countered these two premises with two others: (1) "market power is necessary to innovation" and (2) "innovation is the core of effective competition."<sup>19</sup> Elsewhere, Mason summed up Schumpeter's position in this way:

On the one hand, it is alleged that innovation limits market power; on the other hand, market power is held to be conducive to innovation. But if a time dimension is added to the analysis and competition is viewed as an historical process, there is no necessary incompatibility between them.

Schumpeter was the classic exponent of both positions.<sup>20</sup>

Mason himself admits that there is "some truth" in the contention that some market power is essential to successful innovation; however, in his final judgement, he rejects the position of those defending the "new competition" and maintains a structuralist position for purposes of public policy:

When all is said and done there is a problem of market power that is a proper concern of public policy. When the market is adequately defined, with full account taken of competition among products and of the position of buyers as well as sellers, there are strong reasons for supposing that a firm with a large share of the market will have a large degree of market power. 22

Now, the idea of "market power" derives from the neo-classical idea of the absence of perfect competition which is equivalent to the presence of monopoly elements or "monopoly power." The "powerlessness" of perfect competitors is defined by their individual perfectly elastic demand curves. Thus, "power" means any deviation from this condition.

Schumpeter, as a matter of fact, never wrote of "power" in relation to competition, and rarely anywhere. In his action frame of reference, power could only refer in a rather trivial way to the fact that in acting, human beings could be said to have the ability, capacity or "power" to exercise discretion, that is, to choose between alternatives and act upon a decision. In this trivially abstract, one might say theoretical, sense of power even perfect competitors have power to do certain things other than choose a price above the equilibrium price and sell anything. Power simply meant discretion and this is logically implied by any and all competitive behaviour. Thus, it seems that in appealing to ordinary discourse, Schumpeter claimed that competition implied by its very meaning the type of "monopoly power" that is evident in the economic theorists notion of "monopolistic competition": "The man

in the street never meant anything else by competition but the absence of agreements or interference from outside, and ... he certainly visualized monopolistic competition when he talked about competition in general."<sup>23</sup>

All of this, however, has to do with the interpretation of the meaning of a term which plays a crucial role in economic theory. Mason's chief concern, however, was with the cogency of Schumpeter's policy inferences, that is, about value judgements. Mason was right in pointing to power as an object of study in public policy, and in the latter sense Schumpeter avoided coming to grips with the problems of power in relation to policy. It was as if Schumpeter identified with those "in power" and, therefore, preferred not to speak of power or refer to it euphemistically. In fact, on one of the few times he ever mentioned power, he stated that it was "one of the most misused words in the social sciences."<sup>24</sup>

Yet, Mason, by translating Schumpeter's argument into power as such, creates the false impression that Schumpeter was concerned with power in his conception of competition just as the phrase "new competition" suggests an historical hypothesis that Schumpeter never defended. Had Mason been more cognizant of Schumpeter's conception of competition, as distinct from his policy inferences about competition, he may have realized the dilemma of the neo-classical structuralist approach in both theory and policy; Mason correctly identified that dilemma thus:

One common reaction to the precise statement of the requirements of pure competition is that monopoly is everywhere and something must be done about it. Another, even more common, is that since monopoly is everywhere, and we seem to be getting along, nothing need be done about it.<sup>25</sup>

At a theoretical level (at which there are no evaluative statements made), in Schumpeter's conception of competition the mere existence of power is trivially true and logically implied. Mason did not apparently recognize this, but he did see that Schumpeter's policy inferences about the use or abuse of power (not power as such) reflected a "well-developed ideology ... that clashes rather violently with typical antitrust ideology."<sup>26</sup> However, Schumpeter's historical account of competition as creative destruction is not, as Mason concludes, a "sort of *histoire raisonnée* of capitalism - that is hardly subject to proof or disproof."<sup>27</sup> As Clemence and Doody point out, parts of Schumpeter's analysis are not quantitatively verifiable because they are not quantitative but they are yet empirically verifiable as is any descriptive history of actual behavioural patterns.<sup>28</sup>

On balance, then, it seems pointless and possibly misleading to speak of Schumpeter's work, whether conceptual or historical, in terms of the "new competition."

## 2. The Decline of Competition?

Did Schumpeter either describe or predict the decline of competition in economic life as, for example, Burns described it in his The Decline of Competition<sup>29</sup> or as Marx predicted it in terms of the laws of history: competitive capitalism to monopoly capitalism to socialism?

This question can be given a rather definite answer: he did not describe or predict any "decline" of competition as such, but rather the disappearance of the traditional patterns of competitive behaviour and the appearance of new patterns. His position can be divided into two parts: his analysis of past trends in the transition from competitive



to trustified capitalism, and his prediction as to the future trends into socialism.

Schumpeter first distinguished between competitive and trustified capitalism in his 1928 article, "The Instability of Capitalism," in which he placed the competitive epoch roughly in the nineteenth century and the trustified period in the twentieth.<sup>30</sup> In the same vein, he spoke of the rise of large industrial concerns as the "water-shed between two epochs in the social history of capitalism."<sup>31</sup> However, Schumpeter quite explicitly rejected the Marxian term "monopoly capitalism" since large-scale enterprise, not monopoly, characterized twentieth century capitalism.<sup>32</sup> The terms 'trustified' and 'trustification' referred not so much to the industrial combines formed in the 1890s but rather to the qualities of modern industrial life as described by such terms as 'bureaucratization,' 'automatisation of progress,' 'rationalisation' by 'organization' and 'management' and so on. In the 1928 article, he likened "trustified" to "organised," "regulated" and "managed capitalism." In short, for Schumpeter, trustification meant de-personalization as an antithesis to "individualized" enterprise. All of these terms appear throughout Schumpeter's texts.

Schumpeter accepted the Marxian claim that big business gradually annihilates small-scale enterprise, leading to increasing statistical concentration ratios. However, he adds:

It is true that the facts of industrial concentration do not quite live up to the ideas the public is being taught to entertain about it. ... The process has gone less far and is less free from setbacks and compensatory tendencies than one would gather from many a popular exposition. In particular, large-scale enterprise not only annihilates but also, to some extent, creates space for the small producing, and especially trading, firm.<sup>33</sup>

However, he adds that Marx still "scores," for "in the long run ...

there can be little doubt about the fact we are envisaging." But this in itself does not mean the "decline of competition," as he puts it, for innovation and inter-industry competition are not affected by increasing concentration. Trustification spells not the decline of market competition according to structuralist reasoning (in terms of increasing collusion and monopolization) but, instead, the disappearance of the traditional patterns of competitive behaviour in the "market." This arises not from economic factors but because of the political, sociological and institutional consequences of large-scale organization.

Market competition in competitive capitalism was founded on several key institutions, such as private property and free contracting between individuals, as well as on the centrality of the entrepreneurial function. Large-scale corporate financing spells the separation of ownership from control, especially in the case of entrepreneurial figures, while the size of organization and its public nature reduce the sense of firm identity and loyalty that formerly characterized the small-scale enterprise-entrepreneur relationship. Increasingly, large-scale enterprise minimizes the de-stabilizing effects of innovation and the uncertainty of the market by internal financing and the restriction of "freedom of contracting." Change becomes automatized and routinized, and social resistance to economic change is worn down. Much of Schumpeter's argument clearly foreshadows Galbraith's, as is illustrated in the following passage, written in 1928:

Innovation is, in [the case of "trustified" capitalism], not any more embodied typically in new firms, but goes on, within the big units now existing, largely independently of individual persons. It meets with much less friction, as failure in any particular case loses its dangers, and tends to be carried out as a matter of course on the advice of specialists. Conscious policy towards demand and taking a long-time view towards investment becomes possible. Although credit creation still plays a rôle, both

the power to accumulate reserves and the direct access to the money market tend to reduce the importance of this element in the life of a trust. ... It is easy to see that the three causes alluded to, whilst they accentuated the waves in competitive, must tend to soften them down in trustified, capitalism. Progress becomes "automatised," increasingly impersonal and decreasingly a matter of leadership and individual initiative. This amounts to a fundamental change in many respects, some of which reach far out of the sphere of things economic.<sup>35</sup>

Later, in Capitalism, Socialism and Democracy, Schumpeter described these institutional effects on the disappearance of the traditional market pattern of competitive behaviour:

Thus the capitalist process pushes into the background all those institutions, the institutions of property and free contracting in particular, that expressed the needs and ways of the truly "private" economic activity. Where it does not abolish them, as it already has abolished free contracting in the labor market, it attains the same end by shifting the relative importance of existing legal forms - the legal forms pertaining to corporate business for instance as against those pertaining to the partnership or individual firm - or by changing their contents or meanings. ... Dematerialized, defunctionalized and absentee ownership does not impress and call forth moral allegiance as the vital form of property did.<sup>36</sup>

Thus, Schumpeter might have agreed with Galbraith's claim that "planning replaces the market," but he certainly did not make Galbraith's mistake, which Scott Gordon has identified,<sup>37</sup> of equating planning to a lack of competition. Trustification has major political and sociological consequences as well. Not only does the changing sociological climate (the general attitude towards capitalist change and its values) mean the obsolescence of the entrepreneurial function and the disappearance of the old-style entrepreneurial motivation,<sup>38</sup> but it also calls for the need of a new type of business leader to face the competitive pressures not in the economic market-place but in the political arena where increasingly the source of threat or resistance to business action arises. In a 1928 article, he was already

suggesting that the process of bringing "private" enterprise into the public or political sphere meant that increasingly the type of business leader associated with large-scale enterprise tends to resemble the successful political leader, "a good minister, or bureau-chief." He wrote:

The groups and interests who select the leader tend to agree on a compromise candidate - not always the man of highest ability. Even when the object is to find the 'best man' he may turn out to be not one who can run the concern but a man adept at manipulating public opinion and handling public relations.<sup>39</sup>

With this refocusing of competition into a more political context in mind, Schumpeter wrote later in 1942 that:

Thus the modern corporation, although the product of the capitalist process, socializes the bourgeois mind; it relentlessly narrows the scope of capitalist motivation.<sup>40</sup>

Yet, this process was a transitional stage of capitalism which, in 1950, was judged still to be far complete. The old pattern had not entirely disappeared. "In these things," he stated, "a century is a 'short run'."

Industrial integration is far from being complete. Competition, actual and potential, is still a major factor in any business situation. Enterprise is still active, the leadership of the bourgeois group still the prime mover of the economic process.<sup>41</sup>

Thus, while the entrepreneurial function was fast becoming obsolescent, it was still far from being absolutely so and was not likely to become so in the "calculable future."<sup>42</sup> As late as 1939, in Business Cycles, he confidently claimed that innovations still emerge primarily from "young" firms and that even giant concerns still had to react to each other's innovations, however predictably.<sup>43</sup>

Thus far, attention has been given to Schumpeter's account of past trends in the transition of capitalism into socialism. That he

predicted that competition in the economic sphere of life in a socialist system would persist is also evident, although, of course, Schumpeter is less specific on the exact nature of the behavioural patterns that might emerge.

The institutional pattern of the socialist economic system is one in which control over the means of production and the production process itself is vested in a central authority, Schumpeter writes in Capitalism, Socialism and Democracy,<sup>44</sup> and in its pages he describes the workings of that system in terms of a vast bureaucracy. The old economic problems of production, allocation of resources and the distribution of income still have to be solved, and, therefore, economic conduct is still apart of social reality. The elimination of the capitalist profit and loss motive does not change the essential nature of economic competition. No human behaviour is purely altruistic, and although economic motivation is less important than in capitalist societies, competing claims on scarce resources still arise and are resolved by competitive interaction, even if within a different institutional framework.<sup>45</sup>

Schumpeter admits that some economic concepts, such as private property, are not of universal applicability but are context-bound to a given setting. However, other economic concepts, usually understood with reference only to a given setting, can be interpreted such as to be universally applicable: 'price' as a 'coefficient of economic choice or transformation' and 'cost' in terms of alternative opportunities.<sup>46</sup> Similarly with competition, as outlined in Chapter 5. It is no surprise, then, that after describing the probable methods of solving economic questions in the socialist system, Schumpeter writes;

In trying to construct a rational schema of a socialist economy we have made use of mechanisms and concepts traditionally specified by terms that are familiar to us from our discussions of the processes and problems of capitalist economy. We have described a mechanism which is immediately understood as soon as we utter the words "market," "buying and selling," "competing" and so on.<sup>48</sup>

Despite their institutional differences, the two economic systems share certain "formal similarities" which relate to any and all "rational behaviour" in a socio-economic setting. The reluctance to view such concepts as competition as "general logical categories" which transcend the superficialities, as it were, of actual historical patterns arises from too narrow a conceptual framework in viewing economic theory.

It so happens that in the sphere of economic behaviour the molding influence of mere rationality goes pretty far, at least with regard to the pure theory of it. The concepts which express the behaviourist pattern are then drenched with all the particular meanings of a historical epoch and will tend to retain, in the layman's mind, the colors thus acquired. If our historical acquaintance with economic phenomena had been made in socialist environments, we should now seem to be borrowing socialist concepts when analyzing a capitalist process.<sup>48</sup>

Given the behavioural and universal nature of competition, then, it is rather difficult to imagine what could be meant by the phrase "the decline of competition" in the Schumpeterian scheme of things. This typically universalistic note that characterizes a great deal of what Schumpeter had to say about the concept is an appropriate feature of his work to point to in raising the question of the final section: Did Schumpeter glorify the competitive aspect of economic life?

### 3. The Naturalistic Fallacy?

The Cambridge philosopher G. E. Moore first used the term "naturalistic fallacy" to refer to what he considered to be an invalid form of argument which draws ethical or evaluative conclusions from non-ethical or non-evaluative premises. Criticism of this sort has been directed, for example, at the classical school of economics for its "philosophy" of natural law and harmony of interests in which the notion of competition plays a leading role. A similar type of criticism has been directed at neo-classicism as well for advancing a seemingly "positive" analysis of market behaviour in the value-loaded terminology of "models" of "perfection" and "equilibrium."<sup>49</sup> The criticism so often seems to be not so much that they arrived at value judgements but that they implied them but denied that they made them at all. In other words, the criticism usually is directed against covertly implied value inferences.

Now, Schumpeter's treatment of competition may elicit the same type of critical reaction. Consider the following combination:

- (1) On the one hand, Schumpeter repeatedly denied that he was advancing value judgements, policy proposals or any other kind of ethical or moral evaluations with regard to competition and virtually everything else.
- (2) On the other hand, he claimed that competition was universal, perhaps inevitable, and it might seem, then, that competition was somehow a part of human "nature."
- (3) Furthermore, he quite clearly presented the entrepreneur in rather glamorous terms, and that type's "rugged individualism" in many ways typified the competitive nature of capitalism.

With this combination it is readily seen why the charge might be laid against Schumpeter for covertly glorifying competition. Did he, then, commit the naturalistic fallacy? The answer is that he did not.

In his writings, Schumpeter did tend to glorify something, but that something was not competition. This can be shown by reference to both his analysis of the "sources" of economic efficiency and his political outlook.

First, if one can think of there being "sources" of efficiency, or factors which account the most for the more efficient performance of industry, then competition in Schumpeter's scheme of things is at best only one of those sources, and not the most important one. The technological progress of the capitalist epoch was attributed mostly to the particular motivation of the entrepreneur and his "talents." Competition is neither of these things but is only a factor which disciplines that behaviour. In fact, looking at the world from the entrepreneurs vantage point, Schumpeter was saying virtually that if only the entrepreneur were left alone, unfettered, unregulated by the strictures of the competitive ethic, he alone could perform all that much better! This, of course, is only a general impression and if considered in isolation hardly does justice to Schumpeter's analysis. But it does suggest that the entrepreneur, not competition, was Schumpeter's chief object of admiration. Perfect competition, he wrote, neglected all that was most typical about capitalism and was thus like Hamlet without the Danish prince. One is tempted to add here that Schumpeter looked upon the entrepreneur as the tragic hero of capitalism.

Schumpeter's emphasis on the ability of leaders and their motivation rather than the regulatory mechanism of competition as the prime source of efficiency and technological progress is most evident in his attitude toward the large-scale enterprise. Although it was to eventually leave the entrepreneur (as Schumpeter understood the term)



without a job and without a respectable place in the later stages of capitalist civilization, it was nevertheless the creation of the entrepreneur and the accumulation of his past accomplishments in carrying out innovations during the previous period of capitalist development. Moreover, not only was that institutional creation the "most powerful engine of that progress" but it was also driven by its own internal engine, as it were, and not propelled by the "forces" of competition. It represented "internal, especially technological, efficiency," that is, it was superior in that it "largely create[d] what [it] exploit[ed]."<sup>50</sup> Thus, potential rather than actual competition could be so effective. Management, organization, in effect the co-operative efforts of many, could be just as effective if there were talented leaders who could "break the new paths" and overcome the social resistance to change. Competition only served to channel this creative energy into socially desirable activities.

Schumpeter's de-emphasis of competition as the key to efficiency is all the more evident in his political outlook and his polemic against anti-trust policy. Schumpeter's outlook was truly one of supporting laissez faire and not in the tradition of American right-wing radicalism but more in the European tradition. There is a tendency to confuse the support of laissez faire with the support of a competitive economic system. This connection only makes sense when an extreme alternative to private enterprise, such as socialism, is the relevant contrast. Vigorous anti-trust policy does not represent a faith in the self-adjusting and self-regulating tendencies of market competition; to the contrary, it points to the need to enforce rules of behaviour by external agency. Obviously, Schumpeter de-emphasized this need in his

polemic against American policy. It is no wonder that his structuralists tended to consider the so-called "new competition" as "workable monopoly" rather than "workable competition." Of course, this does not demonstrate that the structuralists entertained the "true" notion of competition and that Schumpeter's conception was a rationalization for weak enforcement of legislation. The validity of Schumpeter's conceptual contentions stand apart from and must logically be judged by reference to separate evidence from his empirical-evaluative claims about economic efficiency and the merits of policy.

In another way, Schumpeter defined democracy in terms of competition without being a proponent of democracy at all. In fact, Schumpeter's elitist and catholic outlook was really very feudalistic in nature. If it is meaningful to say that he had an ideological outlook on the world, that outlook was surely not a purely capitalist one. Schumpeter's inclination toward rugged individualism was not the American equalitarian one.

But however much Schumpeter's ideological outlook may have coloured his presentation of capitalist evolution, it did not prevent him from identifying and undoing the conceptual errors of the neo-classical period and thus setting the analysis of competition as a behavioural process back on its right track.

Notes to Chapter 7

<sup>1</sup>E. S. Mason, "The Apologetics of 'Managerialism'," Journal of Business, XXXI (January, 1958), especially p. 8.

<sup>2</sup>See F. L. Allen, The Big Change: America Transforms Itself (New York: 1952); J. D. Glover, The Attack on Big Business (Boston: Harvard, 1954); A. D. H. Kaplan, Big Enterprise in a Competitive System (Washington: Brookings Institution, 1954); and D. E. Lilienthal, Big Business: A New Era (New York: Harper, 1953).

<sup>3</sup>For example, see J. R. Schlesinger and A. Phillips, "The Ebb-Tide of Capitalism? Schumpeter's Prophecy Re-examined," Quarterly Journal of Economics, LXXIII (August, 1959), 448.

<sup>4</sup>The principal statements of the structuralist position are J. M. Clark, Competition as a Dynamic Process (Washington: Brookings Institution, 1961); Joe S. Bain, Industrial Organization (2nd. ed.; New York: John Wiley & Sons, 1968); and G. J. Stigler, The Organization of Industry (Homewood, Ill.: Richard D. Irwin, 1968). The initial formulation in explicit terms of this view was by Clark, "Toward a Concept of Workable Competition," American Economic Review, XXX (June, 1940), 241-56.

<sup>5</sup>Mason, "Price and Production Policies of Large-Scale Enterprise," American Economic Review, Papers and Proceedings, XXIX (March, 1939), 61-74, and "The Current Status of the Monopoly Problem in the United States," Harvard Law Review, LXII (June, 1949), 1265. Both are reprinted in Mason's Economic Concentration and the Monopoly Problem (New York: Atheneum, 1964), pp. 55-72 and 351-70.

<sup>6</sup>Mason, "The New Competition," Yale Review (Autumn, 1953), reprinted in Economic Concentration and the Monopoly Problem, pp. 371-81.

<sup>7</sup>ibid., p. 13. Elsewhere in the same volume, Mason wrote that Schumpeter's ideas "have colored a good deal of current writing on 'the new competition'." (p. 330)

<sup>8</sup>Arthur Jerome Eddy, The New Competition (Chicago: D. Appleton, 1912) and six subsequent editions.

<sup>9</sup>See above, pp. 65, 79. The full quote from Capitalism, Socialism and Democracy (3rd. ed.; New York: Harper Torchbooks, 1962) is as follows: "First, this involves the creation of an entirely imaginary golden age of perfect competition that at some time somehow metamorphosed itself into the monopolistic age, whereas it is quite clear that perfect competition has at no time been more of a reality than it is at present." (p. 81, italics added)

<sup>10</sup>Essays of J. A. Schumpeter, ed. R. V. Clemence (Cambridge, Mass.: Addison-Wesley, 1951), p. 122.

- 11Mason, Economic Concentration and The Monopoly Problem, pp.97f.
- 12ibid., p. 91.                      13ibid., pp. 101, 94.
- 14ibid., pp. 19, 329.                15ibid., pp. 379, 101, 8.
- 16ibid., p. 92.                        17ibid., p. 394.                      18ibid., p. 379.
- 19ibid., pp. 91-2.                    20ibid., p. 329.
- 21ibid., p. 93.                        22ibid., p. 381.
- 23Essays, p. 122.                    24ibid., p. 264.
- 25Mason, op. cit., pp. 2-3.        26ibid., p. 91. 27ibid., p. 99.
- 28R. V. Clemence and F. S. Doody, The Schumpeterian System.  
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- 29Arthur R. Burns, The Decline of Competition (New York:  
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- 30Essays, p. 48.
- 31The Theory of Economic Development, tr. R. Aris (English ed.;  
New York: Galaxy Books, 1961), p. 67.
- 32See Capitalism, Socialism and Democracy, p. 140. Later in  
the same volume, he writes of "'monopolistic' capitalism," the  
quotation marks apparently indicating his disapproval of the term. (pp.  
194-5)
- 33ibid., p. 140.
- 34See ibid., passim, especially chs. XII-XIV.
- 35Essays, pp. pp. 70-71.
- 36Capitalism, Socialism and Democracy, pp. 141-2.
- 37In his article, "The Close of the Galbraithian System,"  
Journal of Political Economy, LXXVI (May-June, 1968), Scott Gordon  
points out that most of Galbraith's argument about planning replacing  
the market is based on an analysis of the individual firm in isolation  
such that little or no account is taken of the constraints placed upon  
the individual firm by the behaviour of other firms. "Galbraith slips  
from the proposition that the firm plans to the proposition that the  
economy is planned, without realizing that such statements possess  
only a verbal similarity." (p. 640). Reference is to Galbraith's The  
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- 38Capitalism, Socialism and Democracy, pp. 131-4, and chs.  
XIII and XIV passim.

<sup>39</sup>From "Der Unternehmer in der Volkswirtschaft von heute," Struktur Wandlungen der Deutschen Volkswirtschaft I (1928), 303, cited in Mason, op. cit., p. 64 n. 12, italics added.

<sup>40</sup>Capitalism, Socialism and Democracy, p. 156.

<sup>41</sup>ibid., p. 163.

<sup>42</sup>ibid., pp. 411n., 131.

<sup>43</sup>Business Cycles (New York: McGraw-Hill, 1939), I, 96-7.

<sup>44</sup>Capitalism, Socialism and Democracy, p. 167.

<sup>45</sup>ibid., pp. 206-9.

<sup>46</sup>ibid., p. 169 and n.; Essays, p. 119.

<sup>47</sup>Capitalism, Socialism and Democracy, p. 181.

<sup>48</sup>ibid., p. 182.

<sup>49</sup>Myrdal is renowned for this type of criticism. See his The Political Element in the Development of Economic Theory, tr. P. Streeten (London: Routledge & Kegan Paul, 1953), for example.

<sup>50</sup>Capitalism, Socialism and Democracy, pp. 101, 106.

## BIBLIOGRAPHY

This Bibliography consists of four sections:

- A. Works by Schumpeter
- B. Works about Schumpeter
- C. Works about Competition
- D. Other Works Cited

The classification is inevitably arbitrary in some cases. Section A is by no means complete, including only those works by Schumpeter that were either cited in or of special interest to the subject matter of this thesis. A virtually complete bibliography of his works is found in the entry under Elizabeth Boody Schumpeter (Section B). Each section is divided into books and articles, and articles in Section B are divided further into those cited and those not cited in the thesis.

### A. Works by Schumpeter

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