The economics of Marshall, Keynes and Pigou as a Scientific/Intellectual Movement (SIM): Methodological considerations in the history of economic thought

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1 Introduction

The purpose of this paper is to present some methodological considerations in the process of undertaking research for a PhD thesis in the history of economic thought (hereafter referred to as HET). The study being undertaken has two tiers. It has a rational historical component, in which the economic theory developed by Alfred Marshall, Arthur Cecil Pigou and John Maynard Keynes is examined with respect to three specific issues (ethics, evolution and equilibrium), and a broader sociological component, in which the context of the contributions of these three theorists to these three issues will be examined. The sociological study will be based on the notion of Scientific/Intellectual Movements (hereafter referred to as SIMs) associated with the work of Scott Frickel and Neil Gross (2005).

Two levels of historiographical considerations arise in this undertaking. Firstly, there are historiographical considerations related to the rational historical component of the study. Secondly, historiographical considerations arise related to the investigation of scholars’ membership as part of a broader intellectual group in the context of the Sociology of Scientific Knowledge (hereafter referred to as SSK). This paper examines the types of historiographical challenges faced in the pursuit of achieving the rational, historical and sociological objectives set in the forthcoming study and draws implications for the choice of methodology selected.

Methodologically, historians of economic thought generally pursue the history of their discipline such that events are ‘strictly presented based on close study of available sources in an objective and non-judgmental manner’ (Ranke, 1874 [1824], p. v-vii as quoted in; Samuels, Daviss, & Biddle, 2007). However, historians of economic thought are also informed by two broader methodological parameters. The first is the hermeneutic parameter, which
concerns the interpretation of historical events. Traditionally, this has taken the form of reconstructing historical events on the basis of either a rational (constructing the contemporary meaning of an author’s work) or historical (determining the historical context of an author’s work) basis or indeed a mix of both. The second is the broader epistemic parameter which concerns the path of development in economic knowledge and is considered with reference to how economic knowledge has been produced over time. The philosophy of science has provided a vehicle which has influenced methodological approaches in the history of economics. The nature of economics in this epistemic sense encompasses larger considerations concerning underlying changes that have occurred in the philosophy of science, including impact on the development of methodology in economics, and interpretations of the discipline’s history as a science. For example, since the mid-1970s HET has demonstrated an increased interest in the sociology that surrounds the production of knowledge in economics, including SSK (Coats, 2007; Forget & Goodwin, 2011).

This paper discusses the broader methodological considerations referred to above faced by historians of economic thought within the context of my own research. The paper is divided into five sections. The second section of this paper introduces the topic of the PhD project that will be undertaken over the next few years. The third section provides a statement of the working hypothesis of the project and outlines the various research objectives that will be pursued. The fourth section considers historiographical issues as they relate to the rational component and historical (contextual and SSK) components of the study as related to the study’s objectives. The paper concludes by considering the benefits of a study that combines rational, contextual and sociological elements of HET and the implications of doing so in my forthcoming project.

2 The economics of Marshall, Keynes and Pigou as a Scientific/Intellectual Movement (SIM)

After the financial crisis that originated in the United States in 2008, Keynesian economics underwent a revival. There was a great deal of commentary on the nature of economics and of capitalistic systems. Two responses to the crisis, in part, provided inspiration for my PhD thesis. The first was an article written by Amartya Sen in 2009, “Capitalism beyond the Crisis”. The second was a book published the same year by Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly*. Sen had argued that much could be gained from a new understanding of
older ideas, both of Adam Smith and John Maynard Keynes, and also of Arthur Cecil Pigou, an economist whose ideas Sen noted had often been sadly neglected. Reinhart and Rogoff (2009) drew upon historical events in order to reflect upon the current crisis and provided a comprehensive overview of industrial fluctuations and financial crisis that had occurred in many nations over a period of eight centuries. They pointed to recurring patterns and society’s tendency to forget all but the immediate of occurrences.

Pigou and Keynes were concerned with fluctuations in capitalistic economies. This was specifically addressed by Pigou in his book *Industrial Fluctuations* (1927) and was the basis for both men’s theoretical work on unemployment before and after the Great Depression. Pigou’s *Theory of Unemployment* (1933) became a point of theoretical controversy in Keynes’ *The General Theory of Employment, Interest and Money* (1936) which challenged the prevailing view that the tendency towards equilibrium between supply and demand under conditions of competition lead to full employment. Pigou and Keynes were the students and protégés of Alfred Marshall who had been instrumental in the formation of the Cambridge School of Economics. Marshall’s path breaking work in *The Economics of Industry* (with his wife Mary Paley Marshall) (1885) and *Principles of Economics* (1890) established him as one of the most influential economists of his time and provided the basis of establishing the profession of economics as a scientific and separate academic discipline within the Cambridge Triposes. Marshall produced these works in another episode of industrial fluctuation, a period sometimes referred to as the “Long Depression”, an event that extended from 1873 to as late as 1896. All three economists’ theoretical contributions were, therefore, developed against a backdrop that included notable and severe industrial fluctuations impacting on conditions in capitalist economies which were both socially and individually confronting.

The primary purpose of my planned thesis is an exploration of the three scholar’s intellectual paths that developed at Cambridge from 1884, when Marshall was appointed Professor of Political Economy at Cambridge, to 1943, when Pigou retired as Professor of Political Economy at the same university. The thesis will endeavour to establish Marshall, Pigou and Keynes’s contributions to the discipline of economics as a continuum in one SIM in the sociological framework developed by Frickel and Gross (2005). That is, the Marshall–Pigou path, for which the received view is that an intergenerational sequence of ideas developed along clear Marshallian lines, will be contrasted with the Marshall–Keynes path, for which the received view is that Keynes
revolutionised economic thought by breaking from the tradition that his master established. In this sense, the thesis will develop a two-tiered historiographical approach: an examination and comparison of the individual scholars’ contribution to economic theory using both rational and contextual approaches, nested within a thicker sociological study based on the framework of Frickel and Gross.

3 The objectives of the project

The general working hypothesis for this project is that the scholarly work of Marshall, Pigou and Keynes on three specific issues – namely (i) the ethical precepts on the relevance of economic knowledge for society; (ii) the treatment of evolution in time as a process of cyclical but discontinuous movement; (iii) and the analysis of equilibrium and welfare – constitutes one SIM. In terms of general issues of “substance”, the thesis endeavours to demonstrate that the works of Pigou and Keynes are both largely extensions from within the tradition that Marshall established at Cambridge. In terms of “style”, the rhetorical devices utilised for the purpose of persuasion by Pigou and Keynes were very different: Pigou generally highlighted the consistency of his work with that of Marshall’s; Keynes tended to differentiate and contrast the “detail” of his own contributions relative to those of his master in order to highlight differences. Although differences between Keynes and Pigou and between Keynes and Marshall certainly existed, this study investigates continuities and discontinuities in “style”, “detail” and “substance” as understood in the theoretical underpinnings of the three great scholar’s work.

The thesis has three primary objectives and two subsidiary, but related, secondary objectives which are indicated by indented dot points. These objectives are to:

1. establish a mapping and clear pathway of the development of economic thought of Marshall, Pigou and Keynes with regard to “substance”, “detail” and “style” in the three specific areas that fall within the scope of this study - ethics, evolution and equilibrium;

• identify continuities and discontinuities in the lines of Cambridge economic thought for the abovementioned economists with regard to “substance”, “detail” and “style”;
2. enhance the understanding of Pigou’s body of work in relation to the development of his line of thought on ethics, evolution and equilibrium in the study of economics in its own context rather than defined from the perspective of Keynes’s and Marshall’s body of work;

- reflect on A. K. Sen’s comments which highlights the particular importance of Pigou, on the relevancy of the work of Marshall, Pigou and Keynes in understanding capitalistic economies and industrial fluctuations;

3. identify Marshall, Pigou and Keynes in a broader context as members of a school of thought and determine whether their contributions fall within a single SIM by presenting a matrix of sociological information relating to the academic careers of Marshall, Pigou and Keynes’s at Cambridge.

Objective 1 and 2, and the associated subordinate objectives are oriented towards a mainly (but not exclusively) rational HET study. Objective 3 is concerned with the context of their work from a SSK perspective. The types of methodological issues to be considered, therefore, range between the two tiers of this study: there are methodological issues in relation to the rational and contextual component of this study, and there are methodological issues in relation to the sociological components.

4 Historiography

Two main forms of methodology, or research “style” in less formal terms, can generally be observed employed in HET: “rational” and “historical” reconstructions.¹ Textual exegesis is a technique that can be applied in both “styles” and can be described quite simply as a search for the meaning of a text. It has been described as ‘the technique par excellence for doing HET’ within accepted hermeneutic codes, and a tool that can be applied to any type of HET research (Marcuzzo, 2008a).

Rational reconstruction focuses on the translation of past economic theory into present economic discourse and understanding. Donald Walker (1988, P. 106) differentiates the identification of the conscious and unconscious motives leading to a scholar’s

¹ M. Klaes draws attention to the tendency for historiographic debate in HET to proceed as opposing binaries and notes the emergence of multiple terminology attached to traditional research styles in HET. This terminology has included “relativist” versus “absolutist” history, “historical” versus “rational” reconstruction, “presentism” versus “contextualism”, “internal” versus “external”, “thick” versus “thin”, or “social” versus “conceptual” history. In this paper the general terminology of “historical” and “rational” reconstruction is adhered to. (2007)
development of economic theory and a scholar’s theoretical contributions to economic science. Walker notes in relation to the former that it can be ‘put to one side’ so as an author’s work ‘can be evaluated for how well it describes reality and provides an understanding of if’ which is in essence the rational reconstruction of a scholar’s work.

Historical reconstructions are generally pursued in a “contextual” or “thicker” sense whereby the focus of research is the examination and interpretation of the past in terms of a scholar’s own time, place and circumstances. The focus of a contextual approach, therefore, centres on forces and circumstances shaping the economist’s motivations and objectives surrounding the development of his or her theory and concepts in economics. More recently “historical narratives” have been pursued which investigate broader disciplinary perspectives of the intellectual history of economics. The focus of historical reconstructions in this sense shifts away from the study of major economic theorists to include consideration of minor figures and their contributions to economic discourse. Historical narratives tend to be less theory laden and may include sociological analysis of intellectual groups and communities employing approaches such as SSK, an approach which will be drawn upon in my proposed study, to examine broader epistemic considerations. Other research styles have also been employed. For example McCloskey (1994) has argued the importance of style, rhetoric and intent of scholars in the examination of their work.2

While the two research styles are separate in principle, in practice the distinction becomes blurred (Blaug, 1997, p.56). Signorino (2003, p.333), when considering the relationship between the concepts of historical and rational reconstructions, observes that reconstructions can be understood as ‘theoretical exercises whose main worth consists in their ability to make “real” history more intelligible than it would be possible otherwise’. They are thus never built into a historical vacuum. He argues that any attempts to keep separate the concepts of rational (the construction of an author’s general scientific position) and historical reconstruction will inevitably be bound to fail as the reconstruction of economic theory embodied in a past scholar’s text will always be influenced by the interpreter’s conscious or unconscious a priori value judgements.

It is intended in the proposed study to blend rational and historical (including sociological) research styles from the “historiographic toolbox” in order to meet the set

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2 McCloskey in this respect refers to rhetoric as “the available means of [uncoerced] persuasion” p. xiii (McCloskey, 1994)
objectives. Although emerging from different philosophical bases, rational and historical reconstructions need not necessarily be considered incompatible and mutually exclusive but rather part of an approach whereby interpretation is understood as a multi-dimensional process which has multiple objectives. This idea is embodied by B. Gerrard’s (1991) conception of an “organic” approach which he discusses with reference to interpretative difficulties found in Keynesian studies. Although Gerrard differentiates rational and historical approaches, he argues that the act of interpretation should be viewed as an organic process that stresses the importance of context and where the significance of interpretation depends on its ability to explain economic behaviour. The writing and reading of texts are considered processes which are both socially and historically contingent. An organic interpretation, therefore, does not treat the author, the text and the reader as atomistic entities but rather as forming a dynamic whole.

Both rational and historical reconstructions have strengths and weakness associated with their applications in HET. Although recognising rational and historical methodology are not mutually exclusive in the interpretative exercise to be undertaken, the following sections will consider them discretely in order to identify: the strengths of each approach, the problems and limitations that arise in their use, and how these problems and limitations will be managed in order to meet the stated objectives of the planned study. The discussion will firstly consider historiography related the rational study of the three scholars’ theoretical contributions in order to identify continuities and discontinuities in their work. The rational part of the study predominantly provides the methodology to meet the study objectives 1 and 2 detailed above. Contextual considerations will certainly arise in meeting these two objectives, particularly in identifying the ethical precepts upon which the three scholars developed their theoretical work. However, the historiography related to the historical reconstruction, to meet objective 3 of the study, will be discussed secondly and will consider the problems, limitations and management of contextual and historical narrative approaches. Specific consideration is given to SSK and Frickel and Gross’s general theory of SIMs.

4.1 Historiography related to the rational study – Objectives 1 and 2

George J. Stigler’s (1965) paper “Textual Exegesis as a Scientific Problem” has become a conventional reference providing a hermeneutical framework that can be applied in the
process of an analytic interpretation of economic text. Stigler argued that textual interpretation must identify the main concepts in an individual’s work and the major functional relationships among those concepts such that confidence in interpretation can be achieved ‘by increasing the number of his main theoretical conclusions which we can deduce from (our interpretation of) his analytical system’ (p.448). The test of an interpretation being its consistency with the main analytical conclusions of the system of thought under consideration which Stigler calls the principle of scientific exegesis. This is distinct from Stigler’s definition of the principle of personal exegesis that arises when the individual being studied makes logical errors or slips into tautologies which Stigler argues may blemish their work.

As such Stigler views exegesis as the method of rational historical assessment. That is, as the basis for building rational reconstructions. He argues that one may seek to determine what the individual really believed, though this may have no direct relevance to scientific progress, by choosing that interpretation which best fits the style of the individual’s thought. Stigler thereby provides methodology for the historian of economic thought to develop the general position of an individual’s work capable of empirical testing which in turn may be used in comparison to contemporary economic knowledge in order to determine the author’s contribution. However, several difficulties are raised in the literature associated with undertaking Stigler’s textual exegesis of historical economic text. These difficulties include: problems arising from the existence of a hermeneutic circle, the creation of mythologies of coherence, the formation of teleological or Whig history, and issues related to hermeneutic authority (Emmett, 2007, Pp. 526-535).

4.1.1 Problems and limitations associated with rational reconstructions and textual exegesis

The hermeneutic circle is a concept attributed to Martin Heidegger (1962). It is a situation which arises when an interpreter gains an understanding of a scholar’s whole body of work by reference to an understanding of the individual parts; however, an understanding of the individual parts can only be understood by reference to the whole body of work. A circular reference between the whole text and individual parts of a text therefore arises as an understanding of the whole text and the individual parts of that text can only be understood with reference to each other.

Stigler (1982) argues that an understanding of a scholar’s text is determined over time by the scientific community of economists as material is read and re-read. Thus, the modern
interpreter enters the hermeneutic circle with the economist’s prior developed understanding of the theory of the Scholar’s work. The hermeneutic circle in this sense can, therefore, be seen as highlighting that interpretation of text is found within its cultural, historical, and literary context. However, even with a pre-understanding of a Scholar’s work, the identification of a “general position” becomes difficult insofar as any distillation of an author’s work will necessarily be an abstraction by the interpreter from the texts studied. In his textual exegesis of Keynes’s major works Don Patinkin (1982, p. 17) used the analogy of passing a regression line through the scholar’s work to represent the central message. However, many general positions may be constructed from a scholar's body of work through the process of interpretation and by the choice of works studied. This is illustrated by the many (and often contentious) interpretations of scholars’ theoretical contributions in HET studies. Quentin Skinner (1988) and E.G. Aksoy (1989) have both pointed out that the formulation of an author’s “general position” for the purpose of evaluating scientific progress may create “mythologies of coherence”. Skinner contends in this case that constructed histories based on general positions become not ideas at all but abstractions of ‘a history of thoughts which no one ever actually succeeded in thinking, at a level of coherence which no one ever actually attained’ (Skinner, 1988, p. 40 as quoted by Emmett, 2007, p. 528). Rational reconstructions in this sense, therefore, suggest the impossibility of determining an author’s “true meaning” and forming an objective interpretation of their work.

The formation of Whig history, a term attributed to the work of Herbert Butterfield (1931) has particularly been associated with the development of rational reconstructions. The formation of Whig history can be understood as teleological argument: the modern interpreter of historical works judges the past by the standards of the present. Teleological historiography becomes implicit in the framework of Stigler’s scientific exegesis as the formation of an author’s general position is identified as the key factor by which to determine the contribution of that work to the economics profession today. Whig history in the development of rational reconstructions can, therefore, be seen as the analysis of theory and how it has contributed (or not) to the advancement of current understanding.

3 Although Butterfield used the example of the British political system where the “Whigs” advocated the power of the Parliament, the term Whig history has become a term generally understood to describe histories presenting the past as a progression toward the higher levels of liberty and enlightenment argued to exist today. Gregory Moore argues that a more appropriate expression is “teleological historiography” as it encompasses situations in which ideas from the past, both dominant and marginal, are interpreted as progressing towards more flawless versions of these ideas. (Moore, 2009)
Emmett (2007) finds difficulties with Stigler’s notion of pre-understanding of economic texts as an entry into the hermeneutic circle because it gives “hermeneutic authority” to the economics profession as the final arbiter of meaning. That is, it assigns hermeneutic authority to one specific interpretative community. Two problems arise due to Stigler’s position. Firstly, Stigler’s emphasis on determining an author’s general position which can be assessed scientifically precludes the analysis of non-economic texts in determining an author’s general position (for example, biographical information, correspondence, government reports and unpublished manuscripts). Such material is considered non-economic and, therefore, the economic interpretative community are not qualified (the hermeneutic circle) to interpret them. In reality, such sources may provide avenues for gaining a richer understand of the meaning of scholars’ text. Secondly, Stigler presupposes that the interpretative community of economists “speaks with one voice”. But again, in reality, different schools of thought within economics develop quite divergent interpretations, for example, in relation to Ricardo and Keynes.

4.1.2 Managing and limiting historiographical problems related to objectives 1 and 2

In the previous sub-section three main problems related to the development of a rational historiography are identified. Firstly, Stigler’s suggested entry to the hermeneutic circle can lead to the creation of “mythologies of coherence” due to the impossibility of determining an author’s “true meaning” and forming an objective interpretation of their work. Secondly, rational reconstructions can lead to the formation of teleological historiography or Whig history. Thirdly, Stigler's textual exegesis can lead to problems related to hermeneutic authority such as precluding the use of contextual/noneconomic research material in order to form an author’s general position and assuming the interpretative community of economists “speaks with one voice”. Consequently, in relation to the proposed thesis, the following question emerges: how will these three particular problems be constrained and manage?

It is firstly important to highlight that the aim of my proposed study is not to develop a rational reconstruction of each individual scholar’s general position. An author’s general position can never be achieved objectively for the reasons discussed above. Rather, the interpretative goal will focus on Marshall, Pigou and Keynes’s theoretical treatment of equilibrium and evolution, with particular regard to the scholar’s treatment of time, in order to examine the continuities and discontinuities in their works and the significance
of their contributions in understanding economic phenomenon. In this way rather than seeking the “true” meaning of the each individual’s body of work, the rational reconstruction is aimed at achieving the listed objectives of this study which extends its exegesis across the three authors. Compared to a study of a single author, a study of three authors reduces the likelihood of creating “mythologies of coherence”. This is in keeping with Emmett’s (2007) positive application of Stigler’s principle of scientific exegesis; avoiding the mythology of coherence trap by bringing subsets of the authors’ work into dialogue with current economics, and in the case of the proposed study, with the specific objective of identifying continuities and discontinuities between the scholars’ work.

The tendency toward the development of Whig history will be limited and managed in this study in two ways. Firstly, by dealing with subsets of the three author’s contributions, the focus is not the contrast with current knowledge but rather the continuities and discontinuities of their work as members of an intellectual community. Secondly, by nesting the rational study in a broader contextual and sociological study the focus will be on the significance of the scholars’ contributions in understanding economic phenomenon against the backdrop of their broader historical setting rather than forming an evaluation of their theoretical contributions simply with regard to current economic science (see subsection 4.2).

Issues arising from forming the “general positions” of authors inherent in Stigler’s scientific exegesis are mitigated in this study by dealing with subsets of the author’s works. Gerrard (1991) also provides an alternate view which limits problems arising from the hermeneutic authority inherent in Stigler’s textual exegesis as discussed above. He suggests the proposition that interpreters are constrained by the beliefs of the interpretive community to which they belong and that acceptance of new interpretations requires the acceptance of the interpretative community after a process of demonstration and persuasion. This suggests that the scientific community as a final arbiter is constantly evolving, which is consistent with Goodwin’s (2008) recognition that HET changes with the development of economics itself and ‘needs to be re-written by every generation of economists’. Although Emmett (2007) notes the proliferation of interpretations of scholars works due to the various schools of thought that have developed in economics, Gerrard argues that the manifestation of heterogeneous views creating multiple interpretations are the inevitable result of the vagueness of the written word, but also indicative of the reference power particular text may embody. Gerrard argues in this sense the existence of multiple
interpretations is not a problem. Knowledge may be interpreted in a pluralistic manner – i.e. from many perspectives, each shedding new light on the historical episode under investigation. While this study will seek to provide one perspective on Marshall, Pigou and Keynes, it is consistent with the pluralistic approach to HET in the sense that other interpretative perspectives are deliberately not precluded.

4.2 Historiography related to historical reconstruction: Objective 3

SSK, or the sociological analysis of knowledge production, considers science as socially created and dependant and arose from the impact of Kuhn’s work *The Structure of Scientific Revolutions* (1962). Kuhn’s seminal work changed the conception of the progress of science as incremental and uniform which had dominated the American conception of how scientific knowledge was attained during the post-war period. Kuhnian concepts centred on revolutionary paradigm changes stressing the psychological rather than rational basis of how scientific knowledge was acquired and led the way for sociological based explanations of scientific knowledge (Drakopoulos & Karayiannis, 2005). The most immediate response to Kuhn’s proposition was Imre Lakatos’s (1978) work on the methodology of scientific research programs (MSRP) which blended Popperian falsificationism with historical considerations to provide a tool to develop rational reconstructions. Both Kuhnian and Lakatosian ideas were imported into economics from the philosophy of science and applied in HET as a tool for theory evaluation.

SSK evolved as a second generation response to Kuhn’s seminal work. Two genres are generally differentiated in SSK: the formal program known as the Strong Program (Barnes, 1977; Bloor, 1991), and an informal program referred to as social constructionism. The Strong Program is differentiated by its methodological self-consciousness, formal membership, and core idea that scientists’ beliefs are caused by their social interests. Social constructionism which is strongly identified with the work of Karin Knorr Cetina (1981), Bruno Latour (Latour, 1987), and Steve Woolgar (Latour & Woolgar, [1976]1986) on the other hand develops specific or local studies informally and

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4 Hitherto, the work of sociologist Robert Merton dominated sociological understanding of the formation of scientific knowledge. Mertonian studies emphasised the “Cudos” norms of science – Communalism, Universalism, Disinterestedness and Organized scepticism – focusing on the role of individual scientists, reward and leadership.

5 Applications of both Kuhnian and Lakatosian explanations have diminished in economics. This has been attributed to failure of the theories to convincingly respond to a variety of criticisms from economic methodologists and historians of economic thought. For a review and assessment of this the reader is directed to (Drakopoulos & Karayiannis, 2005).
maintains that scientists’ beliefs are caused by their contingent social contexts. The importation of SSK in economics can be observed as commencing in the mid 1980’s (for example, Backhouse, 1997; Coats, 1984, 1987, 1997; Hands, 1994; Mäki, 1989). More recently, the History of Political Economy (HOPE) journal has included a series of essays considering how economists “embedded in intellectual communities … (rather than “man and his work” approaches)… collectively create, promote, and disseminate their ideas” (Forget & Goodwin, 2011, p. 1).

The sociological component of my proposed study, which comes from the most recent developments in the Strong Program in SSK, is based on the framework developed by Frickel and Gross (2005). In recognising the dynamic nature of the histories of all modern scientific and intellectual fields, Frickel and Gross developed a theory to explain the dynamics of SIMs, which they take to be central mechanisms for change in the world of knowledge and ideas. SIMs are defined as ‘collective efforts to pursue research programs or projects for thought in the face of resistance from others in the scientific or intellectual community’ such that a sociology of knowledge can be perceived in the presence of certain characteristics such as publications and institutional networks, followers, and critics for example. Frickel and Gross assume that the core proposition of their theory is that it can be empirically applied. To my knowledge, the application of Frickel and Gross’s framework has not been employed in the analysis of the Marshallian school and has had very limited application in HET to date. The major attributes of Frickel and Gross’s general theory of SIMs are summarised in Appendix A.

Two issues emerge in the methodology sociologists employ with regard to scientific studies of science. They are invariably discussed in the literature in terms of reflexivity, where sociological explanations for specific issues in HET are also applicable to the general SSK, and relativism, whereby economists construct own social beliefs in the same way all social groups construct their social beliefs (Coats, 2007; Hands, 1997; Zouboulakis, 2001). The following section considers the general compatibility of SSK combined with rational and contextual methodology, the nature of two issues which remain problematic in SSK, and identifies limitations raised in the literature specifically associated with Frickel and Gross’s (2005) general theory of SIMs.

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6 Zouboulakis notes the earlier pioneering work of A.W. Coats in 1964 investigating the role of scientific authority in the acceptance of economic ideas in four cases in Britain which included Marshall in 1890 and Keynes during the 1930s. Coats later expanded this project in his 1984 and 1997 publications. (Coats, 1964)

7 For an example of HET incorporating Frickel and Gross’s methodology see (Poitras & Jovanovic, 2010)
4.2.1 Problems and limitations associated with historical reconstructions: contextualism, SSK and the general theory of SIMs

Zouboulakis (2001) argues that interest in alternative modes of historical reconstruction (such as SSK) arose from the inability of traditional methods and methodology imported from the philosophy of science (Kuhnian and Lakatosian approaches) to sufficiently respond to the question of evaluation in the progress of economics through its historical development. Rational approaches treat knowledge as accumulating over time leading to a tendency to form teleological historiography whereby scientific knowledge asymptotically approaches perfection. Confined to an “internal” examination of the discipline’s scientific theory, rational studies ignore the social context of knowledge production.

On the other hand contextual approaches have no need to explain progress in the evolution of scientific knowledge generally; the historian makes the past and its social context the focus of consideration, not the present. The development of economic theory, therefore, reflects static intellectual and social forces surrounding the author as the progenitor of economic knowledge in his time and place rather than as part of the fabric of the discipline’s overall intellectual history. SSK in this sense compliments contextual approaches identification of the broader “external” setting of the economist’s work (historical reconstruction) by extending consideration to include analysis of the impact of the sociological factors driving knowledge production, reception and diffusion. However, Zouboulakis (2001) argues that sociological studies cannot answer the questions of how a new theory came to be born, what the theoretical problems to be solved are, or how the theory explains economic reality.

The issue of relativism in SSK arises as the beliefs of scientists are treated as either relative to their social interests (the strong program) or to their contingent social context (constructivism) (Coats, 2007). This effectively denies the traditional role of the material world as the cause and explanation of scientists’ beliefs or known ‘truths’. D. Wade Hands (1997, p. 717) refers to relativism in SSK as the problem of nature’s impotence. The issue of relativism raises the question of whether all scientific beliefs are valid or only valid to the community proposing those beliefs.

The issue of reflexivity arises in the form of a paradox related to those practising SSK in terms of self-reference; just as the beliefs of the community of scientists they are
studying are determined socially, so too should the beliefs of the practitioners of SSK. Hands points out the conundrum that arises in this case –

‘If sociologists can really find out what is going on out there in the world of science (that it is socially determined), then it means that they have the power to discover (not just construct) the nature of the objects in their domain (the social actions and beliefs of scientists), but this is precisely ability that they deny to the scientists they study. On the other hand, if the argument that beliefs are socially determined is not about what is out there, but is only about what is in here, constituted by the collective belief and actions within the SSK community, then it is not clear what it has to do with scientists at all: thus undermining the debunking claims of SSK’. - (Hands, 1997, p. 717)

Limitations have also been raised in the literature specifically concerning Frickel and Gross’s general theory of SIMs. Neil McLaughlin (2007) suggests a series of theoretical entry points to stimulate case study based on avenues which Frickel and Gross general theory could be extended. Firstly, he argues that the core of the theory tends to revolve around academic forms of social organization and suggests that what Frickel and Gross are really concerned with are “Academic Social Movements” (or ASM) ‘that are embedded in the logic and structures of the academic field as well as SIMs without distinguishing between them’ (p.3). McLaughlin argues in this sense that SIM methodology be extended by opening up research into the different dynamics of Academic or Scientific Intellectual Movements in a global sense where varied forms of academic organizations (including disciplinary differences) in countries shape the formation of SIMs in distinct ways. Secondly, he argues that the elite centered assumption made by Frickel and Gross does not differentiate what percentages of SIMs are created from creative margins as compared to those forming from the center by elite intellectuals. Thirdly, McLaughlin argues that Frickel and Gross’s theory is “internalist” insofar as they ignore “external” motivations and suggests motivations as determined by race, gender, environment, and alternate political and social arrangements outside the university (or locale of the intellectual movement) also be considered. Mikaila Arthur (2008) similarly suggests Frickel and Gross’s methodology be extended by the consideration of New Knowledge Movements (NKMs) such as the creation of women’s studies and Asian American studies in academic centers in the United States. Arthur suggests a synthesis with SIM theory to incorporate the idea that many new disciplines emerge through contentious collective action on the part of political and intellectual outsiders rather than via intellectual elites.
4.2.2 Managing and limiting historiographical problems related to objective 3

In the previous sub-section four main problems related to the incorporation of SSK in the historical component of my proposed study are identified. These problems include: consideration of the compatibility of a sociological study combined with a rational and contextual study; the issues of relativism and reflexivity inherent in the methodology of SSK; and three specific limitations of Frickel and Gross’s General Theory of SIMs raised by McLaughlin (2007) and Arthur (2008). How each of these issues will be managed and limited in my proposed study will be considered in turn.

Firstly, the inclusion of a sociological study within which to nest a rational study of the economics of Marshall, Pigou and Keynes has been proposed on the basis of key considerations that emerged from a review of literature concerning the use of SSK in HET. This includes recognition that sociological studies alone are not equivalent to richly textured historiography or replaces the role of contextualization in order to reconstruct the history of economics. Rather, it is concluded that SSK complements historiography most effectively when applied to historical episodes where economists embedded in intellectual communities produce, promote and disseminate knowledge (Forget & Goodwin, 2011; Hands, 1997; Samuels et al., 2007; Zouboulakis, 2001). In that sense, the sociological study proposed for this thesis does not fall within the “Strong Program” of SSK. Instead, the sociological study of the Marshallian school provides an opportunity to evaluate the social influences on discontinuities and continuities between Marshall, Pigou and Keynes theoretical contributions to economic knowledge under one general framework based on of Frickel and Gross’s (2005) general theory of SIMs, but not subject to the Strong Program’s constraints they seek to impose. Consequently, the logical criticism of “relativism” in all disciplines except for the “all-seeing” SSK is eliminated, because no “absolute” relativism is to be imposed on the project. The rational influence of ideas precludes such absolute relativism. Indeed Hands (1997, p. 732) observes – ‘SSK comes into being and exists only in contrast to (the) relatively pristine and hagiographic vision of scientific enterprise; debunking, like satire, works effectively against the self-assured’ suggesting SSK is important and can complement rational approaches by providing a juxtaposition to the development of teleological historiographies or internal focus of rational studies.

Secondly, given the specific purpose and objectives of my forthcoming project, Frickel and Gross’s framework is resilient to the criticisms of McLaughlin (2007) and
Arthur (2008). It makes no “substantive” difference if the Marshallians are considered as a SIM or ASM or NKM. Moreover, the distinction between creative margins and “elite intellectual” holds no relevance to the study – Marshall, Pigou and Keynes were gifted in terms of creativity and were elite intellectuals.

5 Conclusion

This paper has presented some significant methodological considerations for my forthcoming PhD project in HET. The study being undertaken consists of a rational historical component which seeks to examine the economics developed by Alfred Marshall, Arthur Cecil Pigou and John Maynard Keynes in the three areas of ethics, evolution and equilibrium, all nested within a broader sociological study. The benefits of adopting different approaches are two-fold. Firstly, appropriate methodology are developed which are specifically designed for addressing each of the specific objectives of the project. Secondly, the mixed methodologies being adopted balance the limitations and problems associated with the other, the rational, contextual and sociological component of the study.

The rational component of the study permits the pursuit of meeting the objectives of identifying the scholars’ theoretical work in economics (ethics, evolution and equilibrium). This will be achieved by bringing subsets of the authors’ work into dialogue with current economics with the specific objective of identifying continuities and discontinuities between the scholars’ work and highlighting Pigou’s theoretical contributions in their own context. Sociological (and contextual) components broaden the internal focus of the rational study by the examination of the authors’ contextual and sociological external environment supporting the historical reconstruction of the authors’ time, place and situation.

The sociological component is aimed at meeting the third objective of the study to complement the rational and contextual components of the study by identifying Marshall, Pigou and Keynes in a broader context as members of a school of thought to determine whether their contributions fall within a single SIM. Presenting a matrix of sociological information relating to the academic careers of Marshall, Pigou and Keynes’s at Cambridge utilising Frickel and Gross’s (2005) general theory of SIMs overcomes limitations arising from rational and contextual methodology by permitting an evaluation
of the impact of sociological factors driving knowledge production, reception and diffusion.

The implications for adopting methodology consisting of a rational historical component nested within a broader sociological study is a recognition of the pluralistic nature of economic thought, which can be considered (following Warren J. Samuels 1974, p. 313) consisting of positivist, metaphysical and common-sense elements. It is hoped that the final dissertation written as a result of this research will constitute a broad and comprehensive reconstruction of the economics of Marshall, Pigou and Keynes with respect to the three specific issues of ethics, evolution and equilibrium in its rational, historical and sociological form.
APPENDIX A:

GENERAL THEORY OF SCIENTIFIC/INTELLECTUAL MOVEMENTS (SIMs)

Generally SIMs:

1. At their core have a more or less coherent program for scientific or intellectual change or advance;
2. The core consists of intellectual practices that are contentious relative to normative expectations within a given scientific or intellectual domain;
3. Because the intellectual practices recommended by SIMs are contentious, SIMs are inherently political;
4. Are constituted through organized collective action;
5. Scientific/intellectual movements are episodic phenomena; and
6. Vary in intellectual aim and scope;

Frickel and Gross (2005) state they:

1. Follow the "strong program" in the sociology of scientific knowledge in refusing to consider the intrinsic truth of an idea as the sole cause of its popularity (Barnes 1977; Bloor 1991);
2. Assume a priori that scientific and intellectual fields are hierarchically structured sites of contestation in which agents vie with one another for scientific or intellectual prestige, and acknowledge that fields are historically emergent phenomena;
3. Although the fields in which SIMs develop are relatively autonomous from wider cultural, political and economic contexts, they take it as axiomatic that SIMs are influenced by direct or indirect pressures emanating from the broader cultural and political environment;
4. Presuppose that the social relationships among the individual and corporate actors who collectively comprise a SIM can be measured, if only crudely; that the social conditions to which these actors are subject also can be measured; and that SIM success or failure can be measured as well;
5. Therefore, Frickel and Gross assume that the core propositions of the theory can be empirically tested.

Frickel and Gross’s general theory of SIMs consist of four propositions:

**Proposition 1:**
A SIM is more likely to emerge when high-status intellectual actor harbours complaints against what they understand to be central intellectual tendencies of the day.

**Proposition 2:**
SIMs are more likely to be successful when structural conditions provide key resources. This includes: access to financial support, opportunities for publication, employment for SIM participants, intellectual prestige and organisational resources.

**Proposition 3:**
The greater a SIM’s access to various micro mobilisation contexts, the more likely it is to be successful.

**Proposition 4:**
The success of a SIM is contingent upon the work done by movement participants to frame movement ideas in ways that resonate with the concerns of those who inhabit an intellectual field or fields.


