Social Capital in Economics: Why Social Capital Does Not Mean the End of Ideology[1]

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ABSTRACT

Social capital is one of the most exciting new concepts to have emerged from within economics in the past decade. It promises to reconcile traditional market approaches with an understanding of intangible social dimensions to economic activity, such as trust and community. At the same time, the concept of social capital has been criticised as a form of academic colonisation, attempting to reshape the social sciences in the individualistic image of economics. I examine social capital as a concept within economic discourse and situate its emergence within broader trends in economic methodology. The emergence of social capital reflects a shift within economic methodology away from abstract mathematics and instrumental rationality towards a more holistic, contingent, and complex methodology more common in sociology. However, economic and sociological method remain significantly different. Likewise, ideological differences persist in interpreting the policy implications of the concept of social capital. As such, social capital represents part of a significant move within economic methodology, but is not a portent of the 'death of ideology'.

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1 The author wishes to thank the anonymous referees and particularly Gabrielle Meagher for comments on earlier versions of this paper.

ISSN 1443-8607
Volume 3, Number 3: March 2003, 181–203
The Drawing Board: An Australian Review of Public Affairs
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Introduction

Some have argued that the rise of the concept of social capital spells the beginning of the end for ideology. Advocates of Third Way politics have claimed a middle ground between the great divide of capitalism and socialism — and that the theory and reality of social capital makes a critical contribution to this rapprochement. It would indeed be of great import if social capital were to play this role, heralding an era of public policy based on objective criteria, such as 'evidenced based practice' rather than the more arbitrary criteria of opposing political ideologies. However, I argue that such a development is a mirage. The concept of social capital does reflect significant developments, not only in economics, but in the sciences and social sciences more generally. However, these developments are better understood as methodological, not political. Ideological commitments are being reshaped, but consistent differences remain between positions formerly termed 'Left' and 'Right', 'heterodox' and 'orthodox', and the divergent positions advocated by actors debating the meaning and significance of social capital.[2]

Social capital theory has had a rapid rise to prominence, only coming to widespread attention, either in academic or policy circles, after publication of Robert Putnam's book *Making Democracy Work* (1993). In Australia broadcast of Eva Cox's 1995 Boyer Lectures on ABC radio followed, in which social capital was a centerpiece. Since then social capital has become a buzzword in discussions about community, family, and the welfare state. This debate has sparked research by the Australian Bureau of Statistics (2000) and the Australian Productivity Commission.[3] The concept appears in the rhetoric of federal politicians such as Mark Latham (1998; 2001a) and has been embraced by government bureaucracies both at state and federal levels. Social capital is also being championed by many non-profit organisations, such as the Benevolent Society, the Smith Family, and Mission Australia. Finally, there has been an increasingly prominent debate occurring at the edges between policy practice and academia, exemplified by the volume recently edited by Ian Winter, *Social Capital and Public Policy in Australia* (2000a). A similar enthusiasm for the concept has been witnessed in Britain, partly championed by Tony Blair, and in the United States and mainland Europe, as well as within the World Bank.

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2 I am not suggesting a simple congruence between the binary of 'Left' and 'Right' and that of sociology and economics. However, in the context of this debate these divisions have tended to align, partly due to the dominance of rational choice methods within economics and of alternative methodologies in sociology.

3 At the time of writing, the Productivity Commission was conducting a research project called 'Social capital: exploring the literature and some ramifications for policy analysis'. The expected release date of the research is May 2003.

The popularity of the concept of social capital is testimony to it perceived usefulness. It has come at a time when academics, social commentators, and politicians have begun to refocus attention on 'community' and when advocates of market reform, having achieved significant change in competition policy, have refocused their efforts on the largest item of government expenditure: welfare and social services. Social capital has been embraced by those from the political Left, such as Eva Cox (1995), the political Right, such as the conservative Centre for Independent Studies (Norton et al. 1997), and by the so-called 'Third Way'. This diversity has been seen by some as an encouraging sign associated with the decline of absolutist ideologies (Latham 2001), and as a worrying trend by others who view social capital as part of a pervasive neo-liberal agenda (Fine 2001).

I focus on understanding where the concept of social capital came from within economic discourse. Unlike most of the work I cite above, I do not engage in ongoing debate about either the validity of the concept or empirical measures of social capital. Accordingly, when I use the term 'social capital', I refer to the concept in *discourse*, and not to an actual entity in the world. As a contested concept, social capital has been argued to have a range of often conflicting policy implications. Evaluating these alternative approaches requires an understanding of how and why the concept has been developed, something which in turn requires an understanding of broader trends within economic methodology, and of the relationship between economics and sociology.

Elsewhere I have examined the link between game theoretic debates about the Prisoner's Dilemma and the emergence of social capital (Spies-Butcher 2002). Here I attempt to place this development in the context of the renovation of economic methodology. I suggest that the development of social capital is part of a trend within both economic and science theory that has moved away from conventional reductionist and objectivist methods, towards a naturalistic epistemology and an embracing of evolutionary metaphors. In short, I argue social capital is the result of a move towards a more contingent, complex and holistic methodology in economics.

At the same time as recognising this trend, it is important to note its limitations. The move towards a more complex and social methodology in economics has not — at least not yet — delivered a methodology that takes social or historical context as seriously as other disciplines in the social sciences. These moves have also been distinct from ideological changes. Those involved in undermining what they perceived to be a reductionist method have retained their opposition to state intervention and their adherence to market or 'spontaneous' mechanisms for solving social and economic problems. What has changed is that the justification for this position has shifted from a centralist one; that is, one that understands social and economic systems in mechanistic terms and therefore tends to suggest policy prescriptions that are top-down and determined centrally, to a justification that is both more organic and decentralised. Similarly, while social capital has been embraced by more progressive theorists, who also share a desire to move away from what they view as overly reductionist methods, these theorists have maintained a commitment to an understanding of differential power that clearly associates them with the political Left.

Many social capitals

Before embarking on a detailed history of social capital's development, it is important to recognise that more than one conceptualisation of social capital currently exists, and, in doing so, to define the scope of my argument. The term 'social capital' has been used for almost a century, and is strikingly similar to other concepts in both economics and sociology. As a result, the social capital debate has been taken up within several disciplines and paradigms. Even within the mainstream social capital debate, consensus on the definition of the concept remains elusive. It is generally held to refer to aspects of the social structure that facilitate trust and collective action such as norms, networks, and social relations; however, what this means in either theoretical or operational senses remains vague and contested. For some authors almost all social norms and networks appear to be part of a single resource (social capital), while others have suggested that different social relations need to be identified and only some forms of relations defined as social capital (see, for example, Stone & Hughes 2002).

Many have tried to synthesise the various uses of social capital into a single lineage (see Winter 2000b; Schuller, Baron & Field 2001; Portes 1998). These literature reviews have tended to view most uses of the term prior to the 1980s as isolated and lacking analytical foundation. A more theoretically grounded concept is generally thought to have been developed in the work of sociologists Pierre Bourdieu (1986) and James Coleman (1988; 1990), the later having been credited by Robert Putnam (1993) as his primary source for the concept. Yet, there remain significant differences between even Bourdieu and Coleman. Strangely the two seem to have been unaware of the each other's work despite co-editing a book in the early 1990s (Bourdieu & Coleman, 1991).

Closer examination of the two men's work explains this anomaly. Smith and Kulynych argue that differences between Coleman and Bourdieu 'reflect two long-standing differences in the history of political inquiry', between 'pluralism, on the one hand, and class analysis, stratification theory, or elite theory, on the other' (2002, p. 157). Coleman is associated with the former and Bourdieu with the latter (also see Fine 2001). Bourdieu's approach has enjoyed a degree of interest within sociology and education, particularly outside Australia. However, Coleman's more rational choice analysis has served as the basis for most of the mainstream social capital debate. The pivotal role of Putnam's work in popularising the concept largely explained this success.

I focus on this last, more orthodox version of social capital. This version of the concept is most clearly and closely connected to mainstream economics and, I argue, has had the greatest impact on the current debate. I refer to the sociological debate more closely linked to Bourdieu primarily to demonstrate continuing differences within the social capital literature.[4] Other influences, such as communitarianism and civic republicanism have also been important in social capital's development. I do not dismiss the importance of these other themes. Instead, I aim to focus on economics in order to broaden our understanding of this relatively new concept.

Social capital and economics

In a previous article, I discussed the link between developments within game theory and the rise of social capital in its 'Putnam' form (Spies-Butcher 2002). There I suggested that social capital is best understood as a conceptual solution to problems central to the game theoretic project, particularly tensions between individual and collective rationality, and the desire to reconcile these tensions with a pro-market ideology. While the term has since been used in a variety of contexts and for several purposes, its origins are in the heart of the dominant neoclassical economic tradition.

Developments in game theory were not isolated. Game theory has been at the forefront of debates between economics and the other social sciences. Consequently, it reflects a broader mood in academia that has been challenging and rethinking conventional economic method. The suggestion that scientific (and social scientific) discourse is at least partly a social construction and not simply an objective search for truth, has been accepted by many academics outside orthodox economics. However, sadly, such approaches continue to be rare in research on economic methodology. The work of Philip Mirowski and D. Wade Hands is a rare exception, providing a more historical, social and comparative framework for understanding these developments in economic method. Drawing on this work, I argue that social capital is a product of these same developments.

The received view

Unlike many researchers in the social sciences, most economists have attempted to measure up to the often restrictive standards of the natural sciences, particularly physics.[5] In turn, both scientific and economic methodology have been dominated by

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4 See Portes (1998) for a review of the sociological lineage.

5 Mirowski (1989) has suggested that this desire has deep roots, with much of orthodox economic method paralleling the structure of nineteenth century physics.

epistemologies that make sharp distinctions between meaningful or true statements and the meaningless or untrue and that have been underpinned by a belief in a (scientific) methodology that allows access to objective reality (see Hands 2001, pp. 72–95). Even as this objectivist epistemology has begun to be challenged, the mainstreams of both economics and natural science remain committed to a knowable objective world and a meaningful distinction between science and non-science.

Mirowski (2002) argues that both during and immediately following the Second World War a mainstream economic discourse emerged based both on this objectivist wisdom and the response of economists to failures to establish the empirical validity of core propositions of neoclassical theory. The main current of the emerging economics, the General Equilibrium (GE) project, became an increasingly abstract and mathematical endeavour, and one I argue is closely associated with centralised (top down) policy prescriptions.

Hands and Mirowski (1998) claim that the methods of the GE project were partly a response to the failure of economists Harold Hotelling and Henry Schultz to demonstrate the validity of neoclassical demand theory just prior to the Second World War. Although their price series data did not correspond to neoclassical predictions, Schultz insisted that these findings should not lead to rejection of the theory (1938). Instead, economists attempted to develop alternative methods and justifications for advancing the neoclassical project.

One response was to take economic theory away from empirical tests towards highly abstract mathematical models established through logical proofs, a method embraced by those within the General Equilibrium tradition. Interestingly, it appears this move was championed, among others, by those sympathetic to a brand of socialism. The development of the GE project coincided with the so-called socialist calculation controversy. Economists such as Oskar Lange saw the GE project as facilitating the calculation of optimum price levels in an economy so that, in theory, a central planner who simply imposed the desired price level could replace the market mechanism (Mirowski 2002, p. 233). The association of both pro-market and anti-market theorists with general equilibrium methods demonstrates a broad ideological consensus about the goal of universal predictive theories. Likewise, opposition to this approach has come from both the Left, often from sociology, and the Right, in the work of economists such as Friedrich Hayek (1948, quoted in Mirowski 2002, p. 235).

Mirowksi argues that those involved in the Chicago school, such as Milton Friedman and George Stigler, took a slightly different approach. They combined a similar understanding of human rationality with a more empirical methodology laid out by Friedman (1953). The Chicago approach enabled the application of rational choice methods to a range of non-economic problems, a trend begun during the War. This desire to take the rational choice method to the whole of the social sciences has been continued, perhaps most notably, by Gary Becker. Drawing on James Coleman's work, Becker has developed his own understanding of social capital very much in the traditional of the early Chicago theorists (see Becker 1996).

Trends towards abstraction and universalism in economic methodology both promoted a relatively centralist understanding of dealing with economic problems.[6] Both removed contingency and local experience from consideration in economic analysis, thereby promoting similar policies in virtually all situations. In addition, the idea of rationality built up by both traditions conceptualised the individual as a form of 'lightening calculator', an entity that instantaneously assessed all information and made decisions based on maximising utility. Thus, any given situation would have only one possible outcome, unless an individual was indifferent between options because they produced identical utility outcomes. Where the outcome was undesirable, the only mechanism to change the behaviour of those involved was to change the pay-off structure, something that would require intervention from a third party, usually a government. Even when this logic is used to advance market-based policies, the presumption remains that change occurs from the top, through the imposition of a market, a point emphasised by Eleanor Ostrom, one of the early contributors to the social capital debate (1990, pp. 2–25).

The same universalism — which Hands terms the 'Received View' — dominated science theory, reinforcing the trend in economics (Hands 2001). In a similar vein, James C. Scott (2001) argues that a highly abstract method underpinned a movement he terms 'high modernism' that sought to centrally plan entire societies, based on 'scientific' approaches of social organisation. Interestingly, Scott draws on the work of Jane Jacobs (1962) to criticise high modernism, partly because of modernist policy makers' failure to take account of the complex interrelations of the social world that Jacobs describes as 'social capital'.

Jacobs is not part of the lineage described here. But her critique of the abstract and reductionist methodology of rational choice theory shares much with the criticisms of others involved in developing the concept of social capital. These criticisms are part of a broader move in economics to recast economic method in a way that takes complexity, contingency, and agency more seriously, and which has attempted to move from the mechanistic metaphors of the Received View to evolutionary metaphors. This process in economics has mimicked similar trends in both natural and social sciences, and it is not surprising that social capital has emerged on the edges of economics, amongst those most closely associated with other disciplines.

6 For Mirowski (2002) this abstract method was the result of economists resisting the influence of cyborg or computer methods.

Game theory, social capital and the rejection of the received view

Confidence in the objectivity of scientific knowledge has been under strain for some time now. The post-modern attack on objectivity has informed both external criticisms of science and internal questioning within science theory. Hands claims that this has led to a naturalistic turn in both economic and scientific theory, in which method (epistemology in science and economic methodology in economics) has increasingly found its footing in the practices of the respective disciplines rather than in *a priori* commitments (2001). It is beyond the scope of this paper to explore this concept in detail. Rather, what I take from this 'turn' is that those involved in methodological debates are questioning and revising the very *basis* of methodology.

Two aspects of this revision have particular relevance. First, the understanding of rationality within economics, previously taken as an *a priori* commitment, has increasingly come to be based on experience and observation of how actual decisions are made, primarily within decision theory and game theory. Secondly, the commitment to reductionism, to the assumption that each element of the system can be easily understood in isolation from other elements, has come into question and along with it the commitment to a single equilibrium. Instead, a discourse based on dynamic systems and non-linearity, involving multiple equilibria and sensitivity to initial conditions, has been taken up in both science and economics, evident in debates around chaos theory and the research agenda of the Santa Fe Institute. I aim to understand the development of social capital in this context, as part of the broader turn within both economic and scientific methodology.

For several reasons game theory appears to have been at the forefront of the move against the Received View in economics. The precise definition of decision-making situations in game theory offers one of the only promising instances within economics for experimentation (Roth 1995, p. 18). Game theory has provided empirical evidence of how decisions are made that has at times contradicted the traditional account of rationality. Investigations of how people make decisions also have direct implications for sociology and other social sciences. As a result, experimental economics and game theory have often been at the forefront of the move within economics to engage with other social sciences.

These trends have been assisted by the rise of the computer, a technology at the heart of many of the developments within game theory and experimental economics. The trend to develop a rule-based rationality, and therefore easily programmable and executable in computer simulation, has been central to the development of social capital theory.[7]

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7 Mirowski (2002) treats the role of the computer in recasting economic methodology in more detail.

Rationality and the computer

The dominant form of game theory that took economics and the social sciences by storm in the 1980s differs in important respects from the original version pioneered by John von Neumann and Oskar Morgenstern in the 1940s. Von Neumann and Morgenstern accepted a more complex view of games in which coalition building and multiple equilibria were common. Under these circumstances, 'standards of behavior' could influence outcomes (1944, pp. 40–45).[8] The more recent — and now conventional — method John Nash developed conceptualises rationality in more atomistic terms (see Mirowski 2002, pp. 129–133, 331–341).

The Nash version of game theory has gone on to flourish, but an early adherent to von Neumann's work, Merrill Flood, along with his colleague Melvin Dresher, attempted to undermine the Nash framework. They developed a game that later became known as the Prisoner's Dilemma (PD), in which the equilibrium point predicted by Nash's theory was not the optimum outcome. With a modicum of cooperation the players could reach a more desirable outcome, however, according to the logic of Nash-style game theory, the individual maximisation strategies of the players would lead them to defect.[9]

An empirical test of the game found a high degree of cooperation, although this was not uniform, and an even higher level of confusion and incomprehension among subjects as they struggled to understand their opponents' moves (Flood 1958). The game has since formed the basis of a large literature including contributions both from adherents and dissidents of game theory, and has become a catalyst for debates over rationality (see Roth 1995).

Among those skeptical of game theory were researchers at the Centre for Peace Studies and Conflict Resolution and the affiliated BACH group at the University of Michigan (Mirowski 2002, p. 484). Centre director, Anatol Rapoport was interested in undermining game theory, which had become associated with the US military. Rapoport charged Robert Axelrod with exploring what Rapoport thought was a key weakness in the game theoretic armor, the PD.

Axelrod's resulting work (1984; 1986) has become instrumental to the development of social capital theory (Spies-Butcher 2002). He tested the Prisoner's Dilemma by running two computer tournaments to which he invited theorists and hobbyists to submit programs. The structure of the game used in the tournament was specifically

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8 'Standards of behavior' appear to be similar to what is later understood by other authors to be social norms, that is, non-material features of a society that regulate behaviour.

9 For a more detailed discussion of the Prisoner's Dilemma see Spies-Butcher (2002).

designed to allow a number of equilibrium points by repeating the PD an indefinite number of times (see Axelrod's discussion, 1984, p. 10), opening up the possibility of cooperation within the Nash game theoretic paradigm.

Rapoport's program, known as TIT-FOR-TAT, won both tournaments. TIT-FOR-TAT cooperated with its opponent on the first move of the game, and then simply copied its opponent's move from the previous round in each subsequent round. If it met another cooperative player it would benefit from cooperation. If not it would not lose much as it switched to non-cooperation.

Axelrod extended his analysis to a computer simulation of an evolutionary process, in which programs that were more successful increased in number and those less successful decreased. The result was a world of TIT-FOR-TATs. Axelrod used the results to argue that the development of cooperative norms would facilitate a cooperative resolution to Prisoner's Dilemma type situations (1986). Indeed, Axelrod claimed that PD-type situations allowed for two possible resolutions. In addition to the traditional analysis that resulted in mutual defection by all players, Axelrod claimed cooperation was also a self-reinforcing equilibrium (also see Sugden 1986).

This justification of cooperation in the face of seemingly strong incentives towards distrust formed a central plank of Robert Putnam's analysis of social capital. He conceived of social capital as the resource that allowed a society to achieve cooperative equilibria in situations like the PD. In effect, social capital was a resource to overcome collective action dilemmas (Spies-Butcher 2002).

It is important to note a number of significant differences between Axelrod's approach and that of conventional economics. First, Axelrod's proof came in a computer simulation, not by logical proof. The game he simulated actually has an extremely large number of possible moves and strategies and a large number of possible equilibria, making formal analysis difficult, if not impossible. Second, Axelrod's actors were rule followers and not maximisers, an artifact of computer simulation that requires the programs to be executable even in extremely complex situations. And third, the actors followed different rules; that is, there was no representative actor, and the composition of the fictitious society changed over time, with more successful programs replacing less successful ones. Instead of reaching an instantaneous equilibrium, the evolutionary literature that has grown up around this work has tended to use the language of 'spontaneous', or 'emergent' order, in other words, order that emerges from within the system, rather than being the predictable result of structures imposed upon it.

Similar computer simulations were involved in the development of chaos theory within science. Computers allowed Edward Lorenz to run non-linear programs previously outside the reach of mathematicians using pen and paper. Fractal patterns emerged, in which any given point was unpredictable, and an exact sequence was never repeated, but such that patterns were clearly identifiable, often patterns evident at any scale (Gleick 1987, pp. 11–31). The same sort of behaviour, termed the 'edge of chaos' by the economists involved with the Santa Fe Institute, was later discovered in several natural phenomena, such as turbulent water, rain fall patterns, and wind. These systems were highly sensitive to initial conditions, meaning that a small change to one element of the system may have significant repercussions elsewhere, a phenomenon popularly known as the 'butterfly effect'.

Indeed, the impact of computer simulation and chaos theory has been felt directly within economics. Similar methods have been used in financial economics to analyse stock market and commodity prices, hoping to find patterns that resemble nonlinear dynamics (Gleick 1987, pp. 83–4; Waldrop 1992, p. 274). Likewise, the emerging field of complexity economics associated with the Santa Fe Institute has used computer models based on the same principles of rule-following actors, where different actors use different decision rules, and the composition of the 'society' changes over time (Waldrop 1992). While much of this research has gone beyond the bounds of that associated with social capital, moving towards models without any equilibrium, they remain part of a similar movement.

That similarity is evident Douglass North's work. North is a key source in Putnam's original social capital work and a significant contributor to new institutional economics, which has been at the centre of both the development of social capital and broader moves in economics to include social structure. Presenting his work at a Santa Fe conference, North linked the traditions of new institutional economics to the emerging complexity economics (1997). Also, Elinor Ostrom, one of the first theorists to take up the social capital, has employed evolutionary models in an explicit attempt to modify the dominant model of rationality while remaining within the rational choice tradition (2000).

The desire to mimic more closely actual decision-making behaviour inspired computer and evolutionary models of rationality. Thus, there have been close links between complexity economics and cognitive science (see Waldrop 1992). Research from experimental economics, some of it pursued in cognitive science, has revealed weaknesses in the Nash framework. The model of optimising rationality has also been questioned as non-computable (Lewis 1985, p. 68, quoted in Mirowski 2002, p. 429). This has led those using computer simulations to investigate alternative notions of rationality that can more easily be executed. What have emerged are rule-based models of rationality similar to those Axelrod developed, and which have contributed to new concepts in bounded rationality. These models select rules based on various forms of evolution, reflecting a naturalised (biological) epistemology that has also been influential in science theory and economic methodology generally.[10]

Many of the themes of the social capital debate are linked to these changes in methodology. The emphasis on a 'whole of government' approach that recognises the importance of networks and connections in social systems parallels the emphasis on understanding social phenomena as 'systems' and not a series of component parts. The desire for decentralised strategies that incorporate difference between people and regions mimic computer models with varied rule-based rational actors. The need for reversible steps that acknowledge that small changes can have large effects recognises the logic of the 'butterfly effect'. Finally, emphasis on the importance of a positive culture and good rules (both of which are seen as an emergent property of social systems rather than something that can be easily designed) acknowledges the same evolutionary logic as this new form of economics.

Economics and sociology: The path to Coleman's social capital

Some of the first encounters between game theory and the broader academic community centered on the Prisoner's Dilemma and other collective action problems. This engagement in economic sociology and other social sciences employing a rational choice method has seen both the recasting of social theory in a more individualist tradition and a critical appraisal of game theory that has helped drive the changes in rational choice theory. Through these debates, several of those involved in the nascent social capital literature developed their thinking. Mark Granovetter in sociology, Douglas North in economic history, Edna Ullmann-Margalit in philosophy, and Elinor Ostrom in political theory, as well as both James Coleman and Robert Putnam, all used game theory's understanding of collective action situations to inform their own work.

This ability to engage theorists across disciplinary boundaries was central to the development of a concept that attempts to talk to both economics and sociology. However, the debate between economics and sociologists, crucial to the development of social capital, tended to treat game theory in two distinct ways, and as a result developed different understandings of the concept.

Edna Ullmann-Margalit (1977) made one of the first systematic uses of game theory in social theory. She used non-cooperative games to demonstrate how norms evolved, drawing on work by fellow philosopher David Lewis (1969) who had used the same type of analysis to explain the development of language. Like Axelrod, Ullmann-Margalit departed from a strict Nash interpretation of game theory.

10 See Hands (2001, pp. 141–165) for a discussion of the influence of both cognitive science and evolutionary metaphors on economic thinking.

Referring to the *Theory of Games and Economic Behavior* (pp. 15–6, ff. 8), she noted the importance of non-game factors in determining outcomes in uncooperative games. Ullmann-Margalit claimed that the games mimicked actual problems in society, but that these problems were resolved through the development of norms that effectively changed the structure of the game.

Ullman-Margalit's account of the mechanism by which norms evolved also anticipated Axelrod's later work by constructing a form of evolutionary argument. She claimed that 'The norms discussed here are selected for because even their faint beginnings — through design, stumbling, or whatever — contribute to the survival of something' (p. 11). Again, solutions develop through a mechanism of trial and error, where different rules are each tested, and not through the automatic deductive power of humans as lightening calculators. This analysis remains relatively functionalist, in that norms are often conceived as the 'solution' to game theoretic problems faced by communities; a criticism that has continued to be leveled against the new institutional economics, the methods of which resemble Ullmann-Margalit's. However, there is a distinct break in method, which turns away from the purely deductive to more naturalistic epistemologies.

Coleman draws on Ullmann-Margalit's work to introduce his own account of norms in the *Foundations of Social Theory* (1990). The two chapters on norms, one outlining the demand for norms, along similar lines to Ullmann-Margalit, the other addressing some of the functionalist concerns by accounting for the supply of norms, immediately precede the chapter on social capital. He then refers to norms as an important component of social capital, and norms are later taken up by Putnam (1993) as a central component of his own understanding of social capital.

Coleman is also engaged in a larger task, to discern a path between two intellectual traditions in the social sciences. The first, associated with sociology, conceives of the actor as 'socialised and action as governed by social norms, rules, and obligations', the other, associated with economics, sees the 'actor as having goals independently arrived at, as acting independently, and as wholly self-interested' (1988, pp. S95–S96). Whereas Ullmann-Margalit is self-consciously borrowing a rational choice framework in an effort to develop social theory, Coleman is more concerned to show that his approach is a genuine middle ground, an attempt to reconcile the merits of both traditions. His solution is *social capital*, a 'conceptual tool' that draws inspiration from both traditions (1988, pp. S95–S96).

However, despite his 'middle ground' ambitions, Coleman's framework is explicitly individualist and often game theoretic. Like most of those engaged in this emerging debate, he is firmly situated on one side of the divide, but is attempting to engage with the other. Coleman does manage this to some extent, quoting extensively from a broader sociological literature. Yet, the result is better understood as representing an emerging theme within the rational choice tradition. Coleman draws upon the evolutionary, game theoretic research that develops the themes present in Ullmann-Margalit's work but which became more prominent after the publication of Axelrod's Prisoner's Dilemma work (see Coleman 1990, pp. 31–43).

There remains a significant gap between the two sides of the attempt to reconcile economics and sociology. The debate is focused on economic methods, with sociologists playing a relatively marginal role. An empirical analysis of the field of economic sociology by Davern and Eitzen (1995) found that although sociologists routinely cite both those within their own discipline and economists, economists did not as a rule return the favour, instead quoting almost exclusively from within economics.

The same trend is evident in the social capital debate itself. Both Putnam and Coleman explicitly situate their analysis within a rational choice framework. Both men also refer extensively to the new institutional economics, which although critical of the reductionist methods of much conventional rational choice theory, continues to see itself — and to be seen by other social scientists — as within the rational choice tradition.

Sergio Lenci (1997) has argued that the divide between a sociological approach to economics and an economic approach to sociology pervades the social capital debate. He points to the work of Mark Granovetter (1985) and Pierre Bourdieu, which like Coleman's, has attempted to mediate the divide between over- and under-socialised versions of rationality. However, instead of retaining methodological individualism and attempting to expand this framework to take account of social institutions and relations, both Granovetter and Bourdieu have attempted to develop an understanding that is explicitly located between these poles, termed 'embeddedness' or 'habitus' respectively.

Lenci points out a key dimension of the remaining division within the social capital debate, (which I deal with below in the section on ideology), with his claim that the economic approach fails to take account of power. Lenci argues that 'The concept of social capital, from a political point of view, has to be looked at and analytically used in the frame of the post-modern problematisation of power' (1997 p. 25).

The division within the social capital debate is evident in the most recent edition of Granovetter and Swedberg's (2001) economic sociology text. While this largely sociological text contains two entries referring to social capital, both are critical of the more mainstream economic debate. The first reprinted an essay of Bourdieu's. The second places social capital explicitly in a sociological lineage, while criticising Coleman's conceptualisation for emphasising 'social structures facilitating rational action' (Portes & Sensenbrenner 2001, p. 114). None of the authors more commonly associated with the mainstream debate contributed to this volume, mirroring the absence of serious treatment of sociological research in the mainstream economic debate.

Ideology remains

For many, social capital has been part of a move away from the ideological divisions that dominated the twentieth century, towards a 'Third Way' that surmounts the great divide of capitalism and communism. This middle ground is remarkably similar to the middle ground Coleman and others seek between the atomistic individualism of economics and a norm-governed, Weberian version of sociology. It is therefore unsurprising, then, that social capital has been hailed as a scientific justification for the Third Way (see Szreter 1999), or that social capital, along with 'evidenced based research', has been associated with an agenda that dismisses the continuing significance of ideology.

Yet, as I have argued here, the emergence of the concept of social capital is better understood as the result of changes within economics, rather than a genuine coming together of economics and sociology. A shift towards holism and localism common to both rational choice and science theory has been primarily a change in *method*, and has not undermined traditional ideological divisions. Ideological divisions have been changed by this methodological shift, but a clear distinction can still be drawn that parallels and continues on previous divisions between Left and Right, heterodox and orthodox, and collectivist and individualistic approaches to social scientific investigation.

Those involved in developing social capital theory and in debate about the evolution of norms have advanced a clear ideological agenda. Their attack on centralism was also an attack on the state, in an attempt to promote social and economic policy based on 'spontaneous organisation'. This is clear in almost all the key sources Putnam used in constructing his original social capital thesis, and remains a key theme of the new institutionalist literature in which Putnam situated his own discussion. This lineage clearly sets out individualistic solutions to social problems, based on a logic that prioritises 'spontaneous', often market-based decision-making over collective and deliberative approaches.

Ullmann-Margalit made this point plain in describing her account of norms as 'exemplifying the so-called invisible-hand type explanations', where an 'over-all social pattern' in explained solely as the result of the 'motives, goals, and actions of individuals' (1977, p. 11). Similarly, Michael Taylor and Elinor Ostrom, both important authorities in Putnam's account, attack centralised states by claiming that desirable norms that regulate social behaviour emerge spontaneously.

Taylor developed his argument to refute what he claimed was a renewed justification of state intervention, based on environmental concerns. Taylor likened these environmental arguments to both the PD and the traditional contractarian defence of the state. He developed his anarchist thesis to rebut these arguments, and emphasised the ability of societies to establish cooperative norms (Taylor 1976).

Eleanor Ostrom (1990), also engaging in the environmental debate, decried the centralist logic of traditional economic and game theoretic analysis, claiming that even apparently market-based solutions to environmental crisis (such as expanding property rights) required centralised state action, rather than spontaneous local initiative. Indeed, Ostrom's critique of mainstream game theory is remarkably similar to Hayek's criticisms during the socialist calculation controversy, emphasising the importance of local knowledge and doubting the ability of any central authority to gain command of sufficient information (1990, p. 17). Taylor expressed similar sentiments in advancing his communitarian critique of state intervention (1976; 1982).

Both Ostrom and Taylor developed their work against a background of game theoretic discussions of collective action dilemmas, and both specifically referred to Axelrod's norm based solution (Ostrom 1990; Taylor 1987). They both emphasised the evolutionary logic of a new naturalistic epistemology and used specific, qualitative empirical study to back up their arguments. Not only did they reject centralism as a political proposition, but also the abstract and reductionist methods that promoted such solutions. These authors are critics of elements of rational choice theory and traditional market solutions, but they are critics within the tradition, not outside it. The solutions they propose therefore remain within that tradition, rather than undermining it.

Commitment to demonstrating the dangers of a centralised state is just as pronounced in the work of Douglass North (1990), earlier noted for his links to complexity economics and noted as a key new institutionalist author. North framed much of his discussion in the context of game theoretic debates over collective action. He extended the critique of centralised states, claiming that bureaucracy was associated with a lack of civic cooperation, in turn undermining the trust in both markets and the state. Decentralised, traditionally liberal, institutions, on the other hand allowed for the development of cooperative norms that inspired trust and facilitated action.

North's analysis builds in a notion of path dependence, a theme common to both new institutionalist and complexity economics, where key events at some early point in a country or technology's development result in significant long-term effects. As with Axelrod's analysis of the Prisoner's Dilemma, North disputed the traditional economic method by acknowledging multiple equilibria and increasing returns, allowing the short run to influence the long run. However, to an even greater extent than Axelrod, North restricted this method to a binary model, where the initial set of conditions leads to one of two self-reinforcing, but very different equilibria.

Thus, a vast array of variables is forced into a binary model, each with a positive and negative pair. Centralised states are bad, decentralised states are good, trust is either present or absent, norms are either cooperative or uncooperative. This is most starkly revealed in North's discussion of the differential development outcomes in North and South America.

> U.S. economic history has been characterized by a federal political system, checks and balances, and a basic structure of property rights … Latin American economic history, in contrast, has perpetuated the centralized, bureaucratic traditions carried over from its Spanish/Portuguese heritage … The divergent paths established by England and Spain in the New World have not converged despite the mediating factors of common ideological influences. In the former, an institutional framework has evolved that permits the complex impersonal exchange necessary to political stability and to capture the potential economic gains of modern technology. In the latter, personalistic relationships are still the key to much of the political and economic exchange (North 1990, pp. 116–7).

The two tendencies are self-reinforcing and once established they are difficult to shift. This discussion comes as North's rebuttal to conventional neoclassical economics and game theory, revealing the importance of social institutions. Yet, it remains couched in the framework of rational choice theory, explicitly quoting Axelrod, Taylor, and others and discussing alternative, cooperative solutions to collective action problems like the PD. This entire literature of collective action, norms, and institutions, from Axelrod, Taylor, Ostrom, and North, and a range of others, all of it couched in the language and conceptual framework of game theory, provides the explicit foundation for Putnam's initial discussion of social capital.

This literature demonstrates a very real shift in the methods of rational choice theory. Contributors acknowledge contingency and path dependence, and argue that outcomes arise through a process of trial and error, rather than through the actions of the perfectly rational and infinitely powerful minds of individuals. They use qualitative and socially situated data to justify their conclusions. However, while this represents a significant shift for rational choice theory, it falls well short of a genuinely social, historical, and qualitative analysis.

Perhaps more importantly in this context, this shift has not represented a genuine 'middle ground'. This has been a journey from within economics, not a coming together of economists and the other social sciences. Secondly, these theorists have been uniformly committed to an ideological position that favours markets and spontaneous, rather than deliberative or collective, solutions.[11] The justification for

11 The one possible exception is Taylor, who while opposed to the state is not supportive of market structures either. However, his analysis breaks from that of other communitarian anarchists by formally adopting the method of rational choice theory, thereby implying that

the market has changed from a justification emphasising the ability of free markets to generate a unique, stable, and desirable equilibrium through deductive logic and associated with traditional GE economics, to one that emphasises the ability of markets to promote the sort of trial and error that allows evolutionary mechanisms to 'select' the best outcome. In line with this the emerging social capital literature, particularly the debate surrounding social entrepreneurs, has also moved away from emphasising the need for appropriate market structures, towards emphasising the role of entrepreneurial 'agents' at the local level.

Implications for the current debate

Social capital has proved a highly contentious concept for the political Left, particularly in Australia. Unlike the British debate, social capital in Australia was first popularised by social commentator Eva Cox, who is clearly identified with progressive politics and as advocating an agenda much closer to the concerns of the traditional Left. Since then research into the concept has come from two very different perspectives. Cox's colleagues at Centre for Australian Community Organisations and Management (CACOM) at Sydney's University of Technology have continued to explore the concept. Alternatively, the Centre for Independent Studies (CIS), a conservative think-thank that also embraced the term relatively early, has published extensively on social capital.

The work of CACOM and other more traditionally progressive academics has stressed the importance of social trust and solidarity, along with relatively egalitarian concerns of inclusiveness and equality. Both Cox and her colleague Jenny Onyx have developed their understanding of social capital from a perspective critical of 'economic rationalism' (Cox 1995; Onyx 1996). Indeed, Cox's Boyer lectures explicitly argued for an *extension* of the role of the state as a basis for generating social solidarity (Cox 1995), a point to which many at the CIS have taken great exception. Alternatively, the work produced by the CIS emphasised the dangers of the state (Stewart-Weeks 1996, pp. 36–7) while also criticising elements of radical free market thinking, such as the market's tendency to encourage women into the workforce (see Norton 2001, pp. 42–3).

The two sides of the debate do share common ground, particularly their focus on localism. But differences remain. CIS publications emphasise the importance and benefits of *voluntary* associations (thereby emphasising the importance of freedom, especially from state coercion). By contrast, Cox claims it is not that associations are voluntary but that they are *egalitarian* that allows them to produce social capital (1995,

outcomes are the result of spontaneous individual decision-making, not deliberative or collective decision-making.

p. 20). As Lenci (1997) suggests, there remains a fundamental difference within the social capital debate over how to conceptualise power.

The persistence of ideological differences is more easily understood once progressive input into social capital in placed in a broader context. Cox made clear in her initial Boyer Lectures that she viewed social capital as synonymous with existing progressive concepts such as the social fabric, its advantage being that it claimed the 'reflected status of other forms of capital' (Cox 1995, pp. 15–6). Similarly, Jenny Onyx and Paul Bullen, both from CACOM, claimed that 'Maybe the discourse of social capital is simply community development [an approach to development that emphasises self-determination and equality in contrast to neoclassical economic prescriptions] recycled' (Onyx & Bullen 1997, p. 25).

Like the shift in methodology occurring within economics, the community development literature, and indeed much progressive academic discourse, has been undergoing a similar process. Left-wing sociology has also moved from a more reductionist, and economistic approach associated with classical Marxism to a more complex view of power (Lenci 1997, pp. 12–16). Cox has also placed her work on social capital in opposition to what she views as overly economistic and masculine attempts to theorise the 'social' (1995, pp. 72, 75). The trend is perhaps more advanced on the Left, where new social movements have been more successful in criticising conventional wisdom. Yet, as with the debate within economics, this has had relatively little impact on breaking down ideological commitments. Within the associated Third Way debate, for example, Walsh and Bahnsch (2000) have noted that macroeconomic settings, largely reflecting neoliberal policy prescriptions, are taken for granted. Cox also seeks to leave discussion of macroeconomics to one side, but because she believes winning this battle is unlikely, not because it is not worth changing (1997, p. 3).

Those who embrace a more complex understanding of power on the Left have continued to argue for transformative social change, only this has now been extended beyond a class analysis of capitalism to include issues of gender, sexuality, ethnicity, and the environment amongst others. Even here, social capital is part of the move against reductionist methodologies.

There appears to be a struggle for control of the concept of social capital. There is a degree of agreement on key themes, particularly on the importance of a more complex and holistic understanding of the social world, but key ideological differences remain. Part of the battle is linguistic, as those on the Left attempt to use the 'reflected status' of terms to engage an audience, both within academia and public policy, that has been unresponsive to progressive claims. Yet the term itself, at least in its more popular form, remains largely a product of a rational choice literature that favours individuals and markets over collectives and states. The development of the concept of social capital is a sign of change in economics — a sign of change of methods. It is unclear whether these developments will facilitate a debate that genuinely engages both Left and Right, both economists and social scientists.

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