

Taming the Social Capital Hydra? Indigenous Poverty, Social Capital Theory and Measurement

B. Hunter

DISCUSSION PAPER No. 261/2004

ISSN 1036 1774

ISBN 0 7315 5636 4



CENTRE
FOR ABORIGINAL ECONOMIC
POLICY RESEARCH

Series Note

The Centre for Aboriginal Economic Policy Research (CAEPR) was first established in March 1990 under an agreement between The Australian National University (ANU) and the Aboriginal and Torres Strait Islander Commission (ATSIC). Since 1 January 1999, CAEPR has operated as a University Centre and is funded from a variety of sources including the ANU, Australian Research Council, Aboriginal and Torres Strait Islander Services and the Department of Family and Community Services. CAEPR's principal objective is to undertake high-quality, independent research that will assist in furthering the social and economic development and empowerment of Aboriginal and Torres Strait Islander people.

CAEPR's aim is to be a world-class centre undertaking research on Indigenous economic development issues that combines academic excellence with policy relevance and realism. In Australia, CAEPR is currently the only dedicated research centre focusing on Indigenous economic policy issues from a national perspective. The Centre's publications, which include the CAEPR Discussion Paper series first established in 1991, aim to examine government policy, influence policy formulation, and inform public debate.

CAEPR Discussion Papers are intended as one forum for the rapid dissemination of peer-reviewed papers by Centre staff on relevant research topics. These papers are produced for widespread discussion and comment. Copies of most publications are available for free electronic download from CAEPR's website

[<www.anu.edu.au/caepr/>](http://www.anu.edu.au/caepr/)

Printed copies can be purchased through the website or from:

The Centre for Aboriginal Economic Policy Research
Hanna Neumann Building #21
The Australian National University
Canberra ACT 0200
Telephone 02-6125 8211
Facsimile 02-6125 9730

As with all CAEPR publications, the views expressed in this Discussion Paper are those of the author(s) and do not reflect any official CAEPR position.

Professor Jon Altman
Director, CAEPR
The Australian National University
June 2004

**TAMING THE SOCIAL CAPITAL HYDRA? INDIGENOUS POVERTY,
SOCIAL CAPITAL THEORY AND MEASUREMENT**

B. HUNTER

No. 261/2004

ISSN 1036 1774

ISBN 0 7315 5636 4

Boyd Hunter is a Fellow at the Centre for Aboriginal Economic Policy Research, The Australian National University.

CONTENTS

Abbreviations and Acronyms..... iv

Abstract iv

Acknowledgments..... iv

Introduction 1

The nature of Indigenous poverty: the motivation of a possible role for social capital..... 2

The social capital 'Hydra': definitional difficulties 4

Theoretical concerns about 'social' capital 6

Measurement problems for social capital..... 9

Addressing Indigenous disadvantage through social capital 12

Can the social capital Hydra be tamed? 18

Notes 20

References 22

FIGURE

Fig. 1. A sociological perspective on the dynamics of social capital 13

ABBREVIATIONS AND ACRONYMS

ABS	Australian Bureau of Statistics
ANU	The Australian National University
CAEPR	Centre for Aboriginal Economic Policy Research
NATSIS	National Aboriginal and Torres Strait Islander Survey
OECD	Organisation for Economic Cooperation and Development

ABSTRACT

The second labour of Heracles, the epic struggle with the Hydra, is used in this paper as a metaphor for the difficulties that may be encountered in analysing and measuring social capital. In Greek mythology, the Hydra 'had a prodigious dog-like body, and eight or nine snaky heads, one of them immortal'. In a sense, social capital is the intellectual equivalent of the Hydra in that it is conceptualised in many different ways. While the many heads of social capital appear relatively harmless compared to the Hydra, the unquestioning adoption and application of social capital rhetoric is potentially harmful, especially if it distracts policy makers from the real causes of Indigenous poverty and ongoing social exclusion. This paper outlines the conceptual and empirical issues that are likely to plague attempts to measure social capital. After discussing some possible roles for social capital in describing Indigenous poverty, the paper advocates a modest conceptualisation of social capital that focuses on the structure of social networks. Apart from anything else, this minimalist position should limit the scope for misunderstandings arising from cross-cultural differences in the views about the social, cultural and institutional contexts of such networks.

ACKNOWLEDGMENTS

An earlier version of this paper was presented to the 'Social Capital, Social Exclusion and Indigenous Poverty' workshop sponsored by the Academy of Social Science of Australia, 'The Role of Social Capital in Alleviating Persistent Poverty', held on 1–2 July 2003 at the Charles Darwin University. The author would like to thank Jon Altman, Anne Daly, Matthew Gray, Sarah Holcombe and Dale Sutherland, as well as the participants at the workshop, for their constructive feedback. Thanks are also due to Hilary Bek and Frances Morphy for editorial assistance, and John Hughes for layout.

INTRODUCTION

Classical references may have gone out of style in scholarly work, but they can stimulate the imagination of the reader by examining issues indirectly or by analogy. This paper uses the second labour of Heracles, the epic struggle with the Hydra, as a metaphor for the difficulties that may be encountered in analysing and measuring social capital.

In Greek mythology, the Hydra 'had a prodigious dog-like body, and eight or nine snaky heads, one of them immortal; but some credit it with fifty, or one hundred, or even ten thousand heads. It was so venomous that its very breath, or the smell of its tracks, could destroy life' (Graves 1955: 107–110).¹ In a sense, the number of heads was immaterial because killing a non-immortal head would only result in two or three growing in its place. Note that the Hydra was not all bad, or at least without utility, as part of its immortal head was filled with gold!

Social capital is the intellectual equivalent of the Hydra in that it is conceptualised in many different ways. While the many heads of social capital appear relatively harmless compared to the Hydra, the unquestioning adoption and application of social capital rhetoric is potentially harmful, especially if it distracts policy makers from the real causes of Indigenous poverty and ongoing social exclusion. This paper reflects on the efficacy of the construct of social capital as a basis for social policy to reduce Indigenous poverty.

The 'many-headed' nature of social capital is evident in the many streams that come under the auspices of the broad concept. In the communitarian tradition it is seen as a public good that is under-invested because it is non-excludable and non-rivalrous. For Coleman (1988), it is close to a private good. While for Portes (Portes 1998; Portes & Landolt 1996) it bears a resemblance to a club good (i.e. a congestible public good). Institutional models of social capital range from a generalised notion of trust to the standard theory of property rights. Clearly, social capital is a multifaceted concept that opens the possibility of rationalising policy action at a number of levels. Woolcock (2001) documents how social capital has been re-invented many times in many different guises. It could be argued without stretching the analogy too far, that some of these new 'heads' have grown in the place of other older sociological theories.

This paper provides a critical analysis of the theoretical underpinning of social capital, and examines the possibility of empirical measurement of the concept(s), and testing of the theory (or more correctly, the cluster of theories). To provide a focal point for the analysis, the utility of the notion of social capital will be explored in the context of Indigenous Australians, one of the most socially excluded groups of poor and disadvantaged people living in a first-world setting. Indigenous Australians provide an extreme test of social capital theory that allows us to examine the utility of the concept as a basis for constructive policy.

The Herculean effort required to make sense of the concept of social capital is not without its rewards since it has provided a language for several disciplines (notably sociology, economics and perhaps anthropology)

to interact and engage with one another, even though some of the extant communications may have been at cross-purposes.² However, these benefits may, arguably be related to the intellectual struggle, rather than the notion itself or the supporting analytical structures.

The remainder of this paper is broken into six sections. First, the unique nature of Indigenous poverty is described and a possible role for social capital is briefly introduced. Second, several unresolved definitional issues that plague the concept of social capital are discussed. This leads to the third section that outlines several theoretical criticisms. Fourth, instrumental empirical issues are raised to highlight the difficulties in operationalising the concept. On a more positive note, the final two sections discuss the utility of the concept in Indigenous contexts and highlight some constructive avenues for future research.

THE NATURE OF INDIGENOUS POVERTY: THE MOTIVATION OF A POSSIBLE ROLE FOR SOCIAL CAPITAL

The existing instruments for measuring poverty have become disconnected from the life events that cause poverty and deprivation among Indigenous Australians. The concept of income poverty is inadequate, with many high-income Indigenous families experiencing as much socioeconomic disadvantage as low income families (Hunter 2001). Indeed, Indigenous Australians are so different from other poor (and rich) Australians, in terms of the nature and extent of the destitution they experience, that there is a need for a separate model of Indigenous disadvantage (Hunter 2001). In a literal sense, many Indigenous people are socially excluded from mainstream Australia.

For analytic purposes, social exclusion can be broadly defined as 'multiple deprivations resulting from a lack of personal, social, political or financial opportunities'. While the economist's notion of poverty is primarily focused on contemporary distributional issues, the notion of social exclusion focuses on inadequate social participation, lack of social integration, and lack of power (Room 1995). Note that social exclusion is an intrinsically dynamic concept, and is descriptive of a condition that develops over time after prolonged social isolation and deprivation. In contrast, poverty is a static concept defined by whether an individual, family or household have sufficient income at a particular point in time.

The language of social exclusion is appealing as a description of Indigenous poverty. It gives the flavour of entrenched disadvantage being conditioned by historical, social, and cultural circumstances facing individuals. The distinguishing feature of the Indigenous poor is the depth of poverty they experience across a range of welfare indicators. That is, poor outcomes in various spheres of life are not confined to those in the Indigenous community conventionally defined as poor (i.e., poor in terms of income). Simply increasing the financial resources available to the Indigenous poor may not be sufficient to alleviate their particular form of poverty. Living on the margins of 'Australian' society for more than 200 years may have generated a sense of alienation not easily cured. Perhaps more importantly the multidimensional nature of Indigenous poverty means that a direct assault on Indigenous disadvantage is unlikely to be successful—and this has profound implications for the efficacy of the current policy of 'practical reconciliation' (Altman & Hunter 2003).

Any enthusiasm for social exclusion as a construct to analyse Indigenous poverty must be tempered by the fact that it remains a rather slippery concept that has proved remarkably difficult to operationalise and measure (Bradshaw 2003). One possibility for adding (theoretical) structure to the analysis of social exclusion is to examine the network of relationships, or the lack of networks, in which social exclusion is perpetuated. An important theoretical issue in this area has been the development of the concept of 'social capital'—a concept that emphasises not only the structure of social relationships, but also their quality.

Despite the diversity of uses of the term, social capital can be defined broadly as networks of social relations which are characterised by norms of trust and reciprocity and which lead to mutually beneficial outcomes (Bourdieu 1993; Coleman 1988). Thus social capital can be understood as a resource for collective action, although the nature or ownership of the resource can be disputed. For individuals, this can mean access to social connections that help the processes of getting by or getting ahead. For communities, social capital reflects the ability of community members to participate, cooperate, and interact (Putnam 1995).

Social capital arising from social networks has been classified into three types: bonding, bridging, and linking (Woolcock & Narayan 2000). Bonding social capital is said to exist in dense or closed networks (e.g. among immediate family and friends), and helps people to 'get by' in life on a daily basis. Bridging social capital involves overlapping networks that may make resources accessible across various networks. A closely related, but arguably distinct concept, is 'linking' social capital that involves social relationships with those in authority or positions of power, which is also useful for securing resources.

Social capital is not unambiguously positive. Portes (1998) identifies four possible negative consequences: the exclusion of outsiders, excessive claims on group members, restrictions on freedoms of individuals, and downward levelling of norms. For example, if Indigenous social networks are largely confined to the jobless, then a reduction in expectations can become a self-fulfilling prophecy whereby people fail to see the advantages in gaining further education. This, in turn, diminishes the skill acquisition that facilitates entry into the labour market. These issues will be elaborated in the penultimate section of the paper.

The utility of the notion of social capital lies in its flexibility and its consequent capacity to explain the negative spillovers of certain social relationships. That is, not all social networks are equally useful in progressing the interests of individuals or, indeed, the group. For example, even if Indigenous job seekers have well-developed social networks within the Indigenous community, their contacts may be useless in securing work in the mainstream job market. Indeed, social networks in Indigenous communities may reinforce individuals' motivations and ultimately their aspirations.

While the general notion of social capital shows promise in terms of its ability to explain ongoing Indigenous disadvantage, the panoply of definitions and lack of theoretical clarity threaten to undermine its potential contributions to the policy debate.

THE SOCIAL CAPITAL 'HYDRA': DEFINITIONAL DIFFICULTIES

The concept of social capital is sometimes criticised as being too broad to provide a useful theoretical framework (Putzel 1997).³ The mechanisms through which social capital can affect a range of outcomes need to be made explicit if it is to provide a credible framework for analysis. For example, the benefits of social capital may be incidental, and not easily modelled or captured by academics or policy-makers. People may get jobs through networks of friendship, but they probably do not join networks primarily for this purpose (Arrow 2000).

Despite some agreement from the various disciplines of the main roles and functions of social capital, this has not led to a consensus about its conceptualisation (Van Deth 2003). Van Deth claims that the bewildering number of different aspects, characteristics, indicators and dimensions of social capital makes a common understanding rather unlikely. He quotes the Organisation for Economic Cooperation and Development (OECD) (2001: 91) who claim that 'much of what is relevant to social capital is tacit and relational, defying easy measurement or codification'. However, without precise definition of social capital, virtually no definitive conclusions or implications for operationalisation can be deduced.

Some researchers claim that the lack of specific *a priori* definitions is an integral part of the conceptualisation of social capital. In the case of functional approaches, the exact form of social capital is irrelevant as long as it performs the functions (Van Deth 2003: 81). This rationalisation is rather disingenuous (or deluded) since it is not possible to claim something is performing a function if one cannot define or identify the phenomenon. Stated another way, it is not possible to interpret data without a clearly defined theory, so it would be impossible to identify whether or not a function was being fulfilled by 'social capital' or something else.

One of the orthodoxies arising in the literature is that one can distinguish between the structural and cultural aspects of social capital (Bourdieu 1986, 1993). Connections or networks are seen as structural whereas the cultural aspects of social capital are defined in terms of the norms, manners and customs related to these networks. While this distinction offers the prospect for refining the conceptualisation, it is also necessary to be clear whether social capital is the 'property' of individuals or is a collective good, by definition available to every citizen (Van Deth 2003). The public good (or public bad) aspect of social capital is likely to be particularly relevant for Indigenous Australians for whom reciprocal obligations are a prominent feature of social relations (Hunter 2000).

The view of social capital is either collective or individual in nature is heavily influenced by disciplinary perspectives. Woolcock (2001: 12), a sociologist with the World Bank, claims that whereas human capital resides in individuals, social capital resides in relationships. Much of the interest in social capital among economists has been fuelled by a definition that includes not only the structure of networks and social relations, but more individualistic behavioural dispositions and macro-institutional measures ('rule of law', 'contract enforceability' and 'civil liberties').

The 'panopoly of micro and macro measures of "social capital"—and their corresponding eclectic theoretical frameworks—has led many critics to accuse social capital of being all things to all people (and hence nothing to anyone)' (Woolcock 2001). One strategy to address this criticism has been to refer to macro-institutional issues under a separate banner, calling them instead 'social capabilities', 'social cohesion' and 'social infrastructure'. This has the advantage of making social capital more analytically tractable and resolves disciplinary tensions within the social capital literature.

Another approach has been to advocate a leaner conceptualisation of social capital that focuses on sources of social capital (i.e. networks), rather than on consequences such as trust, tolerance, and cooperation (see Woolcock 2001). Before providing a critical appraisal it is important to briefly outline the various streams of thought in social capital theory.

Woolcock and Narayan (2000: 229) describe several conceptualisations of social capital. The *communitarian* perspective equates social capital with such local organisations as clubs, associations, and civic groups. However, evidence from the developing world demonstrates why merely having high levels of social solidarity or of informal groupings does not necessarily lead to economic prosperity (Woolcock & Narayan 2000: 230).

The *networks* view of social capital stresses the 'importance of vertical as well as horizontal associations between people and of relations within and among such organisational entities as community groups and firms' (Woolcock & Narayan 2000: 230). The networks view is particularly relevant in the Indigenous context as social capital conceived in this way can have negative consequences with considerable claims on a member's sense of obligation and commitment. Indeed, group loyalties can be so strong that they isolate members from information about employment opportunities, foster a climate of ridicule towards efforts to study and work hard, or siphon off hard-won assets (Woolcock & Narayan 2000: 231). Woolcock and Narayan (2000: 232) provide a diagram that illustrates how the relationship between social capital and poverty transitions depends on the balance of emphasis on bonding and bridging social capital.

The *institutional* view of social capital emphasises the role of political, legal and institutional environment in determining the vitality of community networks and civil society (Woolcock & Narayan 2000: 234–5). In the context of Australia, notions of civility are largely defined in terms of 'white' society. Note that even if certain macro aspects of social capital are syphoned off under the banner of 'social capabilities', a strategy referred to in Woolcock (2001), there is still a role for institutional factors to explain the efficacy of social networks in achieving certain goals. One issue for the institutional view is that it can lack a micro foundation to its theoretical perspective. This is not to say that macro aspects of social capital are not valid, rather that such aspects can be difficult to reconcile with micro perspectives.

Woolcock and Narayan (2000) advocate a *synergy* view that combines the *institutional* and *network* approaches to social capital. They dismiss the difficulties in reconciling the macro and micro aspects of these two largely competing views of social capital. They suggest that the central task for policy analysis is to show how to transform situations where a community's social capital substitutes for weak, hostile, or indifferent formal institutions into situations in which both realms complement one another. While this is a laudable goal, it is easier said than done.

Having outlined the concepts underlying the broad streams of social capital theory, it is important to remember that the term is itself controversial. Many economists, including the author of this paper, see the growing literature on social capital as an attempt to gain conviction from a bad analogy (e.g., Solow 2000: 8).⁴ Arrow (2000) urges the abandonment of the metaphor of capital and the term 'social capital'. To neo-classical economists, the term capital implies three aspects: usage over time, deliberate sacrifice of the present for future benefits, and alienability. The first aspect may hold in part in terms of building a reputation or a trust relation. But these are not like a physical investment; a little trust is almost useless.

Social capital certainly fails to meet the second part of Arrow's (2000) definition of capital. The essence of social networks is that they are built up for reasons other than their economic value to the participants. Indeed, this is what gives them their value in monitoring the group members. For example, the information from social networks about individual members or their actions is only credible to the extent that the group's trust has not been compromised by internal competition for economic resources.⁵

Social capital certainly should not be called 'capital' if the definition demands that it must be either alienable or portable (Arrow 2000). Even if you introduce someone into a group, it may not possible be to transfer the trust of others to this third party. However, the condition of portability may be too strong given that education or 'human capital' is not transferable. The presence of irreversible investments means that even physical capital could fail this overly restrictive definition.

THEORETICAL CONCERNS ABOUT 'SOCIAL' CAPITAL

In a recent Fabian Society pamphlet, Christopher Scanlon documents several criticisms of social capital and summarised as follows:

In short, social capital is an attempt to have relations of trust, reciprocity, tolerance and mutual obligation without having to bother too much about the deeper cultural mooring points to which those relations are tied ... Social capital is thus an expression of cultural contradiction, an attempt to realise a particular social ethic but in a form that comprehensively undermines the deeper cultural grounds within which that ethic takes root (2004: BB3).

While I share some of Scanlon's views, his pamphlet tends to overstate the case. For example, the use of the term social capital does not automatically make people 'unwitting dupes lending legitimacy to a larger project' of neo-liberal market-driven ideology (Scanlon 2004: BB4). A more prudent and accurate way of

expressing a similar sentiment is that the poorly integrated and under-theorised nature of social capital literature may lend itself to disingenuous uses of the concept.

Scanlon does however, make good use of quotes from Karl Marx to illustrate that: 'particular objects like land, machinery and money are *under certain circumstances capital, but are not capital in themselves*. It is only when they enter into particular social relations that they function as capital' (2004: BB4). In a sense, the term social capital is tautological for a Marxist.⁶

One weakness of social capital theory is that it is largely formulated without reference to social class. In describing the structures of power, Max Weber describes the 'factor that creates "class" is unambiguous economic interest' (Gerth & Wright Mills 1970). It is hard to conceive of a change in the network that does not affect economic interest, and hence the failure to take explicit account of class is a significant failing of the social capital literature.

It is possible that if social capital is truly a public good (i.e. it is non-rivalrous and non-excludable), as some commentators appear to think, then class interests may not be affected by augmentations and fluctuations in social capital for a particular group. However, the vehement reaction of many propertied groups in the debate on native title illustrates that such groups feel threatened by the perceived competition for 'their' [sic] land—class interest still exists in Australia. For Indigenous Australians at least, the historical exclusion from 'elites' and mainstream 'power structures' need to be addressed before tinkering with social networks.

Mancur Olson (1965) suggested that elites got together to boost the prospect for political advantage. Note that Olson analysed the logic of collective action within a context of individually oriented objectives using a game theoretic framework, and hence his work is not necessarily compatible with collective interpretations of social capital or class analysis (e.g. Marxist interpretations).

There is nothing that necessarily precludes social capital from being located within a more comprehensive view of collective action. Indeed, it could be argued that the synergy perspective attempts to do just that. The main problem is the extent to which this form of social capital theory can be tested or measured empirically. Put another way, since empirical analysis must hold certain things constant to be operationalised, the question must be asked whether a 'multifaceted' and 'lightly-defined' social capital theory controls for enough factors to be distinguished from competing theoretical perspectives.

Discrimination against Indigenous Australians is possibly a special form of social competition based on racial characteristics. Hunter (2004) illustrates that the scope for labour market discrimination against Indigenous Australians is enormous, with discrimination being more likely to occur in the process of securing and retaining employment rather than in the wage setting process. From a social capital perspective, addressing discrimination requires that non-Indigenous social and economic networks need to be more open to the Indigenous population. Arrow (1998) postulates that social segregation may give rise to labour market segregation if local social networks are used for job referrals. In such circumstances, discrimination may not have costs for the employers, and may actually reward discrimination if social networks are sufficiently 'dense'.

However, there are many competing theories of discrimination that do not necessarily use networks or social capital to explain the phenomenon. Employers that persist in discriminating could be said to be indulging a taste for discrimination (see Arrow 1998). Statistical discrimination—where employers who believe that one group has a lower average productivity than other workers use membership of the group as 'information' in hiring workers—has the potential to be more persistent if labour market segregation reinforces the belief in racial differences. If the group that is discriminated against is relatively small, these employers' beliefs are not challenged by the facts.⁷

Even if one believes that social capital, and access to social networks have certain characteristics usually associated with public goods (or more accurately a 'club goods'—see Ancil 1991), there may be indirect avenues for class interests to assert themselves. Social status is a relative phenomenon with classes being somewhat fluid, and is partially determined by current consumption.

In his seminal work *The Social Limits to Growth*, Fred Hirsch (1976: 2) argued that 'as the level of average consumption rises, an increasing portion of consumption takes on a social as well as an individual aspect'. One of the social aspects of consumption that Hirsch was concerned about was that of status-seeking, in which individuals use consumption as a means of achieving social status (i.e. by the consumption of what he defined as 'positional goods'). The importance of such socially constructed goods is their role in explaining the observation that, as people become richer, their levels of material frustration do not appear to diminish. Since the supply of positional goods is fixed in Hirsch's analysis, policy prescription must be directed toward reduction of positional demand. For example, social resources will be wasted competing for positional goods such as homes in 'good' suburbs.⁸

Social capital theory argues that social context can be an asset for individual and groups, but Hirsch (1976) is concerned that social context also affects the acquisition and consumption of goods and services, which he asserts has led to the modern state of 'commodity fetishism'.⁹ Other social scientists make similar points about the importance of the social and cultural context of consumption (Appadurai 1986; Douglas & Isherwood 1978), especially Thorstein Veblen (1902: 68–101) who developed the notion of conspicuous consumption. However, the importance of Hirsch's contribution is in the elaboration of several mechanisms by which the consumption used to secure status can be socially wasteful.

Therefore social capital misses one of the major influences of social context on individual and societal welfare, that competition for positional goods reduces aggregate wellbeing. In the language of social capital, to the extent that people are competing for bridging social capital, the resources involved may be wasted as the number of people who can have social status is limited. Hirsch's formulation can be summarised as a *zero-sum game* whereby socially wasteful competition for social status occurs through consumption of positional goods. While it may be possible to increase the intensity of involvement of high status people in social networks, one must question the extent to which they have incentive to do so since successful building of bridging social capital of the socially excluded may diminish their status.¹⁰

Solow (2000) provides a further criticism of the utility of the term social capital. Contracts are almost always incomplete and the transaction costs of exchange in the market will be lower, defensive behaviour diminished, and economic performance better if the parties can expect each other to be 'reasonable' or non-exploitative. A reputation for trustworthiness in this sense can be highly valuable. While a reputation can be built up by repeated exhibitions of trustworthy behaviour in similar circumstances, many economically important situations are too anonymous or too idiosyncratic or too rare for reputation building to be a useful strategy.

Another theoretical concern is that the rather eclectic theoretical frameworks, and wide variety of definitions of social capital used, seems to violate Ockham's razor—the scientific principle that in explaining any phenomenon, we should use no more explanatory concepts than are absolutely necessary.¹¹ For example, the deliberate vagueness of some social capital theorists seems to keep options open for using several concepts (at different levels of analysis). While the move towards a leaner version of social capital may be reasonably consistent with the famous dictum, the use of multiple levels of analysis leads to substantial problems in our ability to measure the concepts underlying social capital theory.

MEASUREMENT PROBLEMS FOR SOCIAL CAPITAL

The measurement of the validity of the various conceptualisations of social capital, and other potential explanations of the social data, needs to set criteria against which the theory can be assessed. Two or more theories are 'observationally equivalent' if extant (or even any conceivable) data collections cannot distinguish between the competing theories. In a sense, this is a problem for the theory being examined in that it is not sufficiently precise to make accurate predictions about the relationships one would expect to find in the data. Researchers combining limited data with different maintained assumptions can, and often do, reach different logically valid conclusions (Manski 1995: 3).

A related issue is the identification problem, by which an empirical researcher seeks to characterise the conclusions that could be drawn if one could obtain an unlimited number of observations (Manski 1995). That is, certain conclusions may not be possible unless strong assumptions are invoked. Notwithstanding, Manski (1995) makes a plea to tolerate ambiguity as the credibility of social science would be higher if we were to strive to offer predictions under a range of plausible hypotheses that are consistent with the available evidence. Manski's plea should not be taken as a licence for loose theorising because the plausible hypothesis must be clear enough that it can be validly claimed to be consistent with the data.

Themes like social cohesion, engagement in networks, civic orientation, obligations, or norms of reciprocity have a long tradition in social sciences, existing long before the notion of social capital became fashionable in the 1990s (Van Deth 2003: 86). One important issue for the use of existing data sets is that they were collected and informed by existing (non-social capital) theories, and any attempt to re-interpret the data in terms of social capital may be somewhat forced. Consequently, the collection of new data informed by social capital theory is vitally important for testing the validity or otherwise of the theory.

Scanlon uses health research as an example of the likely difficulties to be involved in identifying the efficacy or otherwise of social capital: 'although study after study confirms a correlation between social connectedness and good health, the precise mechanism by which social connectedness impacts on health has yet to be identified' (Scanlon 2004: BB8). Furthermore, to 'explain the links between social relations and positive health outcomes, social capitalists are forced to return to the familiar categories of class, gender, race and age' (Scanlon 2004: BB8).

Karl Popper (1959) claimed that all theories must be judged ultimately in terms of their falsifiable predictions, a position to which many modern economists subscribe (see Blaug 1976: 828). Popper has been described as a philosophical Darwinist where the best theory is one that has the greatest explanatory power. One implication of the Popperian notion of falsifiability is that if a hypothesis cannot be falsified (e.g. creationism, religion), then it adds nothing to our quantum of knowledge. Given that social capital is often motivated in terms of its complementary relationship with human capital, it is interesting that Blaug has criticised the falsifiability of human capital theory and the so-called protective belt of that theory (i.e. the auxiliary assumptions required to form specific testable theories). A useful avenue for future research, therefore, is to engage in a robust debate on the extent of falsifiability of social capital theory. Following Popper's reasoning, qualitative data should be collected in a way to maximise the possibility that the social capital hypothesis can be disproved, with case studies being chosen as extreme examples that are more likely to be consistent with other theories.

Given that social capital is a hypothesis that involves multi-level analysis (individual, family, community, and society), the main problem for empirical analysis of social capital is intrinsic difficulties in conducting cross-level inference. The ecological fallacy (also known as the fallacy of composition) is that the relationships within a large group may be different from the theoretical and observed relationships for individuals or smaller groups. Since the ecological fallacy was first identified, most methodological discussions have focused on modifying the strict prohibition against downward cross-level inference (i.e. the inference from data collected for larger units to lower units of analysis).

Firebaugh (1978) shows that the fallacy is only an issue where there are causal group effects or externalities, and notes that externalities are most likely to occur in groups where members interact and share relevant life experiences. But since social capital theory often involves reference to externalities and public goods, the fallacy is an unavoidable issue that needs to be addressed when measuring social capital.

The obvious strategy is to collect data at several levels but ensure that the basic data are collected at an individual level. However, the Australian Bureau of Statistics (ABS) (2000) questions whether social capital can be measured by aggregating information collected from individuals, especially if it is a property of social interactions that they are collective, and therefore cannot be held by individuals. The ABS paper goes on to question whether the ABS household surveys are useful means for obtaining such information, especially if social capital is measured at the community level. For example, the sample sizes of community (e.g. small area or collection district) data in household surveys are rarely large enough to ensure that estimates are

reasonably accurate. In spite of such issues, the ABS has gone on to develop data collections for social capital, most notably in the General Social Survey and the Indigenous Social Survey (ABS 2004).

Van Deth (2003) documents the pitfalls of using aggregate measures for collective phenomena. It is more difficult to develop strategies to measure social capital as a collective, rather an individual, phenomenon. While it may be possible to develop collective indicators using individual level data when dealing with some aspects of social capital (e.g. the densities of networks), it is more difficult where simple aggregation is less valid. For example, it is questionable whether aggregate survey data about trust really measure the amount of trust available as a collective good for all citizens, as is implied by some social capital theorists (Van Deth 2003: 87). Either the social capital theory has to clearly specify the relationship between the individual and collective aspects, or an attempt has to be made to separately measure the collective phenomenon.

Given the potential difficulties in aggregating individual data to estimate data for social groups, the higher level data might be estimated 'directly' using responses from a representative of a community organisation. While this avoids the aggregation issue, it is difficult to pin down what the differences between the representative response and the aggregated individual responses might mean. That is, do any differences in data collected reflect biases in the representative's response or inherent problems in the aggregation procedure used?

One of the strengths of social capital theory is it provides an explanation for local contexts. However, this also implies a contextual dependency whereby it may be hard to develop standardised identical measures. Consequently, it is necessary to assess the validity of social capital indicators in different settings (cross-cultural and longitudinal) (Van Deth 2003: 86). This is particularly relevant for Indigenous Australians for whom cultural norms are clearly different from other Australians. Even within Indigenous Australia there are large variations in cultural practices and social contexts that need to be taken into account.

Van Deth (2003: 89) also claims that the conceptual heterogeneity of social capital theory is not reflected in a diversity of empirical approaches, at least to the extent that he anticipated. He advocates the use of multi-method and multi-level strategies to capture the multifaceted nature of social capital. This line of argument is reminiscent of the empirical literature that attempts to measure social exclusion (Bradshaw 2003). Given the inconclusive nature of the social exclusion literature, this strategy may also be a risky one for social capital theory. This notwithstanding, statistical techniques such as cluster analysis and factor analysis may prove useful in capturing the important dimensions of social capital (Stone & Hughes 2002).

Woolcock (2001: 12) emphasises the qualitative aspects of social capital research. At a minimum, the construction of survey instruments to measure social capital should follow intensive periods in the field, ascertaining the most appropriate way to ask the necessary questions. Qualitative data also needs to be collected to ascertain the relative importance of aggregation and other problems with measuring data at several levels.

This section has discussed the major impediments to accurately measuring social capital. Even though it is difficult to measure, social capital still may be important. The next section examines several potential roles for social capital in addressing ongoing Indigenous disadvantage.

ADDRESSING INDIGENOUS DISADVANTAGE THROUGH SOCIAL CAPITAL?

Before uncritically importing terms like social capital, it is necessary to analyse how useful these concepts are cross-culturally in understanding Indigenous disadvantage. For example, not having any employment in the Australian labour market may actually empower many Indigenous peoples to hunt, fish, paint and live on their traditional land or 'country'. Indeed, the extra hours of 'spare' time may facilitate more extensive participation in ceremonial activities, thus increasing what may be defined as 'social capital' (Hunter 2000).

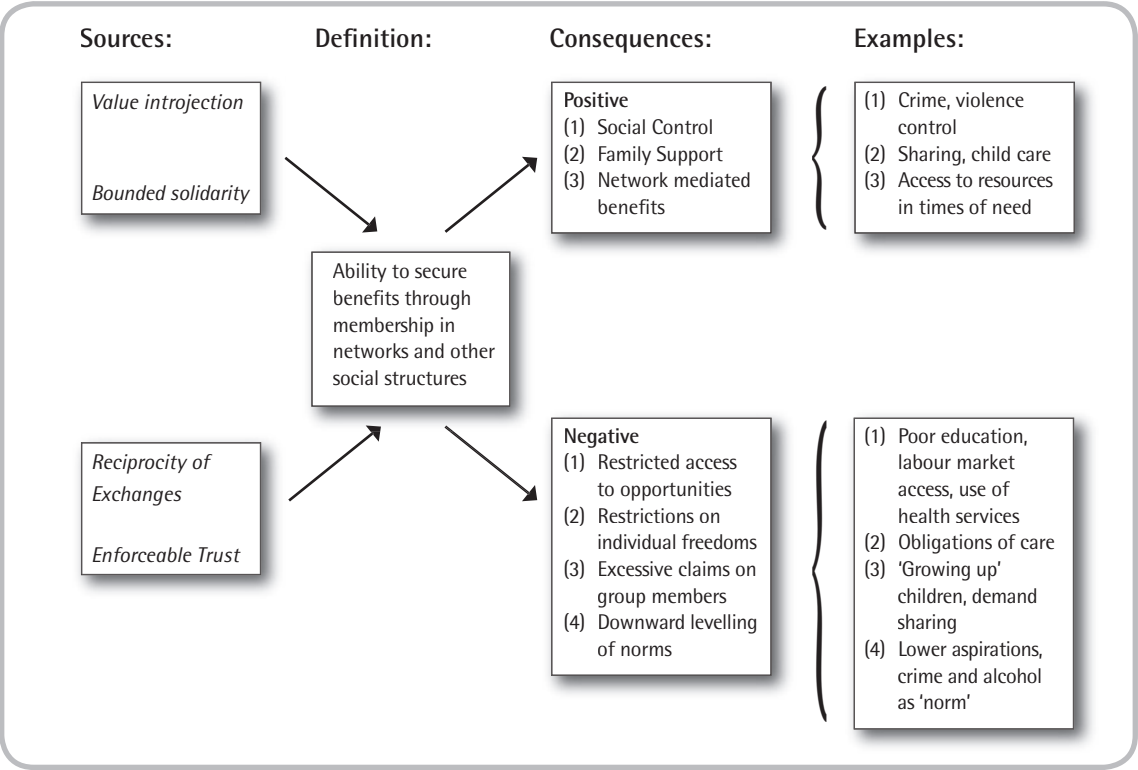
In addition to such cross-cultural critiques, some forms of employment may actually diminish the extent of shared values and trust that may exist among Indigenous groups. Work which involves or leads to frequent relocation of the workforce, such as some types of casual or seasonal work, could uproot the worker's family and thus weaken their links to the local community. Clearly, the relationship between social capital and Indigenous unemployment is not simple.

Bourdieu (1993: 33) sees the family as the main site of accumulation and transmission of social capital. Fukuyama (1999: 17) asserts that 'families are obviously important sources of social capital everywhere'. However, if family ties become too strong, they may crowd out the weaker ties of the community. Allegiance is to family and kin and trust may not extend beyond the bounds of the extended family. In some cases, there appears to be something of an inverse relationship between the bonds of trust and reciprocity inside and outside the family; when one is very strong the other tends to be very weak. Such hypotheses notwithstanding, in the context of Indigenous Australia the notion of family and community are not clearly defined and therefore empirical studies of social capital will have difficulties in using family data to test the theory (Morphy 2002).

Much of the social capital literature, especially that informed by the communitarian view, has focused on the positive outcomes associated with high levels of social capital and sought to explain social problems as an outcome of diminishing social capital stock (Putnam 1995, 1996). However, social capital may have negative effects on some parties (see Putzel 1997).¹² As argued above, a gain for some through the use of social capital may be a loss, or potential loss, for others.

The family played a central role in Indigenous societies in the pre-colonial era (Dodson 1994: 34). However, colonisation disrupted almost all aspects of Aboriginal life, redefining the way Indigenous people went about meeting their basic needs. The nature and volume of social exchanges changed considerably and resulted in a shift away from self-reliance (autonomy) to dependency. Many social functions that had previously been performed within the Aboriginal community were displaced by the state or the market. State interventions

Fig. 1. A sociological perspective on the dynamics of social capital



Source: Adapted from Portes (1998: 8).

in Indigenous family life may have also removed the cultural foundations on which social capital grew. For example, the dislocation of Indigenous people from their traditional lands and the forced removal of children from their families had a profound effect on the social exchanges carried out within the Aboriginal family (Commonwealth of Australia 1997).

It is important to note that the social capital of Indigenous Australians is defined by their relationship with the rest of society. Ian Winter argues that:

if sameness has been forced upon one group by colonisation or other forms of oppression, then neither group (Indigenous or non-Indigenous) has much capacity to trust the other. The colonisers fear resistance and anger; the colonised fear domination and destruction of their cultures and ways of life (2000: 46).

Furthermore, Winter postulates that the oral cultures of Indigenous communities tell too many stories of betrayal and bad faith for the present generations to do anything but distrust governments, churches, other groupings and organisations and many individuals.

Several recent initiatives attempt, more or less consciously, to develop Indigenous people's social capital. As an example, Winter (2000: 149) cites the Body Shop's involvement with the Balkanu Corporation designed at enabling Indigenous people to learn business skills, as well as enabling non-Indigenous business people to attempt to gain a greater understanding of contemporary Aboriginal culture. However, such initiatives tend to unquestioningly import the notion of social capital without asking whether the theory needs to be modified to be relevant to Indigenous Australians.

Portes (1998) defined four (sociological) sources of social capital (see Fig. 1). They are value introjection, bounded solidarity, reciprocity of exchanges, and enforceable trust. Each of these will be examined briefly with reference to the circumstances in which Indigenous Australians find themselves.

Value introjection is a source of social capital that comes from shared values or cultural beliefs. Berndt and Berndt (1988) identify the heterogeneous nature of Indigenous Australia but maintain that there are commonalities across social groups. One such commonality that has survived colonisation is the importance of kin in everyday life. Schwab (1991) in his work on the Nunga people in South Australia shows that Aboriginality is constructed in the form of an ideology he calls the Blackfella Way. Note that what Schwab calls symbolic capital could also be called social capital:

The Blackfella way is an ideological system which provides an avenue for Aboriginal actors in Adelaide to accumulate capital in a symbolic form, for example, by living up to the obligations of generosity and sharing implied in that system. Later, that symbolic capital can be transformed into economic capital 'at call' since the corollary to the obligation of generosity is the right to respect reciprocal generosity in times of need (Schwab 1991: 35)

Bounded solidarity is another source of social capital springing from like people being in like circumstances. Certainly this source of social capital would have existed before colonisation but it would have gained importance in the post-colonial period. Finlayson (1991) describes a cycle of feast and famine in the Kuranda Indigenous community of North Queensland. In this welfare dependent community, household expenditure is linked with the welfare payment week so that resources are scarce in the days leading up to 'pay day'. During this time resources are shared more widely, thereby lessening the adverse impact of financial deprivation.

The third source of social capital mentioned by Portes is *the reciprocity of exchanges*. Berndt and Berndt (1988) describe the reciprocal nature of exchanges in traditional Indigenous society. Schwab (1995) also looks at sharing and reciprocity in Aboriginal families and says that sharing is based on demand, but constrained by a delicate balance between what it is appropriate to demand and what it is appropriate to refuse. If excessive or unreasonable demands are to be denied, then strategic behaviour must be adopted so that neither party is shamed or embarrassed.

The final source of social capital mentioned by Portes is that of *enforceable trust*. This is the mechanism that maintains the reciprocal obligations and social norms existing within an Indigenous community. The ability to share is a direct expression of Aboriginality, with enforceable trust benefiting both the recipient (in the

form of access to resources) and the donor (in the form of group approval). Trust exists in these situations because the obligation to share is enforceable through the power of the community.

Fig. 1 also documents both the positive and negative consequences of social capital. The first positive effect of social capital is its impact on social control. Sources of this type of social capital are often found in bounded solidarity or enforceable trust. Here, the community acts as an informal disciplinary mechanism that maintains social control through the threat of community action.

The second positive effect of social capital is that it is a source of family support. As outlined earlier, sharing is still a common feature in Indigenous kin networks. Indeed, it is a medium by which an individual's Aboriginality can be expressed. Sharing is recognised as a direct means of family support by cushioning the impact of financial constraints through the distribution of collective resources (monetary and non-monetary).

The final positive effect of social capital is that it secures network-mediated benefits beyond the immediate family. The social capital described above is limited in this regard: it does not appear to provide increased access to education, employment, or financial resources that can be used in a productive manner. In other words, the network does not extend significantly into mainstream society.

Portes' review also teases out the four major negative consequences of social capital. They are the exclusion of outsiders, excessive claims on group members, restrictions on the freedom of individuals, and the downward levelling of norms.

The *exclusion of outsiders* may be problematic in Indigenous communities, but for reasons different to those described by Portes. He asserts that the exclusion of outsiders is a problem because it restricts benefits to those within the group. However, in the case of Indigenous Australians the exclusion of outsiders prevents adequate service provision, especially in the areas of education and health: it restricts benefits from reaching the group.

The second possible negative effect of social capital, that of *excessive claims on group members*, is quite prevalent in Indigenous societies today. Schwab (1995) notes that despite the philosophy of reciprocity espoused by many Indigenous Australians, generosity does not flow from recognition of need, it is more often demanded. It is this notion of 'demand sharing', supported through obligatory relationships, that can lead to excessive claims on some group members.

Family solidarity may impose *restrictions on the freedom of individuals*. Here, norm observance, or acting within predetermined cultural parameters, may restrict personal freedoms. An example of this was given in the section on reciprocity of exchanges: when a demand for resources is denied there are financial and social consequences.

The final negative effect identified by Portes is what he calls *a downward levelling of norms*. Portes cites examples of Haitian-American youth in Miami and Mexican-American youth in Southern California, where a downward levelling of norms has been preceded by a lengthy period of restricted mobility caused by outside

discrimination. Within these two groups in the United States, expectations about future life course become a self-fulfilling prophecy, limiting education and employment prospects. These reductions in expectations are often associated with socially unacceptable codes of conduct.

A similar situation currently exists for Indigenous Australians. It serves to increase the solidarity of group members and reinforce the exclusion of outsiders. Downward levelling of norms can impact indirectly though the failure to see the value in gaining further education and in diminishing the skill acquisition that facilitates entry into the labour market.

Note that the downward levelling of norms may also result from external sources, with others expecting less from Indigenous people because they are perceived to belong to a dysfunctional group. Consequently, statistical discrimination may have a role in explaining the negative effects of social capital.

Bounded solidarity and enforceable trust can lead in some circumstances to negative social outcomes and a deteriorating level of social control. The abuse of alcohol in Indigenous communities has vast implications for the intergenerational transfer of cultural norms and the impact on mechanisms of social control (Martin 1998). Aboriginal people themselves are aware of the problem and consequences of alcohol abuse—indeed, the concern about excessive alcohol use was raised in the Royal Commission into Aboriginal Deaths in Custody and also identified in the National Aboriginal and Torres Strait Islander Survey (NATSIS). Almost three-quarters of Aboriginal and Torres Strait Islanders reported alcohol as a substance abuse problem within their household (ABS 1995: 22).

The so-called 'dark side' [sic] of social capital is important and needs to be understood (Putzel 1997). When interpreting social capital variables in the context of Indigenous disadvantage and prolonged unemployment, it is important to be aware how some indicators of social capital may act to reinforce the restrictions on individual opportunity and lower the aspirations of many Indigenous people.

Social capital theory is articulated at a level abstract enough to encompass the experiences of many Indigenous Australians. Ironically, it is the under-theorised nature of social capital, rather than a lack of data, which is the major impediment to empirical analysis. The social capital literature, at least as described by Portes, provides a detailed framework for understanding the social processes, but does little to further our understanding of why such processes could be described as 'capital'. Unless more attention is paid to modelling exactly how these social exchanges add economic value to (or subtract it from) individuals or groups, then the term social capital is little more than a metaphor. People undoubtedly will try to use the social structure as a resource to further their interests, but the concept of social capital lacks analytical content and does not provide an adequate model of how this might be achieved.

The past two centuries have led to a widespread degeneration in the social and economic fabric in which Indigenous Australians are enmeshed. Many policy initiatives to enhance Indigenous development are at odds with local Indigenous practice and values, thus limiting the prospect for 'sustainable' development outcomes (Smith 2003). Further, where there is an engagement with the 'cultural' in Indigenous development, its scope is almost always limited to the 'Aboriginal domain'. The relevance of cultural analysis for the operation of

local Aboriginal corporations, the rationales of development projects and the role of regional organisations themselves are generally ignored. Smith (2003) illustrates that cultural considerations fundamentally affect the sustainability of development initiatives by examining a series of projects undertaken in central Cape York Peninsula since the mid 1990s. The outcomes of these projects are shaped by both the social and institutional context of development projects, especially the presumptions of a number of local Aboriginal 'community' and other agencies.¹³ Social capital may have some role to play in disentangling the roles of social, cultural and institutional context, but is not possible to discount the ability of competing theoretical frameworks to explain Smith's account.

Daly and Smith conclude by exploring the implications for children of exclusion from one sphere of life (i.e. the mainstream economy), for their inclusion in the other (i.e. the Indigenous sphere). They suggest somewhat provocatively that:

exclusion from mainstream economic participation may be actively undermining Indigenous families' own capacity to reproduce culturally valued relationships and roles. If that is the case, then key aspects of Indigenous cultural wellbeing and social reproduction may be directly linked to breaking the cycle of inter-generational welfare dependency and economic exclusion that is being transmitted to Indigenous children (2003: v).

Furthermore, Daly and Smith claim there is a two-way dynamic, where causal factors that are generating exclusion in one domain interact with factors in other overlapping domains (2003: 18).¹⁴ This is especially the case for Indigenous people who are engaged in a 'hybrid economy' where Indigenous and non-Indigenous components and behaviours are now tightly interlocked (see Altman 2002). In a sense, the lack of bridging social capital acts to compound and generate consequences that rebound within and across domains.

Sutherland (2003) motivates her call for a whole-of-government approach within an Indigenous school in the ACT in terms of both the 'learning community' and social capital literature.¹⁵ While she convincingly demonstrates the need to cultivate and nurture Indigenous trust in educational institutions, Sutherland's position can be justified using other theoretical perspectives, including class based analysis.

Notwithstanding the overall limitations of the social capital literature, there are several examples of mechanisms by which social networks could potentially augment economic value for Indigenous Australians. McDonnell (1999) explores the possibility that micro-credit institutions in Indigenous communities may correct for certain market failures in banking services in remote areas through the use of dense Indigenous social networks to monitor individual behaviour.

Another possible example is that labour market studies point to 'friends and relatives' as being the most heavily utilised method of job search among Indigenous and other Australian youth (Gray & Hunter 2000; Heath 1999). If the social networks of Indigenous people are confined to unemployed and other socially excluded individuals, then this search method is unlikely to be of much assistance in finding a job. Expressing this in a more positive way, if the social capital of Indigenous youth can be developed to extend their networks into the labour force, there are likely then to be significant gains in Indigenous employment.

In summary, the introduction of the term social capital may have marginally contributed to the debate about Indigenous disadvantage. However, unless there is a critical engagement with the concept, and an examination of the ability of social capital research to empirically demonstrate the importance of the social and institutional context of Indigenous poverty, these gains will be dissipated by those who seek to justify a particular position with disingenuous rhetoric. The concluding section reflects on the extent to which social capital is useful for analysing Indigenous disadvantage.

CAN THE SOCIAL CAPITAL HYDRA BE TAMED?

It is pertinent to remember that the Hydra in Greek mythology protected the Lernaean cave for the goddess Hera. Extending the metaphor at the beginning of this paper further, the concept of social capital may also be useful in protecting the status quo in the modern era. For example, as most Indigenous people place a great deal of emphasis on kin relationships, it may be relatively easy for them to interpret social capital literature in their own cultural and linguistic terms. However, while some disadvantaged people find some resonance in the notion of social capital, they are unlikely to be talking about the same concept as prominent politicians, including Australia's Prime Minister (John Howard), and other senior politicians (e.g. Peter Costello and Mark Latham). The lack of clarity in the conceptualisation of social capital Hydra is what makes it potentially dangerous.

This paper has attempted to argue for a more modest conceptualisation of social capital that is amenable to empirical analysis, and hence can be used as a basis for useful policy advice. A clearly formulated theory of social networks is rather like the gold hidden away in the Hydra's head—it is dangerous to procure but may be ultimately worthwhile.

In aspiring to a more precise definition of social capital, I am not seeking to ignore the broader social and institutional context. Indeed, I believe it is important to recognise that power structures inform the meaning and organisation of social relationships (see also Bourdieu 1986, 1993). However, the point is that social capital must have theoretical content that is both distinguishable from other theories and empirically measurable.

For Popper, all scientific criticism must be piecemeal—that is, he holds that it is not possible to question every aspect of a theory at once (1963). More precisely, while attempting to resolve a particular problem a scientist necessarily accepts all kinds of things as unproblematic. Popper develops his notion of *verisimilitude* to deal with theories which are *at best* approximations (1963: 235). This is often the case in the social sciences, and is clearly true for social capital theory. *Verisimilitude* describes the incremental movement towards theories with the greatest truth-value.

At this early stage of development of social capital theory, the best strategy is to formulate hypotheses that are clearly falsifiable. Unfortunately, the difficulties in operationalising tests of multi-level hypotheses means that the more powerful tests of the theory will be conducted at either the individual or aggregate levels, but not a combination of both. The incremental insights gained into the processes underlying social

capital from carefully constructed empirical tests of the theory (and hence a convergence towards 'better' theories through the Popperian process of *verisimilitude*), should eventually allow a multi-level social capital theory to be constructed on a less ad hoc basis than is currently the case. This strategy is not without risk because it may lead to the rejection of a 'true' hypothesis if there is a significant correlation between the single-level and multiple-level effects. However, if such correlations are second order issues, as I believe they are, then focusing on data for individuals will maximise the prospect for rejecting hypotheses without substantial truth-value.

It is difficult to think of a single prediction arising from social capital theory that is falsifiable. For example, given that bonding social capital can have positive and negative consequences, to the extent that all people have such networks, it is possible that 'investments' in social networks may not yield additional economic resources. An even more telling point is that the more complex the account of social capital, the more room there is for ad hoc rationalisation of outcomes that contradict any predictions of the theory. The more scope there is for institutional and multi-level influences, the easier it is to explain apparent contradictions of the theory. While falsifiability is something to aspire to, it may be unreasonable to expect a wide-ranging theory such as social capital to embrace it. However, in such circumstances it is valid to question whether social capital has more in common with a religion than a scientific endeavour.

There is another avenue for social capital to become useful. Just as Heracles dipped his arrows in the Hydra's entrails to help him defeat his enemy, it may be possible to kill off the more naïve applications of neoclassical theory, and (largely third-world) development analysis, to fourth-world people such as Indigenous Australians. That is, the debate about theoretical and empirical issues, as well as the cross-cultural appropriateness of the social capital concept, will advance the debate on how to address Indigenous disadvantage by helping us to reject unsustainable arguments.

Australia's Productivity Commission (2003) suggests some policy ideas to build or support social capital because of the tendency towards under-provision within the community if provision is left to private efforts alone. While some of the Commission's suggestions may ultimately prove useful, it is probably premature to move on the policy suggestions until further theoretical and empirical work is conducted.

The Productivity Commission (2003: 56) recognised that people or societies could 'over-invest' in social capital because the expenditure of effort to form social capital precludes the expenditure of that same effort on other matters. For example, beyond some point, additional time spent networking may eat unduly into time spent working or looking for work. Social capital is obviously not a panacea, and more of it is not necessarily better. This observation is particularly relevant in the context of Indigenous Australians for whom the composition of social networks is likely to be crucially important. For Indigenous Australians the most productive research strategy would be to focus on the role of networks in the process of social capital formation, before developing a more grand theory of Indigenous social capital that encompasses multiple levels of analysis.

NOTES

1. The Hydra was a monster that was reared by the goddess Hera as a menace to the hero Heracles. Heracles forced the Hydra to emerge by pelting it with burning arrows, and then held his breath while he caught hold of it. He set alight one corner of a grove of sacred plane-tree in order to prevent the Hydra growing new heads (by searing their roots with blazing branches). Heracles then severed the immortal head with a sword, and buried it still hissing. He disembowelled the carcass and dipped his arrows in the gall so that the least wound from one of them was invariably fatal.
2. Hercules was the Roman equivalent of Heracles.
3. Also see Portes (1998), who believes that due to the growth in popularity of the term, and the broad range of settings to which it is now applied, social capital is at risk of losing any distinct meaning.
4. The naked appeal to authority by the use of the word capital is ironic given a history of controversy of how to measure the value of physical capital (e.g. the Cambridge controversy of the 1960s, see Harcourt 1972).
5. Labour or supplier turnover in response to prices may destroy the willingness to offer trust or, more generally, to invest in the future of the relation. This leads to an important long-standing question: whether the market (or for that matter a large, efficient, bureaucratic state) destroys social links that have positive implications for efficiency.
6. This point was also made by Fine (2001: 26), who notes capital is always already social, and thus the notion of 'social capital' is tautological.
7. Schelling (1978) provided a model of how segregation can arise from small differences in preferences and persist for prolonged periods. While his model was aimed at the housing market it is easy to adapt it to explain the tendency for segregated labour markets.
8. Suburban living of a given quality characteristic is a positional good limited in absolute availability by the context of surrounding conditions and influences (Hirsch 1976: 41).
9. Orthodox economic analysis is concerned with the commodities people have, not with the way people get them. For example, the arguments of a neoclassical utility function are not affected by the social, cultural or historical contexts. Hirsch illustrates his point with the graphic example that 'bought sex is not the same' (1976: 87).
10. Another issue is the physical and emotional limitation of the individual to actively engage in social networks. This is a social networks analogy to 'bounded rationality'—the fact that most individuals have a limited cognitive ability, which means that they fail to live up to the ideal of *homo economicus* in neo-classical models.
11. William of Ockham was an English monk, philosopher, and theologian who provided the scientific method with its key principle 700 years ago.
12. Putnam's (1993) work on Italian regions has provided the oft-cited example of the Mafia drawing heavily on particular forms of social capital to produce positive outcomes for those in the 'family', but potentially negative outcomes for those on the outside.
13. In a discussion of the mutual obligation in Indigenous policy, David Martin (2001: 12) also argues that social and economic policy cannot be abstracted from particular networks and communities and from a commitment to particular values and locales.

14. Many Indigenous children are facing a double jeopardy. First, they are at high risk of entrenched exclusion from the future benefits and opportunities of mainstream economic participation. Secondly, as a direct spillover from that, they are experiencing barriers in actively participating in areas of their own Indigenous social and cultural institutions. Entrenched exclusion from the mainstream economy is arguably reproducing a form of exclusion in another domain—the Indigenous.
15. Sutherland is probably overly sanguine about the positive aspects of social capital generated within an Indigenous school, in that she does not explicitly acknowledge the possibility that excessive bonding social capital may have negative consequences (e.g. downward levelling of norms) in terms of people's ability to engage with the mainstream economic system. This notwithstanding, her argument is driven by the fact that bonding social capital is crucial for building a sustainable and healthy Indigenous community.

REFERENCES

- Altman, J.C. 2002. 'Aboriginal economy and social process: The Indigenous hybrid economy and its sustainable development potential', *Arena*, 56 (January): 38–9.
- and Hunter, B.H. 2003. 'Evaluating Indigenous socioeconomic outcomes in the reconciliation decade, 1991–2001', *Economic Papers*, 22 (4): 1–16.
- Ancil, R.E. 1991. 'Antecedents and implications of Hirsch's positional goods', *History of Political Economy*, 23 (2): 263–78.
- Appadurai, A. (eds) 1986. *The Social Life of Things: Commodities in Cultural Perspective*, Cambridge University Press, Cambridge.
- Arrow, K.J. 1998. 'What has economics to say about racial discrimination', *Journal of Economic Perspectives*, 12 (2): 91–100.
- 2000. 'Observations on social capital', in P. Dasgupta and I. Serageldin (eds), *Social Capital: A Multifaceted Perspective*, The World Bank, Washington D.C.
- Australian Bureau of Statistics (ABS) 1995. *National Aboriginal and Torres Strait Islander Survey 1994: Detailed Findings*, Cat. no. 4199.0, ABS, Canberra.
- 2000. *Measuring Social Capital: Current Collections and Future Directions*, ABS Discussion Paper, ABS, Canberra.
- 2004. *Measuring Social Capital: An Australian Framework and Indicators*, Cat. no. 1378.0, ABS, Canberra.
- Berndt, R. and Berndt, C. 1988. *The World of the First Australians: Aboriginal Traditional Life: Past and Present*, Aboriginal Studies Press, Canberra.
- Blaug, M. 1976. 'The empirical status of human capital theory: A slightly jaundiced survey', *Journal of Economic Literature*, 14 (3): 827–55.
- Bourdieu, P. 1986. 'The forms of capital', in J. Richardson (eds), *Handbook of Theory and Research for the Sociology of Education*, Greenwood Press, New York.
- 1993. *Sociology in Question*, Sage, London.
- Bradshaw, J. 2003. 'How has the notion of social exclusion developed in the European discourse?', Paper presented to the *Australian Social Policy Conference*, University of New South Wales, 9–11 July 2003, Sydney.
- Coleman, J.S. 1988. 'Social capital in the creation of human capital', *American Journal of Sociology*, 94 (S): 95–120.

- Commonwealth of Australia 1997. *Bringing Them Home: National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families*, Human Rights and Equal Opportunity Commission, Sydney.
- Daly, A. and Smith, D. 2003. 'Reproducing exclusion or inclusion? Implications for the wellbeing of Indigenous Australian children', *CAEPR Discussion Paper No. 253*, CAEPR, ANU, Canberra.
- Dodson, M. 1994. 'The Rights of Indigenous Peoples in the International Year of the Family', *Family Matters*, 37: 34–41.
- Douglas, M. and Isherwood, B. 1978. *The World of Goods: Towards an Anthropology of Consumption*, Penguin, Harmondsworth, Middlesex.
- Fine, B. 2001. *Social Capital Versus Social Theory: Political Economy and Social Science at the Turn of the Millenium*, Routledge, London.
- Finlayson, J. 1991. Don't Depend On Me: Autonomy and Independence in an Aboriginal Community in Northern Queensland, Unpublished PhD thesis, ANU, Canberra.
- Firebaugh, G. 1978. 'A rule for inferring individual-level relationships from aggregate data', *American Sociological Review*, 43: 557–72.
- Fukuyama, F. 1999. *The Great Disruption: Human Nature and the Reconstitution of Social Order*, Free Press, New York.
- Gerth, H.H. and Wright Mills, C. 1970. *From Max Weber: Essays in Sociology*, Routledge & Kegan Paul, London.
- Graves, R. 1955. *The Greek Myths*, Penguin, Harmondsworth, Middlesex.
- Gray, M.C. and Hunter, B.H. 2000. An Analysis of Data from the Longitudinal Survey of ATSI Job Seekers: Job Search Behaviour, Report to the Department of Employment, Workplace Relations and Small Business, CAEPR, ANU, Canberra.
- Harcourt, G.C. 1972. *Some Cambridge Controversies in the Theory of Capital*, Cambridge University Press, Cambridge.
- Heath, A. 1999. 'Job search methods, neighbourhood effects and the youth labour market', *Research Discussion Paper 99–07*, Reserve Bank of Australia, Sydney.
- Hirsch, F. 1976. *Social Limits to Growth*, Routledge, New York.
- Hunter, B.H. 2000. 'Social exclusion, social capital and Indigenous Australians: Measuring the social costs of unemployment', *CAEPR Discussion Paper No. 204*, CAEPR, ANU, Canberra.
- 2001. 'Tackling poverty among Indigenous Australians', in R. Fincher and P. Saunders (eds), *Creating Unequal Futures*, Allen and Unwin, Sydney.

- 2004. *Indigenous Australians in the Contemporary Labour Market*, Cat. no. 2052.0, ABS, Canberra.
- Manski, C.F. 1995. *Identification Problems in the Social Sciences*, Harvard University Press, Cambridge, Mass.
- Martin, D. 1998. 'The supply of alcohol in remote Aboriginal communities: Potential policy directions from Cape York', *CAEPR Discussion Paper No. 162*, CAEPR, ANU, Canberra.
- 2001. 'Is welfare dependency 'welfare poison'? An assessment of Noel Pearson's proposals for Aboriginal welfare reform', *CAEPR Discussion Paper No. 213*, CAEPR, ANU, Canberra.
- McDonnell, S. 1999. 'The Grameen Bank micro-credit model: Lessons for Australian Indigenous economic policy', *CAEPR Discussion Paper No. 178*, CAEPR, ANU, Canberra.
- Morphy, F. 2002. 'When systems collide: The 2001 Census at a Northern Territory outstation', in D.F. Martin, F. Morphy, W.G. Sanders and J. Taylor (eds), *Making Sense of the Census: Observations of the 2001 Enumeration in Remote Aboriginal Australia*, Research Monograph No. 22, CAEPR, ANU, Canberra.
- Organisation for Economic Cooperation and Development (OECD) 2001. *The Well-being of Nations: The Role of Human and Social Capital*, OECD, Paris.
- Olson, M. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*, Harvard University Press, Cambridge.
- Popper, K.R. 1963. *Conjectures and Refutations: The Growth of Scientific Knowledge*, Routledge, London.
- 1959. *The Logic Of Scientific Discovery*, Hutchinson, London.
- Portes, A. 1998. 'Social capital: Its origins and applications in modern sociology', *Annual Review of Sociology*, 24: 1–24.
- and Landolt, P. 1996. 'The downside of social capital', *The American Prospect*, 26: 18–21.
- Productivity Commission 2003. *Social Capital: Reviewing the Concept and its Policy Implications*, Research Paper, AusInfo, Canberra.
- Putnam, R. 1993. 'The prosperous community: Social capital and public life', *The American Prospect*, 13.
- 1995. 'Bowling alone: America's declining social capital', *Journal of Democracy*, 6 (1): 65–78.
- 1996. 'The strange disappearance of civic America', *The American Prospect*, 24 (Winter): 34–48.
- Putzel, J. 1997. 'Accounting for the 'dark side' of social capital: Reading Robert Putnam on democracy', *Journal of International Development*, 9 (7): 939–49.
- Room, G. 1995. *New Poverty' in the European Community*, Macmillan, London.
- Scanlon, C. 2004. 'What's wrong with social capital', *Blue Book No. 8, Australian Fabian Society Pamphlet No. 63*, Arena publications, Melbourne.

- Schelling, T. 1978. *Micromotives and Macrobehaviour*, W.W. Norton & Company, New York.
- Schwab, J. 1991. *The "Blackfella Way"*, Phd thesis, Department of Prehistory and Anthropology, Australian National University, Canberra.
- 1995. 'The calculus of reciprocity: Principles and implications of Aboriginal sharing', *CAEPR Research Discussion Paper No. 100*, CAEPR, ANU, Canberra.
- Smith, B.R. 2003. 'A complex balance: Mediating sustainable development in Cape York Peninsula', *The Drawing Board: An Australian Review of Public Affairs*, 4 (2): 99–115.
- Solow, R.M. 2000. 'Notes on social capital and economic performance', in P. Dasgupta and I. Serageldin (eds), *Social Capital: A Multifaceted Perspective*, The World Bank, Washington D.C.
- Stone, W. and Hughes, J. 2002. 'Social Capital: Empirical meaning and measurement validity', *AIFS Research Paper No. 27*, Australian Institute of Family Studies, Melbourne.
- Sutherland, D. 2003. 'An Indigenous school and learning community in the ACT? Opportunity, context and rationale', *CAEPR Discussion Paper No. 258*, CAEPR, ANU, Canberra.
- Van Deth, J.W. 2003. 'Measuring social capital: Orthodoxies and continuing controversies', *International Journal of Social Research Methodology*, 6 (1): 79–92.
- Veblen, T. 1902. *The Theory of the Leisure Class: An Economic Study of Institutions*, Macmillan, New York.
- Winter, I. 2000. *Social Capital and Public Policy in Australia*, Australian Institute of Family Studies, Melbourne.
- Woolcock, M. 2001. 'The place of social capital in understanding social and economic outcomes', *ISUMA: Canadian Journal of Policy Research*, 2 (1): 11–7.
- and Narayan, D. 2000. 'Social capital: Implications for development theory, research, and policy', *The World Bank Research Observer*, 15 (2): 225–49.