Health by Association? Social Capital, Social Theory and the Political Economy of Public Health¹

Simon Szreter, University of Cambridge²

Michael Woolcock, World Bank and Harvard University³

This draft: 3 December 2002

Abstract. Since its introduction into the fields of public health and epidemiology, the idea of social capital has been taken up in three different forms. The first, "social support", has sought to revisit and reinvigorate a long tradition of scholarship documenting the importance of informal support networks for well-being in general, and the prevention of debilitating physiological and psychological conditions in particular. The second, "inequality", argues that rising levels of inequality over the past quarter century have corroded citizens' sense of social justice and mutual trust, leading to heightened anxiety and stress, and lower gains in life expectancies. The third approach, "political economy", argues that casting serious population health problems as primarily social or relational issues obscures more important issues of power, politics, and access to material resources, enabling neo-liberal partisans to justify further withdrawals of funds to public services, offering instead only empty platitudes regarding the virtues of "community" and/or "charity-based" support. While these different emphases correspond to discrete political philosophies, we argue that there are in fact many compatible aspects in terms of social capital theory, research, and policy. We present a more integrated conceptual approach that reconciles these debates, based on a broader reading of history, politics, and the empirical evidence regarding the mechanisms linking the efficacy of social structures to public health outcomes.

¹ We are grateful to Robert Putnam for commenting on and debating the various issues this paper raises; though some minor differences of opinion linger, we have greatly benefited from the candid exchange. We also thank conference participants at the Institute for Public Health, University of Cambridge, wherein an earlier version was presented. The views expressed in this paper are solely those of the authors, and should not be attributed to their respective organisations or executive officers. Please address correspondence to Simon Szreter, St John's College, University of Cambridge, Cambridge CB2 1TP, UK.

² Faculty of History and Fellow of St John's College, University of Cambridge. Email: srss@cam.ac.uk

³ Development Research Group, The World Bank, and Kennedy School of Government, Harvard University. Email: mwoolcock@worldbank.org

Health by Association? Social Capital, Social Theory and the Political Economy of Public Health

In the ongoing quest to improve our understanding of the conditions that make for improved public health and well-being, scholars, practitioners, and policymakers have recently returned in earnest to a theme with a long and distinguished history in the social sciences—namely, following Durkheim, the importance of social circumstances in shaping the quality of life one enjoys (Berkman et al, 2000, Kawachi 2001). Fuelled in part by the indifferent performance of a series of high-profile public service delivery "reforms", the widening rhetorical appeal of communitarian and neo-liberal policy discourse (Coburn 2000), and a growing recognition that ever more sophisticated medical interventions and media campaigns have had a disappointing impact on some of society's most persistent social ills (e.g., smoking, depression, teen pregnancy), attention has returned to assessing the impact of peer group effects, network structures, associational memberships, civic participation, and broader social arrangements.

Identifying the nature and extent of the impact of social relationships—generally referred to as "social capital", following the influential work of Robert Putnam (1993, 2000)—has become a veritable cottage industry across the social sciences. Scholars have documented the importance of social capital in fields ranging from economic development and government performance to criminal activity and youth behaviour⁴, but "in none is the importance of social connectedness so well established as in the case of health and wellbeing" (Putnam, 2000: 326). General guides to how the concept of social capital has been applied to various health issues can be found elsewhere⁵. In this paper we wish to focus instead on (a) the analytical and political controversies that surround this literature, in particular the emerging divide between those focusing on the primacy of (i) support networks, (ii) economic and social inequality, and (iii) access to resources for explaining health outcomes; and (b) the contemporary policy lessons for public health emerging from both historical studies of public health issues and the broader theoretical and empirical debates in the (ever-expanding) field of social capital research.

⁴ For a review of the major fields in which social capital research has been conducted, see Woolcock (1998) and Woolcock and Narayan (2000).

⁵ See, among others, Lomas (1998), Morrow (1999), Hawe and Shiell (2000), Veenstra (2001), MacInko and Starfield (2001), Cattell (2001), Cullen and Whiteford (2001), Whitehead (2001), and Siegrist (2002).

Our central thesis is that it is desirable and possible to reconcile the controversies surrounding social capital as it applies to issues in public health, but that doing so requires incorporating conceptual and empirical insights from the broader social capital literature. Importantly, all camps in the field of public health generally agree that social capital "matters" in some basic sense—unlike in say, the field of economic development, where selected critics (e.g., Fine 2000, Harriss 2002) paint it as a politically vapid distraction. Most participants also agree that, while imperfect, efforts should be (and indeed have been) made to resolve lingering disputes on the basis of the empirical evidence. Even so, however, with provocative summary claims such as those by Putnam (2000: 331)—"[i]f you smoke and belong to no groups, it's a toss-up statistically whether you should stop smoking or start joining" it's not hard to see why the idea of social capital has generated both acclaim and disdain. While taking the critics seriously, we believe social capital, properly understood, can indeed make a significant contribution to public health theory, research, and policy.

The paper proceeds as follows. Section I explores the current terms of the debate between three emergent camps in the field of social capital and public health, and seeks to provide an analytical basis for discriminating between them. Section II outlines a theoretical framework for reconciling the different views. Section III provides a historical perspective on a key set of public health concerns from nineteenth century Britain, demonstrating both the efficacy of the theoretical framework and the more general importance of incorporating historical insights into contemporary policy debates. Section IV concludes, with a brief discussion of the policy implications for public health arising from both the analysis presented and the broader social capital literature.

I: Rival Views of Social Capital and Public Health

In the past few years there has been an intensive exchange in the journals and at conferences among several of the leading figures in the field of public health and epidemiology over the concept of "social capital". Social capital has entered these fields principally through the work of two individuals, namely Robert Putnam (via his seminal 1993 book on regional

⁶ Putnam bases this claim on the literature overviews of James House et al (1988), Lisa Berkman (1995) and Teresa Seeman (1996), although it should be noted that House subsequently joined a team (Lynch, Davey Smith et al, 2000) essentially trying to debunk claims regarding the primary efficacy of social support networks.

⁷ For the principal exchanges, see references listed in note 13; see also Baum (1997, 2000), Coburn (2000),

Wilkinson (2000a), and Kawachi and Berkman (2000).

government in Italy, *Making Democracy Work*) and the more focused work of Richard Wilkinson (most notably his 1996 book, *Unhealthy Societies*). In addition, Putnam has drawn on, and indirectly contributed to, research on social capital and public health in his most recent study of social capital in the United States, *Bowling Alone*, published in 2000 (pp. 326-335). Richard Wilkinson, by contrast, has been working for many years within the field of comparative epidemiology to further our understanding of the relationship in relatively affluent societies between income inequalities and mortality patterns, and is one of the principal protagonists in the recent debates⁸.

The debates generated by these authors have primarily treated "social capital" as if it is a (presumably) more sophisticated formulation of the broader concepts of "social cohesion" (Kawachi and Berkman 2000), "social support" (Berkman 2000), "social integration" (Berkman and Glass 2000) or "civil society" (Baum 1997). Epidemiologists have noted that the term "networks" seems to be used a lot by the proponents of social capital, and this strikes a familiar note for them with a body of respected empirical literature, dating from the path-breaking study of *Social Origins of Depression* by Brown and Harris (1978); and the Alameda County Study, demonstrating that individual risks from a range of chronic and degenerative conditions, such as cancers and myocardial infarctions, are improved where there are good social support networks (Berkman and Syme 1979)⁹. For the purposes of our present discussion, we call these studies the "social support" school. This is a view of social capital—defined simply as the nature and extent of one's social relationships and associated norms of reciprocity ¹⁰—as connected to health outcomes via some variation of a direct social support mechanism. The causal pathway giving rise to superior health outcomes is membership in a dense network of close friends and potential or actual informal caregivers.

The specific research connecting social capital to health outcomes via a social support mechanism is vast. In this sense, social capital has been empirically linked to, among other things, improved child development (Keating 2000) and adolescent well-being (Howard

Wilkinson has, of course, been working on related issues for many years; see for instance Wilkinson (1986).
 For a recent review of this case, see Berkman and Glass (2000).

¹⁰ Definitional and conceptual debates are, of course, a mainstay of the academic social capital literature more broadly. Happily, in the fields of public health and epidemiology, scholars seem to have settled rather quickly on an agreed-upon definition (some variation of the one we present), perhaps because, following Durkheim's classic work on suicide, there is such a venerable tradition of research to call upon connecting networks and social structures to health outcomes. On related methodological and philosophical issues see Forbes and Wainwright (2001) and the articles collected in Eckersley, Dixon, and Douglas (2001).

2001), increased mental health (Kawachi and Berkman 2001), lower violent crime rates and youth delinquency (Hagan et al 1995, Sampson et al. 1999), reduced mortality (Kawachi et al. 1997), lower susceptibility to binge drinking (Weitzman and Kawachi 2000), to depression (Lin et al. 1999, Bullers 2000, Noe 2001), and to loneliness (Oenninx et al. 1999), sustained participation in anti-smoking programs (Lindstrom et al. 2000), and higher perceptions of well-being (Sevigny et al. 1999, Raphael et al. 2001, Helliwell 2002) and selfrated health (Kawachi et al. 1999, Rose 2000, Ellaway and Macintyre 2000, Subramanian et al. 2001). Where urban neighbourhoods and rural communities (and particular subpopulations) are demonstrably low in social capital, residents report higher levels of stress (Steptoe and Feldman 2001) and isolation (Duncan 1999), children's welfare decreases (Drukker et al. 2002), and there is a reduced capacity to respond to environmental health risks (Wakefield et al. 2001) and to receive effective public health service interventions (Rosenheck et al. 2001, cf. Campbell 2000, Ong 2000)¹¹. One might have minor (or even major) methodological quibbles with individual studies, but as a general field of research it is hard not to be impressed with the volume, diversity, and consistency of the empirical evidence identifying social capital as a significant determinant of health outcomes. 12 The issue that animates the academic debates, and which this paper seeks to reconcile, however, is whether social capital is a direct or secondary "cause" of these outcomes—that is, whether changes in the stocks and flows of social capital per se is what is driving observed health outcomes, or whether they are merely responding to the changing character of broader political economic forces.

Richard Wilkinson (1996) led a break from the social support literature, arguing that social capital concerns were relevant to the extent that they were part of the psycho-social effects of widening levels of socio-economic inequality. He argues that in the handful of most affluent, post epidemiological transition (Omran 1971) societies (also excluding Eastern Europe), where lethal diseases associated with sanitation, infection, and absolute poverty now play only a very small part in determining the overall death-rates, that significant changes in the degree of socio-economic inequality have a particularly strong influence over the differentially evolving comparative epidemiology of these populations. He contends that

_

¹¹ For related work on the importance of "community capacity" and "social environments" for health outcomes, see Murray (2000), Smith et al. (2001) and McCulloch (2001).

¹² Kunitz (2001) provides a valuable account of how social capital might be both a part of the problem and solution to local health problems. Pope (2000) argues that it is still premature (at best) to include social capital measures in official public health surveys (cf. Harpham, Grant and Thomas, 2002).

among the most affluent societies, those which have moved towards more uneven income distributions—most notably a number of liberal market economies such as the United States and the U.K. over the last two decades—are characterised by individuals with increased anxiety and declining social support institutions, and by rising levels of violence and disrespect between citizens. This results in poorer population health performances, in terms of national average life expectancy figures, which fail to improve as much as those of comparable economically-advanced societies, such as Canada, Japan or Sweden, which have not experienced such a degree of widening income inequality and associated decline in civic trust and collective support for social infrastructure (Wilkinson 1996, 1999, 2001).

Michael Marmot and others have been important in identifying a physiological mechanism to explain these results, linking social support with more tractable notions of "stress" as the absence or loss of autonomy over one's life-course, or over one's working or neighbourhood environment. Bio-medical plausibility for this has been established by demonstrating the correlates of such perceptions of stress in states of anxiety and physiological arousal, which result in the enhanced chronic secretion of harmful doses of cortisol, adrenaline and nor-adrenaline within the body's neuro-endocrine system (Brunner and Marmot 1999). Marmot too, however, sees widening absolute and relative inequality as the primary driver of public health outcomes.

Wilkinson's principal critics—John Lynch, George Davey Smith, Carl Muntaner and their various collaborators ¹³—have argued that inequalities in health are always fundamentally rooted in differences of access to material resources (including housing and relevant neighbourhood amenities), which are, in turn, ultimately the product of political and ideological decisions. They are concerned that the drift of Wilkinson's analysis is to support a form of "health transition thinking", which would deny the significance of the material and the political under advanced economic conditions of affluence. This "transition" thinking would imply that material deprivations are only of significance to health at lower levels of economic development and that, with the withering away of "real" (i.e., absolute, survival-threatening) poverty in higher-income societies, only the psycho-social causes remain as significant factors producing health inequalities. This gives succour to the neo-liberal position

¹³ See Davey Smith (1996), Kaplan (1999), Lynch (2000), Lynch, Due et al (2000), Muntaner, Lynch, and Davey Smith (2000, 2001), Lynch, Davey Smith et al (2000), and Lynch, Davey Smith et al (2001). For responses, see Wilkinson (1999) and Wilkinson (2000b).

because it appears to imply that such differentials can be fixed "on the cheap" with "social support" and "self-help" networks without needing to give any attention to the more contentious issues of inequalities in ownership of wealth and in distribution of power.

In his response to this critique, Wilkinson (2000b, pp.411-13) makes four relevant points in rapid succession:

- 1) Part of the difficulty with the concept of social capital is that it was borrowed from other disciplines rather than being developed specifically for the health field.
- 2) No doubt it is a popular concept because it holds out the idea that there are costless ways that poor communities can pull themselves up by their bootstraps...
- 3) ...But an important part of the growing health interest in social capital comes not from ignoring income distribution, but precisely from the opposite direction: from trying to understand why income distribution is important to health.
- 4) [As such,] the evidence suggests that more egalitarian societies are more cohesive, less violent, more trusting, and foster more involvement in community life.

Moreover, he subsequently adds,

5) If we fail to reduce income inequalities, societies will be more likely to show tendencies towards discrimination and victimisation of vulnerable groups. ...[T]hese dimensions of social reality may have a special salience as determinants of levels of anxiety and physiological arousal in a population. Because members of the same species have all the same needs there is a potential for continuous conflict between them. But ...human beings can also be the greatest source of [mutual] assistance, [and] support... Similarities between some of the physiological effects of low social status produced under experimental conditions in monkeys and those associated with social status in human beings, suggests that an important part of the social gradient in human health is attributable to the direct effects of social status, rather than to other influences on health like poorer housing, diet and air pollution.

Among this sequence of points, we believe that the first is, in fact, critical, and will return to it at length later in this article. It is critical because it is difficult to debate the utility of a fundamentally sociological concept substantively and productively without full reference

to its original provenance and its current meaning, as developed in the sociological literature. This requires significant expository work where a concept as potentially powerful, complex and contentious as social capital is concerned.

Wilkinson recognises, in his second point, the same political and policy-related dangers identified by Lynch et al. In his third point he comes even closer to the position of his critics, concurring that inequality, of which measures of income distribution form one important index, is highly significant; and in his fourth point he endorses the kind of view of the virtues of social capital which Putnam (1993) developed in his study of differences in institutional performance between Italian regions.

The key point of difference between the two sides in the epidemiological debate emerges from the long, fifth quotation from Wilkinson. This difference is not over whether inequality is highly significant in accounting for class variations in health experience in economically advanced societies, but over the nature of the principal pathways of causation involved. The fifth extract shows that Wilkinson believes that there is something directly physiological going on, and that this is of prime importance. He believes that the concept of social capital is helpful because it is pointing us towards the source of this biological, evolutionary-programmed health effect, which flows from the relative social cohesiveness (or lack thereof) of a local or a national community.

For Wilkinson, the extent to which a society is experienced as a "hierarchy" or a "community of equals" determines the overall extent to which those citizens who find themselves at the bottom of the socio-economic pecking order will, as a characteristic response, experience states of anxiety and arousal, resulting in long-term damage to their health if this becomes a chronic situation for them. Even in more egalitarian societies, some citizens will inevitably still find themselves in this unfavourable position, possibly for long periods. But this will not necessarily produce the damaging physiological reactions, if they do not perceive their predicament in the same demeaning and threatening way. This is actually quite a subtle argument, which it is easy to caricature. It is not a simplistic biological determinist argument; the mechanism of damage is donated by evolution, but whether or not it is invoked depends crucially on potential victims' perceptions of their predicament. This in turn depends on whether or not they see themselves as living in a cohesive, egalitarian, social-capital-rich society, or in one that is changing from being more to less egalitarian.

It is important to note, incidentally, that the research on which Wilkinson and others and their critics have so far based their claims has almost exclusively consisted of statistical comparisons of income inequality measures for national and sub-national populations. However, since it is really *perceptions* of inequality (and/or lack of opportunity for social mobility) that are at issue, it is arguably a rather different kind of evidence that is truly required to assess the hypothesis. For instance, American society may be extremely unequal by such income measures and may be fast becoming more unequal (Krugman, 2002). However, its citizens', even its poor citizens', typical perceptions of the degree of injustice involved in this may be significantly less than that provoked by much smaller absolute changes in income inequality experienced by the inhabitants of another society, which has a strongly established self-image as an egalitarian society (cf. Alesina and La Ferrara, 2001). Clearly there must be some correlation between absolute levels of income inequality and perceptions of "hierarchy", "egalitarianism", and possibilities for "mobility", but the scope for flexibility in these assessments due to differences in national political cultures and cherished myths- i.e. prior histories - should not be underestimated.

While Lynch et al. may (or may not) agree that these physiological effects occur in societies that are perceived as unequal, they certainly do not think any such effects are anything like as important as the direct health-damaging effects of what they term the "material" realities of poverty, even in an affluent society. The range of such effects includes poor quality and often damp or dangerous housing, the tendency to be restricted to lower quality food and clothing, greater exposure to environmental pollutants (including low air quality), higher likelihood of accidents and violence of most kinds, and less likelihood of access to effective medical care when required.

The thought naturally occurs to the observer of this debate that both sides have a point. It is certainly the case that if one or the other viewpoint could be shown empirically to be much the more substantial effect, then this would have important and rather different consequences for indicating the priorities that remedial policies should take. In the absence of such compelling evidence, however, it would seem most sensible to assume that both viewpoints could be valid. This would be conducive to the implementation of a superior, third kind of strategy for policy, which would embrace both points of view—indeed, would also embrace the larger "social support" view.

It is important to this line of thinking that, despite their dispute with Wilkinson, Lynch et al remain relatively well disposed to the concept of social capital. They are careful to withhold their approval from many of the narrow policy formulations of social capital that abound (e.g., as being little more than volunteering and charity work); indeed, they are highly critical of it. They insist that the concept only has potential value to public health and epidemiology if properly located within a broad and comprehensive framework, embracing a role for the state and for the motivating role of political ideology. We would certainly want to agree wholeheartedly with this, having ourselves previously argued for such a formulation (see Woolcock 1998, 2001; Szreter 2000, 2002b). It seems to us, then, that if the concept of social capital is properly developed and carefully spelled-out, it may well provide the means to mediate between the three sides in this dispute. With the assistance of a more fully elaborated specification of the concept of social capital, the extent of common ground between these positions may then be clarified.

II. Social Capital and Social Theory Revisited

There is a particular need for extended conceptual reflection on social capital as it relates to the public health field because none of the authors who have brought social capital to the attention of epidemiology have themselves been directly involved in developing a detailed theory behind the concept. Neither Robert Putnam (and his Harvard colleagues) nor Richard Wilkinson—nor, for that matter, John Lynch and his various collaborators—have undertaken fundamental theoretical work on the concept. The two seminal theorists of the late twentieth century were the French sociologist Pierre Bourdieu and the American sociologist James Coleman¹⁴, but they produced quite distinct formulations during the 1980s, each of which has been highly influential but neither of which is now considered to be a satisfactory or full specification (Portes 1998; Woolcock 1998; Foley and Edwards 1999; Schuller, Baron and Field 2000).

While debate over the concept continues, it seems likely that social capital is destined to become, like "class", "gender" and "race", one of the quintessential "contested concepts"

¹⁴ Jane Jacobs (1961) and Glen Loury (1977) were also important early exponents of the concept. For contributions to a detailed intellectual history of the concept of social capital, see Woolcock (1998) and most recently Farr (2002).

of the social sciences. These are concepts that are simply too politically and ideologically important for those at any point on the political spectrum to concede to a definition of the term that they do not see as squaring with their own beliefs, assumptions, and principles. Contested concepts reflect a consensus on the broad nature of the phenomenon they refer to and its great importance, without any agreed-upon closure on the terms of its definition. It is now becoming clear, after almost a decade of discussion, that "social capital" will likely join those terms mentioned above in the "contested concepts" category. Even so, it is possible to identify the contours of the debate to define social capital, which range between the poles of a narrow individualism to a thoroughgoing collectivism. The former is closer to Coleman's original approach, and its leading contemporary exponent is Robert Putnam. ¹⁵ The latter has been deployed most famously (if highly problematically) by Francis Fukuyama (1995), in which entire societies are deemed to be "high" or "low" trust. Empirical work by the economists Stephen Knack and Philip Keefer¹⁶ has also been influential in this regard. In between are particular writers who wish to include or exclude additional features such as "norms" and "trust", and those such as Evans (1996) and Szreter (2000, 2002b) who assign a prominent role to the nature and extent of state-society relations.

Putnam leans increasingly towards a relatively restricted definition of social capital as the nature and extent of *networks and associated norms of reciprocity* (Putnam 2000). As such, social capital enables individuals to gain access to resources—ideas, information, money, services, favours—and to have accurate expectations regarding the behaviour of others by virtue of their participation in relationships that are themselves the product of networks of association. This occurs as individuals elect to engage in various activities with others in order to pursue their leisure, familial, ethnic, local environmental, or wider political interests. Network scholars (e.g., Burt 1992, 2000; Lin 2001) take a somewhat orthogonal approach, arguing that social capital refers to the resources (e.g., information, social control) that flow through networks, not the network structure itself. In this sense, the "mainstream"

_

¹⁵ In his most recent formulations, however, Putnam (2000) has sharply distinguished his position from that of Coleman, who believed that, by definition, social capital could only yield positive outcomes. Putnam's view, consistent with our own position and that of Portes (1998), is that the purposes to which a given resource can be put should be analytically distinct from how it is defined. Thus knowledge ("human capital") and technology ("physical capital") can be put to purposes that most people find thoroughly detestable—e.g., building chemical weapons—but this does not, in and of itself, prevent those inputs from still being unambiguously "capital". The narrowest definitions of social capital, not surprisingly, are those of economists (e.g. Glaeser, 2001), who regard it as the property of individuals (i.e., their social skills, or capacity to negotiate solutions to joint problems).

¹⁶ For a review of the work of these authors, and others from a New Institutional Economics perspective, see Keefer and Knack (forthcoming).

social capital literature, represented paradigmatically by the work of Putnam, regards social capital as the "wires" while network theorists regard it as the "electricity".

Given the reflective and interpretative, as well as communicative, nature of humans as *persons* (see Douglas and Ney 1998), we would not see it as descriptively accurate to distinguish in this way between networks and the information they carry (though there may be analytical gains of various sorts to be derived from such a simplifying assumption, as the work of scholars such as Putnam, on the one hand, and Burt and Lin on the other hand, each exemplify). Persons continually join, expand, and leave networks as they reflect on both the instrumental and moral value of the information which they receive and transmit (or choose not to so transmit). From our perspective, it may be true that social capital requires the "wires" of networks to exist at all (and this is certainly social capital's most obviously "measurable" manifestation), but, as a resource inhering in the relationships and norms facilitated by those networks, social capital, in itself, is perhaps a little more like the "electricity" flowing through the wires. However, this is still an insufficiently precise analogy, since it is really the qualities of the messages—that is, their decoded meanings—to the participants in the networks, which is the crucial issue; and electricity remains the relatively undifferentiated analogy of an energy flow.¹⁷

In any event, the idea of social capital has made such an enduring impact on the contemporary academic research and policy agenda largely because of the attention it has focused on the role and strength of civic associations. Putnam is particularly worried that there has been a fall-off over the last two or three decades in the propensity of American individuals to join associations and participate together in a range of activities. He attributes this to the lifestyle of the two generations raised since the Second World War, who have been socialised into suburban sprawl (driveways from the road into garages and no walkways between homes) and long commutes (less time in the neighbourhood), the advent of dual

¹⁷ For those who find analogies from physics and technology helpful, we would prefer to use the analogy of light, flowing along a network of fibre-optic cables (of varying volume, multiplexity, etc). The great advantage of the light analogy is that while it is also dependent for its existence on a physical network of "wires" (cables), and while it is also a form of electrical energy, it is capable, by virtue of the spectrum of light colours, of being rendered into a myriad different kinds of message forms by senders, receivers, and transmitters in a network. This is an analogy which is sufficiently subtle and flexible to get across the descriptive reality that relationships, which constitute social capital, can take on many different qualitative forms, of which the broad categorisation argued for in this article—into bonding, bridging and linking forms of social capital (see below)—represents an analytical grouping which, we believe, is most useful for investigating the relationship between social capital and the political economy of public health.

careers (and over-working at that), and over-reliance on the television as a (vastly inferior) substitute for local social interaction (Putnam, 2000).

Putnam is additionally concerned that the kind of social capital that may be proliferating in America today is too often the "wrong" kind. This follows from an important conceptual revision within social capital theory, which occurred in the mid-1990s, when the distinction was made between (what are now popularly called) "bonding" and "bridging" social capital¹⁸. It had become apparent that not all networks of association produced norms of trust and confidence between their members that could be said to serve the best interests of the wider community, nor sometimes the best interests of some of those within the network (Portes 1998). The mafia was an obvious example of this, which Putnam (1993) had dealt with by distinguishing between networks based on "horizontal" egalitarian relations and those that were more "vertical" and hierarchical, with only the former considered to be capable of producing genuine forms of social capital. But more difficult was the case of the dangerously anti-social militia bands of contemporary U.S. society, nominally egalitarian in their associational structure, such as the Oklahoma City bombers. The "bridging" and "bonding" distinction enables scholars to discriminate between these different kinds of social capital. Bonding social capital refers to trusting and co-operative relations between members of a network who see themselves as being similar, in terms of their shared social identity. Bridging social capital, by contrast, comprises relations of respect and mutuality between persons who know that they are not alike in some socio-demographic (social identity) sense (differing by age, ethnic group, class, etc). It then becomes clear that Putnam's particular concern is the decline of "bridging" social capital in America. Indeed, there is also reason to suspect that an absolute deficit of "bonding" social capital is a much more unlikely occurrence in any developed liberal society (although it would be catastrophic if it did occur).

In recent years a further conceptual refinement has been introduced into the social capital literature (see Woolcock 1999, 2001; World Bank 2000; Szreter 2002b). This refinement seeks to incorporate a distinction among all those social relationships that are currently grouped together in the "bridging" social capital category, namely between those relationships that are indeed acting to "bridge" individuals that are otherwise more or less

¹⁸ Gitall and Vidal (1998) were officially the first to coin these terms in print, though Woolcock (1998) and others used related terms to connote a similar analytical distinction. As with the idea of social capital more

equal in terms of their status and power ("bridging" is, after all, essentially a horizontal metaphor)—e.g., ethnic traders seeking counterparts in overseas markets, participants in artistic activities, or professionals exchanging business cards at international conferences—and those that connect people across power differentials, particularly as it pertains to accessing public and private services that can only be delivered through on-going face-to-face interaction, such as classroom teaching, general practice medicine, and agricultural extension (Pritchett and Woolcock 2002). This latter distinction, called "linking" social capital, draws empirical support from a range of studies (e.g., Narayan 2000) showing that, especially in poor communities, it is the nature and extent (or lack thereof) of ties to representatives of formal institutions—e.g., bankers, law enforcement officers, social workers—that has a major bearing on their welfare.

Linking social capital as defined here could be seen as a subset—albeit an important analytical subset—of bridging social capital; as such it is *not* seeking to "add to" or "extend" the units of analysis ("states", "societies") or substantive referents ("access to services") by which social capital is defined, but rather to introduce a conceptual and empirical distinction as it pertains to individuals' overall portfolio of social relationships that is demonstrably central to shaping welfare and well-being (especially in poor communities). Accordingly, just as health outcomes can be improved by expanding the quality and quantity of bonding social capital (among friends, family and neighbours) and bridging social capital (between those from different demographic and spatial groups), so, too, is it crucial to facilitate the building of linking social capital across power differentials, especially to representatives of institutions responsible for delivering those key services that *necessarily* entail on-going discretionary personal interaction.¹⁹

This three-dimensional approach to conceptualising the dimensions of social capital resolves (at least partially) some of the earlier criticisms of social capital theory, especially as it has become manifest in public health and epidemiology. It does so by retaining a relatively parsimonious conceptual and empirical focus (on different types of networks) yet also enables a greater range of important social, economic, and political outcomes (both positive

generally, Putnam has been largely responsible for popularising and disseminating the bonding/bridging terminology.

¹⁹ Linking social capital, it should be added, like bonding and bridging, can also be put to unhappy purposes—e.g., nepotism, corruption, and suppression. To repeat, the definition of social (and any other form of) capital does not turn on the purposes, favourable or otherwise, to which it can be put.

and negative) to be encompassed, while providing a more concrete basis for policy and project responses. We believe it can provide a basis for resolving the emergent disputes between those in the "social support", "inequality", and "political economy" camps of social capital and public health, but to do so requires addressing one final theoretical issue, namely the role of the state.

As indicated above, for some authors the state itself is part of the definition of social capital (since "societies" are deemed to have social capital properties, and the state is a major component of "society"). This is not our view; the definition of social capital per se should not encompass features of the state, yet it is impossible to understand how particular networks and social structures are initiated and sustained without reference to the state. The state and its laws are a primary influence upon many of the patterns of association (or lack of them), which students of social capital and public health wish to examine and interpret. Furthermore, without explicit consideration of the relationship between the state's provision of legal, constitutional and social infrastructure for the full range of its citizens in all their variety of economic and demographic circumstances, social capital theory lacks any credible formulation of historical change. Without a theory of the way in which social relationships entered into voluntarily and formed within civil society relate to the range of permissible entitlements and capacities invested in different individuals by the state, social capital simply floats in an artificial social space. It lacks a framework for understanding the dynamic forces influencing its reproduction, formation or disintegration. This means that while social capital can be empirically studied as if it was merely a phenomenon of civil society (in order to make the job of research manageable and tractable), as Putnam prefers to do, interpreting the findings is likely to be misleading without placing them in their appropriate theoretical context.

We (Woolcock, 1998; 2001 and Szreter, 2000, 2002b) have each emphasised that the nature and extent of the relationship between the state and its citizens is a critical factor to understanding how key outcomes are attained, even though it is not itself part of the formal definition of social capital. This is, firstly, in the constitutional sense of the ways in which the state does or does not underwrite equally the entitlements and the capabilities of all citizens, regardless of gender, age, ethnic origins and creed. Secondly, it is in the moral sense of the disposition, which citizens have towards the collective, of which they form a part, which motivates their actions. This can range from outright rejection and hostility or studied

indifference to patriotic fervour or blind obedience. Somewhere in the large space between these extremes lies the central range of more healthy, balanced and mature dispositions, characterised by both informed commitment to a wider society, while retaining independence and liberty, corresponding to Evans's and Woolcock's notion of "embedded autonomy" (Evans 1995; Woolcock 1998; cf. Granovetter 1985). Thirdly, there is the issue of the state as the appropriate public arbiter of the liberal polity's collective resources. It is an absolutely essential role of the state in a liberal democratic society with a market economy that it act as the just arbitrator among all the different interest groups and parties who stake a claim to the commonwealth's collective resources. This is quite simply because the redistribution of such resources is necessary to ensure that all, including the temporarily and permanently dependent, the marginal and the unfortunate, are permitted their equal chances to participate to the full in the community's life; if this is taken seriously and not performed in a merely token manner, it is an expensive collective undertaking and one that does not get any cheaper as societies become wealthier (and, usually, older).

By now it should be clear that the sense in which "the state" is being used here is as much an idea (or set of principles) as a formal institution or agency (Dyson, 1980). It is certainly not intended that "the state" be used to denote simply "the central government", as in "Whitehall" or "Washington", the bureaucratic caricature beloved of those libertarians who offer the simplistic doctrinaire dichotomies of "the state" versus "civil society" or "the market" in place of serious thought (on this see Evans, 1996). In those societies where "the state" has come to mean only monolithic organs of the centre, it has not played an effective, vigorous or constructive force in its citizens' lives, as Soviet Moscow discovered to its cost. Thus, genuinely devolved and vigorous local self-government and regional self-government, with these bodies not acting as mere ciphers or transmission lines for centralist policies but as independent, democratic agencies with a high degree of local participation and autonomy, should be conceptualised as a vitally important component of the more complex concept of "the state" (cf. Mann 1993). This is the form of the state that is found in a society wellendowed with extensive social capital, and (importantly) in which social relations between citizens and representatives of the state are well-developed. Britain and America, but also Sweden, have been characterised by a fairly well-devolved states of this kind for much of their respective histories.

²⁰ See especially Mann's (1993, chapter 3) formulation of "the polymorphic state".

What, then, does all this mean for the debate among public health experts and comparative epidemiologists concerning the relationship of social capital to their interest in explaining and remedying inequalities of health? It means that social capital is in fact as much about highly tangible matters such as styles and forms of leadership and activism among public health workers and officials themselves—and structures of service delivery—as it is about the seemingly abstract properties of "social cohesion" among communities or social collectivities of various kinds. The practical payload for practitioners and for policy design, resulting from taking linking social capital seriously, and its ideal of an autonomous but embedded and devolved state, is in fact much more immediate and direct for the medical profession itself than might at first be appreciated. It means 'physician, heal thyself'. Lynch et al (1997) ask, "Why do poor people behave poorly?" But what also of health professionals on the front line, and also those who set the overall tone and who design the facilities, the politicians and administrators, 'behaving poorly' with respect to their fellow citizens. The import of linking and bridging social capital would indicate that an equally important question to that of material provision of adequate resources (which undoubtedly is important as Lynch et al have correctly emphasised) is to examine all the aspects of health care provision, which relate to relationships of mutual respect between citizens of different kinds and to their experience of the medical institutions. This inevitably relates to more general features of the national community in question, since it would be entirely unrealistic to expect such respectful relations to be observed uniquely in the health care sector, if they are not congruent with a similar pattern of behaviour in the wider society.

The nature of the general argument being put here can be verified by examining the long-term modern history of British society. The following historical account illustrates the way in which changes in the balance between bonding, bridging and linking social capital occurred over time in Britain during the period 1815-1914, and the very real implications this had for the nation's population health patterns during that long period. It also demonstrates the way in which the evolution of social capital is closely related to the practices and of the state, both as central and as local government, and to citizens' relationship to the multifaceted "state".

III: History Lessons—Social Capital, the State, and the Resolution of Public Health Crises in Nineteenth Century Britain

For about half a century, from the 1820s until the 1870s, during the period when the British economy and population was growing at historically unprecedented rates (historically analogous to the unprecedented rates seen in the Far East during the last two decades), the health and welfare of its industrial workforce and the quality of its urban environments were both allowed to deteriorate in the most appalling way. The booming market economy was undoubtedly generating great wealth decade after decade; there was massive surplus capital initially invested in railways and later overseas; and the real wages of the workers were definitely rising (albeit not as fast as the profits and dividends of employers and rentiers). Nevertheless the health of the industrial urban workers and their families experienced a catastrophic crisis in the second quarter of the nineteenth century. From the evidence of death registration it is clear that in the central parishes of cities such as Manchester, Liverpool and Glasgow life expectancies dropped to lower levels than had ever been seen since the time of the Black Death in the 14th century (Szreter and Mooney 1998). The independent testimony of anthropometric evidence (heights) confirms a health crisis in the second and third quarters of the nineteenth century, such that it took until the generation born just before the First World War before average heights of the working classes had returned to the levels of the generation born a century earlier, immediately after the Napoleonic Wars (Floud, Wachter and Gregory 1990).

There is therefore a major puzzle concerning human resources and welfare during this period when the world witnessed its first great economic success story. This is due to a general characteristic of economic growth, which is its disruptive nature. Disruption is the first 'D' of rapid economic growth and the only inevitable one. Disruption is environmental, social, ideological, administrative and political. The sequence of the other three 'D's of deprivation, disease and death may also follow in due course, if the challenge of disruption is not successfully met by the polity (Szreter 1997). In Britain and in many other countries, all now considered 'successful' examples of economic growth—including America, the Netherlands, France, Germany and Japan—all four 'Ds' certainly did occur during their experiences of economic transformation (Szreter 2003).

Social capital may well provide a key to explaining how and why individual industrial cities or whole industrial nations do or do not successfully rise to the disruptive challenge of economic growth and tackle, or fail to tackle the four 'Ds'. This can be demonstrated by focusing on the key, strategic health resource of water in Britain's industrial cities. The provision of sufficient water and sewerage systems to preserve human health required the effective mobilisation of political will in order to solve the problem of collective action in a market-oriented society espousing a radically liberal ideology- this was the original era of free market 'laissez-faire'. However, the early stages of rapid economic growth in Britain were associated with the formation of a particularly socially exclusive and ideologically separatist set of disparate social networks in the growing cities, each of them focused around a distinctive nonconformist congregation (dissenting from the Anglican Established Church), each with their own variant of Christian belief and their own pool of resources. Furthermore, there was much conflict of values and mutual political suspicion between the various factions of "new men" on the scene. Some were rapidly becoming large employers of other men, while many were only petty capitalists of very modest and precarious means exposed to the vagaries of the free market; both of these were certainly quite distinct from the traditional patrician power elite: the network of mainly Anglican landowners and gentry. A further source of conflict within the community was the widening division of interests between "masters" (employers) and men (wage labour factory hands), especially after the 1832 'Great Reform Act', when the former were given the vote but the latter were denied it, in a clever "divide and rule" move by the landed oligarchy who still dominated the British Parliament.

Britain's towns and cities therefore remained socially, culturally and politically fissured by conflicting and cross-cutting networks of power and association for a whole generation before and after 1832, such that in general all that these different fractions of property—some large, some small; some Anglican, some dissenting—could agree upon, was to disagree! The net result was administrative stalemate. There was plenty of social capital in this society. The trouble was that there was very little bridging and linking social capital, due to a highly negative attitude towards the state and suspicions of all kinds between different social groups (relatively few of whom were yet full citizens with voting rights). There was an abundance only of sect-based social capital of a predominantly bonding kind, with insufficient interest in bridging social capital, between denominations, between social classes, between men and women, or between different industrial regions (which virtually formed

into separate linguistic groups in Britain at this time due to the heavy regional accents which developed at this time and which still remain a marked cultural feature of Britain today).

The rapidly growing towns' physical environments were simply allowed to deteriorate as ever more workers crowded in to the money-making factories while the voting ratepayers could not agree to tax themselves to pay for the extremely expensive sanitation schemes that were needed. The central government itself was also plagued by this paralysing conflict between different ideologies and power networks of equal and opposing strength. A political ideology of laissez-faire and non-intervention by central government becomes attractive to politicians and the executive in these circumstances because it legitimates the political line of least resistance where there are too many and too powerful complex, competing voices. An experiment with central fiat was tried in the late 1840s, in response to the certain knowledge that death rates were unacceptably high in the big industrial cities. But the vitriolic popular reaction elicited by the nation's first general Public Health Act of 1848, threatening to compel towns to spend on their health infrastructure, was so powerful that central government was forced to withdraw from interference in the sacrosanct field of "local selfgovernment' (ratepayers' freedom not to tax themselves) for a further quarter century. Linking social capital also, therefore, remained a rarity in the public health and social policy field in mid-Victorian Britain.

The breakthrough did not come until the 1870s, 1880s or even 1890s and 1900s in some of the smaller towns. It was notably pioneered in the city of Birmingham through the political leadership of Joseph Chamberlain, scion of one of the city's leading screwmanufacturing dynasties, a member of the extensive and well-connected Unitarian congregation and Mayor for three consecutive years, 1872-5. After a century's rapid growth, the influence of the old landed families and their social superiority had finally all but disappeared in a city the size of Birmingham, so that a man like Chamberlain, from a third-generation industrial magnate family, was indisputably part of the unchallenged "natural" leadership of "his" city by this time. He was at the centre of a large network of these leading men of substance, joined together both by their business interests in the prosperity of their "industrial district" (the 'Black Country' around Birmingham) and through their nonconformist congregational institutional forum. Chamberlain simultaneously launched both an ideologically transformative social and moral movement and a practically innovative programme of political economy. The former is known to historians as "the civic gospel",

which was literally preached from the pulpit of the Unitarian and Congregationalist chapels in central Birmingham by leading clerics. The latter was christened by Chamberlain's opponents as the policy of 'gas and water socialism'. The former provided the imperative politically-energising moral legitimation for the attack on squalor, poverty and disease; the latter represented the fiscal magic to take away the financial pain from the city's ratepayers, at least for long enough that the city got its environmental improvements.

Some of the lessons that the British historical case may hold for relating social capital to public health practice appear to be as follows. Commercial and financial success and economic growth may not necessarily be associated with the flourishing of extensive bridging social capital and inclusionary linking social capital. Instead, only socially exclusionary and sectional networks of bonding social capital may proliferate in these circumstances, such as the active, worshipping congregations and their associated voluntary associational life. This sectional and bonding social capital can particularly manifest itself in an incapacity (and/or unwillingness) to take expensive collective decisions on the part of the community as a whole. If the true purposes and extents of networks of association are not properly evaluated in terms of their genuinely social, as opposed to exclusionary remits, there may be much confusion and conflicting results in studying the relationship between social capital, economic growth and collective political action. Societies may appear to be rich in voluntary associational life, a feature which has been emphasised by many leading social capital exponents, such as both Robert Putnam and Francis Fukuyama, yet if these associations are sectional in their goals and too exclusionary in their membership, they may impede the articulation of collective interests and the development of extensive social capital and linking social capital.

Thus, it was crucial that Chamberlain's networks were wide-ranging and multi-faceted. Although there was certainly a famous "caucus" of local Liberal party lieutenants, who worked for and with him, Chamberlain's programme was framed with a catholic social appeal in mind. In fact a key element of his successful political strategy was his capacity to offer a genuine appeal to the increasingly self-organised working class. Meanwhile his range of contacts also embraced all three key dimensions of power in his society: religion, scientific or technical knowledge, and wealth. The British historical example indicates that explicitly moral rhetoric and values (in the nineteenth century this was popularly expressed in the language of religion, applied to economic and social relationships) must be successfully

harnessed for the cause in question if bridging and linking social capital is to be mobilised in order to move an entire community towards a collective goal. Science and technology, alone, is not enough. British water engineers and public health doctors technically knew how to construct a sanitary environment for a city at least as early as the 1840s, but it took a religiously-infused moral movement to provide the collective will. It is also the case that religion seems to remain the problem child of social capital in the developed world today, too.

Thirdly, the precise details of language, rhetoric and policy are extremely important in accounting for the success of Chamberlain's programme; and, fourthly, closely related to this question of political presentation skills, he took the fiscal sensitivities of his diverse audience extremely seriously and devoted a great deal of effective attention to those problems. He addressed directly the principal objection of small ratepayers, which had blocked collective spending throughout the mid-Victorian decades of death in British cities. He devised two extremely effective responses to the powerful objections of the petty bourgeoisie. Firstly in his political rhetoric he ingeniously undercut and subverted the ratepayers' perennial call for "economy" in municipal affairs by arguing that the ratepayers were mistakenly backing false economy and that "true economy" lay in investing in their city today so as to have healthier, more skilled, more educated, more productive and more competitive workers and citizens tomorrow. As a practical man of business with a proven, enviable and unimpeachable track record (Chamberlain had been a ruthless businessman in his youth), his interpretation of "economy" commanded respect among the citizens of his town. Secondly, he used his financial genius and contacts to innovate long-term low-interest loans (on the security of the city's rates) to buy-up productive monopoly services in the city, such as gas supply and transport, thereby raising revenue from a form of indirect taxation to fund the city's social and health services and various capital projects of improvement. Between them these novel ploys quietened the anxieties of the ratepayers for a generation—long enough to get the improvements through.

What, then, are the valid, more general inferences of relevance to social capital and issues of inequality in the world's first industrial society?

Firstly, British economic history indicates that a nation which places too much emphasis on the accumulation of capital in private hands as its primary objective for

economic growth, a direct implication of "free market" growth models, may well be paying a high price in terms of bridging and linking social capital formation; and that consequently both its environmental and its human capital may suffer significantly (measured in the British historical case in the rather direct sense of the citizens' life expectancy and biological growth). Those studying in detail the relationship between social capital and economic success are now increasingly emphasising the importance of "co-production" across the false dichotomies of the "public versus private" and "market versus state" divides. Research by Chalmers Johnson, Alice Amsden, Robert Bates, Robert Wade, Peter Evans, and Judith Tendler (among others) has shown that sustainable economic success is most likely to occur through co-operative, highly negotiated engagement between 'the state' (often in the form of resource- and infrastructure- providing local government agencies), and local businesses and representative bodies of local workers and residents. The British historical case confirms this, in that Britain's industrial cities were fast becoming unworkable environments, until Chamberlain found a political means to implement forms of "co-production".

However, secondly, the British case indicates that to attempt to rely on social capital, alone, un-harnessed to effective political skills or a carefully-devised and presented political programme will not be enough. It is only when networks of association are as well-developed and as multi-faceted as Chamberlain's were, and are geared to comprehending the interests of the political majority in the community, as his were (which enabled him to *know*, understand and respect, but also deal with the fiscal sensitivities of the opponents to his schemes), that policy-makers will, indeed, have sufficiently detailed understanding and knowledge of their own society, which will enable them to formulate effective policy programmes, which genuinely facilitate (rather than merely attempting to "lead") the wishes and interest of the majority of the citizens. This is an example of Woolcock's (1998) emphasis on embedded autonomy and the importance of local government as the responsive and accountable 'state' in action.

This leads on, naturally, to a third important issue: political participation. Chamberlain's new politics was developed directly in response to the opportunities for a more democratic and participatory urban politics opened up by the British state's belated enfranchisement between 1867 and 1884 of a section of the working classes (about half initially; universal adult male franchise did not arrive until 1918 and female until 1928). Many contemporary developing societies and communities exhibit extremely poor resources

in terms of civic political participation, with some important examples such as China formally channelling all political energy through the narrow nexus of the official Party apparatus, while others, such as India, make a mockery of their formally democratic constitutions because of the impoverished and socially-excluded nature of vast tracts of their citizenry, notably rural peasants and, especially, females. Extensive and bridging social capital cannot possibly flourish in these circumstances, where the basic political and institutional ground-rules for citizen participation in the political processes are lacking.

The state is at its most effective in both facilitating and benefiting from social capital, when it is operating in a highly devolved form, something we principally associate with the institutions of local government. Chamberlain showed that local government, when sufficiently politically responsive to the interests of all groups in the local community, is the most obvious and effective ally of social capital. One danger in the social capital literature has been an over-emphasis on voluntary associations, alone, as the key to healthy social capital; and a tendency to cast 'the state' only in the negative terms of an impersonal 'big brother' figure. The British historical case indicates that voluntary associations of citizens, alone, can have ambiguous consequences for a community's social capital and its public health. There is a crucial facilitating role for the state, for elected, representative and dynamic local government agencies, and for politics and ideas in the formation of social capital.

IV. Conclusion

The empirical base of the general social capital story—and the veritable explosion of interest accompanying it across the social and medical sciences—rests in no small part on applied research in the fields of public health and epidemiology. As such, the debates taking place within these fields deserve special attention, and are instructive for broader conceptual and policy deliberations. A central theme of this paper is that the current (always strident, sometimes acrimonious) disagreements among the major protagonists in the field of social capital and public health manifest themselves as methodological differences regarding the efficacy of power (access to resources), inequality, or social support networks as the primary determinant of health outcomes, but that they are in fact better understood as products of an ill-specified (or at least less than comprehensive) theory of social capital. Indeed, closer attention to the current theoretical developments—themselves a product of close engagement with a range of empirical studies—reveals a conceptual framework that provides a basis for

resolving the current three-way debate, one that is also consistent with rich historical evidence regarding the emergence and resolution of major public crises in nineteenth century Britain.

This framework centres on an analytical distinction between three kinds of social relationships in which individuals are engaged, and, crucially, the nature of the state-society relations in which they are inherently embedded. It relies on the distinction between bonding, bridging and linking forms of social capital. A "healthy society", capable of consistently promoting the population health of all its citizens, will be characterised by a balanced distribution of a relatively rich endowment of all three of these forms of social capital. In these circumstances it will be constituted by a vigorous, open and politically-conscious civic society of mutually-respecting and highly varied (in terms of their social identities) citizens and their many associations in active dialogue and negotiation (there are certain to be conflicts requiring negotiation) with both their elected local governments and their central state. Without such a health-promoting balanced development of all three forms of social capital, however, social capital, in any of its three forms, may easily be used as a resource for exclusionary and sectional interests, which may have an ambivalent or even negative consequence for the overall population health of society. It is an entirely contingent question of politics, ideology and historical events whether or not the resources of social capital which exist in any society will take on health-promoting or health-degrading net effects.

We would therefore wish to emphasise, in conclusion, that this question of political and ideological contingency is crucial. Social capital is not a magic bullet for improving society. It is a useful concept which focuses our attention on an important set of resources, inhering in relationships, networks and associations, which have previously been given insufficient attention in the social sciences and health literature. This is probably partly because they are not easy to categorise, study and measure in their effects. Advances are now being made but this will continue to be a site for "work in progress" for some time; it is important to remember that it took several decades of patient methodological work for the concept of human capital to be accepted as a tractable one by most economists, as it is today.

Finally, one highly political and ideological point which should be made is that it is a particularly ironic misconception entertained in some quarters that the social capital approach to both the promotion of population health and also to the improvement of public services in

general in a democratic society necessarily might represent a "cheap" option and might be lacking in political radicalism. Social capital places great emphasis on both the quality and the quantity of relationships between citizens. It also places great emphasis on whether or not these relationships are founded on mutual respect between persons, differentiated either horizontally by their varying social identities or vertically by their access to different levels of power. The social capital perspective therefore informs us that if we normatively approve of the goal of enhancing population health, we cannot achieve this through material inputs, alone, or simply through "technological fixes", whether "imposed" or magnaminously "granted" by those with superior resources. Material assistance will almost certainly be necessary in most contexts; but equally important will be attention to the quality and quantity of relationships which carry any material or technological transfers. Increasingly in the public services and in developed societies in general it is in fact these precious resources of human relationships, time, and effort—labour, to use an old fashioned word—which are increasingly expensive to deploy, rather than mere material resources. Taking social capital seriously in the context of health promotion in rich or poor countries is therefore not in any sense a cheap option; it is an additional dimension—and one necessarily requiring additional costs—which has been too neglected in the past.

References

- Alesina, Alberto and Eliana La Ferrara (2001) "Preferences for redistribution in the Land of Opportunities" Cambridge, MA: NBER Working Paper 8267
- Baum, F. (1997) "Public health and civil society: understanding and valuing the connection" *Australian and New Zealand Journal of Public Health* 21(7): 673-675
- Baum, F. (1999) "Social capital: is it good for your health? Issues for a public health agenda" *Journal of Epidemiology and Community Health* 53(4): 195-196
- Berkman, Lisa (2000) "Social support, social networks, social cohesion and health" *Social Work in Health Care* 31(2): 3-14
- Berkman, Lisa and SL Syme (1979) "Social networks, host resistance and mortality: a nine year follow-up study of Alameda County residents" *American Journal of Epidemiology* 109: 186-204
- Berkman, Lisa (1995) "The role of social relations in health promotion" *Psychosomatic Medicine* 57: 245-54
- Berkman, Lisa and Thomas Glass (2000) "Social integration, social networks, social support and health" in Lisa Berkman and Ichiro Kawachi (eds) *Social Epidemiology* New York: Oxford University Press, pp. 137-173
- Berkman, Lisa, Thomas Glass, Ian Brissette and Teresa E. Seeman (2000) "From social integration to health: Durkheim in the new millennium" *Social Science and Medicine* 51(6): 843-857
- Boudieu, Pierre (1986 [1983]) "The forms of capital", in John Richardson (ed.) *Handbook of Theory and Research for the Sociology of Education* Westport, CT: Greenwood Press
- Britt, B. K. and A. V. D. Roux (2002) "Community trust: A multi-level analysis of county social capital, income inequality, and individual health" <u>Journal of General Internal</u>
 Medicine 17: 152
- Brown, George W. and Tirril Harris (1978) *Social Origins of Depression: A Study of Psychiatric Disorder in Women* London: Tavistock Publications.
- Brunner, E. and Michael Marmot (1999) "Social organization, stress, and health" in Michael Marmot and Richard Wilkinson (eds.) *Social Determinants of Health* New York: Oxford University Press, pp. 17-43
- Bullers, S. (2000) "The mediating role of perceived control in the relationship between social ties and depressive symptoms" *Women Health* 31: 97-116
- Burt, Ronald (1992) Structural Holes Cambridge, MA: Harvard University Press

- Burt, Ronald (2000) "The network structure of social capital", in Robert Sutton and Barry Shaw (eds.) *Research in Organizational Behavior* Greenwich, CT: JAI Press
- Calloway, M. O. and T. M. Nadlicki (2000) "Research and learning: using theories of social capital to guide health policy and evaluation" Southern Sociological Society
- Campbell, Cathy (2000) "Social Capital and Health: Contextualizing Health Promotion Within Local Community Networks" in S. Baron, J. Field and T. Schuller (eds.) *Social Capital: Critical Perspectives* Oxford: Oxford University Press, pp. 182-196
- Campbell, Cathy and P. Aggleton (1999) "Young people's sexual health: a framework for policy debate" *Canadian Journal of Human Sexuality* 8(4): 249-62
- Campbell, Cathy and P. Gillies (2001) "Conceptualizing 'social capital' for health promotion in small local communities: a micro-qualitative study" *Journal of Community and Applied Social Psychology* 11(5): 329-46
- Campbell, Cathy and S. Jovchelovitch (2000) "Health, community and development: towards a social psychology of participation" *Journal of Community and Applied Social Psychology* 10(4): 255-270
- Cattell, V. (2001) "Poor people, poor places, and poor health: the mediating role of social networks and social capital" *Social Science and Medicine* 52(10): 1501-16
- Coburn, David (2000) "Income inequality, social cohesion and the health status of populations: the role of neoliberalism" *Social Science and Medicine* 51(1): 139-150
- Coleman, James (1988) "Social capital in the creation of human capital" *American Journal of Sociology* 94: S95-120
- Coleman, James (1990) Foundations of Social Theory Cambridge, MA: Harvard University Press
- Cooper, H., S. Arber, et al. (1999) *The Influence of Social Support and Social Capital on Health* London: Health Education Authority
- Cullen, Michelle and Harvey Whiteford (2001) "The interrelations of social capital with health and mental health" Commonwealth of Australia: National Mental Health Strategy, Discussion Paper. Available at: http://www.health.gov.au/hsdd/mentalhe/pdf/inter.pdf
- Davey Smith, George (1996) "Income inequality and mortality: why are they related? Income inequality goes hand in hand with underinvestment in human resources" *British Medical Journal* 312: 987-88
- Douglas, M, and Ney S (1998) *Missing Persons: A Critique of Personhood in the Social Sciences* Berkeley and Los Angeles: University of California Press

- Drukker, M., S. L. Buka, et al. (2002) "Neighbourhood social capital and children's general health in different cultural settings" *Acta Psychiatrica Scandinavica* 105: 93
- Duncan, Cynthia (1999) Worlds Apart: Why Poverty Persists in Rural America New Haven: Yale University Press
- Dyson, Kenneth H.F. (1980) *The State Tradition in Western Europe: A Study of an Idea and Institution* Oxford: Robertson
- Eckersley, Richard, Jane Dixon and Bob Douglas (eds.) (2001) *The Social Origins of Health and Well-Being* Cambridge: Cambridge University Press
- Ellaway, A. and S. Macintyre (2000) "Social capital and self-rated health: support for a contextual mechanism" *American Journal of Public Health* 90(6): 988-988
- Evans, Peter (1996) "Government action, social capital and development: reviewing the evidence on synergy" *World Development* 24(6): 1119-1132
- Farr, James (2002) "The secret history of social capital" Mimeo, Department of Government, University of Minnesota
- Fine, Ben (2000) Social Capital Versus Social Theory: Political Economy and Social Science at the Turn of the Millennium London: Routledge
- Floud, Roderick, Kenneth Wachter, and Annabel Gregory (1990) *Height, Health and History: Nutritional Status in the United Kingdom, 1750-1980* Cambridge: Cambridge University Press
- Foley, Michael and Bob Edwards (1999) "Is it time to disinvest in social capital?" *Journal of Public Policy* 19: 141-73
- Forbes, A. and S. P. Wainwright (2001) "On the methodological, theoretical and philosophical context of health inequalities research: a critique" *Social Science and Medicine* 53(6): 801-16
- Fukuyama, Francis (1995) *Trust: The Social Virtues and the Creation of Prosperity* New York: Free Press
- Gibbon, M. (2000) "Partnerships for health: a way of working with women's groups to improve community health in rural Nepal" *IDS Bulletin* 31(1): 57-63
- Gitall, Avis and Ross Vidal (1998) *Community Organizing: Building Social Capital as a Development Strategy* Thousand Oaks, CA: Sage Publications
- Glaeser, Edward (2001) "The formation of social capital" *Canadian Journal of Policy Research* 2(1): 34-40
- Gorski, P. A. (2000) "Caring relationships: An investment in health?" *Public Health Reports* 115(2-3): 144-150

- Granovetter, Mark (1985) "Economic action and social structure: the problem of embeddedness" *American Journal of Sociology* 91: 481-510
- Jacobs, Jane (1961) The Life and Death of Great American Cities New York: Random House
- Hagan, J., Merkens, H., and Boehnke, K. (1995) "Delinquency and disdain: social capital and the control of right-wing extremism among east and west Berlin youth" *American Journal of Sociology* 100(4): 1028-52
- Harriss, John (2002) *De-politicizing Development: The World Bank and Social Capital* London: Anthem Press
- Harpham, Trudy, Emma Grant and Elizabeth Thomas (2002) "Measuring social capital within health surveys: key issues" *Health Policy and Planning* 17(1): 106-11
- Hawe, Penelope and Alan Shiell (2000) "Social capital and health promotion: a review" *Social Science and Medicine* 51(6): 871-85
- Helliwell, John (2002) "How's life? Combining individual and national variables to explain subjective well-being" Cambridge, MA: NBER Working Paper No. 9065
- House, James S, Landis K.R., and Umberson, D. (1988) "Social relationships and health" *Science* 241: 540-45.
- Howard, D. E. (2001) "How alienation and declines in social capital are affecting adolescent well-being" *Journal of Adolescent Health*
- Hyde, J. (1999) "Health system reform and social capital" Development 42(4): 49-53
- Kabir, M. A., A. Rahman, et al. (2000) "Sickness among the urban poor: a barrier to livelihood security" *Journal of International Development* 12(5): 707-722
- Kaplan, George (1999) "Part III Summary: What is the role of the social environment in understanding inequalities in health? *Annals of the New York Academy of Science* 896: 116-120.
- Kawachi, Ichiro (1999) "Social capital and community effects on population and individual health" *Socioeconomic Status and Health in Industrial Nations* 896: 120-130
- Kawachi, Ichiro (2001) "Social capital for health and human development" *Development* 44(1): 31-35
- Kawachi, Ichiro and Bruce Kennedy (1999) "Income inequality and health: pathways and mechanisms" *Health Services Research* 34(1): 215-27
- Kawachi, Ichiro and Lisa Berkman (2001) "Social ties and mental health" *Journal of Urban Health-Bulletin of the New York Academy of Medicine* 78(3): 458-467
- Kawachi, Ichiro, Bruce Kennedy, et al. (1997) "Social capital, income inequality, and mortality" *American Journal of Public Health* 87(9): 1491-1498

- Kawachi, Ichiro, Bruce Kennedy, and R. Glass (1999) "Social capital and self-rated health: a contextual analysis" *American Journal of Public Health* 89: 1187-93
- Kawachi, Ichiro, and Lisa Berkman (2000) "Social cohesion, social capital, and health" in Lisa Berkman and Ichiro Kawachi (eds.) *Social Epidemiology* New York: Oxford University Press, pp. 174-190
- Keating, D. P. (2000) "Social capital and developmental health: Making the connection" Journal of Developmental and Behavioral Pediatrics 21(1): 50-52
- Keefer, Philip and Stephen Knack (forthcoming) "Social capital and the New Institutional Economics", in Claude Menard and Mary Shirley (eds.) *Handbook of the New Institutional Economics* New York: Kluwer Academic Press
- Krugman, Paul (2002) "For richer" New York Times Magazine, October 20.
- Kunitz, Stephen (2001) "Accounts of social capital: the mixed health effects of personal communities and voluntary groups" in David A. Leon and Gill Walt (eds.) *Poverty*, *Inequality and Health: An International Perspective* New York: Oxford University Press
- Leeder, S. and A. Dominello (1999) "Social capital and its relevance to health and family policy" *Australian and New Zealand Journal of Public Health* 23(4): 424-429
- Lennartsson, C. (1999) "Social ties and health among the very old in Sweden" <u>Research on Aging</u> (September)
- Lin, Nan (2001) *Social Capital: A Theory of Social Structure and Action* New York: Cambridge University Press
- Lin, Nan, X. Ye, et al. (1999) "Social support and depressed mood: a structural analysis" Journal of Health and Social Behavior 40: 344-59
- Lindstrom, M., B. S. Hanson, et al. (2000) "Socio-economic differences in smoking cessation: the role of social participation" *Scandinavian Journal of Public Health* 28(3): 200-8
- Lipsky, Michael (1980) Street-level Bureaucracy New York: Russell Sage
- Lomas, J. (1998) "Social capital and health: implications for public health and epidemiology" Social Science and Medicine 47(9): 1181-88
- Loury, Glen (1977) "A dynamic theory of racial income differences", in P.A. Wallace and A. LeMund (eds.) *Women, Minorities, and Employment Discrimination* Lexington, MA: Lexington Books
- Lynch, John (2000) "Income inequality and health: expanding the debate" *Social Science and Medicine* 51(7): 1001-1005

- Lynch JW, Kaplan GA, and Salonen JT (1997) "Why do poor people behave poorly? Variation in adult health behaviours and psychosocial characteristics by stages of the socioeconomic lifecourse" *Social Science and Medicine* 44(6): 809-19
- Lynch, John, George Davey Smith, George Kaplan, and James House (2000) "Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions" *British Medical Journal* 320: 1200-04
- Lynch, John, George Davey Smith, Marianne Hillemeier, Mary Shaw, Trivellore Raghunathan, George Kaplan (2001) "Income inequality, the psychosocial environment, and health: comparisons of wealthy nations" *The Lancet* 358 (9277): 194-200
- Lynch, John, P. Due, Carles Muntaner, and George Davey Smith (2000) "Social capital is it a good investment strategy for public health?" *Journal of Epidemiology and Community Health* 54(6): 404-408
- Macinko, James and Barbara Starfield (2001) "The utility of social capital in research on health determinants" *Milbank Quarterly* 79(3): 387-427
- Malone, M. (2001) "The health experience of Irish people in a North West London 'community saved'" *Community, Work & Family* 4(2): 195-213
- Mann, Michael (1993) *The Sources of Social Power. Vol II. The Rise of Classes and Nation-States, 1760-1914* Cambridge: Cambridge University Press
- McCulloch, A. (2001) "Social environments and health: cross sectional national survey" *British Medical Journal* 323(7306): 208-9
- Moodie, R., C. Borthwick, et al. (2000) "Health promotion in South-East Asia: Indonesia, DPR Korea, Thailand, the Maldives and Myanmar" *Health Promotion International* 15(3): 249-57
- Morrow, V. (1999) "Conceptualising social capital in relation to the well-being of children and young people: a critical review" *Sociological Review* 47(4): 744-65
- Muntaner, Carles, John Lynch, and George Davy-Smith (2000) "Social capital and the third way in public health" *Critical Public Health* 10(2): 107-24
- Muntaner, Carles, John Lynch, and George Davy-Smith (2001) "Social capital, disorganized communities, and the third way: Understanding the retreat from structural inequalities in epidemiology and public health" *International Journal of Health Services* 31(2): 213-237
- Murray, M. (2000) "Social capital formation and healthy communities: insights from the Colorado Healthy Communities Initiative" *Community Development Journal* 35(2): 99-108
- Narayan, Deepa (2000) Voices of the Poor New York: Oxford University Press

- Noe, G. F. (2001) "Depression and social capital: the independent and joint effects of religion and financial status on depression" <u>Southern Sociological Society</u>
- OECD (2001) The Well-Being of Nations Paris: OECD
- Oenninx, B., T. v. Tilburg, et al. (1999) "Social network, social support, and loneliness in older persons with different chronic diseases" *Journal of Aging and Health* (May)
- Omran, A.R. (1971) "The epidemiologic transition: a theory of the epidemiology of population change" *Milbank Memorial Fund Quarterly* 49: 509-38
- Ong, B. N. (2000) "Assessing the context for partnerships between communities and the National Health Service in England" *Critical Public Health* 10(3): 343-351
- Popay, J. (2000) "Social capital: the role of narrative and historical research" *Journal of Epidemiology and Community Health* 54(6): 401-401
- Pope, J. (2000) "Social capital should not be incorporated into surveys designed to monitor population health" *Australian and New Zealand Journal of Public Health* 24(3): 341-341
- Portes, Alejandro (1998) "Social capital: its origins and applications in modern sociology" Annual Review of Sociology 24: 1-24
- Pritchett, Lant and Michael Woolcock (2002) "Solutions when *the* solution is the problem: arraying the disarray in development" Washington, DC: Center for Global Development, Working Paper No. 10
- Putnam, Robert (1993) Making Democracy Work: Civic Traditions in Modern Italy Princeton, NJ: Princeton University Press
- Putnam, Robert (2000) Bowling Alone: The Collapse and Revival of American Community New York: Simon and Schuster
- Raphael, D., R. Renwick, et al. (2001) "Making the links between community structure and individual well-being: community quality of life in Riverdale, Toronto, Canada" *Health & Place* 7(3): 179-196
- Rico, A., M. Fraile, et al. (1998) "Regional decentralization of health policy in Spain: social capital does not tell the whole story" *West European Politics* (October): 180-199
- Rose, Richard (2000) "How much does social capital add to individual health? A survey study of Russians" *Social Science and Medicine* 51(9): 1421-35
- Rosenheck, R., J. Morrissey, et al. (2001) "Service delivery and community: social capital, service systems integration, and outcomes among homeless persons with severe mental illness" *Health Services Research* 36(4): 691-710

- Ross NA, Wolfson MC, Dunn JR, Berthelot J-M, Kaplan GA, Lynch JW (2000) "Income inequality and mortality in Canada and United States: A cross-sectional assessment using Census data and vital statistics" *British Medical Journal* 320: 898-902
- Sampson, Robert, Jeffrey Morenhoff and Felton Earls (1999) "Beyond social capital: spatial dynamics of collective efficacy for children" *American Sociological Review* 64(5): 633-60
- Schuller, Tom, Stephen Baron, and John Field (2001) "Social capital: a review and critique", in Stephen Baron, John Field and Tom Schuller (eds.) *Social Capital: Critical Perspectives* Oxford: Oxford University Press, pp. 1-38
- Seeman, Teresa E. (1996) "Social ties and health: the benefits of social integration' *Annual of Epidemiology* 6: 442-51
- Sevigny, B., J. P. Belanger, et al. (1999) "Social capital and improvement in health and wellbeing of populations" *Canadian Journal of Public Health* 90(6): 369-371
- Siegrist, J. (2002) "Social capital and health" Gesundheitswesen 64(4): 189-192
- Smith, N., L. B. Littlejohns, et al. (2001) "Shaking out the cobwebs: insights into community capacity and its relation to health outcomes" *Community Development Journal* 36(1): 30-41
- Steptoe, A. and P. J. Feldman (2001) "Neighborhood problems as sources of chronic stress: Development of a measure of neighborhood problems, and associations with socioeconomic status and health" *Annals of Behavioral Medicine* 23(3): 177-185
- Subramanian, S. V., Ichiro Kawachi, et al. (2001) "Does the state you live in make a difference? Multilevel analysis of self-rated health in the US" *Social Science and Medicine* 53(1): 9-19
- Szreter, Simon (1997) "Economic growth, disruption, deprivation, disease and death: on the importance of the politics of public health" *Population & Development Review* 23: 693-728
- Szreter, Simon and G. Mooney (1998) "Urbanisation, mortality and the standard of living debate: new estimates of the expectation of life at birth in nineteenth-century British cities" *Economic History Review* 50: 84-112
- Szreter, Simon (2000) "Social capital, the economy and education in historical perspective", in Stephen Baron, John Field and Tom Schuller (eds), *Social Capital: Critical Perspectives* Oxford: Oxford University Press, pp. 56-77
- Szreter, Simon (2002a) "Health, class, place, and politics: social capital and collective provision in Britain" *Contemporary British History* 16(3): 27-57

- Szreter, Simon (2002b) "The state of social capital: bringing power, politics, and history back in" *Theory and Society* 31: 573-621
- Szreter, Simon (2003) "The Population Health approach in historical perspective" *American Journal of Public Health* (forthcoming)
- Veenstra, Gerry (2001) "Social capital and health" *Canadian Journal of Policy Research* 2(1): 72-81
- Veenstra, Gerry (2002) "Social capital and health (plus wealth, income inequality and regional health governance)" *Social Science and Medicine* 54(6): 849-868
- Wakefield, S. E. L., S. J. Elliott, et al. (2001) "Environmental risk and (re)action: air quality, health, and civic involvement in an urban industrial neighbourhood" *Health & Place* 7(3): 163-177
- Weitzman, E. R. and Ichiaro Kawachi (2000) "Giving means receiving: the protective effect of social capital on binge drinking on college campuses" *American Journal of Public Health* 90(12): 1936-9
- Whitehead, Margaret and Finn Diderichsen (2001) "Social capital and health: tip-toeing through the minefield of evidence" *The Lancet* 358(21): 165-166
- Wilkinson, Richard (ed.) (1986) Class and Health London: Tavistock Publications
- Wilkinson, Richard (1996) *Unhealthy Societies: The Afflictions of Inequality* London: Routledge
- Wilkinson, Richard (1999a) "Putting the picture together: prosperity, redistribution, health and welfare", in Michael Marmot and Richard Wilkinson (eds.) *Social Determinants of Health* Oxford: Oxford University Press, pp. 256-74
- Wilkinson, Richard (1999b) "Income inequality, social cohesion and health: clarifying the theory. A reply to Muntaner and Lynch" *International Journal of Health Services* 29: 525-43
- Wilkinson, Richard (2000a) "Deeper than "neoliberalism": a reply to David Coburn" *Social Science and Medicine* 51(7): 997-1000
- Wilkinson, Richard (2000b) "Inequality and the social environment: a reply to Lynch et al" *Journal of Epidemiology and Community Health* 54: 411-13.
- Wilkinson, Richard (2001) *Mind the Gap: Hierarchies, Health, and Human Evolution* New Haven: Yale University Press
- Wolfson M, Kaplan GA, Lynch JW, Ross N, and Backlund E. (1999) "The relationship between income inequality and mortality is not a statistical artefact" *British Medical Journal* 319: 953-57

- Woolcock, Michael (1998) "Social capital and economic development: toward a theoretical synthesis and policy framework" *Theory and Society* 27(2): 151-208
- Woolcock, Michael (1999) "Managing risk, change, and opportunity in developing countries: the role of social capital", in Gustav Ranis (ed.) *Dimensions of Development* New Haven: Yale Center for International and Area Studies
- Woolcock, Michael (2001) "The place of social capital in understanding social and economic outcomes" *Canadian Journal of Policy Research* 2(1): 11-17
- Woolcock, Michael and Deepa Narayan (2000) "Social capital: implications for development theory, research, and policy" *World Bank Research Observer* 15(2): 225-49
- World Bank (2000) World Development Report 2000/01: Attacking Poverty New York: Oxford University Press