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Editorial

Placing health in context

While there is a long history of interest in place and health in the geography of health, in the past decade or more a number of disciplines have witnessed an increasing interest in the 'effect' that attributes of collective social organization and the local built environment at neighbourhood scale have on a variety of social outcomes, including health, health behaviours, early child development, youth delinquency, crime and deviance, political behaviour, employment outcomes and other economic opportunities. The argument has been that there are contextual processes operating at the scale of whole communities or geographical areas, which are important for health and health inequality (Macintyre, Maciver, & Sooman, 1993). This kind of research has sought to understand how, why and to what extent features of the local social and physical environment, shape individual outcomes over and above the effect of individual-level factors. Attention has focused for example, on collective social organization, the local built environment and differences between areas in facilities and services (Diez-Roux, 2001). There have been significant methodological innovations that have had an enormous impact on empirical research on the effect of contexts on health, including techniques such as multi-level modelling and greater attention to context in qualitative studies.

This perspective on health variation is now starting to be subject to critical and sophisticated debate. Several authors have enumerated many of the problems and challenges of neighbourhood contexts and health research, but researchers are now seeking more theoretically and methodologically advanced approaches to address the unanswered questions about the importance of social and geographical context for health variation (Diez-Roux, 2004). In this special issue we have assembled a number of papers that demonstrate the latest developments in research around this theme. It was our hope to assemble a group of papers that point us in new directions for placing health research in context, and I believe we have been successful in doing so.

The issue begins with a critical analysis of the notions of space and place that have been predominant in this field of work. In a careful argument, Cummins, Curtis, Diez-Roux, & Macintyre (2007) adopt a relational perspective to place and health, but go well beyond previous attempts to articulate such a perspective. Specifically, they argue for the importance of considering place 'on the ground' as being produced by multiple scales of contextual influence, thinking of places as dynamic and fluid, with different social meanings and importance for different people and most importantly, maintained by power relations at varying spatial scales. While many of these issues are well established in human geography, they have been underdeveloped in most of the recent flurry of research on the effects of places on health. The paper by Bernard et al. (2007) also makes a significant contribution to the theoretical development of place and health, again drawing on a relational notion of place, but informed by the importance of 'informal reciprocity' in the provision, acquisition and exchange of health-related resources, among people occupying common residential areas.

Two empirical papers in this issue use multi-level techniques for the investigation of neighbourhood effects on health. Morenoff et al. (2007) investigate neighbourhood effects on social disparities in hypertension prevalence, awareness, treatment, and control, using data of a quality that is unusual

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in studies of context and health. They find that there are neighbourhood effects on race/ethnic and educational disparities in hypertension prevalence and awareness of hypertension, but no neighbourhood effects on hypertension control or treatment. Stockdale et al. (2007) investigate the buffering effects of neighbourhood environments on alcohol and drug use and mental disorders by examining cross-level interactions between individuals and their neighbourhood of residence in a large US sample. This is a promising line of inquiry; few previous studies have examined buffering effects of neighbourhoods. They find that individuals exposed to violence, who also live in high-crime neighbourhoods, are vulnerable to mental disorders and individuals who are socially isolated and live in neighbourhoods with low social support are also vulnerable.

A shortcoming of much empirical research on context, place and health has been inadequate measures of context. The paper by Stafford et al. (2007) addresses this shortcoming head on by developing a comprehensive set of measures of neighbourhood context, and demonstrating how features such as access to supermarkets and swimming pools are associated with lower levels of obesity. Frank, Saelens, Powell, & Chapman (2007) are also successful in tackling the problem of measuring context, in this case focusing on walkability in the built environment in Atlanta. They also go a step further in addressing the criticism levelled by some at research on neighbourhoods and health, namely that relationships between neighbourhoods and health are confounded by the residential choices and preferences of households, by measuring preference for several different neighbourhood types and including it in their analysis. They found a sizeable mismatch between the individuals' preference for a walkable neighbourhood and the actual walkability of their neighbourhood.

One of the tantalizing features of research on context and health is that it may lead to more effective interventions to improve health and reduce health disparities. Traditional behaviouralist perspectives, which saw health behaviours and other determinants of health as simple individual attributes, have now been eclipsed by a perspective that emphasizes human behaviour and activity as significantly influenced by contextual factors. It follows from this perspective that changes in context may produce changes in the risk profile for whole populations, rather than just for the people who receive and are successful with individually-oriented interventions. In their paper, Fong Chiu and West (2007) take a particularly inventive approach to the question of context-based interventions by investigating whether community health educators (CHEs) are effective in becoming embedded in local social networks, which would be expected to make their activities more effective. Because their work is so original and exploratory in nature, the results are tentative. Nevertheless, they strongly suggest a promising line of inquiry. Another appealing concept is that transformations of the built environment, like that which occurs with urban regeneration of public housing developments, can improve the health of residents. Of course there are multiple, complexly related causal pathways by which such a significant change in the built environment can affect health. Durie and Wyatt (2007) explored how complexity theory may provide a guide for conducting complex and multifarious interventions in the environment. The value of complexity theory, they argue, is that it directs the focus of inquiry away from individually based analysis, towards the influence of context on interventions. This focus, and their paper more generally, draws attention to the importance of contextual factors in the potential adaptation of interventions from one place to another.

The final three papers in this issue address aspects of the geography of relative inequality and health. Each takes a very different approach, but all address questions of scale and proximity in examining the relationship between relative inequality and health. Using exploratory data analysis (ESDA), Sridharan, Tunstall, Lawder, & Mitchell (2007) investigate the relationship between spatial clustering of deprivation and elevated mortality in Scottish postcode sectors. The issue at stake in their analysis is not only whether there is a relationship between deprivation and mortality in individual postcode sectors, but also whether *the spatial patterning* of deprivation affects mortality. Their findings suggest that it does, and that there may be a fundamental difference between 'islands' of deprived areas, surrounded by wealthier communities,and those that are metaphorically 'land-locked' by neighbouring deprived areas. Their work offers an important new direction for research in this area, which has, to date, been relatively silent on the importance of contiguity and spatial patterning of deprivation for health disparities.

Cox, Boyle, Davey, Feng, & Morris (2007), take a slightly different approach to investigating a similar phenomenon of geographical clustering of small areas with similar population risk factors. One of the important aspects of the literature on relative inequality and health has been the debate surrounding the relative importance of psychosocial and neo-material factors. The former refer to ill effects of the meanings that individuals and groups attribute to their relative socio-economic position, while the latter refers to the difference in access to material resources that are experienced by people at different levels of relative socio-economic position. Cox et al. (2007) test two opposing hypotheses about the relationship between deprivation, the disparity in deprivation between neighbouring small areas, and the incidence of Type 2 diabetes in Scotland. First, the 'psycho-social hypothesis' suggests that negative comparisons made by individuals in relation to those who surround them may lead to chronic low-level stress via psycho-social pathways, the physiological effects of which may promote diabetes. They find that deprivation is associated with Type 2 diabetes, but deprived areas surrounded by less deprived areas had lower diabetes incidence than expected, while less deprived areas surrounded by relatively more deprived areas had higher diabetes incidence. Their results are consistent with what Cox, et al call a 'pull-up/pull-down model' but do not support their formulation of a 'psycho-social' hypothesis at the level of very small geographic areas. Their results, in other words, are consistent with those of Sridharan et al. (2007).

The final paper in this Special Issue by Wilkinson and Pickett (2007) also investigates the psycho-social aspects of relative inequality. Their perspective on the geography of relative inequality and health is quite different, though no less compelling, than that of Cox and colleagues. Working at the level of whole societies (operationally defined as nation-states), Wilkinson and Pickett (2007) review the evidence on the relationship between income distribution and health, and appeal to evidence on other health and social indicators to make an argument for the importance of societal level psycho-social factors in the production of population health. Specifically, they present new evidence of how between-country differences in processes of social differentiation are associated with differences in health and a variety of other social problems. For Wilkinson and Pickett, the geography of relative inequality must consider societal-level processes of social differentiation because the processes observable at small area levels are only partial views of such processes. They demonstrate that larger income differences appear to make social mobility less likely and processes of social differentiation less tractable and this translates into consistent effects on population-level rates of mortality, morbidity, crime, educational performance and a host of other social indicators. Finally, without discounting the potential importance of local status hierarchies on health, they make a strong argument for the importance of national-level structural factors in producing societal-level status hierarchies and health differences both within and between countries.

The collection of papers presented here that sow the seeds of debate, for example, on the role of neighbourhood preference in understanding associations between context and health, is a potential lightning rod. Similarly, the use of complexity theory, given its novelty and its dissimilarity to the conventional 'black box' approach of investigating the effects of interventions should also spark responses in the literature. All of the papers in this Special Issue point us in compelling new directions for research that places health in context. We hope that this special issue sparks debate and new lines of inquiry and look forward to its future repercussions.

To close this brief overview of the Issue, we would like to thank all of the authors for their patience with the review process and their willingness to constructively engage with the comments provided by reviewers and the editors, and the anonymous reviewers who provided very constructive and thoughtful comments to help refine the papers included here. We would also like to thank those authors (more than 140) who sent us proposals for papers to be included. If we could have accepted them all, it would have filled the pages of half a year's Issues of *Social Science & Medicine*. The response to our invitation for paper proposals only underscores the importance and the level of interest in this compelling area of research. Finally, we would also like to thank Sarah Curtis, the Senior Editor for Medical Geography at *Social Science and Medicine*, Ellen Annandale, the Editor-in-Chief, and Ryan Mowat, the Managing Editor, for their oversight of the review process and Sarah Deedat, the Editorial Assistant, for managing the submissions and reviews. We believe that the final product was well worth the efforts of all involved.

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