

Practicing New Economic Geographies? Some Methodological Considerations

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Abstract

Practicing new economic geographies entails a critical re-evaluation of existing research methodologies. In this paper, I examine some methodological implications of the recent refiguring of the "economic" in economic geography. Some key features of new economic geographies include the social embeddedness of economic action, constructing shifting identities of social actors, and the role of material and discursive context in shaping economic behavior. I argue that practitioners of new economic geographies can no longer rely exclusively on the traditional methodology for empirical research and data analysis. Instead, I argue for a total method approach to research methodologies in which we employ multi-methods (e.g. tracking down actor networks and *in situ* research) and triangulation not only to explore the micro-foundations of economic action, but also to abstract theories from the multi-scalar dimensions of economic action. To "operationalise" my arguments, I discuss the practice of researching into Chinese business. Despite their worldwide webs, Chinese business and entrepreneurs are extremely difficult to research because of formidable methodological problems. One such problem is the secretive nature of Chinese business which makes survey methods obsolete and personal interviews time-consuming. I provide a reflexive assessment of several issues confronting Chinese business research and apply the total method approach to shed light on future research into Chinese business.

Keywords: new economic geographies, methodology, research design, multi-methods, triangulation, Chinese business

Introduction

Recent theoretical and empirical advances in economic geography have fundamentally reshaped the nature of the sub-discipline and connected it to wider discourses within the social sciences. In particular, the concept "economic" has been refigured in such a way that it is no longer seen as singular, uni-dimensional, deterministic, and aspatial. Indeed, Thrift and Olds (1996: 313) even argued that we need to "make a space for new kinds of economic geography that can supplement or even replace the older forms of economic geography". In this process, we must appreciate how to "contextualize rather than to undermine the economic, by locating it within the cultural, social and political relations through which it takes on meaning and direction" (Wills and Lee, 1997: xvii). Several recent progress reports detail how these exciting developments in new economic geographies¹ have transcended the

¹ New economic geographies are defined here as the study of economic activities in relation to other political, social, and cultural processes in society and space. My usage of the plural to define new economic geographies is intentional in order to be inclusive rather than exclusive,

normal orbit of economic geography and influenced empirical research in corporate geography (Yeung, 1994), political economy (Barnes, 1995; 1998; Walker, 1998) and geography of finance (Leyshon, 1998). Despite this recent euphoria created by the promise of new economic geographies, however, we seem to have missed a critical point - the methodological issue. The practicalities of what it means to "do" new economic geographies are still unclear and remain underdeveloped. While acknowledging the "epistemological horse" should come before the "methodological cart", I suspect that the cart has perhaps not been attached to the horse at all. Even in physical geography where methodology is thought to be better developed and accepted, there are claims that methodological choices have apparent consequences for the development of substantive research agendas (Bauer et al., 1999: 680). Many recent writings in economic geography have focused on *why* we need to refigure the "economic". Still others have practiced these new economic geographies without much consideration of their methodological implications. Interestingly, several recent papers and theme issues on the use of personal interviews and close dialogue in economic geography (Schoenberger, 1991; 1994; Clark, 1998a; Hughes and Cormode, 1998; Cormode and Hughes, 1999) are the exception rather than the norm. Other papers published in the 1980s were exclusively concerned with the role of abstraction and ideology versus statistical generalization (Lever, 1985; Massey and Meegan, 1985; Sayer, 1985). It is clear therefore that practicing new economic geographies entails a critical re-evaluation of existing research methodologies.²

In this paper, I examine some methodological implications of the recent reconfiguration of the "economic" in economic geography. I argue that practitioners of new economic geographies can no longer rely *exclusively* on traditional methodology for empirical research (e.g. collection of large-scale data sets through surveys and field measurements) and data analysis (e.g. modeling, hypothesis testing, and content analysis). This methodology has often

and to celebrate the multiplicity of approaches to understanding economic geographies today (see also Lee and Wills, 1997).

² In this paper, I define methodology as the entire process of practicing research (e.g. positivistic vs. interpretive methodology) and methods as specific technique and/or instruments for research (e.g. postal surveys vs. in-depth interviews).

been perceived as "scientific" and "objective" in that it is "neutral" in research execution and it separates the researcher from the subject researched. As Pile (1991: 467) noted, "geographers have acted as if they stand outside the specific historicity and geographicity of their subjects; this has enabled them to comment on the reality of the subject's view of their own situation, while not allowing the subject's equally valid versions of reality". This quest for the so-called "scientific method", in fact, has obfuscated the real issue of whether the empirical world in which we live is knowable and observable. As argued by Clark (1998a: 74), "academic objectivity, in a strong sense, is only plausible if we retreat to a theory of knowledge that idealizes facts and strips bare the complexity of [social] life" (see also Sayer and Storper, 1997). Massey (1999: 264) has recently termed this kind of uncritical acceptance of a hierarchy among the sciences as "reverential reference": "if 'physics' says so, who are we [geographers] to disagree?". As such, neoclassical economics has striven hard to distinguish itself as much as possible from other social sciences and to give itself as much as possible the appearance of a physical (hard) science. Does that mean economic geography *must* heed the self-indulged intellectual leadership claimed by economics? Recent research in new economic geographies has now made it clear that economic action and spatial outcomes, whether at the level of the individual, the firm, or the region, are highly variable and dependent on various historical-geographical contexts. Some economic geographers even question the singularity, identities and constitution of such fundamental categories as *homo economicus*, firms, labour markets, regions and so on (see Barnes, 1996; 1998; Gibson-Graham, 1996; Peck, 1996; McDowell, 1997; Schoenberger, 1997; Storper, 1997; Herod, 1998). There is an urgent need for us to go beyond traditional research methodology in economic geography to incorporate other context-specific and, in the eyes of some positivists, idiosyncratic and subjective methods (see Section One below).

In this regard, I argue for a *total method approach* to research methodologies in which we employ multi-methods and triangulation not only to explore the micro-foundations of economic action, but also to abstract theories from the multi-scalar dimensions of economic

action. My objective here is neither to reify a new methodological approach³, nor to frame my discussion too narrowly on the nuts and bolts of research methodology. My intention is rather to explore the methodological implications of practicing new economic geographies. I do not pretend the total method approach to be eclectic and free-for-all. Instead, the use of triangulation is based on the conviction that "there is no fundamental clash between the purposes and capacities of qualitative and quantitative methods or data. What clash there is concerns the primacy of emphasis on verification or generation of theory" (Glaser and Strauss, 1967: 17). To go beyond what Clark (1998a) termed stylized facts and close dialogue, I consider the use of secondary and quantitative data, the need to track down chains and networks, the role of *in-situ* research, and the use of abstraction to build grounded theories (see Section Two). Taken together, these methods constitute the total method approach which, I believe, can contribute to refining the methodology of practicing new economic geographies.

To "operationalise" my arguments, I discuss the example of researching into Chinese business (see Section Three). This example is relevant because the study of Chinese business has to incorporate not only economic issues of business organizations and competition, but also such "non-economic" issues as the socio-cultural identities of actors in Chinese business, their personal networks and family linkages, their discursive constructions of the material business world, and their relations with wider structural forces (e.g. globalisation and geopolitics). Through this example, I aim to demonstrate *how* the total method approach can be very useful in addressing some major methodological constraints in practicing new economic geographies. One such problem is the secretive nature of Chinese business which makes survey methods obsolete and personal interviews time-consuming. This difficulty arises from the complex interplay of such factors as ethnicity, positionality of researcher, and methodological rigor. I provide a reflexive assessment of several issues in researching into

³ While the use of multi-method research strategy has long received significant attention in social research (Campbell and Fiske, 1959; Brewer and Hunter, 1989; Brannen, 1992; Creswell, 1994; 1998), its application in human geography has not surfaced until very recently (Philip, 1998; *The Professional Geographer*, 1999a: 40-89).

Chinese business. First, the paper offers some reasons why Chinese business people are so secretive. The key factors here are the central role of the family in internalizing information and the highly competitive or hostile host countries for ethnic Chinese. Second, I offer some methodological suggestions for improving existing research into Chinese business. In the concluding section, I consider the related issues of contributions to public policy and ethics in the practice of new economic geographies.

What's New in the Study of "New Economic Geographies"?

There is no doubt that new economic geographies have advanced the frontiers of geographical research to incorporate substantive issues which were traditionally considered as outside mainstream economic geography. At their very least, new economic geographers have (re)constituted the "economic" through an excursion into the "cultural" and the "political". Since it is not my intention to review comprehensively what constitute new economic geographies (see Barnes, 1996; Lee and Wills, 1997) or the "cultural turn" (see Barnett, 1998), I intend to present only their key features to inform my methodological treatise in the next section. These features include the social embeddedness of economic action, constructing shifting identities of economic actors, and the role of context in understanding economic behavior. While I am aware that this stylized presentation may fall into some kind of essentialism, my defense is that we need to identify at least some key features of new economic geographies before we are able to address in a meaningful way their methodological implications. Moreover, the aim of this paper is to create and engage with dialogue rather than to define the final vocabulary. As concluded by Thrift and Olds (1996: 332) in their recent refiguring of economic geography, "our final vocabulary is not so final after all. There is no last word".

Beginning with Karl Polanyi's (1944) seminar work and its reconstruction by Mark Granovetter (1985), the concept of *embeddedness* has made a significant impact on what Granovetter and Swedberg (1992) called "new economic sociology". The concept poses as a serious challenge to the "undersocialised" view of economic action typically found in neoclassical economics. In its simplest sense, embeddedness refers to the argument that "the [economic] behavior and institutions to be analyzed are so constrained by ongoing social

relations that to construe them as independent is a grievous misunderstanding" (Granovetter, 1992: 53). Dicken and Thrift (1992) subsequently introduced the concept to economic geography. Today, a large body of research in new economic geographies has examined the social embeddedness of economic action accounted for by industrial firms and business networks. These studies range from debates on geographical agglomerations (see Malmberg, 1996; Maskell and Malmberg, 1999), industrial districts (see Markusen, 1996), and regional development (see Amin and Thrift, 1994; Storper, 1997; Cooke and Morgan, 1998; Scott, 1998; MacLeod and Goodwin, 1999) to empirical investigations into social divisions of labour and local labour markets (see Sayer and Walker, 1992; Peck, 1996), changing production methods (see Florida, 1996; Schoenberger, 1997), and the spatial transfer of manufacturing technologies (see Gertler, 1995; 1997). What these studies have plainly shown is that economic institutions (e.g. firms) are embedded in wider social relations such that they are spatially bound by these relations in their locational and labour strategies, as well as constrained by the influence of proximity in their innovation activities. Understanding economic geographies of firms and labour entails more than an analysis of economic and locational factors. More importantly, it requires us to examine the complex ways through which these economic institutions are spatially entangled in webs of social relationships. As such, these economic institutions are conceptualized not as merely economic machines responding to external market and cost conditions, but rather as social constructions by individuals "whose action is both facilitated and constrained by the structure and resources available in the social networks in which they are embedded" (Granovetter, 1991: 78).

How then do these social actors generate and perform economic action over time and space? This question brings us to the second key feature of new economic geographies, which is concerned with how the *shifting identities of these economic actors* are spatially and discursively differentiated by gender, ethnicity, and culture. This line of enquiry fundamentally argues that their plurality and multiplicity explain the diverse economic action of social actors. Instead of conceptualizing economic units (e.g. the firm) as a singularity and a site of rational, reproductive and progressive imperative, new economic geographies have been concerned with "decentering" and "destabilizing" these fundamental categories of organizing

social life. Thrift and Olds (1996: 319) declared that "the very idea of a singular story of an object denoted 'economic' is now lost. It follows that the idea of trying to focus a new economic geography around one concept or theoretical tradition, however broadly defined, cannot hold". Similarly, Gibson-Graham (1996: 15-16) argued that "a capitalist site (a firm, industry or economy) or a capitalist practice (exploitation of wage labour, distribution of surplus value) cannot appear as the concrete embodiment of an abstract capitalist essence. It has no invariant 'inside' but is constituted by its continually changing and contradictory 'outsides'" (see also Walters, 1999). Economic actors are argued to be embedded in social discourses and practices and therefore cannot be conceived as rational and mechanistic economic entities as conceived in neoclassical rational choice theory. Recent work by Schoenberger (1998) and others (e.g. Thrift, 1998; 1999a; O'Neill et al., 1999; Pinch and Henry, 1999; Pritchard, 1999) have shown that the behavior of corporate firms and actors is by no means governed by a singular logic of profit maximization. Rather, these actors are subject to multiple discourses dominated by power relations and changing identities influenced by the gender, ethnicity, and culture of these actors. This refiguring of the "economic" has important implications for discursive practices and politics. O'Neill et al. (1999: 11), for example, viewed the disruptive representation of the firm as "opening up political options for action in place and over space that are relatively invisible in the vicinity of a stable, coherent and self-reproducing firm".

In this spirit of questing for plurality and inclusiveness in representing economic actors, Smith (1999: 130) argued for a broader perspective in which "there is no clear dividing line between politics and life, economy and culture". Judging from the enormous amount of recent literature on the role of identities in shaping economic action and spatial outcomes, she is certainly not a lonely exponent. Three inter-related strands of empirical studies fall into this important concern with the intersection between the "economic" and the social/cultural. First, the significant influence of culture and practice on the spatial organization of economic action is supported by research into corporate strategy (e.g. Schoenberger, 1997; Shackleton, 1998), financial services (e.g. Allen and Pryke, 1994; Clark, 1997; 1998b; 1998c; Hudson, 1998; McDowell, 1997; Leyshon et al., 1998) and consumption (e.g. Crewe, 1996; Crewe and

Gregson, 1998; Leslie, 1999). These studies have not only decentered the "economic" as the dominant logic for understanding economic outcomes, but also resurrected the role of social construction and cultural interpretations of these economic outcomes in firms, industries and sectors. Second, a related body of empirical literature focuses on gender and ethnic relations in capitalist political economy (e.g. Gibson-Graham, 1996), commodity chains (e.g. Bridge, 1997; Leslie and Reimer, 1999), and, more specifically, labour markets (e.g. Massey, 1991; 1994; McDowell and Court, 1994a; 1994b; McDowell, 1992; 1997; V. Lawson, 1995a; 1999; Wright, 1997; Reynolds, 1998; Radcliffe, 1999; Mattingly, 1999). These studies have demonstrated that such economic mechanisms as labour markets are not really operating at arm's length all the time. Gender and ethnic relations often shape labour market practices so that such transactions cannot be solely determined by abstract economic logic. Understanding labour market transactions requires a concomitant commitment to social analysis and gender/ethnic politics. A third strand of literature in new economic geographies is concerned with the role of social identities in transnationalism (e.g. Mitchell, 1993; 1995; 1997; Olds, 1995; 1998; Yeung, 1997a; Zhou, 1995; 1998a; 1998b). What is distinctive in these studies is that they incorporate social networks and culture into their analyses of such transnational processes as capital circulation across different regions. These transnational processes have been the forte of international economics and organization studies, which are primarily interested in the optimality, and efficiency of organizing such processes in different countries and/or regions. There are clearly no provisions in these economic and business studies for the multiple voices and trajectories of transnational actors.

This concern with the "open" and contingent nature of economic systems leads me to the final feature of new economic geographies for this paper. This is the role of *context* in shaping and understanding economic behavior in time and space. To decenter the "economic", new economic geographers have consciously argued against both logic determinism in positivism and structural determinism in Marxism. As mentioned above, the multiplicity of economic action and behavior points to the impossibility of pre-determining economic outcomes over time and space. Instead, the context in which this multiplicity of identities and logics shapes the social practices of economic actors becomes the primordial starting point in

most studies of economic geographies. There are at least two aspects to how context is and can be constructed (see Sunley, 1996; Barnett, 1999). The first aspect is the context of the empirical economic phenomenon under study. This view is strongly supported by the realist philosophy which claims that causal mechanisms may not be empirically observable and may only be realized under appropriate context (see Sayer, 1992; Pratt, 1995; Yeung, 1997b; Hannah, 1999). The context in which economic action is realized over space becomes a critical component in any economic geography explanation. As the plurality and multiplicity of social actors increasingly shape this context, it is highly difficult to determine the exact causality of economic action.

The second aspect of a contextual economic geography is linked to the role of power and discourses in creating geographical knowledge (Barnes and Curry, 1983; Pile, 1991; Keith, 1992; Thrift, 1996; Barnes, 1998b; see also Walters, 1999). As evident in the postmodernist and poststructuralist interpretations of economic geographies, there is no such thing as a singular geographical knowledge. Instead, these new economic geographers argue that the context in which geographical knowledge is created has very important implications for the kind of knowledge we learn and the impact of this knowledge on subsequent power relations in every sphere of social life. In a Foucaultian sense of governmentality, knowledge is power and the institutions of knowledge (e.g. academia) create the context in which knowledge is produced, acquired and transpired to the wider community of social actors. Understanding the context of knowledge (re)production becomes part and parcel of discourses in new economic geographies. To sum up my arguments so far, new economic geographies are concerned with embedding the "economic" in the social and the cultural, decentering the "economic" in favor of multiplicity and a more pluralistic interpretation of economic action, and contextualizing both economic outcomes and the conditions in which the knowledge of these outcomes is (re)produced. However the legitimacy of these concerns, there seems to be a lack of appreciation of their methodological implications and how the validity and reliability of their research practices can be guaranteed. This is the focus of my next section in this paper.

Beyond Stylized Facts and Close Dialogue: Methodological Implications of Practicing New Economic Geographies

Clark's (1998a) recent paper has made a crucial distinction in the methods of studying economic geography in economics and in geography. He noted that whereas stylized facts tend to be preferred by mainstream economists concerning with economic geography and increasing returns to scale, economic geographers tend to engage in close dialogue with the subjects under research. Taking a skeptical viewpoint, he claimed that both methods are "part and parcel of an inevitable and never-ending test of claims in the construction of social knowledge" (p.78). Though his preference seems to elide with close dialogue as "a means of reintroducing geography (and history, sociology, etc.) into a world that seems to have been made up for the benefit of theorists" (p.82), Clark has provided neither sufficient epistemological basis nor a robust methodological "litmus test" for his research strategy. In line with my substantive review above, this section aims to consider some methodological implications of practicing new economic geographies. Here, I argue that practicing new economic geographies requires more than "reaping progressive benefits" from close dialogue, as advocated by Clark (1998a: 83). We need to go beyond both stylized facts and close dialogue and to adopt a total method approach to understand the complexity of economic life.

Before I consider different aspects of this total method approach (i.e. methodology) for practicing new economic geographies, I want to introduce my methodological "litmus test": validity and reliability. As argued by Silverman (1993: 156), "the issue of validity is appropriate whatever one's theoretical orientation and use of quantitative or qualitative data". In simplest terms, validity refers to whether the research instrument used is measuring the correct phenomenon and whether it explains what it is supposed to explain. Reliability refers to the replicability of findings. Going back to Clark's (1998a) dichotomy of methods in economic geography, while they may be highly reliable because of their replicability, stylized facts tend to be less valid in capturing complex reality of the economic world. On the other hand, close dialogue may be more valid in "understanding better the actual practice of decision making [by social actors]" (Clark, 1998a: 82). It may, however, encounter serious reliability problem when the same kind of data may not be obtainable by another interviewer. It appears therefore that there may not be a simple one-to-one correspondence between epistemology and research methods because in practice, we often adapt and adjust our research methods in

view of changing research contexts. In this sense, we may have a perfectly valid and reliable design in theory (say, postal survey to find out employment practice of automobile firms in one specific locality). In practice, however, we may face serious social and cultural resistance to postal survey in the local community. This practical difficulty not only may jeopardize our field research, but also may render our research method invalid and unreliable. Different research methods are valid and reliable in different epistemological and research contexts (cf. discussion of context above; see also Layder, 1993; Baxter and Eyles, 1997). It is necessary to examine the validity and reliability of different methods or their robustness in practicing new economic geographies. In particular, I consider the use of primary and secondary quantitative data, the need to track down chains and networks, the role of *in-situ* research and the use of deconstruction and abstraction to build grounded theories (see Table 1). These are all different aspects of the total method approach for practicing new economic geographies.

Table 1 here

Primary and secondary quantitative data

Conventional economic geography is concerned with explaining the logic behind the spatial patterns and processes of economic activities. This approach is underpinned by a quantitative methodology which, to borrow from Philo (1998a), was and still is about "the things that count". Large quantitative data sets about individuals and firms are collected through direct surveys (primary data) or surveys by government and non-government agencies (secondary data). Data about firms and regions can also be collected through transactional records and other cumulative means of data bookkeeping. These data are then processed through inferential statistics to test the statistical significance of pre-defined hypotheses and/or models. Valid findings are then generalized into theories and laws for predictive purposes. As the researcher is highly isolated from the researched, this process is deemed highly neutral and objective, and is therefore awarded an esteemed status of being "scientific". The fundamental assumption of this positivist methodology is that the economic system under observation is "closed" and economic processes are empirically observable. A "closed"

economic system implies that the causality of empirically observable outcomes can be identified and measured, and no external influence on this causality can be found. This methodology seems to achieve reliability because repeated observations of causality can be made and should generate the same results (see Table 1). It is also deemed valid because the research instrument (e.g. survey) can measure what it is supposed to measure (e.g. employment characteristics).

If economic systems are much more open and subject to multiple co-determination by different social actors, as argued in new economic geographies, the reliance on primary or secondary quantitative data becomes problematic (see Table 1). One begins to question both the validity and reliability of using these quantitative data to *explain* spatial economic outcomes. Since quantitative data are not sensitive to variations in experiences at the individual social actor level, they are not valid measurement of the rationale and behavior of these social actors. If we take the economic action of these actors as socially embedded, the validity of quantitative data is even more questionable because indicators of economic action may not be compatible with measuring social and cultural behavior. As evident in the next section, Chinese business is simultaneously the firm (economic) and the family (social). There is a dialectical relation between the firm as an economic institution capable of generating profits and the firm as a social institution concerned with maintaining family cohesion and ethnic identities. Other studies in new economic geographies mentioned earlier, for example, have not found validity in quantifying the pluralistic identities of gender and ethnic relations (McDowell, 1992; V. Lawson, 1995b). Quantitative data, whether in their primary or secondary genres, are neither inclusive nor sufficient in generating valid explanations of social actors in new economic geographies. They may be more valid in *describing* carefully contextualised relations of social actors and in explaining the spatial behavior of such actors at higher levels of abstraction (e.g. industries and regions; see below).

But what about the reliability of these quantitative data? Surely they are much more reliable than alternative data (e.g. close dialogue, oral histories, ethnographic notes and so on). I argue that while quantitative data retain some extent of reliability in the study of new economic geographies, they are not necessarily *more* reliable than other forms of data because

of two reasons. First, the changing empirical and research contexts may undermine the reliability of quantitative data. Since new economic geographies privilege a contextual approach to interpreting quantitative and qualitative data, these data may be subject the problem of "commodifying contexts" in which the context of economic behavior by social actors may be categorized as a stand-alone variable. Such process of stripping context into an independent variable is guilty of methodological reductionism. The richness and contingency of context in shaping economic behavior is lost in this process of reduction. In terms of the research context, the reliability of quantitative data may be compromised by the power structure of knowledge creation. As Clark (1998a) acknowledged, some respondents are more cooperative in providing answers to certain kinds of interviewers who may have legitimate claims to these data (i.e. the "interviewer's effect"). Other researchers from much lower power stratum may find it difficult to replicate the same set of quantitative data for both cost and status reasons (see also Cochrane, 1998; Herod, 1999; Sabot, 1999).

Second, other forms of data obtained beyond stylized facts and close dialogue may be as reliable as quantitative data. New economic geographies study not only the nexus between the economic and other spheres of social life, but also the discursive context in which knowledge of this nexus is created. In other words, the spatial effects of discourse and power embedded in a dominant form of capitalism can be one of the substantive issues in new economic geographies. This line of inquiry requires genealogical research which "becomes the reconstruction of trajectories of discourses and practices which produced a unified capitalism" (Walters, 1999: 321). Much of the data for genealogical research and the related discourse analysis originate from key writers, proponents, politicians, and other advocates of a particular hegemonic discourse. Information about the power structure of knowledge creation and reproduction, i.e. the situatedness of knowledge, is also necessary in this project (see Pile, 1991; Keith, 1992; Thrift, 1996; Rose, 1997; Cochrane, 1998; Hammersley, 1999). All these data and information may be reliably obtained from existing intellectual and popular publications, public speeches, and policy statements. This kind of data may be "unconventional" in the tradition realm of economic geography, but they promise to unravel the underlying power structures and social relations in the (re)production of our knowledge of

economic geographies. In that sense, there is no particular reason why these data are not as reliable as those quantitative data collected through surveys and transaction records.

Tracking down actor networks: heterogeneous power geometries

Insofar as we have decentered the methodological robustness of data obtained through quantitative surveys and measurements, we are now able to proceed with the next methodological challenge to practicing new economic geographies - the existence of multiple and overlapping actor networks which generate heterogeneous associations and relations among social actors. The conceptual underpinning of this approach originates from actor network theory after Michel Callon, Bruno Latour and John Law. In human geography, actor network theory has gained increasingly currency in new economic geographies because it is seen "as a useful way of thinking about how spatial relations come to be wrapped up into complex networks" (Murdoch, 1999: 357; see also Thrift, 1996; 1999b; Murdoch, 1997; Whatmore, 1997; Parry, 1998). It is a useful approach to geographical research because it offers "a non-dualistic standpoint by focusing on how things are 'stitched together' across divisions and distinctions" (Murdoch, 1997: 322). The main claim of actor network theory is that actors and their intermediaries from spatially disparate places are enrolled into networks of heterogeneous association and relations. The ability of actors to reach across space and "act from a distance" ultimately depends upon entraining other actors *and* the necessary material objects, codes, procedural frameworks and so on which are required to effect the activation of power. A fundamental part of extended network construction is the ability to create and manage the knowledge, vocabulary, procedures, rules, and technologies through which economic activity is conducted. A good example is the globalisation of accountancy standards which allows financial management from a distance (see Sassen, 1999) or the development of standards on what information listed corporations must release to shareholders and the public. The creation, legitimization and adoption of such knowledge, rules and so on generates power for some actors in networks because they are effectively able to reshape the strategy and activities of other actors in networks (see Thrift, 1998; 1999b; Olds and Yeung, 1999). To a certain extent, these social actors are therefore synonymous with "elites" bound by strong

social, professional or political ties (Parry, 1998; Woods, 1998; see also Peck, 1995; Ward, 1997; Hughes and Cormode, 1998; Cormode and Hughes, 1999).

The above power geometry of actor networks may be opaque to traditional analysis in economic geography because these heterogeneous actor relations and association may not be empirically observable and distinguishable from other social relations. The validity of tracking down these actor networks becomes questionable and the method is perceived as highly unreliable (see Table 1). New economic geographers, however, give much more validity to tracing networks as a method for understanding the territorial constitution and reshaping of economic organizations via tracing their engagement with an array of actor-networks. This stance reflects a social constructionist approach to development, and the "reconstruction of power without refiguring it as an inhuman force leading to foregone conclusions" (Thrift et al., 1995: 1). It also necessitates intimate knowledge of these social actors and their intermediaries through Clark's (1998a) close dialogue. Tracking down actor networks is, nevertheless, a risky and difficult endeavor. Its reliability is still open to questions primarily because the power geometries of these actor networks are constantly shifting and reconfigured (see Table 1). Parry (1998: 2149) has coined the term "hybrid networks" to describe these shifting actor networks. Tracing actor networks is therefore not as simple a method as implied by Murdoch (1997: 332) who noted that:

Network analysis is quite simple: it means following networks all the way along their length; there is no need to step outside the networks for all the qualities of spatial construction and configuration of interest will be found therein... Actor-network theorists thus reject the view that social life is arranged into levels or tiers some of which determine what goes on in others; everything is kept at 'ground level'.

But doesn't keeping things at "ground level" lose sight of the structural power relations within the global economy? It may be true that 'capitalism' is too abstract a category to be very useful in understanding the spatial specificity in the global economy or the finer empirical contexts of economic life (necessarily incorporating the non-economic). However, we should surely not discard this level of abstraction *entirely*. Useful work has been conducted, for example, under the rubric of regulation theory, which seeks to specify the particularities of capitalism over time and space. To constrain our analyses of the "economic" to the "ground

level" and to approach the power relations therein as simply traceable through tangible linkages would be a mistake.

The objective of tracking down actor networks is not to produce highly replicable results because the primary concern is with its methodological validity. This follows from its ontological conception of heterogeneous networks as relations and its epistemological implications for open-endedness in geographical theorization. As noted in Thrift (1999b: 57), the purpose of actor network theory is about "emphasizing the contingency of the world and the many possibilities that are open at any point". A fundamental methodological requirement of tracing actor networks should, therefore, be to acknowledge three critical dimensions of these networks: (1) the autonomous power of actors; (2) the role of intermediaries, and (3) the interconnections of nodes. First, it is important not only to recognize the autonomous power of social actors (cf. classical Marxism), but also to *prioritize* power relations in the heterogeneous association of these actors. Through this method of prioritization, we may be able to pinpoint the *key* actors in a particular network and to track down how heterogeneous power relations in this network are spatially constituted and realized (cf. Parry, 1998; Ward and Jones, 1999). The identification of key actors requires intimate knowledge of the network through intensive research methods (e.g. participant observations, focus groups, close dialogue, and action research). In other words, the researcher has to immerse him or her into the network; he or she may even have to be enrolled into the network. There may not be a clearly distinguishable role and position of the researcher and the researched (e.g. see Herod, 1999; Kitchin and Hubbard, 1999). This methodological approach runs in great contrast to the idea of an "objective" researcher in the scientific approach to the social sciences. As argued above, however, this scientific approach to studying networks from the *outside* does not seem to have more validity and reliability than the active approach suggested hereafter (see the case of Chinese business below).

Second, the role of intermediaries can be critical in our understanding of the material and spatial constitution of actor networks. After identifying the key actors in networks (e.g. an entrepreneur), it is also necessary to identify specific intermediaries who can be human (e.g. an accountant) and non-human beings (e.g. a business association). These intermediaries

provide the social and institutional foundation upon which spaces of actor networks are prescribed and negotiated (see Murdoch, 1999). The validity of tracking down actor networks can be substantially enhanced if the researcher is able to link these intermediaries to their key actors and to demonstrate the mechanisms through which power geometries are configured and executed. Network intermediaries therefore play a facilitating role in materializing the power of actors. How best then should the researcher identify these intermediaries in actor networks? This question of reliability can be satisfactorily answered once the researcher is able to immerse into the networks. This is because actor networks encapsulate the totality of actors' intentions, behavior and action.

The third and, perhaps, most important dimension of tracking down actor networks is to acknowledge the interconnections of nodes in these networks. Since heterogeneous associations of actors in networks almost necessarily create disorders and ambiguities, it is methodologically important to make sense of these networks by determining the interconnections of their nodes, which may be occupied by actors, intermediaries or others. It is through these nodes actors control and exercise power relations "from a distance". To borrow from Castells (1996), these nodes in global spaces of flows have particular *spatial* characteristics. For example, they may be embodied in global cities, which provide the wider social and economic fabric for the performative acts of these actor networks. In methodological terms, we need to trace the interconnections of these nodes in actor networks (e.g. inter-city material and immaterial flows). We also need to build connections between these nodes and actors and their intermediaries (e.g. the residence of key actors and/or their intermediaries in global cities). To a certain extent, this research can be fruitfully conducted via traditional methods of data collection and analysis (e.g. in urban studies). But a significant portion of this analysis must still be conducted through tracing networks because some of these nodal interconnections may be impervious to direct measurement and empirical observations (e.g. multiple and transnational residence of key actors). Taken together, tracking down actor networks may offer a potentially powerful methodological tool to unravel the complexity of economic geographies and, for that matter, social life.

***In-situ* research: understanding context and identities**

A related methodological implication of tracking down actor networks is that much of the research has to be conducted *in situ*. This spatial constraint on methodology in practicing new economic geographies is not entirely new at all. *In situ* research has always been hailed as the vanguard of ethnographic research to provide what Clifford Geertz (1973) coined "thick" descriptions of people, culture, and society (see also Keith, 1992). The demand for *in situ* research is the methodological dividing line between neoclassical economic geographers and new economic geographers. Whereas the former tend to rely on stylized facts and modeling to approximate the real world, the latter appreciate the complexity of economic landscapes through direct and intimate research into the firms and industries concerned. While Clark (1998a) has already explained the origins and choreography of these two different methodological traditions, it remains to be seen why *in situ* research provides a better understanding of issues confronting new economic geographies. As explained above, new economic geographies take into serious account the plurality and multiplicity of identities and voices of social actors. The research objective of these new economic geographies is to understand the material and discursive constructions of such identities and voices. For example, Schoenberger's (1994; 1997) excellent study of Lockheed and Xerox has examined the role of identity and knowledge of key executives in shaping corporate strategies which in turn led to the rise and fall of the corporations. Similarly, O'Neill et al.'s (1999) recent study has used excerpts from interviews with two managers of the Australian-based multinational, BHP, to deconstruct the dominant monopoly capitalist representation of the company.

The methodological implications of these new economic geographies are clear. One may argue that in these firms, there should always be a dominant "voice" and representation which legitimizes stylized modeling of the firm as a whole. Both studies have shown, however, that our monolithic conception of the "firm" has to be revised. The firm is indeed a messy constellation of multiple identities, contestation of power, and shifting representations. To write off this multiplicity and contestation as "distortions" to the overall picture of the firm is a gross mistake committed by traditional economic geography in which there is a clear division between the firm as the object of research and the researcher as an external observer. Similar to the role of laboratories in physical sciences, the firm is akin to an experiment

through which the traditional economic geographer observes its dynamics and spatial outcomes. In this experiment, direct measurements can be obtained through certain "scientific" methods (e.g. surveys). In that kind of economic geography, the firm is objectified as an external monolith whose spatial strategy, action, and outcomes are subject to the researcher's investigation "from a distance". On the other hand, new economic geographies do not privilege a dominant voice within and outside the firm. Instead, the contestation and negotiation of this dominant voice and identity becomes the most interesting issue. To unravel these issues, new economic geographies need to conduct research *in situ* in order to obtain much richer and intimate understanding of identities and representations of actors within and outside firms, industries, and regions. In that sense, *in situ* research offers much more reliability than the "remote sensing" approach to studying contemporary economic geographies (see Table 1).

Another methodological implication for practicing new economic geographies is that *in situ* research tends to improve one's validity in explanations. This point is related to the earlier method of tracking down actor networks. The role of *in situ* research here is to provide a much deeper understanding of the empirical context through which these actor networks operate. As contextual analysis becomes increasingly important in practicing new economic geographies, "being there" promises not only more reliable data through direct observations and experiential recording, but also more valid data from observing the subtlety of certain economic processes and behavior of social actors (see the example of Chinese business below). Going back to Schoenberger's (1997) exemplar research into the cultural dimensions of corporate strategies, she painstakingly spent an enormous amount of time and effort to get close to information sources and her informants in the corporations (see also Schoenberger, 1991). She was therefore able to build a valid account of what exactly was going on in these corporations through her *in situ* research. Had she sent these corporations some general questionnaires and asked whoever the respondents to evaluate several likert-styled factors linking corporate culture and strategies (much often found in international business studies), she would have obtained highly invalid and, perhaps, unreliable answers to a highly important research question. As argued by O'Neill et al. (1999: 13), corporate strategy is increasingly seen in new economic geographies as "the outcome of organized human activity - of relations between

individuals, between individuals and the firm, and between each of these sets of relations and the firm's environment".

A related methodological issue here is that sometimes *in situ* research can be done on the researcher's behalf by other interested parties. Here, I am not referring to contract researchers or even research assistants. But I am thinking of people from research houses of stock broking firms, investment banks, credit rating agencies and so on, and other institutions (e.g. labour organisations and regulators) who may have a vested interests in unpacking certain firms and corporations. These "pseudo-researchers" may also conduct *in situ* research through personal interviews, focus group discussion, gossip talks over lunches and dinners with executives from these corporations, and reading company files and records. Their "expert" reports on these corporations sometimes contain vast amount of data obtained through their *in situ* research. This highly important source of oral and written data can be profitably exploited by economic geographers (see the case of Chinese business below). In brief, *in situ* research is a highly valid and reliable method in practicing new economic geographies (see Table 1).

Abstractions, deconstruction and different scales of analysis

As empirical data and information are gathered through *in situ* research and tracing actor networks, it becomes necessary return to the big picture and build theories about actors in economic geographies, whether these theories are explanatory or deconstructive in nature. To make sense out of messy data and information (see McDowell, 1998), social scientists regularly construct and deconstruct theories. Geographers are not exceptional and tend to engage in such theorization. Here, I argue that whether one is a positivist, realist or poststructuralist economic geographer, he or she should still be concerned with theory development. On this need for theory, Sayer and Storper (1997: 6) remarked that "[w]orkers may not need Marx to know they are exploited and women may not need feminism to know that they are subordinated, but we are likely to need theory to know how and why these things come about". Notwithstanding their philosophical differences, different economic geographers arrive at theory development through different methodological routes. For a positivist economic geographer, theory development is deductive, starting from hunches and hypothesis and ending with verification by empirical data. In other words, theories are

deducted a priori and tested statistically by empirical data. Abstraction is neither a valid nor a reliable method for theory development (see Table 1).

For a realist economic geographer, *abstraction* seems to be the most accepted method of theory development. Abstraction refers to the process through which we abstract "from particular conditions, excluding those which have no significant effect in order to focus on those which do. Even where we are interested in wholes we must select and abstract their constituents" (Sayer, 1992: 86). Abstraction serves as a first ground step towards conceptualizing and theorizing the real essence, power and mechanism of an object (Sayer, 1981; T. Lawson, 1995). Abstraction remains a highly valid method for theorization because new economic geographies are concerned with the causal interfaces between the "economic" and other spheres of social life (see Table 1). Although the spatial outcomes of these causal interfaces are contingent on the multiple identities of social actors and their action contexts, these interfaces are not readily available to empirical observations. A valid theorization of these interfaces requires an abstraction of their essential and causal effects. Two good examples of such abstraction at work are Amin and Thrift's (1994) notion of "institutional thickness" and Storper's (1995; 1997) idea of "untraded interdependencies" in explaining trajectories of regional development. Both sets of authors have conducted intensive *in situ* research to unravel the nature and operations of actor networks and relational assets in contributing to regional development. Abstraction is used as a method to abstract the necessary relation between the concrete phenomenon (i.e. regional development) and deeper causal structures to form generative mechanisms (i.e. institutions and networks as relational assets). Abstraction remains an important method for practicing new economic geographies.

What if a poststructuralist economic geographer does not prefer model building nor abstraction of theories from empirical data? There seems to be an emergent trend in new economic geographies which privileges the *deconstruction* of grand theories, singular categories, and representations of economic life. By its own virtue, I argue, deconstruction may not offer much as a method for significant theory development (cf. Barnett, 1999). It is a valid and useful method to highlight the contested and fragmented nature of firm's activities and, for that matter, capitalism (see Table 1). It helps to generate new vocabularies to describe

accurately different spheres of social life. These new vocabularies (e.g. competitive advantages and core competencies) are often internalized within the firm and form the norms through which key corporate decisions are made (e.g. restructuring and laying off staff). The business of business is as much about material processes of economic activities as about talks, conversations and discourses (Boden, 1994). Having said that, however, I see deconstruction as a necessary, but not sufficient, method for theory development. How often does one read a deconstructionist account of economic organizations and end up asking "so what"? The advantage of deconstruction, as a method for practicing new economic geographies, is also its own enemy. While it is able to fulfill our wishes to leave the subject matter open, or in Thrift and Olds' (1996) idiom of "there is no last word", deconstruction continues to open spaces for fragmented interpretations by different actors. These, I guess, are what Clark (1998a: 83) referred to as "the debilitating effects of fragmented identities and separate royalties". To reap the full benefits of deconstruction, new economic geographers must work with *both* abstraction and deconstruction as the total method approach to theory development.

Before I sum up this total method approach, a brief excursion into the issue of *scale of analysis* is necessary. In traditional economic geography, the scale of analysis is fairly clear, ranging from firms and industries to regions and nations. This well nested hierarchy of scales, however, does not offer much to new economic geographies who are interested in the simultaneous operations of multiple scales of economic phenomena. Several empirical studies cited earlier have testified the difficulty of limiting one's analysis to a particular scale (e.g. the firm). Actor network theorists add further complexity to understanding economic life at different scales because actor networks often cut across different geographical units and scales such that an individual entrepreneur may be residing in a global city through which his/her global empire of business operations can be gainfully controlled from a distance. His/her decisions from the corporate headquarters in this global city may significantly affect the life of many social actors in different countries and/or regions in the global economy. To understand this complex multi-scalar operations of actor networks, new economic geographers must go beyond singular scales of analysis and be comfortable with abstractions and deconstruction at different spatial and temporal scales.

The total method approach to practicing new economic geographies

The practice of new economic geographies necessitates a reconfiguration of our existing research methodologies. The above brief examination of various methodological issues demonstrates their inherent bias and weaknesses as *stand-alone* methods for practicing new economic geographies. As individual methods, they are unable to fulfill our methodological "litmus test" of validity and reliability. There is thus a case to call for a total method approach in which these different methods are seen and employed as a *coherent whole*. In Figure 1, I summarize the dynamic relationships among these various modes of practicing new economic geographies in the total method approach. Several observations stand out for further comments. First, my argument for a total method approach depends significantly on my epistemological understanding of the subject matters in new economic geographies. It is much less driven by the validity and reliability of individual methods *per se*. As noted by Hartley (1994: 208), "[t]here is nothing about a method *per se* which makes it weak or strong. The argument about the method depends on two factors. First, the relationship between theory and method, and, second, how the research attends to the potential weaknesses of the method". In other words, because of the much more "open" and pluralistic view of economic action and spatial outcomes in new economic geographies, traditional singular method approach to research (e.g. postal surveys) is not necessarily sufficient. One's acceptance of the core features of new economic geographies (not exclusive to those mentioned earlier) implies a complementary acceptance of the total method approach because stand-alone methods (e.g. historical research or reliance on quantitative data) cannot satisfactorily answer the questions raised in practicing new economic geographies.

Figure 1 here

Second, the total method approach is better able to overcome the inherent weaknesses of individual stand-alone methods. This is known as the process of *triangulation*, the logic of which rests on the fallibility of any single measure or representation of social phenomenon and psychological construct. The use of triangulation can achieve convergence validity in

which different methods generate broadly similar and complementary findings. What is necessary in the process of triangulation is to compare and contrast different sources of findings if they are addressing the same phenomenon. Alternatively, if different methods are used to investigate different facets of the same phenomenon (e.g. actor networks), the resultant findings tend to be complementary. The methodological implication is that triangulation is useful insofar as different facets of a concrete phenomenon are researched through the most appropriate combination of methods; it is surely not about replication *per se*, but about making connections within particular cases. Denzin (1970: Chapter 12) suggests four basic modes of triangulation: (1) data triangulation with respect to time, place, person and level; (2) investigator triangulation between multiple observers of the same phenomenon; (3) theoretical triangulation between multiple theoretical perspectives with respect to the same set of objects and (4) methodological triangulation *vis-a-vis* between-method (dissimilar methods) triangulation and within-method (variations within the same basic methodology) triangulation. Despite its early origin from the practice of social research, the application of triangulation in human geography has so far been minimal, let alone in practicing new economic geographies. This relative neglect is explained by the general lack of methodological developments symptomatic of excessive preoccupation with theoretical debates within human geography in the past few decades.

This brings me to my third observation that in much of new economic geographies, "arm-chair" theorizing and "remote sensing" have become the *modus operandi* for understanding contemporary economic landscapes. This methodological approach clearly runs in contrast to my call for *in situ* research as an integral facet of the total method approach (Figure 1). If we view this approach as a knowledge production chain, I believe that it can be disintegrated through collaborative research across disciplinary and national boundaries. For example, one may not find it possible to trace an actor network in its entirety, particularly those transnational actor networks spanning different countries and/or regions. Collaborative research becomes a useful means to accomplish this total method approach where researchers from different countries and/or regions engage in joint efforts to track down certain transnational actor networks (e.g. for multi-locational research into foreign elites, see Herod,

1999). Inter-disciplinary research is also important here because actor networks have multi-faceted dimensions manifested in the realms of history, geography, psychology, politics, business, economy, and society. Whereas the execution of the total method approach may require one to transcend disciplinary and national boundaries, it may also reward imaginative combination of methods which are inclusive rather than exclusive. Geographical imagination can be much enhanced by methodological imagination. As new economic geographies have benefited tremendously from unrestrained geographical imagination, their methodological practices must similarly be imaginative and inclusive. For example, there is no reason to rule out the usefulness of statistical analyses as a tool for piecing together broad pictures of economic landscapes (see Philo, 1998b). What is important for practicing new economic geographies, however, is to bear in mind that results from these analyses only provide a macro view which leaves detail processes (e.g. resistance and negotiation by social actors) to other elements of the total method approach. To demonstrate the validity of this total method approach for practicing new economic geographies, I now turn to an empirical example of researching into the secrets of Chinese business.

New Economic Geographies in Action: Unfolding the Secrets of Chinese Business

To date, a significant body of literature is available on the nature and organization of Chinese business in Asia (Hamilton, 1991; Brook and Luong, 1997; Hefner, 1998), Europe (Benton, 1997; Chirot and Reid, 1997), and North America (Mitchell, 1995; Olds, 1998; Zhou, 1998b). It is not my purpose to review this body of literature. Rather, I am interested in the methodological issues in unfolding the secrets of Chinese business as an example of practicing new economic geographies. To begin my methodological excursion into Chinese business research, it is necessary to explain one of the most significant data constraint - the secretive nature of Chinese business. Similar to a number of other diaspora and minority businesses, family and business among ethnic Chinese outside mainland China have a primordial existence of being "total institutions". The family business serves a dual function as a provider to the founder and (almost always) his immediate family members and as an employer of his family members and trusted "lieutenants" (Redding, 1990). Although Chinese

family business has experienced some degree of internal transformations in an era of globalisation, this pattern of the centrality of family in Chinese business remains relatively intact. What then explains the secretive nature of Chinese family business? Two reasons have been given in the literature. First, because of the central role of the family in Chinese business, there is a significant degree of internalization of information within the family. This results in strong cooperation within family groups and networks, but fierce competition among different business groups and networks.⁴ Second, the host countries in which Chinese family business operates (e.g. Southeast Asia) tend to be hostile to this ethnic organization of economic activities for various political and institutional reasons (McVey, 1992; Hodder, 1996). The internalization of information within the family becomes an important mechanism to protect one's family and business from external threats by local states and dominant ethnic groups. This mindset among ethnic Chinese in Southeast Asia, for example, has been known as "the siege mentality" (Yoshihara, 1988; Redding, 1990), "the refugee mentality" (Kotkin, 1992) and "the trader's dilemma" (Menkhoff 1993).

Methodological problems in Chinese business research

Given the highly secretive nature of Chinese business and its tendency to be organized in networks of family and social relations, there is an important task for new economic geographers to understand the material and discursive constructions of these networks in their specific time-space contexts. In methodological terms, these dense and intricate webs of networks and relationships in Chinese business have created formidable problems for empirical research. Though not exclusive, these methodological problems are related to (1) the unit of research; (2) the discursive identity and ethnicity of actors; (3) the spatiality of actors and (4) the role of gate keepers (or intermediaries in the terminology of actor network theory). One of the most daunting methodological issues confronting Chinese business research is the grave difficulty in identifying the *unit of research and analysis*. This problem may be particularly serious in studying Chinese business because of its extensive regional presence throughout Asia and its distinctive identities discursively constructed by the host countries

⁴ A similar literature on family secrets exists in the sociological literature (see Vangelisti and Caughlin, 1997; Berardo, 1998).

and amongst the "Overseas Chinese" themselves (see Lim and Gosling, 1983; Wang, 1991; Lynn, 1998). Should it be the family, the family firm or the network? The complex interconnections among these three theoretical categories have methodologically handicapped empirical studies, as epitomized in most of Chinese business research. These previous studies either focused exclusively on Chinese families and their social practices or took the family firms out of their social and institutional contexts, and examined the economic organization of these family firms. This "methodological exclusiveness" has impaired much of their analysis because of their inability to examine the family, the firm, and their networks as total institutions in Chinese business. This methodological problem also has serious implications for what constitute appropriate data (see Table 1). Most quantitative data available on Chinese business refer to firm establishments and, sometimes, their shareholding, and management structures. A straightforward quantitative analysis of Chinese business firms is thus unable to unravel the complex interconnections between the family, the firm, and their networks, let alone the material and discursive contexts in which they are constructed.

Of course, one may argue otherwise and question what is so Chinese about Chinese business and why should we study Chinese business in the first place. These questions raise another methodological issue - the *identities and ethnicity* of actors in Chinese business. Dirlik (1997), Ong (1993; 1997) and Yao (1997), for example, argued that much of the hype about Chinese business is linked to the romanticization of "Chineseness" and the discursive constructions of Chinese business as an object, an ideational construct, and a moment in the wider hegemonic discourses on global capitalism. The methodological implication is that we need to deconstruct these shifting identities and ethnicity of actors in Chinese business and to examine the powerful effects of discourses on these identities and ethnicity. For example, Kong's (1999) recent study of Singaporean transmigration in China has shown how the national identity of these Singaporeans (as Singaporean Chinese) has been reimagined and negotiated when they are confronted with their ethnic identity as Chinese (in China). Similar confrontation and negotiations of national identities and Chinese ethnicity can be observed among the "Overseas Chinese" in Southeast Asia, Europe, and North America. Given this transnational fluidity in Chinese identities, it becomes methodologically imperative for

Chinese business research to examine not only ethnic Chinese actors, but also non-ethnic Chinese who have assumed some form of Chinese identities in material (e.g. through cross-cultural marriage) and discursive ways (e.g. through academic writings and popular press reports). New economic geographies of Chinese business therefore need to transcend actors' cultural identities and ethnic boundaries to arrive at a fuller appreciation of the complexity of Chinese business.

This concern with the *spatiality of actors* is particularly important because, as argued earlier, the geography of actor networks is increasingly complex and oblivious to conventional measurements and analysis. Chinese business networks are now extending across space in both material and discursive ways (Olds and Yeung, 1999; Yeung, 1999; Yeung and Olds, 1999). This is especially prevalent among Asia's leading Chinese business conglomerates. Through direct investments abroad, they are able to shape the material context in which their investment objectives (e.g. market penetration) are satisfied. As discursive constructions, actors in Chinese business networks attempt to incite more analysts and financiers in major global financial centers to talk about their business transactions and therefore generate favorable discourses to facilitate their capital raising and other related activities. These actors in Chinese business networks may not be exclusively family members nor even ethnic Chinese. They may be bankers, accountants, and consultants for these Chinese business firms. These actors are capable of influencing the nature and organization of Chinese business from a distance. Unfolding the secrets of Chinese business requires us to make explicit how these non-Chinese actors are enrolled into and shape Chinese business networks. On the domestic front, gate-keepers in home countries continue to serve as vital intermediaries in Chinese business so that family firms can use their monopolistic licenses and special privileges to generate capital to sustain their transnational operations. These home country intermediaries in Chinese business are typically government bureaucrats, politicians, indigenous business partners, and so on. Disentangling their complex enrollment into Chinese business networks is again an important task in understanding the nature and operations of Chinese business in East and Southeast Asia.

Researching into the secrets of Chinese business

The Chinese business example above shows not only that economic institutions are embedded in social relations, but also that actors in these networks of relations have multiple identities and social action which are strongly influenced by their discursive and institutional contexts. Returning to my earlier discussion of the methodological implications of practicing new economic geographies, I argue that the total method approach is an appropriate methodology to unfold the secrets of Chinese business (see Figure 2). Starting with the *choice of data*, it is clear that exclusive reliance on either primary data or secondary sources is insufficient to unfold the secrets of Chinese business. Instead, Chinese business researchers need to combine both data sources and triangulate their efficacy and complementarity. For example, conducting large-scale surveys with actors in Chinese business (e.g. CEOs of family firms) may be sufficient to generate some quantifiable establishment characteristics (e.g. firm size and employment). But it is not a meaningful method to explain the material and discursive constructions of Chinese family firms and their business networks. In-depth interviews seem to be much more relevant in this latter task, although the willingness of Chinese business people to be interviewed is often questionable (see below).

Figure 2 here

Meanwhile, a large amount of secondary data exist in the form of media interviews, biographies, oral histories, company documents, and research reports. These secondary data can sometimes be very useful as a starting point to identify actors in Chinese business networks. For example, the media often has special access to many actors in Chinese business because some of them are well connected and thus are willing to talk to reporters (as part of the large discursive construction of Chinese capitalism). These actors may be less likely to talk to researchers who, as McDowell (1998) and Herod (1999) observed, have little to reciprocate. Published reports may have some very interesting reports on specific business deals and their underlying relationships. Power relations in global financial markets tend to favor well-known credit-rating agencies and international business media which often have very good access to large Chinese business firms. In spite of their bias towards transactional

recommendations, these reports on specific Chinese business firms or actors can be very insightful (e.g. Olds and Yeung, 1999). Biographies and/or oral histories of selected actors in Chinese business may also offer significant depth of information unavailable to most researchers (e.g. Chan and Chiang, 1994). By definition, these secondary data are collected for different reasons and may contain certain inherent bias. We need to collect *both* primary and secondary data to satisfy our criteria of triangulation. For instance, we may use personal interviews (or close dialogue) to verify some of the data and information contained in media and other unpublished reports. Secondary data can also help us to fill the gaps in primary data collected from interviews with actors in Chinese business.

Having identified the main actors in Chinese business, it is now possible to *trace the interconnections* of actors in Chinese business networks (see Figure 2). My earlier discussion of the socio-spatial attributes of these actors does not intend to imply that these actors must be all powerful people and/or institutions. Instead, I argue that an actor's power is not an given attribute because its efficacy can only be known when it is realized. For example, a patriarch in the family business may not be so powerful as we imagine if there is indeed a significant contestation of power among the siblings outside the control of this patriarch. Similarly, a seemingly insignificant and low ranking local official in China (i.e. an intermediary), through his sheer lack of cooperation and support of a major infrastructural development project, may create such a havoc for a Chinese business firm that its bankruptcy becomes imminent. Tracking down actor networks in Chinese business is therefore both theoretically and methodologically important. To begin this tracking process, a good combination of multiple sources of primary and secondary data is critical to identifying the key actors involved in these networks. Participant observation is clearly a valid and, perhaps, reliable method to "follow through" these networks and their strategic outcomes. The reality of empirical research, however, is often not as neat as proposed in this paper. One may experience pre-mature termination of his or her participant observation. Alternatively, other actors in networks may not feel easy to be included in the study. Methodological opportunism emerges as an appropriate guideline. As argued by Ward and Jones (1999) in their reflections on researching local elites in England, the political-temporal contingency of

the research process and the politically time-specific entry made by the researcher into the research field can significantly shape the interaction between the researcher and the researched. In Yeung's (1997a; 1998) study, for example, *guanxi* or personal relationships with the family members of one Chinese entrepreneur was activated to arrange for in-depth interviews. He was subsequently able to reach several other key actors of the business network in Hong Kong and Singapore (see also Hsing, 1998; Olds, 1998; cf. McDowell, 1998; Parry, 1998; Herod, 1999).

Tracing actor networks clearly has a spatial dimension and, as I have argued earlier, *in situ* research is an indispensable method to enable new economic geographers to go beyond using "remote sensing" to study today's complex social and economic life (see Figure 2). Since many actor networks in Chinese business are multinational in their locational characteristics, it becomes imperative for one to engage in multi-locational fieldwork in order to track down these networks. Many such actor networks are increasingly transcending Asia in their geographical scope (e.g. Olds, 1998; Zhou, 1998b; see also Herod, 1999). Conducting multi-locational *in situ* research creates serious time and resource constraints on researchers. But transnational research also offers many benefits, including deeper insights into the material and discursive constructions of these actor networks and better understanding of spatially differentiated contexts of these constructions. The need for multi-locational *in situ* research also generates certain scope for cross-border research collaboration among geographers and between geographers and other social scientists. Whereas geographers may contribute their expertise in theorizing actor networks in Chinese business at different geographical scales, other social scientists from political science, sociology, and business management may offer relevant insights into the politics of Chinese business, the social organization of actor networks and the management of Chinese business firms in the host countries.

This multi-locational and multi-disciplinary research into Chinese business takes us to the most important aspect of the total method approach - abstraction and deconstruction (see Figure 2). Instead of overtly concerned with describing everything about actor networks in Chinese business, new economic geographers should aim at unfolding the multiple logic(s) of these actor networks, their shifting identities and discursive constructions, and the diverse

mechanisms of their enrolment. I argue that these processes do not emerge directly from empirical observations. In other words, data do not speak for themselves. We need abstraction to distill these multiple logic(s) and mechanisms of Chinese business from an array of messy empirical data and to facilitate theory development. For example, Whitley (1992; 1999) developed his business system perspective on the growth and evolution of Chinese business from an abstraction of findings in a diverse range of existing studies. Orrù et al. (1997) also provided an institutional framework for understanding Chinese capitalism in East Asia through many years of empirical research and theory development. Equally important, we must go beyond a materialist theory of Chinese business which is oblivious to its discursive constructions. Deconstruction is therefore a useful method to identify different discourses surrounding the rise of Chinese business and Chinese capitalism as a vocabulary in our understanding of the "economic" in East and Southeast Asia. By decentering hegemonic discourses of Chinese business, we are better able to appreciate the time-space dynamism of everyday life by Chinese and non-Chinese actors bound up with specific networks of relationships.

Conclusion

Despite significant theoretical advances in human geography during the past two decades, research methodology has remained underdeveloped.⁵ This is perhaps even more so in the practice of new economic geographies because of the philosophical influence of poststructuralism and postmodernism. Methodology in new economic geographies is seriously lagging behind theoretical development, culminating in suspicion and skepticism by other geographers and social scientists. In this paper, I argue that practicing new economic

⁵ Notable recent exceptions are Baxter and Eyles (1997), Bailey et al. (1999), several journal special issues on the use of focus groups (*Area*, 1996: 113-49) and quantitative methods (Philo, 1998b), researching into elites (Hughes and Cormode, 1998; Cormode and Hughes, 1999), multi-method research in population geography (*The Professional Geographer*, 1999a: 40-89) and qualitative approaches in health geography (*The Professional Geographer*, 1999b: 240-320). Physical geographers are also increasingly aware of the issue of methodology in their research practice (see Bauer, 1999).

geographies necessarily entails a rethinking of methodological issues. It should be clear by now that I am advocating a much more *embracing* and, yet, *open* methodology to practice new economic geographies. The total method approach recommended in this paper is embracing in that it transcends methodological dualism (e.g. quantitative-qualitative divide) in much of social science; it is open because through the criteria of triangulation, the total method approach enables different methods to be employed to recognize different voices and vocabularies by social actors. These multi-method research strategies are deployed, however, not at the expense of methodological validity and reliability. Indeed, robustness remains a key criteria in assessing data and/or information gathered from these methods and their combination. Using the example of unfolding the material and discursive constructions of Chinese business, I have shown how new economic geographies can be practiced with a relatively valid and robust methodology. While denying the hegemonic explanatory power of quantitative methodology, I do not believe that it has run its course yet (cf. Barnes, 1996; 1998b). In this paper, I have taken a revisionist position by showing that while some aspects of quantitative methodology is useful in practicing new economic geographies, we need to rethink the methodological implications of these new practices. I therefore agree with Hepple's (1998: 231-2; original italics) observation that:

quantitative analysis is alive and well in the other social sciences... Now it *may* be true that the other social sciences will soon jettison their quantitative dinosaurs in the same way that human geography claims to have done, seeing the light; but such a view is surely a triumph of (misguided) hope over experience. Social science will remain (and to the pragmatist should remain) a conflicting medley of perspectives.

In this concluding section, I want to consider briefly two specific issues arising from the practice of new economic geographies: (1) contributions to public policy and (2) ethics. Contributions to public policy have always been a hallmark of different varieties of economic geographies and should continue to remain so. Because of their reflexive and pluralistic nature, new economic geographies have an even better reason to contribute to public policy (see Tickell, 1998; Wills, 1998). What is the point, for example, to give multiple voices and representations to social actors if we cannot free them from false consciousness and/or suppression by dominant hegemonies in organizations, institutions and localities? It is disheartening, however, to learn from a recent editorial by Peck (1999: 134) that:

economists tend to be clustered at the formulation end of the policy-making cycle, while economic geographers - despite all they have to contribute on issues of formulation - tend to be found at the implementation/evaluation end. Too often, economic geographers are deployed as the manual laborers of the policy world, earning rewards and exerting influence in ways commensurate with this position in the policy-making division of labour. Meanwhile, it is an economist, rather than an economic geographer, who is whispering in the ear of the minister.

This rather paradoxical status of (new) economic geographies reflects, to a certain extent, the spatial entrapment of these geographers with "studying delivery systems and outcome patterns rather than addressing the fundamentals of policy design and the regulatory 'rules of the game' itself" (Peck, 1999: 134). The "policy problem", I argue, is particularly disturbing among new economic geographers who are concerned with the social embeddedness of economic action in local contexts of multiple identities and pluralistic determination. While raising our sensitivity to different voices and behavior of social actors, the tendency for new economic geographies to lean towards poststructuralist and postmodernist deconstruction narratives has led to fragmented research and an inability to see the "big picture". This shying away from the "fundamentals" of economic processes among some quarters of new economic geographies is likely to perpetuate this "policy problem". To sustain the future of new economic geographies, we need to take into account of the public policy context. The total method approach suggested in this paper may well be a first methodological step in producing rigorous new economic geographies which place geographers back in the policy circle.

This policy concern by new economic geographies raises another issue about ethics (see also Sayer and Storper, 1997). Given the much "deeper" and complex understanding afforded by new economic geographies, we would imagine that policy recommendations by these geographers can potentially be more penetrating in shaping the behavioral and spatial outcomes of social actors. Is it fair and/or ethical then for new economic geographers to participate in the life world of social actors for research purposes on the one hand and to make use of their findings for policy, which may have an adverse effect on these social actors on the other hand? Take the example of researching into the secrets of Chinese business (see also McDowell, 1998; Parry, 1998). Through methodological opportunism, one may get access into an actor network and manage eventually to trace the interconnections of actors in this

network through *in situ* research. The researcher then abstracts some general processes about the economic outcomes of this actor network and makes policy recommendations for home and host country governments. Assuming this actor network of Chinese business has a significant degree of greed, rogue and corruption in the everyday practice of social actors (cf. Tickell, 1996; Clark, 1997; 1998c), how does the researcher compromise his or her multiple roles as a trusted enrollee of the actor network (for research), an independent critical scholar, and a public citizen with strong civic consciousness? This ethics issue is apparently less significant in traditional economic geography in which the research is well separated from the subject of analysis. But for new economic geographers, this issue is an inevitable and integral aspect of the research process.⁶ In another sensational example, McDowell (1998: 2137) recapitulated recently that her conference paper on women's oppression in London's merchant banks was magnilantly reported in *The Sun's* page-three header as "Academic says women flirt to get top jobs" which was strategically placed next to that day's bare-breasted "stunna"! What appeared to be an original research into sexual discrimination in banks' employment practice was mangled by the press into a public embarrassment against women in the financial industry. Clearly, the ethical challenge to research in new economic geographies can be daunting. A fuller appreciation of this challenge is an important initial step in our collective intellectual endeavor to develop a comprehensive research agenda for understanding the complexity of contemporary economic landscapes and social life.

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⁶ A similar issue of ethics is also very relevant to interpretive geographies (Pile, 1991; Keith, 1992) and feminist geographies (McDowell, 1992).

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TABLE 1. Validity and Reliability of Methods in Economic Geography

	Validity in Explanation		Reliability of Data	
	Traditional Economic Geography	New Economic Geography	Traditional Economic Geography	New Economic Geography
1. Quantitative and secondary data	√	x	√	?
2. Tracking down networks	x	√	x	?
3. <i>in situ</i> research	NA	√	NA	√
4. Abstraction	x	√	x	√
5. Deconstruction	x	√	x	√
6. Total method approach	√	√	√	√

Notes: A “√” sign refers to sufficiency in economic geography. A “x” sign refers to non-sufficiency in economic geography. A “?” sign refers to ambivalence in sufficiency. “NA” refers to not applicable.

FIGURE 1. The Total Method Approach to Practising New Economic Geographies

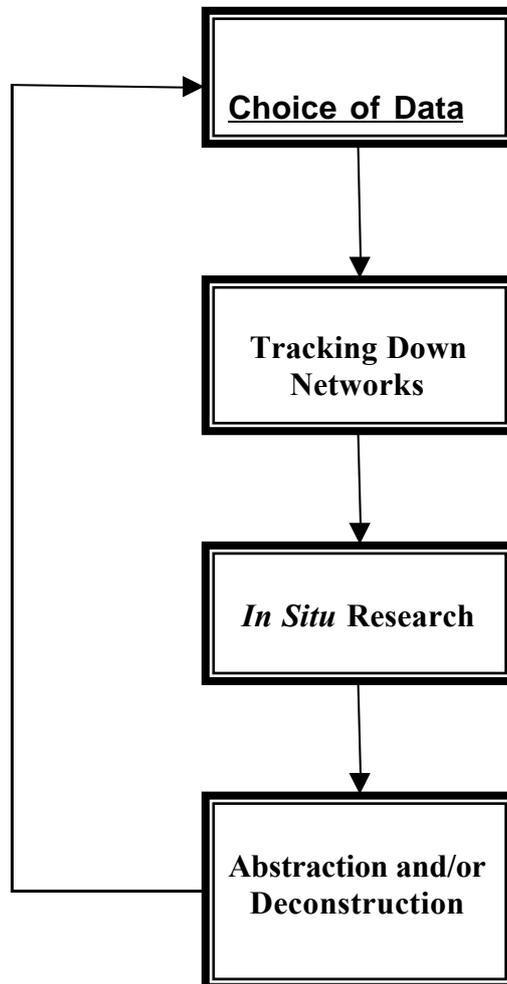


FIGURE 2. The Total Method Approach to Chinese Business Research

