# Causal Mechanisms, Job Search and the Labour Market Spatial Mismatch: A realist response to a neo-positivist methodology

### Owen Crankshaw

### Sociology Department, University of Cape Town

## Abstract

Many studies of the labour market spatial mismatch rely on the deductive-nomological model of causation to test the theory that low-skilled, inner-city residents have been isolated from the knowledge of job opportunities by the suburbanisation of jobs. The logic of this approach follows the deductive-nomological model of explanation which does not conduct research on the causal mechanisms themselves. As an alternative, I have used a ‘realist’ approach to the study of the labour market spatial mismatch that uses a ‘retroductive’ methodology. This approach requires the study of the causal mechanism itself in order to discover its causal properties. The results suggest that the spatial mismatch theory could be refined in order to accommodate the finding that workers in excluded ghettos do not necessarily rely solely on local social networks to find out about job vacancies. Instead, workers with employment experience have strong workplace-based social networks. Since employers recruit workers by relying on referrals from trusted workers, these workplace-based social networks can put job seekers at the front of the hiring queue, regardless of where they live.

## Introduction

The spatial mismatch hypothesis has a long history in a literature devoted to understanding the persistence of racial inequality in cities. Kain (1968) was the first to argue that low-skilled black residents, who were forced to live in racially segregated inner-city neighbourhoods, were isolated from job opportunities by the suburbanisation of jobs. Kain argued that this emerging spatial mismatch caused higher rates of unemployment among low-skilled black workers.

The spatial mismatch theory argues that a spatial disconnection between low-wage workers and jobs can cause unemployment in a number of specific ways. These proposed causes, or mechanisms, have been helpfully summarised in a recent review article by Gobillon, Selod and Zenou (2007). The first type of mechanism concerns the spatial disconnection that makes commuting between home and potential workplaces impossible. Long distances between work and home means that commuting costs are higher, which may deter workers from accepting jobs far from home because their potential net wages would be unacceptably low (Gobillon et al., 2007: 2408; Wilson, 1997: 37-42).

The second type of mechanism that causes unemployment concerns the spatial disconnections that restrict the flow of information about job vacancies to workers who reside far from places of employment. Long distances between potential jobs and home mean that workers search less intensively than they otherwise would because of the costs that are incurred in searching for jobs. Alternatively, they may tend to search closer to home, where there are fewer jobs. Also, workers may have only weak knowledge about jobs in distant locations. This weak knowledge may be caused by firms using localised recruitment methods that disadvantage workers who live far away. The result of a weak knowledge about distant jobs means that workers may search for jobs in the wrong places. Finally, for the reasons listed above, workers who live far from job opportunities live in communities with high unemployment rates. The result of this is that they have fewer social connections with employed workers who may be in a position to provide them with information about job vacancies (Gobillon et al., 2007: 2408; Wilson, 1987: 60). This study is concerned only with this second causal mechanism.

## Models of Causal Explanation

Some of the research that addresses the spatial mismatch hypothesis relies on data collected using questionnaire surveys. As such, the methodology is a deductive one: causal mechanisms are hypothesized and then tested by collecting statistical evidence using a sample survey. The results of these surveys aim to test if there is a statistically significant relationship between particular variables whose association is consistent with the mechanism proposed in the model. The logic of these arguments therefore relies on the covering law model of explanation, or what is alternatively known as the deductive-nomological model (Sayer, 1992: 171). This model takes the following form, in which variable ‘A’ has a statistical impact on variable ‘B’:

If A occurs then B also occurs

An interesting feature of this covering law model of argument is that it is described as a ‘black box’ explanation that identifies the operation of ‘laws’ rather than ‘mechanisms’ (Hedström and Swedberg, 1998, p. 9). The causal mechanism that links variables ‘A’ and ‘B’ is referred to as a black box because the usefulness of the model does not depend on the specific nature of the causal mechanism. In other words, this model will predict changes in ‘B’ due to the influence of ‘A’ without any knowledge of the causal mechanism. Put differently, the covering law model does not distinguish between explanation and prediction (Manicas, 2006). In other words, if a statistical model correctly predicts an outcome, then this is taken to mean that the model has explained why the outcome occurred. The origin of the covering law model, along with its lack of interest in causal mechanisms, was due to attempts by positivists to avoid metaphysical explanations by restricting their use of evidence to observable phenomena. Since many causal mechanisms cannot be observed directly, they preferred to restrict their conclusions to predictions rather than to invoke unobservable causes that would make their scientific explanations indistinguishable from metaphysical ones (Doyal and Harris, 1986).

However, as I have shown above, it is not true to say that scholars who use the covering law model of explanation have no interest in causal mechanisms. They advance a number of causal mechanisms to explain the high levels of unemployment among low-wage, black residents of the inner city. So, how do these scholars reconcile their interest in causal mechanisms with the use of an explanatory model that has no use for such mechanisms? The answer, interestingly enough, is that these scholars treat causal mechanisms as if they were unobservable phenomena. This means that these scholars devise hypotheses that are consistent with the predictions of their causal model but they do not conduct research on the causal mechanism itself. Therefore, one weakness of this approach is that the proposed causal mechanisms are not the subject of research, only their outcomes. A great deal of effort is spent on collecting data concerning the association of variables and proposing hypotheses concerning causal mechanisms but the causal mechanism is seldom the subject of research itself. I will consider the work by Ihlanfeldt (1997) to demonstrate this point.

On the basis of a study of residents’ knowledge of the spatial distribution of jobs in Atlanta, Ihlanfeldt (1997, pp. 234-239) argues that low-skilled residents who lived in the central city and southern suburbs were less likely to know that most of the region’s growing job opportunities for low-skilled workers were to be found in the northern suburbs. He argues that his findings explain why black residents were more likely to be misinformed about the spatial distribution of jobs than white residents. The reason is that black residents were much more likely to live in the central city and southern suburbs, whereas white residents were much more likely to live in the northern suburbs. Ihlanfeldt concludes by arguing that the spatial mismatch between place of residence and job opportunities therefore goes some way towards explaining why low-skilled black residents had poorer knowledge of the spatial distribution of jobs than their white counterparts.

The important observation that I wish to make is that the main conclusions of Ihlanfeldt’s study, and others that use the same deductive-nomological type of explanation, make no reference to the social mechanism through which distance is translated into a lack of knowledge of the spatial distribution of jobs. This is not surprising because Ihlanfeldt’s research did not collect any evidence on such social mechanisms. Instead, Evidence was collected on the respondent’s (a) knowledge of where jobs were most plentiful, (b) place of residence, (c) race, (d) gender, (e) level of education, (f) health, (g) tenure status, (h) marital status, (i) family income and (j) work experience. Information was also collected on (k) whether children lived at the respondent’s home and (l) the poverty rate of the neighbourhood in which the respondent resided (Ihlanfeldt, 1997:232). So, the information collected with the sample survey was used to measure the independent impact of variables ‘b’ to ‘l’ on the dependent variable ‘a’.1

This methodological approach to the collection and analysis of data therefore conforms closely to the covering law model described above. The main concern with this approach is to measure the extent to which there is a ‘constant conjunction’ between the independent and dependent variables. The model has no place for incorporating evidence of how the causal mechanisms may explain the impact of the independent variables on the dependent variable. Explanation is therefore synonymous with predicting the variance in the dependent variable through reference to the variance in the independent variables (Manicas, 2006, p 11). This is clear from the data that were collected, how they were analysed and how the results were interpreted. However, Ihlanfeldt does discuss possible causal mechanisms in some detail. In a section titled ‘Theoretical Framework’, he proposes that residents who live far from employment opportunities will have access to less information about these jobs if they use either the door-to-door method of searching or if they rely on their social networks to find jobs (Ihlanfeldt, 1997, p 230).

I should add at this point, that I am not arguing that there is no merit in Ihanfeldt’s argument. It is a plausible hypothesis. My point is that the deductive-nomological method does not offer us a way of collecting evidence that demonstrate whether or not his hypothesis bears any relationship to reality. Put differently, the deductive-nomological method does not collect evidence on his proposed causal mechanism and therefore cannot verify his hypothesis.

If residents use their local social networks to find out about jobs in distant locations, then they are not subject to the costs imposed by travelling. However, Ihlanfeldt argues that central city residents are less likely to know about employment opportunities because their local social networks are less likely to comprise employed workers (Ihlanfeldt, 1997, p 230). Although Ihlanfeldt presents this social mechanism as a possible reason for why central city residents have limited knowledge of suburban jobs, his questionnaire survey does not ask questions concerning this mechanism. Although the mechanism is acknowledged in theoretical terms, it is treated as if it is unobservable by the way the data were collected and by the way that the results were analysed statistically.

Ihlanfeldt’s methodology is by no means unique. As I have argued above, it is a popular methodology that is used in the study of the labour market spatial mismatch. Although the precise research question may differ, a similar approach can be found in a variety of studies (for example, Cooke, 1993; Naudé, 2008; O’Regan, 1993; Rospabe and Selod, 2006; Stoll and Raphael, 2000).

## Job Search and Social Networks

This core theory, about how workers in excluded ghettos rely largely upon their local neighbourhood networks to find out about jobs in distant locations, is drawn from theories in the literature on social networks. The first theory from this literature on social networks is that workers mostly find their jobs through ‘informal’ social networks rather than through door-to-door searching or through answering ‘formal’ advertisements (Franzen and Hangartner, 2006; Granovetter, 1973 and 1995). To the extent that workers do rely on informal social networks to find jobs, it is argued that employment is positively correlated with the number, quality and multiplexity (or diversity) of social ties that are held by workers. So, workers with both a large social network and a wide range of weak social ties, which extend beyond their circle of family ties, are more likely to find employment (Aguilera, 2002; Aponte, 1996; Calvó-Armengol and Jackson, 2004; Fernández-Kelly, 1995; Granovetter, 1973; Montgomery, 1992; Small, 2007; van Hoye, van Hooft, and Lievens, 2009; Zhao, 2002). This argument therefore has direct relevance to the spatial mismatch argument, which argues that when workers live in neighbourhoods with high levels of unemployment, their prospects of finding jobs through their social networks are diminished.

The second theory drawn from the literature on social networks argues that workers have social networks that are largely found within their own neighbourhood. This is exemplified by O’Regan (1993: 331) when she argues that ‘Social networks are largely determined by location’. This conflation of social networks with the neighbourhood is a long-standing assumption of scholarship in urban sociology. It has its origins in a particular approach to the study of neighbourhoods that conflates the geographical boundaries of neighbourhoods with the social community itself (Bloklund, 2003; Wellman and Leighton, 1979). Wellman argues that this conflation is quite wrong and that his research on social networks in Toronto showed that only a small percentage of social ties were confined to the respondent’s own neighbourhood (Wellman, 1979). Similarly, recent research in the Netherlands has shown that social ties are formed through shared activities in specific institutional contexts, such as churches or sports clubs. These social activities may or may not be spatially defined, so the social networks of residents are not necessarily confined to their own neighbourhoods (Bloklund, 2003; van Eijk, 2010).

This criticism of the way that social networks have been conflated with neighbourhood boundaries is a partial but nonetheless important challenge to the application of the deductive-nomological methodology to test the spatial mismatch hypothesis. If it is true that social networks are not solely restricted to neighbourhood boundaries, then scholars need to reformulate the spatial mismatch theory to accommodate this new evidence. To the extent that job seekers rely on social networks within their own neighbourhoods to find jobs, they will be disadvantaged by living in neighbourhoods with high unemployment. To the extent that their social networks extend beyond the neighbourhood, into social networks that have lower levels of unemployment, their prospects of finding a job will not be diminished by the fact that they live in a neighbourhood characterised by high unemployment.

In the study that follows, I have used an alternative approach to the deductive-nomological model. In contrast to the deductive logic of the deductive-nomological model, the logic of my method can be described as ‘retroductive’ (Sayer, 1992: 107). This method understands the association of events, not by their constant conjunction, but by conducting research on the causal mechanism itself. The aim of research is therefore to discover and describe the causal mechanisms that produce the events. By studying the properties and powers of social networks and recruitment practices, this method allows us to develop an understanding of how they necessarily cause certain outcomes under specific conditions. This approach is quite different from the deductive-nomological model in another important respect. Instead of treating the causal mechanism as if it is unobservable and using statistical models to establish whether or not it operates, I have conducted research on the causal mechanism itself in order to describe and understand its properties.

## The labour market spatial mismatch in Cape Town

Like other large South African cities, the geography of Cape Town is characterized by long distances between the homes of low-skilled, low-wage workers and their jobs. Unlike American cities, where the ‘excluded ghettos’ (Marcuse and Van Kempen, 2000: 256) are found in the inner cities, most low-skilled residents live in the south-eastern suburbs of Cape Town. This social geography is partly due to the forced removal of poor African and coloured residents from inner-city neighbourhoods by the apartheid state and partly due to the geography of low-income housing provision in the post-apartheid period. African residents were forcibly removed from the inner-city neighbourhood of Ndabeni and relocated to suburban Langa in the late 1920s and early 1930s (Saunders, 1979) (Fig.1). Coloureds were forced out of the inner-city neighbourhood of District Six during the 1970s and relocated in the suburbs of Mitchell’s Plain (Hart, 1988) (Fig.1). In the 1980s, the apartheid state built new, low-cost housing for Africans in the suburbs of Khayelitsha (Cook, 1986 and 1991). In the post-apartheid period, the provision of state-subsidized housing for the poor has reproduced this same geographical pattern by building such housing on the south-eastern suburban periphery where land is cheap and plentiful (Turok, 2001; Turok and Watson, 2001). The end result is that extremely high levels of unemployment are concentrated in the south-eastern neighbourhoods of Cape Town where low-skilled coloured and African workers live. Unemployment rates are higher among Africans than coloureds, due in large part to employment, urbanisation and housing policies during apartheid that favoured coloured residents.

The largest employment nodes in Cape Town are still located in the central business district, the old inner-city neighbourhoods of Woodstock and Salt River and the industrial areas of Ndabeni, Paarden Island, Epping Industrial, Parow Industria, Elsies River Industria and Bellville South Industrial. Nonetheless, there is an established, long-term trend of decentralisation as new commercial and industrial areas are developed in the northern and south-western suburbs (Netshikulwe, 2010; Rospabe and Selod, 2006; Sinclair-Smith and Turok, 2012; Turok, 2001). Low-wage workers are therefore increasingly housed in the far south-eastern neighbourhoods, while jobs are increasingly created in the northern and south-western neighbourhoods. As a result, the spatial mismatch between home and workplace is growing as workers travel long distances to reach industrial and commercial areas in which low-skilled jobs are concentrated. A household survey conducted in Khayelitsha and greater Nyanga during 2002 revealed that almost three-quarters of workers (74%) commuted by public transport and that 40% of them took over one hour to travel to work (de Swart et al., 2005: 103).



## Understanding Job Search Dynamics in Cape Town

This study is based partly on the results of 46 semi-structured, in-depth interviews with managers and workers in Cape Town. Using the findings of these interviews, I designed and conducted a probability sample survey of 1,752 adults in Cape Town during 2011 and 2012 in order to quantify some of the characteristics of job search methods.2

The semi-structured interviews with workers aimed to provide my student and I with an understanding of the different ways that they found and secured jobs over the course of their working lives. The interviews with managers were concerned largely with the nature of their businesses, their workers and their recruitment strategies. Following the logic of qualitative sampling design, we aimed to identify as much diversity as we could through a combination of purposive sampling for residents in particular locations, followed by snowball sampling within these locations. We therefore interviewed workers who lived in Site C, Khayelitsha, which is far from concentrations of employment and workers who lived in Du Noon, which is on the doorstep of the industrial areas of Kensington Gardens and Montague Gardens (Fig.1). Generally, we interviewed workers who walked to work or commuted by public transport, namely by train, bus or mini-bus ‘taxi’. These workers were employed as unskilled and semi-skilled manual workers in homes, factories and construction sites. Typical occupations included those of domestic servants, child minder, factory machine operators, construction workers, petrol attendants, cashiers, office cleaners, shelf-packers, waiters, dishwashers and cooks.

We also interviewed managers of companies that were located near and far from the south-eastern neighbourhoods of Khayelitsha and Mitchell’s Plain. These companies were located in Paarden Island, Philippi, Airport Industria, Somerset West, Blackheath, Westlake, Diep River and Constantia (Fig.1). These companies were engaged in a wide range of commercial and industrial activities. We interviewed, among others, managers of supermarkets, restaurants, real estate agencies, crèches, electrical repair workshops, construction companies, catering companies, metal engineering factories, bus companies and a printing works.

### The character of the job network and recruitment practices

Our finding is that social networks among unemployed low-skilled black workers are not necessarily confined to residents in their excluded ghetto (Elliott, 1999: 201). Although we did establish that workers found out about jobs through their immediate family, other relatives and friends who lived in their neighbourhood, their source of job information was by no means restricted to these local social networks. Instead, residents who had a personal history of employment had developed social networks among fellow workers and previous employers. Furthermore, we discovered that employers used their social networks with other employers to share information about workers in order to fill vacancies. Since most centres of employment are found outside the excluded ghetto, these social networks were not restricted to the local neighbourhood in which workers lived. The result of these geographically-dispersed networks is that workers living in remote excluded ghettos nonetheless have access to knowledge about jobs that comes to them directly from the workplace, instead of solely through their neighbours and other residents of the excluded ghetto.

Why do employers prefer to use referral hiring to recruit workers, instead of using recruitment agencies or newspaper advertisements, or simply recruiting applicants who knock on their door? The literature on this topic suggests that referral hiring is widely practiced by employers on the grounds that this recruitment method is cheap and delivers better-quality applicants (Fernandez et al., 2000; Kasinitz and Rosenberg, 1996; Standing et al., 1996). Referral hiring is not, of necessity, restricted to social networks that have their origins in the workplace. We found that employers who wished to fill a vacancy would ask their trusted workers to recommend someone for the post. Sometimes the workers recommended their family, sometimes their neighbours and sometimes their friends. Crucially for our findings, their friendships were not necessarily formed in local residential neighbourhoods: they were also formed at other workplaces.

Employers preferred to recruit applicants who are known to themselves or to their employees because their employees can vouch for the applicants. They argued that low-skilled workers are not recruited on the basis of specialised technical skills. Instead, employers are looking for workers who are reliable, honest and have the social skills that will enable them to cooperate with other workers and to engage with customers. There is only one way by which employers can identify these characteristics in an applicant and that is through someone else who can vouch for the applicant. Employers therefore rely on trusted staff to provide references for applicants. According to their own logic, they believe that trusted employees would not risk their own reputations by vouching for applicants who they know to be unreliable or dishonest.

The manager and owner of an exhaust pipe and tyre-fitting workshop in Mowbray argued that, ‘Ya well you see for me, I like to hire people that I know and trust. So I don’t go out looking for workers because I don’t know those people, you know, and I don’t know anything about them, so I don’t trust them. So the people I hire, you know, usually from a recommendation of one of my other workers, or people that I know...Most of the people here know someone already working here, or know me somehow. That is how I got employed here, I knew the previous owners.’ (Marimuthu, 2010).

A manager of a large supermarket store in Plumstead put it this way, ‘You can’t test someone for trustworthiness when you interview them...How the person appears or how they present themselves can ever give you an indication of how trustworthy they are...So, certainly, that’s why when someone, especially a good, honest, reputable staff member comes and refers someone to us, we do attach weight to that.’ (Petersen, 2010).

These results have therefore identified a causal mechanism that operates in workplace-based social networks. A necessary consequence of employment relationships in the workplace is that employers develop an opinion on which workers they can trust. In the belief that their judgement will ensure that referral hiring results in the recruitment of trustworthy workers, employers therefore rely on their social networks with workers and other employers in order to recruit staff. This means that job seekers with social networks among employed workers will be placed at the front of the employment queue.

### Social networks between employers and workers

How is it that unemployed workers have social links directly with employers and that different employers share their knowledge about specific workers in order to fill vacancies? The answer lies in our finding that many kinds of low-skilled jobs are found in small businesses where workers are in direct contact with their manager, who was also the person responsible for hiring them. Others worked in private homes as domestic cleaners and were obviously in direct contact with the householder, who was their employer.

Our respondents had been employed in a diverse range of small businesses that employed only a handful of workers. These workers found employment in restaurant and coffee shop kitchens as cooks (such as pizza makers, grillers), cleaners and dishwashers and also as a ‘barista’ (espresso maker) and bartender. At petrol stations they were employed as a cashier and petrol attendants. Building sub-contractors employed our respondents in the ‘wet’, deskilled trades of bricklaying and tiling. Others worked as domestic cleaners in private households.

Our research showed that the relationship between employers and workers in these small businesses is a personal one. Workers are in constant communication with managers as they go about their daily tasks. The obvious reason for this is that managers in these small businesses have a hands-on role in which they not only hire, fire and discipline workers, but also work alongside them. For example, in restaurants, managers are responsible not only for financial administration, but also manage ‘front of house’ waiters and kitchen workers by maintaining an active presence and helping out when necessary (Buchanan, 2009; Ninemeier and Hayes, 2005). Similarly, building sub-contractors employ small teams of workers to carry out building operations associated with particular trades. In the case of our respondents, the owner-managers of these small businesses were the artisans themselves and therefore worked alongside or supervised the workers who they employed. The same kind of working relationship was found between petrol attendants and the managers at petrol stations. In private homes, where householders employ domestic cleaners, workers and employers also develop a personal knowledge of one another. Although they do not work side by side, they nonetheless have personal contact because of the one-on-one nature of the worker-employer relationship.

As a result of this personal knowledge of one another, managers kept in touch with our respondents and called on them when particular work opportunities arose. The following case studies provide evidence of this mechanism by which job seekers who live in distant excluded ghettos are able to secure employment far from home.

Alfred worked as a barista in the ‘Mugg & Bean’ coffee shop in the Long Beach shopping mall in the suburb of Sun Valley, near Fish Hoek. This job lasted for only a year because the business was not profitable and the coffee shop was closed down in 2001. The following year his old manager started up a new Mugg & Bean coffee shop in the Bayside Mall in the suburb of Milnerton. Looking for an experienced barista who he could trust, he phoned Alfred to offer him a job. Whereas Alfred’s first job in the Long Beach shopping mall was a short walk from his home in the informal settlement of Masipumulele, his second job in Milnerton was at the other end of the city from Khayelitsha, where he had moved to live. This relationship between employer and worker therefore led to the transmission of job information that by-passed Alfred’s local social networks in Khayelitsha. Furthermore, it also secured Alfred a job that was a great distance away from his home in Khayelitsha (Goetz, 2009).

Val lives in the African ‘township’ of Gugulethu, near the Airport. She first started working in restaurants as a sculler, taking the evening shift in the Mexican Kitchen in Cape Town’s central business district. After a couple of years experience and a promotion to chef, she fell out with one of the waitresses. As a result, she left this job, but only after her employer arranged for her to take up a similar job at the Dunkley Inn, in the inner-city neighbourhood of Gardens. Val’s employer could arrange this new job for her because he had previously owned the Dunkley Inn and was on friendly terms with the new owner. Three years later, when the Dunkley Inn closed down, Val approached her previous employer and was offered a temporary job at one of his restaurants, Fat Cactus, in Mowbray. Soon thereafter, she took a job in his new restaurant, The Greek, which opened across the road from Fat Cactus (Buchanan, 2009).

Private householders who employ domestic cleaners share information about workers and take referrals from one another. As a result, domestic cleaners can secure jobs through the social networks of their employers as well as through the social networks of their neighbours, friends and relatives. For example, take the case of Nbambo, who lives in Site C, Khayelitsha, and has worked as a domestic cleaner in the inner-city neighbourhoods since 1998. Her first job was in Sea Point, which she heard about through a close friend who she knew from her childhood in the rural district of Willowvale in the Eastern Cape. In more specific terms, her employer put out the word to his friends that he wished to employ a part-time domestic cleaner. His friends then passed this information on to the domestic cleaners who worked for them. One of these domestic cleaners was Nbambo’s childhood friend, who passed the information on to her. Nbambo secured her second part-time job in a similar way: Since she was only employed for two days a week, she asked her employer if he know of anyone who needed a domestic cleaner. As it turned out, he did and Nbambo secured another job for three days a week in Observatory. She was later fired her job in Sea Point because her employer suspected her of stealing from him. Soon afterwards, she found another job for one day every second week, working for the ex-husband of her employer in Observatory (Goetz, 2009).

We therefore found that employers in a wide variety of small businesses developed personal knowledge of their staff through a shared workplace. This personal knowledge was the basis on which managers re-hired workers or referred them to other employers. Most importantly, the character of these workplace-based social relationships was such that they necessarily gave trusted job seekers direct access to the job network, even though they lived in excluded ghettos that were far from centres of employment.

### Social networks among workers

In larger companies, where senior managers do not have direct personal contact with shop floor workers, there was less opportunity for them to develop personal knowledge of these workers. In these companies, managers therefore relied on their trusted front-line supervisors to provide them with information about job applicants. Here, personal referrals by trusted shop-floor workers were a favoured method of assessing the merit of job applicants.

One of the managers of a large supermarket reasoned that this is a ‘very effective’ way of recruiting new staff, ‘Because...there is a credibility issue. When you refer a friend for employment, you know, you want to make sure that they are the right person, because if they are not, it reflects on you as a person. The most effective form of advertising is when...a good staff member comes to us and says, “I know of a friend at school or whatever, who is capable”. We put them on the list. We still obviously go through the interview process, but it does sort of add a bit of weight...in the interview, when they come recommended by a friend.’ (Petersen, 2010).

Another good example was provided by Charlton, the manager of a small printing company based in Salt River. Charlton had just started his company and was looking to recruit staff. He therefore relied on the referral of a newly-recruited worker, Sipho, who lived in Gugulethu. Charlton and Sipho had worked together some years before when they were both employed at another printing company. Sipho recommended that he employ his friend and Charlton did so, reasoning that ‘I think that having known Sipho for such a long time, I trusted his judgement in bringing someone along. [Sipho]...knew our standard of work and he knew that the type of person that we want would be the person we can rely on, that he would be a self-starter, that we wouldn’t have to be standing behind him to [make him] work. And it worked out.’ (Solomon, 2010).

Alfred was employed for a period at the Cobb Inn restaurant in the seaside suburb of Scarborough. He was employed to make and cook pizzas, but this job was brought to an end when the restaurant closed. Two years later, one of the waiters with whom he had worked persuaded the manager of the Imhoff Farm Restaurant in Kommetjie to interview him for a temporary job making pizzas (Goetz, 2009).

In 1988, Isabel started work as a cleaner at the ‘Rainbowland’ crèche in the suburb of Milnerton. The job paid very little, but she was provided with a rent-free room on the premises. After she had worked there for about six years, the owners sold the business and Isabel resigned soon thereafter because she disliked the new owners. Ten years later, Isabel moved back to Milnerton, this time staying with her husband and children in Du Noon. While shopping at the nearby Bayside Mall, Isabel bumped into an old friend who used to work with her at the Rainbowland crèche. Isabel discovered that her friend had started her own crèche, named ‘Jay Skits’, also in Milnerton. On the basis of this workplace-based friendship, Isabel was offered a job as a cleaner at the Jay Skits crèche (Goetz, 2009)

Managers therefore relied on the character of the workers who provided referrals to job applicants. The social networks of these referees included, not only their family, friends and neighbours, but also erstwhile workmates. Again, as with relationships between employers and workers, these workplace-based social networks necessarily connect job seekers into the job network. As a result, their social network is not restricted to the excluded ghetto but instead reaches across the spatial divide between work and home.

Job seekers who live in excluded ghettos but who have a personal history of employment and who have a reputation for trustworthiness are therefore in a completely different position from job seekers who rely on social networks based solely on their family and neighbours. These latter social networks, comprising many unemployed people, are by necessity limited to the spatial confines of the excluded ghetto and provide job seekers with little information about jobs in distant centres of employment. By contrast, workers with workplace-based social networks have direct access to information about jobs, regardless of how far they live from places of work. Furthermore, if employers use referral hiring, then workers with these social networks are able to jump the hiring queue ahead of workers who use the door-to-door method of searching for a job (see Kasinitz and Rosenberg 1996, 187).

So, in methodological terms, this research shows that by studying the nature of social networks and recruitment practices, we can begin to understand their characteristics and their necessary causal powers. This is a completely different method to one that hypothesizes the character of social networks and tests the validity of the hypothesis by studying statistical relationships between variables. I should add that these results are not intended as a full-throated criticism of the spatial mismatch theory. Rather, these results point to the need for a theoretical refinement of the causal mechanism by which the mismatch between work and home restricts the flow of information about jobs to job seekers. For example, the mechanism that we have identified here may well play a role in explaining the high levels of unemployment among the residents of excluded ghettos, even when there is a plentiful supply of appropriate jobs nearby (Cohn and Fossett, 1996; Kasinitz and Rosenberg, 1996).

### Estimating the quantitative importance of different job searching methods

An obvious limitation of these results is that they do not provide any indication of the extent to which workers use social networks outside of their neighbourhoods to find jobs. In order to estimate these quantities, I conducted a questionnaire survey of adults in Cape Town. The following results are based on the information collected from respondents who lived in the excluded ghettos in the south-eastern neighbourhoods stretching from Gordon’s Bay to Strandfontein, which include the neighbourhoods of Khayelitsha, Mitchell’s Plain, Blue Downs, Gugulethu, Nyanga, Grassy Park and Philippi (Fig.1).

Respondents were asked how they found their present job, or if they were not employed, how they found the last job that they held previously. Over half (58.5 %) of them reported that they received information about their job from their social network (Table 1). Only a minority found their job by knocking on doors (11.5%) or by noticing an advert at the workplace while searching door to door (1.0%) (Table 1). These results conform to those of other studies (Elliott, 1999: 208; Franzen and Hangartner, 2006; Granovetter, 1995: 11; Nattrass and Seekings, 2005: 285) and reinforce the importance of the following quantitative results on the geographical nature of social networks.

Defining the neighbourhood as the area within 15 to 20 minutes’ walking distance from each respondent’s home, we asked respondents about the social network that they used to get their job. Our survey results revealed that, contrary to the assumptions made by the spatial mismatch hypothesis, only one-half to two-thirds of respondents relied on neighbourhood-based social networks to get a job. The rest of the respondents relied on social networks that were found outside their own neighbourhood (Table 2).

When we questioned respondents about how they got to know the person who told them about their job, only half of them reported that they got to know the person through living in the same neighbourhood. As much as one-fifth reported that they got to know the person through working at the same workplace (Table 3).

**Table 1.** Job search method used by job seekers in the south-eastern neighbourhoods to find their job3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| How did you find out about this job? | PercentageDistribution(Weighted) | SampleSize | Standard Errorat 95%Probability Level\* | ConfidenceInterval\* |
| Someone told you about the job | 58.5 | 391 | 3.7 | 54.8 | to | 62.2 |
| You knocked on the doors of houses, factories, shops and offices | 11.5 | 77 | 2.4 | 9.1 | to | 13.9 |
| You looked in a newspaper | 14.4 | 94 | 2.6 | 11.7 | to | 17.0 |
| You looked at a notice board in a shopping centre or community centre | 0.4 | 3 | 0.4 | 0.0 | to | 0.8 |
| You saw the job advertisement outside the workplace | 1.0 | 7 | 0.7 | 0.2 | to | 1.7 |
| You found the job by using employment agency | 5.6 | 37 | 1.7 | 3.9 | to | 7.3 |
| You found the job using the internet | 2.5 | 32 | 1.2 | 1.3 | to | 3.7 |
| You waited on the side of the road for an employer to come by | 0.9 | 4 | 0.7 | 0.2 | to | 1.7 |
| Other | 5.3 | 35 |  |  |  |  |
| Total | 100 | 680 |  |  |  |  |

\* Measured in percentage points

**Table 2.** The geography of social networks in the south-eastern neighbourhoods

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Where did this person live at the time that they told you about the job? | PercentageDistribution(Weighted) | SampleSize | Standard Error at 95%Probability Level\* | ConfidenceInterval\* |
| In your neighbourhood | 57.6 | 219 | 7.6 | 50.0 | to | 65.2 |
| In another part of Cape Town | 40.1 | 164 | 7.5 | 32.6 | to | 47.6 |
| Not in this city | 1.7 | 5 | 2.0 | 0.0 | to | 3.7 |
| Don't know | 0.7 | 0.3 | 1.3 | 0.0 | to | 2.0 |
| Total | 100 | 391 |  |  |  |  |

\* Measured in percentage points

**Table 3.** How respondents in the south-eastern neighbourhoods got to know the person who told them about their job

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | PercentageDistribution(Weighted) | SampleSize | Standard Errorat 95%Probability Level\* | ConfidenceInterval\* |
| Did you get to know this person from the neighbourhood where you lived? | Yes | 48.0 | 186 | 5.0 | 43.0 | to | 52.9 |
|  | No | 52.0 | 205 | 5.0 | 47.1 | to | 57.0 |
|  | Total | 100.0 | 391 |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Did you know this person from working at a previous job? | Yes | 21.4 | 86 | 4.1 | 17.3 | to | 25.4 |
|  | No | 78.6 | 305 | 4.1 | 74.6 | to | 82.7 |
|  | Total | 100.0 | 391 |  |  |  |  |
|  |  |  |  |  |  |  |  |
| Did this person recommend you to your employer? | Yes | 75.2 | 289 | 4.3 | 71.0 | to | 79.5 |
|  | No | 24.8 | 102 | 4.3 | 20.5 | to | 29.0 |
|  | Total | 100.0 | 391 |  |  |  |  |

\* Measured in percentage points

Finally, these survey results also show that three-quarters of respondents secured their job through referrals via their social network, which reinforces the importance of social networks, not only for finding out about a job but also for getting a job (Table 3). These results therefore suggest that the assumptions made by the spatial mismatch hypothesis need to be adjusted to accommodate the evidence that as many as one-fifth of job seekers living in excluded ghettos do not rely solely on neighbourhood-based social networks. Again, I need to stress that these results are not aimed at dismissing the theory that the spatial mismatch between work and home does result in social networks that are isolated from workplace networks. Rather, the results are aimed at refining our understanding of the causal mechanisms at play and the extent to which they can account for unemployment.

## Conclusion

Many studies of the mechanisms of the labour market spatial mismatch use a deductive-nomological model of explanation. These studies hypothesize causal mechanisms without establishing their existence through research. Instead, they treat such mechanisms as if they were unobservable and measure the quantities of variables that might be associated with a hypothesized mechanism in order to establish the association of independent variables (such as distance from work) with the dependent variable (employment status). As I have argued, this approach cannot identify and provide an understanding of the causal mechanism since the causal mechanism itself is not the object of study.

I have taken a different approach by using the logic of retroduction to discover and describe the social mechanisms whereby low-wage workers both establish workplace-based social networks that they use to find out about jobs far from their homes and how they secure these jobs through referral hiring. So, unlike the deductive-nomological model of establishing causation, which can only hypothesize the nature of causal mechanisms, we have collected evidence on the nature of social networks and their role in job searching and recruitment under conditions of a spatial mismatch between work and home. By discovering and describing the social structure and social practices involving employers, their workers and job-seekers, this research has established that job seekers with social networks based on workplace experience are necessarily connected into the job network. These social connections not only convey information about jobs, but are also the basis on which job referrals are made. The nature of this link with the job network does not change when workers are obliged or even forced to live in excluded ghettos with high unemployment rates among their neighbours and relatives. By contrast, workers with no work experience do not have direct access to the job network. In the absence of an income to search further afield, they can only gain access to the job network through their friends and relatives who live in their own neighbourhood.

These findings contribute to the debate about the labour market spatial mismatch by discovering and describing the conditions under which the spatial mismatch between work and home does cause unemployment and the conditions under which it does not cause unemployment. Furthermore, by quantifying the extent to which these different conditions are found in Cape Town’s excluded ghettos, this research suggests that a small but substantial proportion of workers who have developed workplace-based social networks are not excluded from the job market, even when they live in remote excluded ghettos.

## Notes

1. The most useful technique is logistic regression because it allows for the measurement of the independent co-variance of independent variables with a dichotomous dependent variable.

2. The questionnaire survey design was a three-stage cluster sample. The primary sampling units were the ‘small area’ residential neighbourhoods as defined by Statistics South Africa. The secondary sampling units were households and the tertiary sampling units were individuals. One adult respondent was chosen randomly from each selected household. The sample was stratified by race, non-proportional to the population size of each race. The results are therefore weighted to represent the correct number of adults living within the boundaries of the City of Cape Town. For further details, refer to Crankshaw et al. (2001) who report on a very similar sample design that was used in the Khayelitsha Mitchells Plain Survey.

3. This question was based on another question used in the Khayelitsha Mitchell’s Plain Survey (Seekings and Nattrass, 2005: 285).

## Acknowledgements

This study was supported financially by the University of Cape Town, the African Centre for Cities, the Max Planck Institute for Religious and Ethnic Diversity, the Centre for Social Science Research and the National Research Foundation.

NRF Grant Nos. 66062 and 48283; Max Planck Grant Ref. 10622

I would like to acknowledge the fieldwork contributions by the following students in the Sociology Department at the University of Cape Town (UCT): Deborah Goetz, Hayley Petersen, Pandora Buchanan, Anya van Wyk, Jean-Paul Solomon, Binaishree Marimuthu, Denver Grigg and Kylie Stewart. I would also like to thank Elena Moore for assisting with the training and supervision of fieldworkers and her contribution to the design and management of the questionnaire survey. The questionnaire survey was conducted by Progressus, a private survey company and the data for the sample design were kindly provided by Diego Iturralde of Statistics South Africa. Martin Wittenberg and Cally Ardington advised me on the sample design. Nick Lindenberg and Thomas Slingsby at the GIS Laboratory provided expert advice on creating aerial images for the primary sample. The map was drawn by Philip Stickler, Cartography Unit, Department of Geography, University of Cambridge.

## References

Aguilera, M. (2002) The impact of social capital on labor force participation: Evidence from the 2000 Social Capital Benchmark Survey. *Social Science Quarterly* 83.3, 853–874.

Aponte, R. (1996) Urban employment and the mismatch dilemma: Accounting for the immigration exception. *Social Problems* 43.3, 268-283.

Blokland, T. (2003) Urban bonds: social relationships in an inner city neighbourhood. Polity Press, Cambridge.

Buchanan, P. (2009) Spatial mismatch vs. job search: Case study of employment trends in the Cape Town restaurant industry. Unpublished Honour’s Thesis, Sociology Department, University of Cape Town.

Calvó-Armengol, A. and M. Jackson (2004) The effects of social networks on employment and inequality. *The American Economic Review* 94.3, 426-454.

Cohn, S. and M. Fossett (1996) What spatial mismatch? The proximity of blacks to employment in Boston and Houston. *Social Forces* 75.2, 557-572.

Cook, G. (1986) Khayelitsha: Policy change or crisis response?. *Transactions of the Institute of British Geographers* 11.1, 57-66.

Cook, G. (1991) Cape Town, in: A. LEMON (Ed.) *Homes apart: South Africa’s segregated cities*, 26-42. Paul Chapman, London.

Cooke, T. (1993) Proximity to job opportunities and African American male unemployment: A test of the spatial mismatch hypothesis in Indianapolis. *Professional Geographer* 45.4, 407-415.

Crankshaw, O., M. Welch and S. Butcher (2001) GIS technology and survey sampling methods: The Khayelitsha/Mitchell’s Plain 2000 Survey. *Social Dynamics* 27.2, 156-174.

de Swardt, C., T. Puoane, M. Chopra and A. du Toit (2005) Urban poverty in Cape Town. *Environment and Urbanization* 17, 101-111.

Doyal, L. and R. Harris (1986) Empiricism, explanation and rationality: an introduction to the philosophy of the social sciences. Routledge & Kegan Paul, London.

Elliott, J. (1999) Social isolation and labour market insulation: Network and neighbourhood effects on less-educated urban workers. *The Sociological Quarterly* 40.2, 199-216.

Fernández-Kelly, M. (1995) Social and cultural capital in the urban ghetto: Implications for the economic sociology of immigration, in A. Portes (ed.), *The economic sociology of immigration: essays on networks, ethnicity, and entrepreneurship*, 213-247. Russell Sage, New York.

Fernandez, R., E. Castilla and P. Moore (2000) Social capital at work: Networks and employment at a phone center. *American Journal of Sociology* 105.5, 1288–1356.

Franzen, A. and D. Hangartner (2006) Social networks and labour market outcomes: The non-monetary benefits of social capital. *European Sociological Review* 22.4, 353–368.

Gobillon, L., H. Selod and Y. Zenou (2007) The mechanisms of spatial mismatch. *Urban Studies* 44.12, 2401-2427.

Goetz, D. (2009) An investigation into the barriers to employment for unskilled workers in Site C, Khayelitsha and Du Noon, Milnerton. Unpublished Master’s Thesis, Sociology Department, University of Cape Town.

Granovetter, M. (1973) The strength of weak ties. *American Journal of Sociology* 78.6, 1360-1380.

Granovetter, M. (1995) G*etting a job: a study of contacts and careers* 2nd Ed. Chicago, University of Chicago Press.

Hart, D. (1988) Political manipulation of urban space: The razing of District Six, Cape Town. *Urban Geography* 9.6, 603-628.

Hedström, P. and R. Swedberg (1998) *Social mechanisms: an analytical approach to social theory*. Cambridge University Press, Cambridge.

Ihlanfeldt, K. (1997) Information on the spatial distribution of job opportunities within metropolitan areas. *Journal of Urban Economics* 41, 218–242.

Kain, J. (1968) Housing segregation, Negro employment and metropolitan decentralization. *Quarterly Journal of Economics* 82, 175-197.

Kasinitz, P. and J. Rosenberg (1996) Missing the connection: Social isolation and employment on the Brooklyn waterfront. *Social Problems* 43.2, 180-196.

Manicas, P. (2006) *A realist philosophy of social science*. Cambridge University Press, New York.

Marcuse, P. and R. van Kempen (2000) Conclusion: A changed spatial order’, in: P. Marcuse and van R. Kempen (eds.), *Globalizing cities: a new spatial order?*. Blackwell, Oxford.

Marimuthu, B. (2010) The nature of social networks and the spatial mismatch hypothesis: a study of Pitstop auto-mechanics in Cape Town. Unpublished Honour’s Thesis, Sociology Department, University of Cape Town.

Montgomery, J. (1992) Job search and network composition: Implications of the strength-of-weak-ties hypothesis. *American Sociological Review* 57.5, 586–96.

Naudé, W. (2008) Is there a spatial mismatch in South Africa’s metropolitan labour market?. *Cities* 25, 268-276.

Netshikulwe, A. (2010) An investigation into the geographical trends in the sectoral composition of the Cape Town economy, Unpublished Master’s Thesis, Sociology Department, University of Cape Town.

Ninemeier, J. and D. Hayes (2005) *Restaurant operations management: principles and practices*. Pearson Prentice Hall, New Jersey.

O’Regan, K. (1993) The effect of social networks and concentrated poverty on Black and Hispanic youth unemployment. *The Annals of Regional Science* 27.4, 327-342.

Petersen, H. (2010) The spatial mismatch hypothesis and Cape Town. Unpublished Master’s Thesis, Sociology Department, University of Cape Town.

Reingold, D. (1999) Social networks and the employment problem of the urban poor. *Urban Studies* 36.11, 1907-1932.

Rospabe, S. and H. Selod (2006) Does city structure cause unemployment? The case of Cape Town, in: H. Bhorat and R. Kanbur (eds.) *Poverty and policy in post-apartheid South Africa*. HSRC Press, Cape Town.

Saunders, C. (1979) From Ndabeni to Langa, in: C. Saunders (ed.) *Studies in the history of Cape Town Vol.1*. History Department, University of Cape Town, Cape Town.

Sayer, A. (1992) Method in social science: a realist approach. Routledge, London.

Seekings, J. and N. Nattrass (2005) *Class, race and inequality in South Africa*. Yale University Press, New Haven.

Sinclair-Smith, K. and I. Turok (2012) The changing spatial economy of cities: An exploratory analysis of Cape Town. *Development Southern Africa* 29.3, 391 – 417.

Small, M. (2007) Racial differences in networks: Do neighbourhood conditions matter?. *Social Science Quarterly* 88.2, 320-343.

Solomon, J. (2010) An investigation into social networks in job-search: does the spatial mismatch hypothesis apply?, Unpublished Honour’s Thesis, Sociology Department, University of Cape Town.

Standing, G., J. Sender and J. Weeks (1996) *Restructuring the labour market: The South African challenge*. International Labour Office, Geneva.

Stoll, M. and S. Raphael (2000) Racial differences in spatial job search patterns: Exploring the causes and consequences. *Economic Geography* 76.3, 201-223.

Turok, I. (2001) Persistent polarisation post-apartheid? Progress towards urban integration in Cape Town. *Urban Studies* 38.13, 2349-2377.

Turok, I. and V. Watson (2001) Divergent development in South African cities: Strategic challenges facing Cape Town. [*Urban Forum*](http://eprints.gla.ac.uk/view/journal_volume/Urban_Forum.html) 12.2, 119-138.

van Eijk, G. (2010) Does living in a poor neighbourhood result in network poverty? A study on local networks, locality-based relationships and neighbourhood settings. *Journal of Housing and the Built Environment* 25, 467–480.

van Hoye, G., E.van Hooft and F. Lievens (2009) Networking as a job search behaviour: A social network perspective. *Journal of Occupational and Organizational Psychology* 82.3, 661–682.

Wellman, B. (1979) The community question: The intimate networks of East Yorkers. *American Journal of Sociology* 84.5, 1201–1231.

Wellman, B. and B. Leighton (1979) Networks, neighbourhoods and communities: Approaches to the study of the community question. *Urban Affairs Quarterly* 14.13, 363-390.

Wilson, W. (1987) *The truly disadvantaged*. University of Chicago Press, Chicago.

Wilson, W. (1997) When work disappears: the world of the new urban poor. Vintage Books, New York.

Zhao, Y. (2002) Measuring the social capital of laid-off Chinese workers. *Current Sociology* 50.4, 555-571.