Chapter 2

The Theoretical Landscape

2.1 Introduction

The aim of this book is to describe and explain the impact of network resources on labor market outcomes in Hungary. This chapter searches for theories that are helpful to answer the descriptive and the explanatory questions. More specifically, there are two objectives in this chapter. The first is to find theories that can answer the question whether relatively good jobs can be found through personal contacts. The second objective is to find theories that can help us to understand whether particularism or intensive search generates the observed contact effects (see Section 1.2). These objectives correspond to our second and third research questions (see Section 1.5).

By now, many theories were proposed to explain network effects and a large body of empirical studies tested the proposed explanations. Therefore, I begin by reviewing these theories. Our review will focus on evaluating the theories using two criteria. The first requirement is that the predictions of the theory under review should be confirmed. If a theory is often refuted, then it does not help to answer our descriptive question whether relatively good jobs can be found through personal contacts. The second requirement is whether the theory can distinguish between particularism and intensive search on the basis of observable contact effects. If a theory does not allow a clear inference about mechanisms from observed effects then it is of limited value for answering the explanatory question of why personal contacts help people to find a good job.

2.2 Do Personal Contacts Always Promote Labor Market Success?

The theories reviewed in this chapter can be seen as different attempts to explain a single fact: the use of personal contacts rarely promotes success in labor markets. This section briefly reviews the empirical evidence concerning the effect of personal contacts on various labor market outcomes.

Many studies have examined whether informal methods lead to jobs with higher earnings and/or status. Studies carried out within the status attainment paradigm unambiguously show that personal connections in themselves do not lead to jobs with higher status (Lin et al. 1981, De Graaf and Flap 1988, Völker and Flap 1999). Second, evidence is mixed about whether
personal connections lead to jobs with higher *income*. Studies carried out in the Netherlands, Germany, and the former GDR do not support the superiority of informal methods (Habich 1984, De Graaf and Flap 1988, Völker and Flap 1999). Similar conclusions arise from studies that are restricted to a small number of occupations (Reid 1972, Preisendörfer and Voss 1988). However, some US studies showed that personal connections lead to higher wage jobs than direct application (Campbell and Rosenfeld 1985), and the wage advantage applies for starting wages but disappears over time (Corcoran *et al.* 1980, Simon and Warner 1992). More interestingly, Corcoran *et al.* (1980) found that the higher the initial wage advantage, the faster is the decline of that wage advantage.

Informal methods may affect the *likelihood of finding a job*. Using a large US data set, Bortnick and Ports (1991) find that search method choice does not make a substantial difference in job finding probabilities within one month. Among various search methods, informal methods are most likely to lead to employment (Hilaski 1971). However, personal connections are more likely to produce *acceptable job offers* (or to find adequate employment) than other methods (Holzer 1987a, 1988, Alon and Stier 1997). This finding is consistent with evidence about relatively short vacancy durations for jobs filled informally (Roper 1988).

One might also consider the impact of job finding methods on job satisfaction and job tenure. These criteria of labor market success were mainly investigated by psychologists. Many studies suggest that those who get their job informally *stay longer with the firm* (Gannon 1971, Decker and Cornelius 1979, Breaugh 1981, Caldwell and Spivey 1983, Taylor and Schmidt 1983, Breaugh and Mann 1984). Recruitment sources also affect job satisfaction (Breaugh 1981, Griffeth *et al.* 1997). However, most of these studies are carried out within one firm and do not control for wages. When these problems are eliminated, it turns out that recruitment sources do not matter (Wielgosz and Carpenter 1987, Vecchio 1995). Personal connections reduce quit rates only for high status employees and blacks (Datche 1983, Simon and Warner 1992), two groups which can gain most from getting detailed information about the prospective job.

### 2.3 The Theory of Employee Referrals

The research into personal contacts in labor markets was motivated by the insight that there are important uncertainties in labor markets, and uncertainties can be overcome with the help of informal methods (Rees 1966). Based on the assumption that the use of personal connections to match persons to positions depends mainly on the behavior of employers, this insight was further elaborated and a coherent theory emerged. The theoretical ideas were often used in empirical studies of employers’ recruitment practices, mainly carried out in US and British settings. Since the concept of employee referrals plays a key role here, I label this theory the theory of employee referrals.
RECONSTRUCTING THE THEORY

The theory of employee referrals elaborates upon a special case of getting a job informally. First, as the concept of employee referrals suggest, these are the employees who bring vacancies and persons together. Getting a job through a social friend of the employer is not an employee referral. Second, the activity of employees to bring persons to the firm is initiated by the employer. Referrals are a systematic or institutionalized means of filling vacancies, without using other labor market intermediaries. Thus, finding out about a job through a person who has just seen an advertisement or who works in an employment agency is not a referral. The questions of why employees play such a central role and why the theory neglects other forms of contacts are considered after elaborating on the incentives of relying on referrals.

The basic idea of the theory is simple: employers perceive referrals as a cheap way of getting good workers. In other words, employee referrals are assumed to reduce various labor costs. In the literature, we can find five reasons why this might be so (Rees 1966, Rees and Shultz 1970, Fernandez et al. 2000).

First, referrals are assumed to lower the costs of recruiting new workers. This is not surprising since employers do not need to spend resources in order to encounter applicants. Note that the assumption behind this argument is that the only cost of recruitment is the costs associated with using agencies and placing advertisements.

Second, referrals reduce the costs of screening. Screening costs both time and effort since the individual characteristics of applicants must be inspected. This time and effort becomes lower when applicants form a homogeneous group. Employee referrals produce such a homogeneous pool. Interpersonal relations tend to take place among persons with similar human capital characteristics (Laumann 1966, Verbrugge 1977, Marsden 1988). Employee referrals save hiring costs not only because applicants are homogeneous but also because they are similar to the current employees. If the similarity between employees and applicants were perfect, the known characteristics of the employee would inform employers about the unknown characteristics of the applicant. In this extreme case, the first applicant could be hired without any screening effort, thus selection costs would be zero.

Third, referrals might lower the costs of training. Note that the arguments about screening costs are based on structural assumptions about the similarity between applicants to current employees. The similarity between applicants and current employees also pertains to training costs. First, applicants similar to employees have a better understanding of the job to be done. Second, many skills can be acquired through learning from the experience of others. The similarity between applicants and employees might create a friendly environment which enables the transmission of experiences of employees. Therefore, the similarity between applicants and employees increases the probability that newcomers will acquire firm-specific skills and values (Manwaring 1984).

Fourth, informal recruitment might reduce monitoring costs, i.e. the costs of supervising workers, or alternatively, it might increase the commitment and discipline of newcomers. The argument is that referral is a form of social control: since referring bad workers destroys
reputation, employees will control the behavior of referred newcomers. To understand this argument, consider the costs of workers' effort. Obviously, exercising effort (working hard) incurs direct costs (getting exhausted). Direct costs are mitigated when workers care about how they are judged by their co-workers. Deviation from the average or expected performance results in conflicts with co-workers: exerting more effort than is required is perceived as decreasing the status of others, whereas less effort often implies that others have to carry the burden of the task (Hodson 1993). The assumption of an effort level as norm implies that disapproval is proportional to the difference between individual and required effort (Kandel and Lazer 1992, Kugler 1997). The total cost of effort can be represented as a weighted sum of direct costs and losses from disapproval.\(^\text{12}\) The important implication of this cost function is that the cost of effort diminishes with both the weight attached to disapproval of peers and the required level of effort.\(^\text{13}\) Receiving a referral increases the weight attached to the losses from disapproval. The opportunistic behavior of newcomers might harm the reputation of the person who gave the referral. The effort to protect reputation, or a friendship tie between the employee and the newcomer, is reflected in the large weight the newcomer attaches to disapproval. Therefore, referrals increase the effort of the newcomers. The employer achieves this without any monitoring efforts, thus referrals can substitute for costly monitoring.

Finally, employee referrals might reduce turnover. Turnover is costly since new workers should be hired and trained, and separation may involve direct administration costs. There are two reasons for why referred employees will stay longer with the firm. First, employee referrals enable job seekers to have a look inside the firm, a unique opportunity which is not present when job seekers use formal intermediaries. Job seekers using referrals will learn about job and firm characteristics (fairness and attitudes of supervisors, colleagues, working conditions) (Rees 1966, Rees and Shultz 1970). Additionally, while other sources might provide only positive job information, referrals also inform job seekers about negative aspects of the job (Decker and Cornelius 1979, Wanous 1980). This reduces the risk of being disappointed and to quit. Second, the referrals might help newcomers to fit in with colleagues and to create social solidarity among workers (Coverdill 1998, Fernandez \textit{et al}. 2000). Solidarity mitigates various incentives of leaving the job. Examples are the emergence of a culture of coping with boring work (Windolf and Wood 1988), or the absence of conflicts with colleagues.

\(^\text{12}\) The following cost function may be specified: \(c(e) = (1-s)e^2 + s(e-g)^2\), where \(e\) denotes the workers' own effort, \(g\) denotes the effort that is required by the firm or is established as group norm, and \(s\) is a weight which represents the salience of conformist behavior. If \(s\) is zero then new workers do not consider their peers as a reference group, and thereby they do not take disapproval of peers into account.

\(^\text{13}\) The optimal level of effort is calculated on the utility maximization assumption: optimal effort is the value of \(e\) when marginal cost equals marginal benefit. The marginal cost of effort is equal to 2e-2sg. Assuming a simple linear wage function \(w=w_0+2be\), the marginal benefit of effort is 2b. Thus optimal effort becomes \(sg+rb\). This means that effort-based compensation and creating commitment to group norms are substitutes. When wages are independent of effort (b=0), the chosen effort can be equal to required effort when \(s=1\), but optimal effort cannot transcend the required effort since \(s\) cannot be larger than unity. Under the assumption of linear wage function (b>0), actual effort can exceed required effort, also by workers who perceive effort costly (s>0).
The arguments from labor costs also help us to understand why employers rely on their employees rather than on their social friends when they wish to recruit workers through contacts. First, the costs of recruitment depend crucially on the number of potential applicants. More workers can be accessed through employees than through social friends because the network of employees has a wider range than the network of the employer (cf. Granovetter 1974, Burt 1992). Second, screening costs are low if employers trust the information generated by contacts; if referrals are not trusted employers must use alternative methods to screen candidates. Since trust emerges in personal relations (Granovetter 1985), employees are likely to be selected as referrals (Rosenbaum et al 1990, Miller and Rosenbaum 1997). Note that reliance on employees is likely to be stronger as one moves toward smaller firms. In large firms, employers do not have direct contacts to their employees, thus they are more likely to use formalized screening procedures. Third, social friends of employers cannot influence the training and the turnover of employees.

The arguments from labor costs suggest that personal connections always lower the costs associated with recruitment, screening, monitoring, and turnover. However, if this were the case then employers would never rely on advertisements and agencies. Since many employers turn to advertisements and agencies, we have good reasons to suspect that employee referrals do not always cut hiring, monitoring, and turnover costs.

Indeed, there are two problems inherent in the arguments about the implications of referrals for labor costs. The first problem is that informal recruitment does not necessarily reduce recruitment costs. Employers might pay bonuses for their employees for referring new workers (Rees and Shultz 1970), especially when firms have difficulties in attracting new workers (labor shortages, the firm pays low wages, etc.) (Malm 1954, Manwaring 1984, Manwaring and Wood 1984). Nevertheless, the money spent on bonuses might still be lower than the fees to be paid to agencies or newspapers (Schuler and Jackson 1996). Recently, it was also suggested that paying bonuses to employees is a worthwhile investment (Fernandez et al. 2000). A more fundamental objection focuses on costs associated with the waiting time for a new worker. Filling a vacancy through personal methods is likely to take longer than to find an applicant through formal channels (Kugler 1997). Since empty vacancies have opportunity costs, waiting time increases the costs associated with empty vacancies. In short, informal methods are cheap only if the firm is able to attract workers. Indirect evidence about the assumption that informal recruitment increases the costs associated with empty vacancies comes from the observation that employers begin to use more expensive channels of recruitment when firms face labor shortages (Manwaring and Wood 1984, Fevre 1989).

The second problem is that referrals do not necessarily reduce monitoring costs. These costs are saved due to the similarity or friendship between the current employee and the newcomer. However, similarity is valuable only if the current workforce has good quality and it can be trusted. Additionally, friendship among the employees can work against the interests of employers (Fernandez et al. 2000). Therefore, referrals save these costs only if employers think of their workers as good and honest (Montgomery 1991, Kugler 1997). Employers avoid
the use of referrals when they wish to upgrade their workforce or they have bad experiences with cliques (Rees 1966, Ullman 1968, Manwaring and Wood 1984).

The theory of employee referrals, as formulated originally, also hints at the conditions under which referrals reduce recruitment costs (Rees and Shultz 1970). The general idea is that wages and search costs are substitutes for each other (Stigler 1962).\(^\text{14}\) Obviously, high wages attract a large number of applicants, thus vacancies can be filled quickly. However, high wages also create incentives to cut search costs, thus high wage firms are likely to use employee referrals. Ironically, costly recruitment methods like agencies or advertisements are used by employers who pay low wages or who pick up inexperienced applicants and train them later (training is salient for large firms where specialization is possible) (Ullman 1968). Therefore, employers who pay high wages are able to rely on referrals.\(^\text{15}\)

Interestingly, the payment of high wages has implications for the honesty of workforce. As radical economics (Edwards 1979) and various efficiency wage models (Akerlof 1982, Shapiro and Stiglitz 1984; for an overview, see Yellen 1984) suggest, firm-internal promotion or the payment of high wages promotes the honesty of workforce. Additionally, paying a wage premium reduces turnover (Holzer 1990), which can also contribute to an honest workforce. Therefore, in high-wage jobs there are more reasons to trust the current workforce and to expect employees to control the behavior of newcomers.

To conclude, employers find the use of employee referrals cheap when they pay high wages. This is so because two components of labor costs – recruitment costs and monitoring costs – are low when the wages paid are high. Therefore, mainly employers paying high wages will rely on referrals. From the point of view of job seekers, good jobs are accessed through employee referrals. Thus, the analysis of firm-level conditions under which employers use referrals explains why and under which conditions informal job seekers get good jobs.

**EMPIRICAL EVIDENCE**

Few studies examined the relationship between wages and employee referrals.\(^\text{16}\) These studies

\(^{14}\) This idea leads us to the extensive search problem. This might be surprising since Rees (1966) did not consider extensive search as a problem for employers. But after pointing out that "employee" referrals are very well suited to providing qualitative information" (Rees and Shultz 1970: 203), they tested Stigler's (1962) hypothesis that low wage firms engage in more costly search (ibid., pp. 207-210).

\(^{15}\) Empirically, wage level is not the only factor that affects employers' choice of recruitment. A well-known factor is labor demand and labor supply (Malms, Jenkins et al. 1983, Fevre 1989). Besides, there are job and firm characteristics that have an impact on the firms' recruitment strategy but are independent of wages paid. Because only a limited number of people can be reached through personal connections, formal channels are used if specialized labor is needed (Rees 1966), or when a relatively high number of new jobs is created (Grieco 1987). Additionally, the existence of personnel departments causes a shift towards the use of formalized procedures due to the particular interests of employees specialized in human resources management.

\(^{16}\) Since the theory of employee referrals is closely linked to efficiency wage models, it is necessary to review evidence about efficiency wage models. Higher wages are paid in large firms where it is costly to monitor workers (Mellow 1982) and in jobs where employees are not closely supervised (Grosen and Krueger 1990, Krueger 1991). Incentive pay (piece-rate system, bonuses) is avoided where monitoring problems are severe (Brown 1990). There is also evidence that employees perceive wages as gifts (Capelli and Chauvin 1991).
used firm-level or industry-level data and were carried out in the US. On industry level, a positive correlation exists between the proportion of employees hired through employee referrals and wages paid (Kugler 1997). A similar relationship exists at the level of firms: wages paid have a positive impact on the probability that employers ask current employees when a vacancy is to be filled (Holzer 1987c). The importance of referrals is also documented in ethnographic research: workers believe that obtaining a good job required either luck or the help of a friend who put in a good word with the employer (Wial 1991).

Many studies examined the search behavior of employers. These studies are valuable because they provide evidence concerning the elements of the theory. Empirical research, mainly carried out in the US, generally supports the assumption made by Rees (1996) that the main problem of labor markets is finding good applicants, and employee referrals are useful for this purpose. The main problem faced by employers is quality rather than the number of applicants (Neckerman and Kirschenman 1991). Referrals produce good quality applicants (Williams et al. 1993), or at least hiring managers hold this belief (Mencken and Winfield 1998).

Although referrals reduce screening costs, they do not necessarily reduce recruitment costs. Indeed, there is a trade-off between the number and the average quality of applicants, which corresponds to a trade-off between using formal and informal methods to find new workers. When the quality of applicants matters, employers should use employee referrals (which involves low screening but high recruitment costs); when the number of applicants matters or a position should be filled quickly, employers should turn to formal methods (which involves low recruitment costs but high screening costs).

Some studies examined the job and firm characteristics that influence the trade-off between recruitment and screening. The first factor is firm size. Hiring managers in smaller and private firms are more likely to claim that referrals increase the average quality of applicants (Mencken and Winfield 1998). Note that in large and public firms personnel management is usually bureaucratic (Barron and Bishop 1985), and personnel departments tend to promote formal and constrain informal recruitment (Cohen and Pfeffer 1986, Marsden and Campbell 1990, Marsden and Gorman 1999). Another factor is the educational requirements associated with the job, which increase the likelihood of using newspaper ads or the length of job interview, but do not increase the chances of using referrals (Barron et al. 1985, Holzer 1987c, Marsden and Campbell 1990, Marsden 1996, Russo et al. 1998). Finally, the composition of the population which resides in the neighborhood also affects the trade-off in question. Informal recruitment is less apt to reach beyond the local arena, thus firms use referrals only if the quality of workforce residing in the neighborhood is sufficiently good (Neckerman and Kirschenman 1991, England 1995). Note that while reliance on referrals depends on job

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Indirect evidence about efficiency wage models come from the observation that employees in high wage industries enjoy noncompetitive rents (Krueger and Summers 1988) and wage growth of employees is larger than that of self-employed (Lazear and Moore 1984).
characteristics, employers’ reliance on social friends and relatives is independent of such characteristics (Holzer 1987c).

EVALUATION

The theory of employee referrals provides a powerful explanation of why informal methods might lead to relatively good jobs. It elaborates on the behavior of employers, which is realistic since matching a worker to a position is the result of an employer picking from among several applicants rather than workers’ picking from among several job offers (Barron et al. 1985). Therefore, it can specify firm and job level conditions under which employee referrals are used and referrals are associated with returns.

Although the theory intends to elaborate the implications of the intensive search problem, it cannot rule out the possibility that returns to referrals are based on particularism. The theory assumes that returns to referrals are due to employers’ simultaneous and autonomous decision over recruitment channels and wage level. However, we have good reasons to assume that employers’ decision over recruitment is not autonomous but it is constrained by their employees. Constraints on hiring are imposed by employees since they play a key role in the training and the turnover of newcomers (Bailey and Waldinger 1991). Especially a dense group of employees (Manwaring 1984) or unions (Gordon and Thal-Larsen 1969, Mills 1978, Tóth 1994) might gain control over recruitment and hiring decisions. Therefore, the reliance on referrals can be seen as an attempt of employers to ensure the loyalty of the workforce (Dick and Morgan 1987) or as a part of the organizational culture (Fernandez and Weinberg 1997).

The recruitment of friends and relatives has further implications for recruitment costs. The personal networks of employees are not overlapping when friends and relatives are hired, therefore finding new workers must be relatively difficult (cf. Granovetter 1973, Burt 1992).

Note that in this alternative account, monitoring problems do not play a key role. Therefore, the efficiency wage argument about the relationship between paying high wages and using referrals does not apply. The relationship between wages and referrals can be deduced from two other hypotheses. The first is that firm-specific training leads to the use of referrals, due to the insider power of employees. The second is that employers pay high wages in firms or jobs where good performance requires investments in firm-specific skills on the part of workers, since high wages create incentives to invest in firm-specific skills (Barron et al. 1987). In short, the use of and the returns to referrals might also indicate the power of insiders. For this reason, the insider-outsider version of particularism cannot be ruled out as a theoretical alternative.

Finally, note that the theory is less concerned with network characteristics that guarantee success in the search process. The reason is that within this theory network characteristics are

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17 Considering unions does not necessarily lead to this conclusion. The reason is that the payment of high wages is often due to the presence of unions, and unions promote honesty – for example, the productivity – of the workforce (cf. Freeman and Medoff 1984). The implications of the role of unions in hiring for the theory of employee referrals are not elaborated here.
hard to describe *independently* of the outcome of job search. Since good jobs can be obtained through employee referrals, useful networks consist of people who are employed at a particular firm. However, at the beginning of job search, the firm at which the job seeker will be employed is unknown. The theory thus specifies relatively general network characteristics as useful. Generally, ethnic minorities and women work in relatively bad jobs. Therefore, useful referrals will be received by those who know white males. Although this idea is often used to explain the persistence of the disadvantaged position of ethnic minorities and women, it does not allow for more detailed analyses.

### 2.4 The Strength of Weak Ties Hypothesis

The theory of employee referrals elaborates on how employers use their employees to get new workers. The implications of referral systems for job seekers were first elaborated in the strength of weak ties hypothesis.

**RECONSTRUCTING THE THEORY**

The theory is motivated by the finding that job seekers often receive job information as a by-product of social interactions which are often initiated by the contact persons (Granovetter 1974). This observation is hard to reconcile with the assumption of labor economics that job information is produced by intentional search behavior. Granovetter argued that the transmission of job information should be seen as a diffusion process. If the assumption of diffusion process is correct then weak rather than strong ties are useful for job seekers to get a good job. This counter-intuitive claim is justified with the help of two distinct theories (see Granovetter 1973). First, balance theory (Heider 1946) suggests that personal networks consisting of strong ties tend to be closed. This implies that ties between separated groups can only be weak. Imagine two groups, A and B, both consisting of at least three people, among whom strong ties exist. Assume that the only connection between groups A and B is the tie between person X and person Y (X belongs to A, Y belongs to B). If the tie between X and Y were strong then X would introduce Y to other members of group A and thereby other connections would emerge between the two groups. In other words, only weak ties can be the unique or shortest links to different social groups. These unique links are called local bridges or bridging ties. Notice that this theory introduces a relationship between tie characteristics and network structure: the higher the proportion of weak ties the higher the number of local bridges, i.e. people who are a member in other social circles, in the network. Second, in diffusion situations, the number of potential recipients of information is proportional to the number of local bridges (Rapoport and Horvath 1961). This result and balance theory imply a negative relationship between the amount of non-redundant information and tie strength.

Subsequent research pointed out that the relationship between local bridges (or the amount of non-redundant information) and weak ties is not as close as imagined by Granovetter. There
are at least two reasons why weak ties do not necessarily indicate bridges. The first reason is that, contrary to balance theory, also strong ties might be local bridges. A serious shortcoming of balance theory is that it explains network characteristics solely in terms of attitudes or emotions. Balance theory neglects social and cultural norms (Allan 1979, Bian 1997) and economic interests (Burt 1992) that might create incentives to keep close friends separated. Balance theory also neglects the institutional contexts (workplace, neighborhood, etc.) that constrain the choices that lead to a particular network structure. There are some attempts to elaborate the structural determinants of network structure (Feld 1981, 1982). Unfortunately, these attempts are of limited value because they have the same implications concerning the relationship between tie strength and bridges as the strength of weak ties hypothesis (Wegener 1987).

The second reason for doubting the thesis that bridges are weak ties is that non-redundant information might flow through strong ties. When developing the strength of weak ties hypothesis, Granovetter (1974, 1982) emphasized a structural interpretation: weak ties have a structural tendency to provide actors with valuable information. Yet, in his empirical work, he focused on the actual acquisition of job information. Therefore, a behavioral interpretation of the strength of weak ties hypothesis emerged: valuable information actually flows through local bridges (Friedkin 1980, Granovetter 1982). It is important to notice that the predictions of the behavioral and structural interpretations might diverge if the motivation to pass valuable information is correlated with tie strength. Obviously, people prefer to pass valuable information to friends rather than acquaintances, therefore it is possible that valuable job information is received through strong ties. If this is the case then empirical tests will show that better jobs are accessed through strong rather than weak ties.\(^{19}\)

**EMPIRICAL EVIDENCE**

In his study of professional, technical, and managerial workers, Granovetter (1974) found that weak ties lead to better jobs than strong ties do. Since the research focused on the actual flow of job information, the finding cannot be interpreted as evidence for the structural interpretation. Rather, evidence should be interpreted using the behavioral interpretation of the strength of weak ties hypothesis, i.e. weak ties actually provide job seekers with better information (Montgomery 1991).

\(^{18}\) Granovetter (1982) noted Feld's foci theory as the only elaboration of his earlier suggestion (Granovetter 1973, p.1375) that the existence of several distinct contexts lead to weak ties being bridges. Weak ties emerge when personal connections originate in a small number of institutions or places which do not impose many restrictions on interaction, and where different activities are organized (Feld 1981). The classic account for the emergence of weak ties is division of labor (Granovetter 1973), which nicely illustrates the increase in the number of foci where activities are different and not constraining.

\(^{19}\) Network composition in terms of strong and weak ties has also an influence on the likelihood of using local bridges. Local bridges are more likely to be used when the personal network is composed of weak ties. If networks consist mainly of strong ties then, despite their relative inefficiency, strong ties will be used (Pool 1980).
Empirical studies motivated by Granovetter’s (1974) findings also used a research design focusing on the actual provision of job information, and thereby testing the behavioral interpretation. When the study is restricted to high status jobs (or when an interaction term between status of job and tie strength is introduced into the analysis), it turns out that weak rather than strong ties lead to jobs with higher status (Wegener 1991) or earnings (Bridges and Villlemez 1986, Ericksen and Yancey 1980, Boxman et al. 1991a). The advantages of weak ties were also established among employees with short job tenure (Bridges and Villlemez 1986) and among males (Beggs and Hurlbert 1997). However, studies examining a representative population of employees did not replicate Granovetter’s famous result (Bridges and Villlemez 1986, Marsden and Hurlbert 1988, Greenwell et al. 1997). It was also pointed out that failure to replicate Granovetter’s hypothesis might be due to the fact that the contact person is not necessarily the ultimate helper (Bian 1997, Bian and Ang 1997).

EVALUATION

The strength of weak ties hypothesis can be evaluated if we try to explain why weak tie effects are observed only in high status positions. A systematic account for this finding must show that weak ties are not always local bridges, but they are for high status people (Granovetter 1982). Keeping the two problems of the strength of weak ties hypothesis mentioned above in mind, a systematic explanation could be developed when one either abandons balance theory or when one elaborates on the behavioral interpretation by examining the motivation of people who pass job information. When balance theory is abandoned, one must show that the structural and cultural constraints on network formation are such that weak ties are bridges only in high status positions. When the behavioral interpretation is taken up instead of the structural one, it must be shown that high status job seekers typically meet contacts who are more willing to pass job information to weak ties.

Granovetter was aware of the issue that weak ties might be less motivated to transmit information. Keeping the behavioral interpretation in mind, he speculated why job seekers obtain job information through weak ties (Granovetter 1974: 54-55). Working together may complicate the friendship relation, thus employees pass job information to their acquaintances. Moreover, contact persons may also have strategic deliberations: they recruit those who will be allies within the organization, if there are factions at the workplace.\footnote{A similar point was made earlier by Dalton (1959) about the function of promotions: they help leaders of organizations to surround themselves with people who will support them.} Probably the most important reason is that contact persons are interested to invest in their reputation at the firm via recruiting good workers. Since good workers are not necessarily their relatives or close friends, contact persons are willing to transmit job information to weak ties. It is likely that the preference of contact persons for favoring distant acquaintances mainly holds for high status people. The motivation to share information with acquaintances is salient for high status people since, compared to lower strata, they are more likely to include weak acquaintances in their discussion networks (Fischer 1982, Marsden 1987, Burt 1990). Additionally, norms
concerning the separation of communal and work-related ties might be developed especially among people with higher education. Indirect evidence is provided by studies showing the importance of family recruitment to manual jobs (Dick and Morgan 1987, Grieco 1987, Mier and Giloth 1985). The salience of and the preference for passing job information to weak ties among high status people implies that high status job seekers will get better job information through weak ties.

These arguments have crucial implications for the behavioral interpretation of the strength of weak ties hypothesis. The behavioral interpretation can be deduced from the theory of employee referrals and from an interesting structural theory about the relationship between work-related and weak ties. The behavioral interpretation becomes a derivative of the theory of employee referrals because the behavioral interpretation assumes an active role of employees in making recruitment decisions (passing information to a strong or to a weak tie). The recruitment decision depends on whether strong or weak ties are appropriate for being work-related ties. Here the assumption of diffusion situation is irrelevant, tie strength and local bridges do not have theoretical primacy. Rather, the fundamental difference is between work-related and communal ties and the derivation of hypotheses about the effect of weak ties requires additional structural assumptions about the overlap between work-related and weak ties. The paradox of the behavioral interpretation is that it is very often used in empirical work, but its usefulness is independent of the strength of weak ties hypothesis itself. If the behavioral interpretation works, it works because both the theory of employee referrals and the structural assumption are correct. If it does not work, then either the theory of employee referrals is irrelevant or the structural assumption needs modification. Ironically, Granovetter (1995) also followed, although implicitly, this logic to explain why the strength of weak ties hypothesis does not hold in some Asian societies.

We are now in a position to evaluate the relation of the strength of weak ties hypothesis to the intensive search and the particularism mechanisms. The behavioral interpretation of the strength of weak ties hypothesis is a derivative of the theory of employee referrals. I argued that the theory of employee referrals is consistent with both particularism and intensive search. The structural interpretation is independent of the theory of employee referrals. Following Montgomery's (1992) analysis, the structural interpretation is related to the problem of finding more or better opportunities. This problem again is compatible with both intensive search and particularism (see section 1.2). Therefore, the strength of weak ties hypothesis is compatible with both particularism and intensive search.

21 More precisely, the diffusion situation should be considered as a problem of employers rather than a problem of employees. Employers should rely on their employees (weak ties) rather than their social friends (strong ties) if they wish to recruit through personal contacts since employees will have access to potential new workers.

22 The strength of weak ties hypothesis does not hold in Japan because work-related ties are strong. The strength of weak ties hypothesis does not hold in China because the theory of employee referrals does not apply, due to the institution of centralized job assignment.
2.5 Social Resources Theory

The problem of limited empirical support for the strength of weak ties hypothesis was overcome in social resources theory. Using the observation that the success of instrumental action depends on the status of the person mobilized (Lin et al. 1978), it was suggested that returns to informal methods depends on the status of the contact person.23 Weak ties have only an indirect effect: they facilitate contacting high status persons.

RECONSTRUCTING THE THEORY

The hypothesis that the status of the contact person promotes success goes back to the idea that labor market information and influence is unevenly distributed: the higher the status of a person the more knowledge and influence this person has. Therefore, upward mobility of people using personal contacts depends on the status of the contact person. The mobilization of high status contacts depends on the use of weak ties, on the one hand, and the status of origin, on the other. These relationships are understood with the help of the homophily principle, i.e. social interactions tend to take place among similar actors. For this reason, high status people have an easy access to other high status people (strength-of-position hypothesis). Besides, access to high status people is facilitated by the use of weak ties. Since the emergence of strong ties requires repeated interactions, and similar people engage in frequent interactions, strong ties evolve among similar actors. By the same logic, the ties between dissimilar actors remain weak. Thus, weak ties are more apt to reach dissimilar people (strength of ties hypothesis). Note that the use of weak ties is especially important in low status positions. Due to the homophily principle, the status range of personal networks is restricted (Fischer 1982, Campbell et al 1986). High status people can easily find other high status people in their personal network. On the contrary, in low social positions, access to high status people requires weak ties who can help in transcending the restriction of personal networks. To summarize, persons of low social origin have to use weak ties in order to contact a high status person, while high status persons can reach high contacts through strong ties (the interaction hypothesis).

Although social resources theory can be seen as an elaboration of the strength of weak ties hypothesis, it is not clear whether social resources theory is able to explain the finding that returns to weak ties depend on social position. Social resources theory argues that contact status mediates the effect of tie strength (for empirical support, consult Lin et al. 1981, Boxman 1992). Therefore, if contact status always increases the status of the job, but weak ties lead to better jobs only in high status positions, then the explanation of the interaction effect would be that weak ties should lead to high status contacts only in high status positions.

23 Recently, Lin (1999) claimed that “[...] Granovetter never suggested that access to or help from weaker rather than stronger ties would result in better statuses.” (p. 469). Although Granovetter’s work is independent of the status attainment paradigm, he argued and found that weak ties lead to better jobs in terms of income than strong ties (Granovetter 1973: 45).
Unfortunately, it is not clear whether this account is consistent with social resources theory. Social resources theory claims that networks that are composed of weak ties have a larger status range than networks that are composed of strong ties. The theory also specifies a ceiling effect: moving towards high status positions, the difference in status range disappears. In other words, at the bottom of hierarchical structures, only weak ties can lead to a contact person with high status, while at top positions, high status contacts can be mobilized using strong ties (Lin et al. 1981). Empirical evidence does not support this hypothesis (Lin and Dumin 1986; Völker and Flap 1999). First, evidence is mixed concerning the hypothesis that weak ties rather than strong ties are able to reach high status people. Second, differences in the status range between weak and strong ties exist when access to low status is studied: people find their lowest status network member among weak ties (Lin and Dumin 1986). Ironically, increase in status range of weak ties increases the risk of reaching a bad contact rather than the likelihood of reaching a good contact. Thus, it remains an open question why weak ties should lead to high status contacts only in high original positions.24

EMPIRICAL EVIDENCE

Empirical research about contact status effects was pursued within the status-attainment framework, using cross-sectional data of employees.25 The research accumulated mainly confirming evidence for the hypothesis that contact status has a positive impact on attained status, and the effect of tie strength, if any, can be explained away in terms of contact status. Most of the confirming evidence comes from studies where status attainment models were estimated (Ensel 1979, Lin et al. 1981, Lin 1982, Flap and De Graaf 1986, De Graaf and Flap 1988, Boxman 1992, Bian and Ang 1997, Bian 1997, Lai et al. 1998, Völker and Flap 1999; for disconfirming evidence, see Requena 1991). The results lead to the same conclusions when other measures of background are added to education (introduction of age or work experience, and sex) and also the tie strength between the contact and the job seeker is controlled for (Marsden and Hurlbert 1988, Wegener 1991, Bian 1997). Unfortunately, these results are not replicated when the effect of contact status on income is studied. The effect of contact status becomes either insignificant (De Graaf and Flap 1988, Marsden and Hurlbert 1988) or reversed (Requena 1991).

24 Note that the findings discussed stem from studies using the position generator methodology (Lin and Dumin 1986). Right now, there is no evidence from name generator studies because network range studies using name generator data did not examine weak and strong tie range separately (Huang and Tausig 1990).

25 In some of these cross-sectional studies, measures of access to various occupations map personal networks at the time of the interview and not at the time when the current job was obtained. Since network characteristics change as a consequence of job mobility, the cross-sectional relationship between measured network characteristics and labor market outcomes reflect two distinct processes: (a) unmeasured network characteristics in the past had an effect on getting a good job; and (b) getting a good job had an effect on measured network characteristics. As a consequence, interpreting the cross-sectional relationship as evidence for the causal effect of network characteristics is arbitrary since the relationship is also consistent with the hypothesis that good jobs produce good network characteristics.
Empirical research also produced evidence that resources of network members contribute to labor market success. The volume of social resources has mainly an indirect effect: it increases the status of contact person (Barbieri 1998, Lia et al. 1998, Völker and Flap 1999) or the likelihood of searching informally (Boxman 1992). Some studies showed a direct effect of social capital on income without finding contact status effects (Boxman 1992, Flap and Boxman 1998). Direct social capital effects were also discovered in studies analyzing re-employment chances: social resources, especially among long-term unemployed (Sprengers 1992), and the number of people contacted (Korpi 1998) speed up leaving unemployment.

**EVALUATION**

Despite the impressive empirical results, there is a serious problem concerning the relationship between empirical studies and theory. Although we know empirically that contacts with higher prestige lead to better jobs, the theory *does not specify exactly the mechanism which accounts for this effect*. What is stated in the theory is that prestige indicates knowledge and power, and knowledge and power should have an effect on the status of the job one attains. When mechanisms behind the effects of knowledge and power are not specified and causal hypotheses are justified with empirical observations, circular argumentation might be suspected behind the theory (Wegener 1987; for defense, see Voss 1988).

Indeed, social resources theory is not free of an important *circularity problem*. As mentioned earlier, the introduction of contact status was motivated by a small-world study (Lin *et al.* 1978). This study developed an explanation for the causal effect of contact status: status is an indicator for the number and the heterogeneity of personal connections (Lin *et al.* 1978: 160). This explanation has crucial implications for the research program guided by social resources theory. Contact status turns out to be a redundant part of the *theory* because contact status effects are due to the network composition of contacts. Contact status is nothing more than a convenient *proxy* for the network characteristics of contact persons (since contact persons are not interviewed, collecting information about the occupation of the contact person is more cheap and reliable than collecting information about the personal network of the contact person). Ironically, the fact that status indicates network characteristics was used to interpret family background effects, but it was not used to account for contact status effects.

Conceputalizing networks as resources in *search contexts* may be seriously misleading. When contact status effects are based on information, this effect is due to the large and heterogeneous personal network of the contact. Thus, social resources are not the individual resources of the contact person; rather, social resources refer to the number of various social circles to which the contact person has access. Nevertheless, the network-as-resources

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26 After observing that successful chains have higher average prestige, Lin *et al.* (1978: 160) continue: “Why ... does the strategy of reaching up to higher status tend to lead to success in the searching task? One clue provided by past research is that as social prestige increases, the extensiveness and heterogeneity of the actor’s social contacts also increases (...). If a given social structure is viewed as pyramidal then the higher the prestige of an actor’s position in the pyramid, the more panoramic view he has of the structure, especially the levels below him.” [emphasis in original].
metaphor does not indicate why the heterogeneous and extended network of the contact person helps job seekers to get a good job. Not surprisingly, few attempts were made to develop a systematic interpretation for network effects in search contexts (Boxman et al. 1991b, Boxman 1992, Flap and Boxman 1998).

Social resources theory also allows a power-based interpretation of contact effects. Using power is consistent with interpreting status as an indicator of resources, thus the networks-as-resources metaphor gives a correct interpretation of network effects. It is natural to explicate the power-based interpretation in terms of particularism. High status persons can influence the hiring decision of employers because they have reciprocity relations with the employer and a patronage tie to the job searcher.

Unfortunately, explicating the power-based interpretation of social resources theory in terms of particularism has a drawback. It cannot be reconciled with the problem formulation of social resources theory, namely, that network effects are expected because there are information problems in labor markets (Lin et al. 1981). Interpreting empirical findings as proving the role of particularism can be frustrating since most of the research was carried out in highly developed industrial countries. A solution to this problem is motivated by taking up an interesting note made by Granovetter (1974) that marriage and labor markets might be similar with respect to the existence of intermediaries. In Japan, marriage requires an official go-between, whose status is higher than the status of the couple; and the presence of a high status person exercises a tacit pressure on the couple not to break the marriage (Azumi 1969). A similar social structure is assumed in social resources theory: contact status is higher than the original status of job seeker and the status of the job (Lin et al. 1981). One interpretation of our analogy is that go-betweens solve the problem of trust which is present when people engage in durable relations. In other words, status of go-betweens signals to the partners that they can trust each other. If this interpretation is correct then contact status effects are generated by the intensive search mechanism.

To conclude, explicating the networks-as-resources idea leads to a dilemma concerning the interpretation of the empirical evidence. Status of contact person indicates either the contact’s individual resources or the heterogeneity of the contact’s network. If contact status indicates individual resources, empirical evidence is consistent with either the intensive search or with the particularism explanations. If contact status indicates network heterogeneity then the effect is based on extensive search, and the interpretation of evidence does not need the concept of resources at all. Note that extensive search can be the consequence of both particularism and intensive search (see section 1.2). Social resources theory is consistent with both the intensive search and the particularism mechanisms, but observing the effect of high status contact does not tell us which one is operating.

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27 See especially Figure 1. Note also that Lin et al. (1981) also found that on average the contact status was higher than attained status.
2.6 Conclusions

This chapter reviewed three theories that dominate the research field about network effects in labor markets. Our review had two objectives. The first objective was to find theories that can answer the question *whether relatively good jobs can be found through personal contacts.* The second objective was to find theories that can help us to explain the effects of personal contacts *in terms of particularism and intensive search* (see Section 1.2). The conclusions of the review can be summarized as follows.

On the one hand, the theory of employee referrals and social resources theory received considerable empirical support. Less support was received by the strength of weak ties hypothesis, and this hypothesis cannot explain its most consistent finding, namely that weak ties lead to better jobs only among high status employees. Therefore, the theory of employee referrals and social resources theory are excellent tools for the *description* of the conditions under which personal contacts lead to better jobs than other job finding methods.

On the other hand, the reviewed theories are not sufficient to give an answer to our explanatory problem, namely whether particularism or intensive search is responsible for the observed contact effects. In other words, all theories can be explained using both the particularism and the intensive search mechanism. Knowledge of which contact characteristics have an impact on labor market outcomes does not reveal which of the two mechanisms is operating. Therefore, the reviewed theories cannot be used to explain contact effects. Table 2.1 summarizes the possible interpretations of contact effects under intensive search and particularism.

<table>
<thead>
<tr>
<th>Observed contact effect</th>
<th>Interpretation of contact effect under Intensive Search</th>
<th>Interpretation of contact effect under Particularism</th>
</tr>
</thead>
<tbody>
<tr>
<td>contact status</td>
<td>high status people are go-betweens in order to create trust between employer and job seeker</td>
<td>high status people influence hiring decisions due to their exchange relations to employers</td>
</tr>
<tr>
<td>employee referral</td>
<td>employees refer trustworthy applicants</td>
<td>employees gain control over hiring decisions</td>
</tr>
</tbody>
</table>