

Occupations, Organizations, and Boundaryless Careers

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It does not take a particularly perspicacious observer to note that industrial societies are characterized by a wide variety of work careers—careers that are linked to very different types of labor markets and employment relationships. These differences are denoted in contemporary research by an array of terms and associated acronyms—*firm internal labor markets* (FILMs), *occupational labor markets* (OLMs), *secondary labor markets* (SLMS), and so forth (see Althausser and Kalleberg 1981). Although such conceptual distinctions clearly imply variations in career patterns, the notion of *career*, nonetheless, has come to be strongly associated with a particular employment relationship—a relationship characterized by long-term employment with a single employer, and involving movement through a series of interconnected, and increasingly prestigious and powerful jobs arranged within a hierarchy.

The predisposition to identify careers, at least implicitly, with this type of employment may be partly a reflection of underlying cultural assumptions about effective forms of organizing work and, in particular, the acceptance of the ideal type of bureaucracy as an implicitly prescribed model for organization. So, for example, in his original articulation of this model, Weber (1947) attributed the success of bureaucracy as a contemporary form of organization, in part, to this employment structure. By offering individuals opportunities for upward mobility, contingent on demonstrated merit and performance, Weber argued, bureaucracies link individual success to the enterprise's success and are thereby able to effectively secure employees' commitment to the achievement of the enterprise's objectives (see also Barnard 1938; Simon 1945).¹

Whatever the source, contemporary preoccupation with careers formed within the boundaries of a single firm or agency is reflected both in the psychologically oriented literature on careers and in the extensive literature in economics and sociology on internal labor markets. It's not clear, however, that lifetime, or even relatively long-term, employment with a single employer has ever been the dominant career pattern in the United States. Moreover, as this book has underscored, this type of career pattern appears to be in decline in this country, as firms increasingly seek to adapt to turbulent economic conditions through "externalization" (Pfeffer and Baron, 1988) and "flexible staffing" (Milkovich and Boudreau, 1994; Noe, Hollenbeck, Gerhart, and Wright, 1994).²

Thus, researchers recently have begun to give greater attention to the implications of boundaryless careers for individuals, organizations, and the larger society (Arthur, 1994). As others in this book and elsewhere have noted (e.g., Spilerman, 1977; Rosenfeld, 1992), the notion of a career, in its most fundamental form, denotes a sequence of jobs—a sequence that is patterned by what Braude (1975: 112) obliquely refers to as "some containing social structure." It is this patterning that distinguishes careers from simple job histories (Van Maanen and Barley, 1984). The modifier, *boundaryless*, as Arthur and Rousseau indicate in chapter 1, is intended to underscore the declining significance of

organizations as a “containing social structure” that produces the patterning in job sequences.

But boundarylessness should not necessarily be interpreted to mean patternlessness. The central premise of this chapter is that, as organizations become less important in defining career pathways and boundaries, occupations will become increasingly *more* important. While occupational demarcations have always had a significant, albeit often unacknowledged, impact on individual career patterns, the significance of such demarcations for careers is likely to be heightened by current trends in employment relationships.

In this chapter, then, I review the sociological literature on occupational labor markets and on the structure of professional occupations, in an effort to shed light on a number of issues associated with occupationally based careers. Of specific concern are three questions: What kinds of job and occupational characteristics foster such careers? When occupations become the major locus of careers, what are the consequences for organizations? And finally, what are some of the key career-management issues for individuals pursuing occupation-ally based careers?

Historical Backdrop: Research on Occupations and Careers

Sociological research on occupations and careers was originally motivated by an interest in the way in which industrial systems of production shaped and reshaped social institutions and patterns of social relationships. Reflecting this concern, much of the early research on occupations consisted of rich ethnographic case studies of workers in a given occupation, as suggested by the titles of such books as *Saleslady* (Donovan, 1929); *Man on the Assembly Line* (Walker and Guest, 1952); *Men Who Manage* (Dalton, 1959); *Professional Soldier* (Janowitz, 1960); and *Wall Street Lawyer* (Smigel, 1964). Career processes—gaining entrance into an occupation, changing jobs and getting promoted, retiring from work—were examined in such studies as only one part of the larger research enterprise of understanding work and social relationships.

An alternative approach to the analysis of careers, although one that still reflected recognition of critical occupational influences, developed in the years following World War II, and focused on the probabilities and determinants of shifts between jobs and between occupations. Based on work histories of a sample of respondents surveyed in Ohio and in Oakland, California (Form and Miller, 1949; Lipset and Bendix, 1952a, 1952b; Lipset and Malm, 1955), early research in this vein explored differences among occupational groups in terms of patterns of occupational persistence, job tenure, and shifts among occupational categories.³ General findings from the different studies were largely corroborative: They indicated that white-collar and skilled workers had much more stable careers (defined by continuous employment in a single occupation and with a single employer) than semiskilled and unskilled workers; that career shifts within manual, and within nonmanual, occupations were much more common *than career shifts across the manual/nonmanual boundary* (bridging occurred most often among respondents who were self-employed at some point in their careers); and that chances of upward mobility were affected both by respondents’ own educational achievements and by the occupational status of their fathers.⁴

The latter finding served as an initial point of departure for a substantial body of research on the determinants of social mobility (e.g., Blau and Duncan, 1967) generated by sociologists throughout the 1960s and 1970s. Partially driven

by the popularity of regression analysis, which was designed for use with continuous (not categorical) dependent variables, research on social mobility during this period focused primarily on quantitative measures of career attainments, such as earnings and occupational prestige; the central debates in the area centered on the relative importance of individuals' ascribed characteristics (for example, social class background) compared to achieved characteristics (such as level of education completed) as determinants of such career outcomes. The implication of earlier studies—that occupational categories were likely to be associated with qualitative boundaries to mobility (presumably due to occupationally specific knowledge of work content and particular skills)—was largely ignored.

However, studies by economists and sociologists in the 1970s (e.g., Doeringer and Piore, 1971; O'Connor, 1973; Edwards, Reich, and Gordon, 1975; Bibb and Form, 1977), predicated on the notion of separate and distinctively different labor markets in the United States, led to a renewed interest in structural economic divisions as determinants of individual career outcomes. In its most basic form, this research posits two different systems of employment relationships, each associated with correspondingly different labor markets and individual career patterns. In one system, jobs are arranged in ladders involving progressive skills, with well-defined ports of entry and, to varying degrees, points of intersection with other, higher-reaching ladders in an organization (Rosenbaum, 1984; Osterman, 1984; DiPrete and Soule, 1988). The career patterns, or movements of individuals between jobs, in such systems are comparatively orderly and predictable. In the other system, jobs are characterized as being largely unconnected, neither requiring nor providing specialized skills; and incumbents are typified by a relatively short organizational tenure and, presumably, disorderly, unpredictable job sequences. Although occupational differences are implicitly embedded in this sort of conceptualization of employment patterns, the specific independent effects of firm-based job definitions, occupational categories, and industrial boundaries on career processes and outcomes were often blurred and largely unexplored in analyses done in this tradition (Baron and Bielby, 1980).

Other problems and limitations of particular models of economic segmentation have been highlighted (Kalleberg and Sorensen, 1979; Zucker and Rosenstein, 1981), but the focus of this general line of work—on the effects of economic structures on career patterns—provided an important corrective to the severe neglect of such structures in much of the preceding work on social mobility. For our purposes, the notion of different types of labor markets provides a particularly useful point of departure for thinking about the nature of boundaryless careers.

Variations in Labor Markets and Career Patterns

The trend toward limited-term employment relationships and the changes in career patterns that accompany this trend reflect the response of many contemporary businesses to increasingly turbulent economic conditions. Greater levels of uncertainty in organizational operations, created by increased competition in product markets and rapid rates of change in core technologies, have led many firms to seek flexibility through the reduction of permanent employees and the increasing use of subcontractors or temporary employees (Carey and Hazelbaker, 1986; Swinnerton and Wial, 1995). Short-term, project-based employment has long been characteristic of some types of jobs and some occupational groups (e.g., construction workers, film crews and studio musicians, agricultural workers), but it appears that such employment

arrangements are now being extended to a wider proportion of the workforce.

Some jobs and occupations appear to be more vulnerable to the transformation to contingent status than do others (Baron, Davis-Blake, and Bielby, 1986; Davis-Blake and Uzzi, 1992), but few appear to be completely immune (see Nelson, 1988; Belous, 1989; Feinstein, 1989; Williams, 1989; Magner, 1995). College faculty provide a good example of an occupational group in which the norm of long-term employment, made unusually explicit in the form of tenure contracts, is being eroded. In 1984, approximately 12% of all full-time faculty held “temporary” (nontenure-track) positions (American Association of University Professors 1986); by 1992, that figure had risen to nearly 20% (*1994 Almanac of Higher Education*: 65). In addition, over a third of 510 higher education institutions surveyed in 1992 indicated that the number of positions held by temporary faculty had increased since the previous year; less than 15% reported a drop. Similarly, a recent survey of the earnings of temporary workers included an array of occupational groups rarely thought of as being “temps,” such as managers, computer systems analysts and scientists, engineers, and registered nurses (Williams, 1989).

Thus, the evidence suggests that a growing number of jobs and occupations are joining the ranks of those traditionally associated with boundaryless careers. However, relatively little attention has been given to the analysis of the conditions that affect the occurrence of such career patterns. Here, two conditions are considered: the level of human asset specificity associated with particular jobs; and the degree of codification of occupations.

Human Asset Specificity: Internal versus External Labor Markets

It may be useful to begin this section by considering the relationship between jobs and occupations. While specific positions (jobs) within firms are usually associated with particular occupations, the required skills and responsibilities assigned by different employers to a job can vary considerably within occupations. Thus, the duties and knowledge required of a waiter in a small pizza restaurant are only loosely related to those of a waiter in a large, four-star restaurant with a sophisticated and demanding clientele. Similarly, the job of an accountant in a small, local practice, that of a lower-level, junior member of an accounting department in an international business corporation, and that of a senior partner in an elite accounting firm differ markedly in the kinds of skills and knowledge required. A critical dimension along which jobs vary, in this respect, is the degree to which they involve human asset specificity—skills and knowledge that are unique to a firm, and/or that are required by a firm and are not readily available in the labor force (Williamson, 1981). As the foregoing examples are intended to illustrate, jobs may vary on this dimension independent of the status of the larger occupation with which they are identified.

The degree of human asset specificity usually serves as a critical determinant of whether or not a job is part of an internal labor market. The relatively high search and replacement costs for employees with a high level of human asset specificity make it rational for firms to create internal labor markets—a series of interlinked, progressively higher-status and higher-paying positions—to retain such individuals (Becker, 1957; Doeringer and Piore, 1971; Williamson, 1981). The way particular jobs are defined by employers, then, determines whether they are likely to be part of an internal or an external labor market.

Jobs that are part of internal labor markets are not, by definition, normally associated with boundaryless careers. But

there are also distinctive differences among the career patterns associated with jobs in external labor markets. The existing literature on segmented labor markets suggests two distinctive career forms that could be described as boundaryless, in the sense of being characterized by relatively high rates of interfirm mobility. In one form, high rates of interfirm mobility are accompanied by low levels of interoccupational mobility; Althauser and Kalleberg (1981) identify this with occupational labor markets. The other form is characterized by high rates of both interfirm and interoccupational mobility; this form is most likely to be found in what have been labeled secondary labor markets. Thus, a key source of the differences between labor markets associated with boundaryless careers lies in the structure of occupations.⁵

Codification: Occupational versus Secondary Labor Markets

Occupations represent a particular type of social group, one whose major bonds are specifically economic (Weber, 1968: 342-345).⁶ Pursuit of collective economic interests normally leads occupational groups to seek both broad and exclusive jurisdictions—that is, to claim, as the exclusive domain of group members, as wide an array of work activities as possible (Berlant, 1975). Exclusivity and breadth are, oftentimes, competing objectives: The broader the array of work activities an occupational group lays claim to, the more likely it is to become embroiled in jurisdictional disputes with other occupational groups that also seek to define the activities as part of *their* domain.

Abbott (1988), in an insightful analysis of relations among occupational groups, identifies three main loci of jurisdictional conflicts: the legal arena, public opinion, and the workplace. Successful assertion of jurisdictional claims in all three arenas entails what Bridges and Villemez (1991) refer to as *codification*. Drawing on Boisot and Child's (1988) usage, this term denotes the degree to which occupations are commonly identified with a clearly defined set of skills and knowledge, and with a distinctive set of tasks or problems to which these skills and knowledge are applied. It thus implies the existence of social understandings about the “bundles” of work activities for which an occupational- group member can and should be responsible. Bridges and Villemez argue that such understandings provide the crucial foundation of occupational labor markets, allowing “*both* prospective employers and prospective employees [to] know what they are getting into when hiring workers or accepting jobs” (Bridges and Villemez, 1991).⁷

What are the conditions that are associated with higher levels of codification? The literature on the development of professions provides some useful insights on this point (e.g., Caplow 1954; Goode 1957; Wilensky 1964; Cullen 1978). Key characteristics that have been identified with professional occupations include highly standardized education/training requirements; the existence of strong occupational associations; and strong member identification with the occupation. Whether these characteristics define critical differences between professional and nonprofessional occupations per se is moot (as is the general utility of this distinction; see Tolbert 1990), but quantitative evidence does suggest that these attributes distinguish importantly among occupations. An analysis of characteristics of over 250 occupations by Cullen (1978: 208—209) shows that the broad occupational categories of professional and technical workers, and of crafts and kindred workers, have consistently higher mean scores on these dimensions, as compared to other occupational groups. These two broad categories encompass a wide range of occupations—accountants, architects, dental hygienists, carpenters, brick and stone masons, shoe repairmen, tool and die operators, among others—but they are linked by virtue

of having relatively well- defined work tasks and responsibilities, and requisite skill and knowledge bases (that is, by being highly codified).

The degree of occupational codification, in turn, is predicated on the ability of group members to develop a dominant paradigm (Kuhn, 1962)—that is, the ability to reach an internal consensus on a definition of relevant work activities and the application of appropriate work techniques and procedures for the occupational group. A second factor is the level of resources that can be mobilized from among group members and from other groups in society, resources that can be applied in influencing both public opinion, in general, and legislative bodies, in particular (Larson, 1977). Occupational groups are more likely to become highly codified, then, as the degree of self-conscious collective organization increases among the members, and as the level of resources that can be accessed by and from individual members increases. An extreme form of codification of occupations is represented by a legal monopoly, based on the provision of strong state sanctions that protect the occupational group's claims to work domains and practitioner requirements. When occupational groups are able to use such sanctions effectively to limit entry into the group, members' economic interests are likely to be advanced (Holen, 1965). But even in the absence of such sanctions, codification facilitates the employment of individuals with the appropriate occupational credentials, since those lacking such credentials are less likely to be seen as eligible candidates for particular work activities.

Occupational labor markets, then, rest on codification; secondary labor markets are most likely to contain jobs associated with occupations that are not highly codified. This is not intended, however, to imply that all jobs in less-codified occupations are in secondary labor markets. As suggested previously, the level of codification of the occupation and the degree of human asset specificity of particular jobs may vary independently. "Idiosyncratic jobs" (Miner, 1987, 1991), for example, are probably more likely to be found in less-codified occupations (such as sales or management), but may, nonetheless, be part of an internal labor market because they entail a high degree of human asset specificity.

In sum, jobs in secondary labor markets are likely to be characterized by general skills that are widely distributed in the population and to be in occupations that are less codified. Jobs in internal labor markets, on the other hand, may be drawn from highly codified or not very highly codified occupations, but are more likely to involve firm-specific and less widely distributed skills. As Bridges and Villemez's (1991) analysis indicates, it is quite possible that jobs associated with occupational labor markets will be found in internal labor markets (for example, professors, graphic designers, engineers); these markets are not necessarily mutually exclusive. Table 20.1 shows the implications of my argument concerning the effects of the codification of occupations and the level of asset specificity of jobs on forms of labor markets and associated career patterns.

Current trends in organization, and particularly the reduction of internal labor markets by many contemporary organizations that seek to increase flexibility through subcontracting and contingent employment, can be predicted to lead to the increasing codification of occupations, and to the increasing dominance of boundaryless careers via an expansion of occupational labor markets.

Table 20.1 Types of Labor Markets, by Job and Occupational Characteristics

Codification of Occupations	Human Asset Specificity Required by Jobs	
	High Degree	Low Degree
Highly codified	ILM/OLM ^a	OLM
Not highly codified	ILM	SLM ^b

^aILM: internal labor markets; OLM: occupational labor markets

^bSLM: secondary labor markets

Expansion of Occupational Labor Markets and Boundaryless Careers

Greater use of contingent employees makes increasing codification of occupations advantageous from both employers' and employees' points of view (Bridges and Villemez, 1991). For employers, codification helps to define relevant skill packages for particular types of work, and provides preexisting standards (as defined by the occupational group) for evaluating the suitability of candidates for jobs. Possession of group-approved credentials provides some assurance that candidates do in fact have the requisite training and skills to carry out the jobs. Thus, codification contributes to the reduction of costs of recruitment for organizations—an important consideration when repeated rounds of hiring are at stake, as they are with the employment of contingent workers.

The use of existing occupational standards in the construction of jobs within organizations is one facet of what Barley and Tolbert (1991) have referred to as the “occupationalization” of organizations. Zucker (1991) also discusses some of the advantages that occupationalization provides for organizations in terms of internal performance evaluation. She argues that when judgments of work quality are an important component of performance evaluation, occupational members outside the firm generally provide information that is more thorough and more valuable than that obtained internally. Codification also provides advantage from an employee's standpoint. By ensuring that they have credentials and training that are deemed to be relevant for particular types of jobs, individuals can enhance their marketability. Moreover, to the degree that occupational groups succeed in gaining control of entry requirements and standards of practice, both through influencing social definitions of appropriate credentials and training, and through shaping formal legislation on licensing and peer-review requirements, members of those occupational groups are likely to benefit from the existence of favorable supply/demand conditions.

Thus, there are a number of reasons to expect that the increased reliance on contingent employment arrangements, by both private firms and public agencies, will lead to the expansion of occupational labor markets. Such expansion rests, in large part, on the rate at which “communities of practice” develop and become institutionalized within occupations; this, in turn, will have implications for employers' management practices, as well as for employees' career-management strategies.

Implications for Occupational Communities

“Communities of practice”—individuals who actively share a core body of tacit knowledge that is necessary for the execution of concrete, everyday work tasks (Latour, 1986; Lave and Wenger, 1990; MacKenzie and Spinardi, 1995)—provide the foundation for occupations. Occupations become increasingly codified as a consequence of associational processes within communities of practice, as described by Van Maanen and Barley (1984), and of progressive recognition of common material interests among members (Larson, 1977; Berlant, 1975). It is such recognition that typically leads to the creation of some sort of organizational mechanism for pursuing collective interests—that is, a national association, or a set of cooperatively related associations. As I argued earlier, the existence of a strong association can be taken as an important indicator of codification.

Formal associations usually play a critical role in diffusing tacit knowledge among occupational-group members, both through providing opportunities for social contact among individuals, and through the creation of standardized education and training requirements. The latter task is often a highly contentious (albeit crucial) element of codification: It is bound up with adjudication of internal disputes among members over definition of task boundaries and appropriate techniques for conducting the tasks (Abbott 1988). Thus, for example, the American Medical Association succeeded in making allopathy (as opposed to the rival approach of homeopathy) the basis of medical treatment procedures through the standardization of medical education (Starr, 1982). (The AMA’s drive for educational standardization was greatly aided by the widespread distribution of the “Flexner Report,” a scathing review, based on a study funded by the Carnegie Foundation, of the state of medical education at the turn of the century.) More recently, association-led struggles to standardize occupational- training requirements similarly have been evinced in such emergent occupations as employee-assistance counseling (Osagie, 1995) and human-resource management (Ritzer and Trice, 1969).

Thus, contemporary changes in employment and career patterns set the stage for increasing codification of occupations; in response, many occupations are likely to witness increasing associational growth and activity, especially activity involving educational credentialing. Closer personal ties to other occupational-group members—created through participation in associations—in conjunction with more standardized training and educational backgrounds, can lay the foundation for the formation of stronger occupational identities for individuals. This, in turn, may have implications for effective work-design and reward systems.

Implications for Work-Design and Reward Systems

The literature on professionals in organizations offers a number of relevant and potentially important insights concerning the impact of occupationally based careers on employment relationships. A central debate in this literature revolves around the issue of whether there is an inherent conflict involving what Freidson (1971) terms “occupational versus administrative principles of control.” This debate can be traced to a now-famous footnote by Talcott Parsons (1947), who, in translating Weber, pointed out that Weber’s discussion of the bureaucratic organization appeared to conflate two very different sources of authority—one of which is based on the possession of expert knowledge in a particular substantive area; and the other, based on an individual’s position in an organizational hierarchy. As Parsons

points out, these are very different, and not necessarily compatible, bases on which assertions of authoritative control may rest.⁸

Thus, Freidson identified the occupational principle of control with general social deference to the judgments of members of particular occupational groups, based on the groups' successful claims to an exclusive body of knowledge and area of practice. In contrast, according to the administrative principle of control, responsibility for direction of work and coordination among interdependent workers is determined by individuals' positions in an organizational hierarchy; such authority, presumably, is based on beliefs about the superior knowledge of organizational operations and functioning that is possessed by individuals at given hierarchical levels.

Based on this distinction, early research often assumed that the employment of professionals in organizations inevitably resulted in high levels of conflict for organizations, and in work alienation for individual professionals. Kornhauser (1962), for example, in a study of scientists employed in industry identified four key issues on which professional/organizational conflicts frequently occurred: recruitment (professionals value technical competence, while managers value administrative potential); organization of work (professionals prefer same-discipline groups, while managers favor mixed task forces); assignment of group leadership (professionals choose individuals with high professional status as leaders, while managers choose individuals with a strong administrative orientation as leaders); and outcome of scientific research (professionals follow norms of research dissemination to colleagues, while managers tend to view findings as proprietary). Similar points of conflict have been documented in other research (e.g., Daniels 1969; Zahn 1969; Perrucci 1980).

However, research by Gouldner (1957) showed that significant variations in professionals' orientations toward their work could affect such conflict. His study of university faculty suggested that individuals he classified as cosmopolitans, those whose identification with their occupational group was much stronger than that with their university, were relatively more likely to experience conflict with the administration than were locals—individuals with a stronger loyalty to the local institution than to their occupation. Other studies, covering a range of occupations, have provided additional documentation of the variability in relative levels of occupational and organizational commitment among professional employees (Reissman, 1949; Friedlander, 1971; Aranya and Ferris, 1984; Gunz and Gunz, 1994). More recent studies, however, have called into question the assumed polarity of the cosmopolitans/locals distinction, suggesting that high levels of occupational commitment are, not incompatible with high levels of organizational commitment, and that these two forms of commitment are, in fact, positively correlated (Aranya and Ferris, 1984; Gunz and Gunz, 1994).

From a managerial perspective, these recent findings are promising, suggesting that contingent employment arrangements will not necessarily limit organizations' ability to attract employees who are both technically proficient and attentive to organizational rules and requirements. However, since mobility prospects for individuals in occupationally based careers are likely to be affected more by their standing and reputation in their occupational group than in a given organization, effective work design for people pursuing such careers will almost certainly have to take this into

consideration. Organizational time horizons associated with boundaryless careers will affect the perceived value of acquiring skills and knowledge unique to the organization (Mannix and Loewenstein, 1993); employees are likely to be motivated most by work that permits the enhancement of occupationally valued skills. Thus, if tasks require the development of skills and knowledge that are unique to the organization, extra rewards or other forms of motivation may need to be associated with them if contingent employees are to be used effectively.

Similarly, potential conflict between professional and organizational bases of authority may be realized more frequently when employees have shorter-term employment horizons. The greater an individual's long-term career independence from a particular organization, the more likely he or she may be to resist control of work by those lacking specific occupational expertise, since their evaluations of performance are apt to be given less weight within the occupational community. This implies that effective management of such employees will require organizations to emphasize technical expertise and reputation in making hiring decisions about permanent employees, who will be responsible for supervising contingent employees.

This, in turn, may accelerate an existing trend toward the occupational segmentation already noted in some professions. Arguing against analysts who forecast widespread deprofessionalization as a consequence of the increasing employment of members of traditional professions (such as doctors and lawyers) by bureaucratic organizations (Haug, 1975; Toren, 1975; Rothman, 1984), Freidson (1984) points out that organizational employment in itself is not sufficient evidence of declining professional control of work, and that members of occupational groups considered to be professions are almost always under the direct supervision of members of the same group. He argues, instead, that bureaucratic employment is leading to changes in the internal organization of many professions, and, specifically, to the emergence of a more formalized stratum of administrative elite who serve as managers and supervisors of rank-and-file practitioners (see also Finlay 1983; Abbott 1988; Tolbert and Stern 1991). If Freidson's arguments are correct, selected members of occupational groups are likely to serve as increasingly important gatekeepers for long-term career success. This, in turn, has implications for strategies used by individuals in managing occupationally based careers.

Implications for Individual Career Strategies

Other chapters in this book detail the role of individual's characteristics in determining boundaryless careers (see the chapters in part IV, especially); thus, I will just touch on a few issues briefly. One implication of the preceding argument is that individuals' connections to occupational networks, and, particularly, to occupational members who serve as organizational gatekeepers, are likely to become increasingly important determinants of career outcomes. While the effect of social networks on job-search outcomes has long been recognized (Granovetter, 1974), extraorganizational networks, particularly occupational networks, are likely to be especially important to the development of boundaryless careers. Existing evidence that the educational institution from which an individual graduates has strong effects on career outcomes is consistent with this idea (Caplow and McGee, 1958; Crane, 1970; Judge, Cable, Boudreau, and Bretz, 1994). From the individual's standpoint, then, graduating from the "right" institution, and participating in occupational associations and other occupationally based social groups, may become increasingly important components of effective

career-management strategies.

There is some evidence, however, suggesting that women and minorities have less access to network connections and are often less able to utilize the connections they have (Brass, 1985; Thomas, 1990; Burt, 1992). Ibarra (1992), for example, in a study of advertising managers and professionals found that men are most likely to have both affective and instrumental network ties to other men. Women exhibited a more differentiated pattern of network ties: They were more likely to have affective ties to other women, but to have instrumental ties to men. These findings are consistent with explanations emphasizing preferences for similar others, and with those emphasizing strategic status seeking efforts in networks (since men are more likely to be in resourcecontrolling positions). Ibarra suggested that the differentiated patterns of ties among women resulted in weaker network connections, which in turn contributed to gender-based inequality in organizational power.

Relatedly, Burt (1992) found that weak ties were less advantageous for women than for men; women's mobility hinged on the existence of strong ties to strategic partners. The degree to which such findings support the blunt conclusion drawn by Brass (1985: 340)—that “encouraging women to form networks with other women . . . may be unnecessary or, at worst, nonproductive”—can be debated. However, they do suggest that women—and, by extension, members of other groups that are not socially dominant—need to give particularly careful thought to network relations and strategies in managing their careers.

One potentially positive effect of boundarylessness on individuals' careers may be the lessening of the frequently observed relationship between age and unfavorable mobility outcomes. The tendency for interfirm mobility to slow markedly as individuals age has been well documented (see Baker and Aldrich's discussion in chapter 8), and research examining the effects of such mobility on career outcomes (Spilerman, 1977; Kalleberg and Hudis, 1979; DiPrete and Kreckler, 1991) indicates a reason for this pattern: Changes in employers at later stages of an individual's life are often associated with income loss. However, while the evidence on late-career, interfirm, within-occupation job changes is limited, it suggests that such changes are less likely to have negative consequences when careers are occupationally based (Kalleberg and Hudis, 1979). Thus, age considerations per se (that is, as distinguished from other age-related factors, such as technical obsolescence) may be less of a career-management issue for those in boundaryless careers.

Conclusion

The central premise of this chapter is that a likely but unintentional consequence of employers' efforts to gain greater operational flexibility through the use of contingent employees will be the increased centrality of occupations as the primary loci of individual careers. Using this premise, I have considered how the changes in employment patterns, and a shift toward occupationally based careers, may produce changes in occupations, firms, and individual career strategies.

Occupations, in this scenario, assume an increasingly important role in defining work processes and arrangements within firms, as well as in allocating individuals to statuses within the system of societal stratification. For the use of contingent employees to be efficient, organizations must define work tasks in packages that can be readily parceled out to employees who have preexisting knowledge and skills relevant for such tasks. As occupations become more codified,

they are likely to exert considerable influence on organizations' definitions of such packages, and on the definition of skills needed for particular types of work activities. In this context, members of a given occupational group are in the best position to assess the level of occupational qualifications possessed by individuals and, thus, are likely to serve as key agents in determining the suitability of candidates for contingent work.

These arguments point to the need for increased attention to research on processes through which occupations develop and change, and on the effects of occupational influences on both organizational and individual outcomes. Abbott's (1988) work offers important, trail-breaking insights on the first issue, but much empirical and theoretical work remains to be done in following up on these insights. Similarly, early work by Form and Miller (1949), and by Spilerman (1977), on the effects of occupations on individual career patterns offers promising leads for further research, but, to date, relatively little has been done to follow these leads. And as yet, very few studies have explicitly addressed the problem of how occupational developments influence organizational structures, and vice versa. (Studies by Jacoby [1985], and by Baron, Dobbin, and Jennings [1986], of the development of the field of human resource management represent two notable exceptions, and perhaps models for future work.) The most general implication of the occupational analysis presented here is that a full understanding of the rise and nature of boundaryless careers necessarily must rest on the concatenation of such lines of research.

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Notes

1. While Weber was clearly aware of both organizational and social problems associated with bureaucracy, he nevertheless argued (1947: 337) that the bureaucratic form of organization was, "from a purely technical point of view, capable of attaining the highest degree of efficiency and is in this sense formally the most rational known means of carrying out imperative control over human beings. It is superior to any other form in precision, in stability, in the stringency of its discipline, and in its reliability."

2. There is a question about whether average employment tenure is, in fact, declining. For example, based on a comparison of the average length of tenure of workers in 1979 and 1988, Osterman (1992) concluded that tenure rates were basically stable over the 10-year period. Swinnerton and Wial (1995), on the other hand, using similar data for the period 1979 to 1991, but a different analytic approach, argued that a general decline in job stability had occurred during this period. This conclusion is consistent with evidence of a substantial increase in temporary employment during the 1980s (Feinstein, 1989; Williams, 1989). It's possible that increases in the average tenure of full-time employed workers may have occurred simultaneously with increases in layoffs and temporary employment, if employees with shorter tenures (regardless of age) were most likely to be laid off, and if firms tended to rehire laid-off employees as temporary workers. In the latter case, both firms' reports and employees' own reports of employment tenure could be problematic.

3. This work—and most work on occupations today—is based on some variant of the occupational schema first developed by Alba M. Edwards for the U.S. Census Bureau in the 1940s, which was aimed at grouping together occupations that “connoted a common life style and social characteristics” (Reissman, 1959: 145). His original set of categories included, in order of social ranking: professionals, proprietors/managers/officials, clerks/kindred workers, skilled workers/foremen, semiskilled workers, unskilled workers.

4. Unfortunately, these studies fail to provide information on the distribution of men and women among the respondents, consequently precluding inferences about possible gender effects on the findings. Later work that followed from these studies also often ignored sex differences, frequently relying only on samples of male employees.

5. Although most work on internal labor markets does not differentiate between forms of careers within organizations, a logical distinction could also be drawn among those involving movement across occupational boundaries and those that did not involve occupational shifts.

6. Van Maanen and Barley (1984) make a persuasive case for viewing occupations as communities—social groups bound together by a shared normative order and affective ties. However, while occupational groups often acquire communal qualities, members are connected, fundamentally, by a common market-exchange relationship, rather than by blood ties, geographic closeness, or other social factors.

7. It should be recognized that the concept of codification has a close connection to two other commonly used concepts in the sociological literature on organizations and occupations: institutionalization and professionalization. *Institutionalization* has been used to refer to the processes through which commonly held expectations of behavior and form are generated and take on a “rulelike status in social thought and action” (Meyer and Rowan, 1977: 341). The emphasis on social understandings as a crucial determinant of social action and outcomes is thus common to the concepts of institutionalization and codification. The latter concept, as used here, at least, is a narrower one, referring specifically to processes involving creation and change in occupations. *Professionalization* is another term often used to describe evolutionary processes of occupations (Abbott, 1988), but carries with it the connotation of increasing occupational prestige and autonomy. The concept of codification lacks this latter connotation. Therefore, even at the risk of contributing to the unfortunate spread of multisyllabic turns in academia, I follow Bridges and Villemez’s use of the term *codification* here.

8. Weber’s neglect of this distinction may well stem from his reliance on the Prussian army as a prototypical bureaucratic organization. In the military, the overlap between individuals’ expertise, in terms of knowledge of military strategy and tactics, and their hierarchical position is likely to be considerable.

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