

# **EUI Working Papers**

MWP 2012/26 MAX WEBER PROGRAMME

SKILLS AND RECRUITMENT IN FLEXIBLE WORK SETTINGS

Birgit Apitzsch

EUROPEAN UNIVERSITY INSTITUTE, FLORENCE MAX WEBER PROGRAMME

Skills and Recruitment in Flexible Work Settings

**BIRGIT APITZSCH** 

EUI Working Paper MWP 2012/26

This text may be downloaded for personal research purposes only. Any additional reproduction for other purposes, whether in hard copy or electronically, requires the consent of the author(s), editor(s). If cited or quoted, reference should be made to the full name of the author(s), editor(s), the title, the working paper or other series, the year, and the publisher.

ISSN 1830-7728

© 2012 Birgit Apitzsch

Printed in Italy European University Institute Badia Fiesolana I – 50014 San Domenico di Fiesole (FI) Italy www.eui.eu cadmus.eui.eu

### Abstract

Over recent decades, we have witnessed profound changes in labour markets with an increase in flexible forms of work and employment, driven by organizational restructuring and institutional change at the macro- and at the sectoral level. In order to understand transformations of employment it is central to grasp the interrelations between the organisation of work, recruitment practices, and labour market institutions. Yet, despite the growing interest in flexible work practices and the growing number of in-depth case studies in industries seen as forerunners of flexibilisation, labour market theory and research into new forms of work are not well coordinated. Therefore it is difficult to generalize findings and to anticipate outcomes of institutional changes in training, industrial relations and labour law, or of organizational restructuring such as the externalization of employment or a shift towards temporary cooperation in projects. This paper aims to contribute to the understanding of flexible work arrangements. With this in mind it situates research on extreme cases of flexibilisation in labour market theory and the analysis of work control and suggests a conceptual extension, and it empirically compares two highly flexible, yet differently regulated labour market segments in Germany. The comparison of work organisation and recruitment practices in labour market segments with different degrees of professionalization allows estimating how organizations and labour market institutions shape skill demand and recognition. On this basis, the paper conceptualises the skill demand that results from personal forms of control and specifies the conditions under which networks are used for hiring.

#### Keywords

Flexibility, work, labour markets, networks, recruitment, skills.

I would like to thank Martin Kohli and Mihai Varga for their valuable comments and suggestions on earlier versions of the paper.

Birgit Apitzsch Max Weber Fellow, 2011-2012

#### **1. Introduction**

Organizational restructuring and institutional change at the macro- and at the sectoral level over last two decades have led to profound changes in the sphere of work. These changes have not only increased flexibility requirements for the working population, but they also seem to call into question established concepts about what delineates organisations and what distinguishes different labour markets from each other. This paper aims to contribute to a better understanding of flexible labour markets.

While the trend of flexibilisation in work organisation and employment is considered to apply potentially to all labour markets in Western societies (Kalleberg 2009), the field of cultural and creative industries appears as a pioneer of on-going changes (Gottschall/Betzelt 2004). Accordingly, there are a growing number of studies in this field, covering creative subsectors such as film and television (Blair 2001; Jones 1996; O'Mahony/Bechky 2006; Elbing/Voelzkow 2006; Sydow/Staber 2002), theatre (Goodman/Goodman 1976; Haunschild 2004), and new media and advertising (Grabher 2002a; Girard/Stark 2002; Batt et al. 2000; Koppetsch 2006; Grabher 2002b). Insights into flexible forms of work and employment gained from in-depth studies in these areas are valuable for understanding where current work transformations may lead us. For instance, they suggest there is a strong association between organising work and particular forms of structuring labour market processes: studies of different areas of creative work agree that flexible, temporary forms of cooperation - projects - are accompanied by an intensified self-control of work and careers and by a strong use of networks. Accordingly, to adapt to volatile markets, workers flexibly change specializations by instrumentalising informal relations (O'Mahony/Bechky 2006; Menger 1999; Haak 2006; Voß 2001; Faulkner/Anderson 1987; Haunschild/Eikhof 2009; Jones 1996; for a theoretical elaboration of the argument see Blair 2009).

Yet, in order to assess the applicability of these findings to other areas of work, we need to better understand the interrelations between forms of work organisation, such as project work and selfcontrol, and the functioning of the labour market, especially regarding the recognition of skills and the use of networks for recruitment. Therefore, research on creative industries needs to better coordinate with research into labour market structures and change both empirically and theoretically. Hitherto, the characteristics of the industry have been attributed to the peculiarities of creative work or even the subsector studied, although, as we know from earlier studies of fields in the arts (Becker 1974), many of the tasks and positions involved are not genuinely creative<sup>1</sup>. The lack of comparative empirical research on the different segments of the creative industries (Smith/McKinlay 2009: 3f)<sup>2</sup> makes it difficult to generalize the findings. In addition, not only individual case studies but also the attempts to compare and synthesize the findings explicitly concentrate on the delineation between creative subsectors and other sectors (Caves 2003; Smith/McKinlay 2009). These delineations prevail despite the prevalence of flexible forms of work and atypical employment in other industries, which are far from being considered creative, and some of which are very old, such as construction (Stroink 1992; Syben 1999; Stinchcombe 1959) or longshore operations (e.g. Nelson 2001; Finlay 1982; for a more detailed account on creative and casual work see Apitzsch 2010: 94ff).

Also theoretically, research on the creative industries is barely connected to concepts central to labour market research, such as that of labour market segmentation and sector- or country-specific configurations of labour market institutions, such as training institutions, social insurance and industrial relations systems. Flexible forms of work and employment may operate in very different

<sup>&</sup>lt;sup>1</sup> In addition, the division of labour and the definition of artistic and creative achievement vary historically (Müller-Jentsch 2005).

<sup>&</sup>lt;sup>2</sup> Exceptional are the comparative study of the solo self-employed in different cultural industries by Gottschall and Kroos (2007), the conceptualization of employment in cultural industries in comparison to different models of employment regulation in Germany by Betzelt and Gottschall (2004), the comparison of care and cultural industries by Henninger and Papouschek (2008), and, from an organizational perspective, Jones and Lichtenstein (2008), and Grabher and Ibert (2006).

institutional contexts and a unidirectional replacement of internal labour markets by external flexibility and market principles would indeed seem questionable, given the widely acknowledged differences not only in labour market regulation between countries (Hall/Soskice 2001; Streeck 1996; Marsden 1999; Thelen 2012), but also between sectors and segments of the labour market (Kerr 1954; Doeringer/Piore 1971; Sengenberger 1987). In addition, labour market theories may themselves require elaboration and reconceptualisation in order to understand new forms of work and employment, and to better grasp, for instance, the causal link between project work and the use of networks in recruitment. More generally, the combination of different forms of work coordination – be it self-control and autonomous adjustment to markets or cooperative work in projects and networks – and their ramifications for labour market processes and structures are not yet fully understood.

This paper aims to contribute to our understanding of current changes in the sphere of work by situating the findings for extreme cases of flexibilisation more generally in labour market research. To this end, I review, employ and try to advance conceptual tools for the analysis of the relationship between organisational structures, such as projects and specific control forms, labour market practices, such as recruitment, and formal labour market institutions, in particular those that regulate training.

To evaluate the use of the conceptual framework that labour market and industrial sociology provide for this end, I investigate empirically how the labour market and the work organisation interact in flexible work settings. On this basis, I suggest a theoretical extension of established concepts of qualification and labour market segmentation. More specifically, I relate historically evolved labour market institutions to the organisation of work and recruitment by empirically comparing two different institutional settings. German architecture firms and the German media have in common both a project basis to their organisation of work and deviations from standard employment, but they differ in the degree to which professional control is institutionalised. The comparison of the two industries given here is based on qualitative interviews with project workers and labour market experts. The study shows how the institutional set-up of a particular labour market segment structures the organisation of work, the problem of skill demand and recognition, hiring, and generally the outcomes of employment externalization.

This paper is organised as follows: in order to connect the explanations of forms of control of work to research on recruitment practices, in particular informal hiring, I first review existing labour market theory. I suggest paying closer attention to skill requirements that may result from personal forms of control, thus proposing an explanation of why networks are of varying importance in different labour market segments. Then I empirically investigate the interplay of labour market institutions, the organisation of work and hiring. Lastly, I summarize and discuss the findings.

#### 2. The interaction of work organisation and the labour market

The research on creative industries suggests that forms of flexibilisation of work and of employment constitute a specific pattern of flexible work arrangements, in that projects are accompanied by an intense use of personal networks and by individual control over one's work and career. So far, however, these interrelations have been attributed to specificities of creative work and it is not clear whether and why networks are generally used more often in volatile environments, and which forms of control of work and which labour market processes are related to them. To address these questions, in the following I localize recruitment through networks and the organization of work in projects or through individual control within the alternatives that are suggested by labour market theory and the sociology of work. In the review of existing accounts I focus first on recruitment patterns and second on forms of control, both of which I relate to their institutional prerequisites.

#### 2.1 Determinants of recruitment

Central to recruitment are the problems of the evaluation of suitability (i.e. qualification), and the problem of how to spread and how to receive information about vacancies and available candidates. Involved in both aims are informal networks and impersonal channels, e.g. advertisements to spread information about the post, or certificates and CVs to judge the suitability of candidates. In comparing both means, Granovetter's (1995 [1974]) seminal study of the recruitment and job search processes of

highly skilled workers suggested that networks, especially weak ties, were a superior means of job search and hiring in leading to better jobs and better fitting applicants (Granovetter 2002 [1983]). This finding has inspired a broad strand of research. The specific aspects that are investigated include the effect of network structure and content on intrafirm cooperation (Casciaro/Lobo 2008; Ibarra 1992) and on the firm's hiring, screening and training costs (Fernandez/Castilla/Moore 2000). Regarding individual outcomes, the impact of networks on mobility (Ibarra 1995; Podolny/Baron 1997), on socio-economic status (Lin 1999) and on wages (Bridges/Villemez 1986), as well as on job turnover (Kmec 2007) has been discussed. As a result, our knowledge of the outcomes of informal recruitment from the perspective of both workers and employers has increased significantly (for a review see Marsden/Gorman 2001).

Yet we still know little about the conditions under which networks become more important than other recruitment channels. Their utility is usually explained by their capacity to efficiently channel information of a better quality. But are they of equal importance in the recruitment processes of all labour market areas? Does their use and utility depend on the qualification structure or the type of work recruited for? Answers to these questions differ in the degree to which they take into account characteristics of the organization of work and the broader institutional context.

Concentrating on the impact of organizational and job characteristics on hiring practices, Jacobs and Cornwell (2007) argue that different networks are used depending on the extent to which the vacant positions contribute to organizational goals. Manwaring's study (1984) reveals how firminternal labour markets are informally tied to community networks in order to recruit workers who are more committed and better integrated into work teams. Tilly and Tilly (1994), as well as Granovetter and Tilly (1988), suggest that networks are used in recruiting for firm-internal labour markets, especially where the tasks demand a high degree of cooperation<sup>3</sup>. These studies indicate that the expectations concerning applicants differ with regard to the characteristics of the work setting. They do not, however, discuss the role of a specific skill supply related to training institutions, thereby proposing a relationship between organizational characteristics and hiring that is universal.

In contrast, labour market segmentation theory explicitly addresses the questions of how the organization of work, a firm's employment strategies and promotion practices, and formal labour market institutions such as collective bargaining, labour law, vocational education and training systems or employment protection, interact and together form labour market segments with an "inner structure", specific types of qualifications and varying degrees of attachment between employers and employees (Doeringer/Piore 1971; Kerr 1954; Sengenberger 1987: 53ff). To put it briefly, in unstructured labour markets there are neither any specific skill demands nor are there institutions that effectively de-commodify labour. Firm-internal labour markets restrict inter-firm mobility insofar as they offer employment security in return for investments in firm-specific training. Institutions such as employment protection laws, collective agreements with seniority rules regulating wages and careers, and codetermination provide both employees and employees with security and incentives for long-term commitment (Sengenberger 1987: 150ff). Lastly, in professional or craft labour markets, professional institutions coordinate and standardize training across companies and secure the supply of occupational skills; they protect occupational titles, and, together with job design according to occupational titles, facilitate the recruitment and inter-firm mobility of workers (Sengenberger 1987: 126ff; for professional control in the construction industry Stinchcombe 1959). Accordingly, it has been suggested that professionalism constitutes a third logic (in addition to hierarchy and the market) that structures the organization of work and labour markets (Freidson 2001). Professional and general skills (appearing in professional vs. unstructured labour markets, respectively) alike enable a greater inter-firm mobility of workers, in contrast to more experiential, firm-specific knowledge required by idiosyncratic, complex and expensive assets in firm-internal labour markets.

This logic is also similar to the characterisation of country differences in labour market structures (e.g. Marsden 2000; Fligstein 2001)<sup>4</sup>. Accordingly, Germany combines features of firm-

<sup>&</sup>lt;sup>3</sup> Furthermore, strong cooperation within work teams and with clients can strengthen ties to freelance and temporary workers, as has been shown for the German internet services (Tünte/Apitzsch/Shire 2011).

<sup>&</sup>lt;sup>4</sup> See for an overview of conceptualisations of skills in different comparative approaches, Streeck (2011).

internal and occupational labour markets with employment protection and codetermination encouraging long-term employment, while standardized occupational training and unemployment benefits enable inter-firm mobility. In contrast, Japan lacks the latter characteristic and its employment regime combining firm-internal labour markets, firm-specific training and company unions has been termed "managerialistic" (Fligstein 2001). The US labour market is described as putting a premium on general training, as it offers little employment protection and unemployment benefits – features that facilitate high inter-firm mobility. However, neither these approaches nor segmentation theory pay systematic attention to networks as structuring labour markets and hence give no explanation for their occurrence.

As one exception, Arne Baumann (2002a) conducted a comparative study of the British and German film industry. His study follows the premise that hiring is determined by the institutional setup of a given labour market, but leaves aside the organization of work per se. He argued that informal recruitment practices compensate for a lack of transparency of the skill supply in labour markets that lack standardized training and occupational titles. In doing so, he explicitly relates training institutions to recruitment practices. In the absence of standardized occupational skills and occupational titles that are linked to standardized training, on the one hand, and without internal labour markets able to provide both training and the evaluation of (firm-specific) skills and efforts, on the other, employers seek alternatives for evaluating the occupational skills of workers. Consequently, networks are particularly important in labour market segments that lack formal training institutions and that have a limited number of standard forms of employment.

To sum up, the review of research on networks and other lines of labour market segmentation provides specific insights into the relationship between the use of networks for hiring, firm-internal processes, and the institutional set-up of a labour market. Hints that the organization of work also affects hiring and mobility by structuring skill demand are best spelt out for the ideal types of professional and unstructured labour markets. Standardized occupations and qualifications that structure work organization, or the absence of specific skill demands in the context of simple routine tasks in unregulated labour markets, allow for inter-firm mobility, and, it could be concluded, seem to supersede networks in hiring. We also understand mobility and skill demands in firm-internal labour markets, where specific assets make internal hiring and mobility more likely, but it is not clear through which channels people are hired into entry positions. While Baumann (2002a) suggests that informal hiring via personal relations is more prevalent in the absence of professional and firm-internal labour markets, the organisation and control of work remain a black box in this study. Network research only vaguely fills this gap by suggesting that cooperative tasks promote hiring through networks, but the institutional conditions, the type of skill demand and the resulting mobility patterns have not yet been specified. Therefore, the picture remains incomplete regarding the skill demand and supply and the organisational and institutional determinants of hiring in the context of project work. The following addresses this problem by reviewing what we know about the different forms of organization, their preconditions and the skill demand they give rise to.

# 2.2 Work organization and control

To consider a broader range of modes of organising and controlling work is necessary not least because project work – the temporary cooperation of differently specialized workers – can potentially use different forms of control, some of which seem to have been forgotten in the discourse on new forms of organization. As is suggested by Mintzberg (1979), there are five alternative modes of coordinating work: standardized routines and processes (bureaucracy), standardized qualifications, standardized results, direct control and mutual adjustment. The first three may be considered essentially impersonal modes of controlling the labour process; they first and foremost rely on an advance specification of results or on codified rules.<sup>5</sup> In contrast, the use of direct control and mutual

<sup>&</sup>lt;sup>5</sup> The role of informal coordination in bureaucratic organizations has been recognized early (Blau 1955; Roethlisberger/Dickson 1975 [1939]) and currently receives growing attention (Pettinger 2005; Zelizer 2009). However,

adjustment could, following Edwards (1984), be classified as a personal form of control. According to Mintzberg (1979), it can be argued that the three forms of standardization reduce the need for informal communication. Conversely, the fewer the formal rules, the more important personal interaction becomes and the greater the interdependence between colleagues.

These forms are also based on specific conditions. Bureaucratic governance presupposes a stable market demand and a work process that can be planned, thus making this form of coordination incompatible with the volatility that appears to mark today's work environments. Professional or craft control does not presuppose such stability, but requires labour market institutions that provide for standardized training and institutionalized professional control (Stinchcombe 1959). Forms of bureaucratic and professional control also require specific provision for training. Obviously, if work is coordinated by standardized procedures and formal rules, it takes effort and long-term commitment to train workers in these rules, but tacit knowledge of routines is also required. In contrast, if work is coordinated according to professional rules, training is more independent of firms and the skills are relevant and transferable across companies.

The preconditions of self-control or of result-based work control are, however, only rarely commented upon. Labour market theorists suggest that products or services have to be defined in advance for output-control to be viable (Sengenberger 1987: 119ff; Marsden 2004: 660). In contrast to standardized outputs, the capacity for self-coordination, especially of complex tasks, may arguably require professional socialization or extended training (Gottschall 1999). Not least it could be argued that the flexible adjustment to market demands presupposes transparent information and a considerable degree of autonomy in task fulfilment.

Direct personal control and mutual adjustment also require certain conditions to be fulfilled. They can be employed only as long as work groups are not too large (Mintzberg 1979). The skill requirements that result from personal control or mutual adjustment, however, seem to be undertheorized. In order to approach this problem it might be helpful to go beyond theorizing on labour markets, and in particular beyond the well-established distinction between firm-specific, occupational/professional, and general skills which tends to fall short in grasping the relational context of production and recruitment. Therefore I suggest an extension that follows a more general social control perspective (Coser 1961), on the basis of which it can be argued that interactivity and interdependency at work require spatial proximity and tend to increase the observability (Merton 1957: 114) of everyone who is involved. As a consequence, control tends to extend to criteria that are more particularistic in nature.

A concept of skills that can be related to increased observability, namely extra-functional skills, was introduced into post-war German industrial sociology by Ralf Dahrendorf (1956). Extrafunctional skills can be defined as requirements that do not immediately result from the technical production process, which are more diffuse and relate to the broader social and organizational context of the task (Dahrendorf 1956: 554ff). They contribute more subtly to the efficiency of production and involve the capacity to adapt to working conditions, taking responsibility for and being knowledgeable of the adjacent parts of the production process. Furthermore, they are acquired through experience rather than through formal training (ibid: 557)<sup>6</sup>. Offe (1970: 93ff) suggests that a further distinction be made between several subcategories of extra-functional skills. For instance, in work settings that are characterized by a high degree of interdependency, the contribution of an individual worker, especially if s/he is in a lower hierarchical position, is hard to distinguish from the achievement of co-workers (see also Stinchcombe 1990: 247ff). Other examples include the normative expectations regarding political views, adaptability, religion, age, and gender (Offe, 1970: 94f).

In accordance with the argument that the organization of work shapes skill demand, it can be argued that when observability increases (as in interactive work settings), all these extra-functional aspects are easier to evaluate. Accordingly I suggest that not only idiosyncratic procedures in the

<sup>(</sup>Contd.)

this paper argues that it matters crucially whether personal evaluations are the only source of information on skills and achievement.

<sup>&</sup>lt;sup>6</sup> Such extra-functional skills may also include relational and tacit knowledge about clients' firms and products (Tünte/Apitzsch/Shire 2011).

organization necessitate the experiential learning of routines and other forms of tacit knowledge – all of what is usually called firm-specific skills; rather, it is the extent of interactivity and social control in work settings more generally that can be considered as contributing to the relevance of extra-functional skills. This also points to the problem of recognizing and transferring these skills. Are they better evaluated personally and therefore presuppose the use of networks for hiring?

#### 2.3 Summary

From what we know so far, mechanisms governing the labour market and the organization of work rest on different institutional, environmental and organizational preconditions, and they differ in their reliance on personal communication and interaction. Potentially compatible with volatile environments and project work are professional control or control of work results, or any personal control form. Are the latter more likely to result from a lack of standardized professional training, and will they give rise to extrafunctional skill demand and informal hiring practices, as such skills can be potentially better evaluated personally? The interplay of work organisation and training institutions and their ramifications for recruitment will be investigated empirically in the following section.

#### 3. The cases

The interrelation between labour market institutions, recruitment and work organizations in flexible work settings is investigated empirically in the two highly flexible, yet differently regulated project labour markets. As I will describe in more detail below, German architecture and the media industry are relatively old industries that share the project character of the organization of work, the prominence of atypical forms of employment, such as freelance work and fixed-term contracts, and the lack of collective formal regulation of terms of employment. In this, they combine different forms of flexibility – of work organisation, working time, and employment –, and contrast markedly with the so-called standard employment relationship, the life-long, collectively regulated employment in one company and in one occupation. Both, however, differ markedly in their degree of professionalization. These characteristics make both cases particularly suitable for investigating the interplay of work organization and the shared characteristics of work (temporary cooperation in projects) should help to approach an explanation of assumed differences in recruitment practices.

This analysis is based on 57 qualitative, semi-structured interviews with project workers from both fields. I also conducted 16 expert interviews with representatives of professional associations, unions, and employers on the general labour market situation, the interest representation as well as organization and employment practices. This material was complemented with secondary data on firm structure, employment and the historical development of both industries.

More specifically, the sample of project workers comprised architects and, in the media industry, mainly camera crew members, along with video camera operators, and members of departments such as costume and set design, administration, cutting, and production company management. The sample was drawn from the list of members of professional associations and from the most popular internet database of media workers, Crew United. The interviewed project workers lived in a large city that is one of the five media clusters of Germany. I concentrated mainly on project workers with 10 to 20 years of work experience, because they can be expected to be more familiar with vertical and horizontal mobility, with economic boom phases and downturns, and with labour market characteristics in general. Also, interviewed media workers varied in their training background, allowing estimating the importance of credentials for mobility.

The main part of the interview consisted of work history narratives. Afterwards, I asked more specific questions on major transitions, such as the training-to-work transition, changes in position, occupation and forms of employment. In addition, respondents were asked about the development,

structure and function of personal networks and how they proceed when filling subordinate positions.<sup>7</sup> For the analysis, I interpreted the work histories, network integration, and recruitment experiences first on the level of individual cases and then as an inter-case comparison.

# 4. Regulation of employment and skills in German architecture and media

Work in architecture and media production is organized in projects, i.e., architects and media workers collaborate in accomplishing a complex, often innovative task in a limited period of time. The end product is usually unique and market demand is highly volatile and uncertain (Faulkner/Anderson 1987). In both fields, project work often implies that work loads are hard to predict in advance and working times may vary considerably.

Also, in both architecture and media production, small firms dominate and the proportion of atypical forms of employment such as self-employment and fixed-term contracts is high. More than 90% of German architecture and engineering firms employ less than 9 people (Statistisches Bundesamt 2005). In 2007, 97,326 architects were registered at the federal chambers of architects, half of them were listed as self-employed and almost half of them as regular employees or civil servants. Both this dominance of small offices and the significant number of self-employed correspond with the ideal of the independent professional ("Freier Beruf", see also Littek/Heisig/Lane 2005: 77).

After the breakup of the public broadcasting monopoly in Germany and the approval of private broadcasters in the 1980s, the production of television content underwent dramatic changes through processes such as decentralization, outsourcing, and subcontracting. This marked a shift from the vertically integrated broadcaster to the publisher-broadcaster model and led to the erosion of internal labour markets for media production (Baumann 2002a; Baumann 2002b; Baumann/Voelzkow 2004; Tunstall 1993). As a consequence, the number of self-employed and temporary workers increased significantly. The media sector included 101,442 workers in the audio-visual media sector in 1997 as a whole (DIW 1998: 21ff in Baumann 2002b), including 42,400 workers in film, video and television production (ibid.). However, the share of self-employed and atypical workers, which are in large part hired temporarily by independent production firms for the duration of the production of a single television or film project, can be expected to be much higher.

This market volatility entails a lack of employment security and income for project workers. Although architecture firms refrain from fixed-term contracts due to the problems of defining the work load and project duration in advance, employment perspectives remain uncertain, since employment protection is restricted to firms with more than 10 employees. All members of the federal chambers of architects have access to a specific pension insurance scheme. In comparison, media workers with fixed-term contracts do know how long they will be involved in a given project. But because they hardly have time to search for, or work on, new projects before their current project is completed, they repeatedly face the risk of unemployment. The occupants of leading positions, such as director and director of photography (DoP), are usually self-employed and can, if their work is classified as artistic and independent, gain access to the health and pension insurance scheme of the Artists' Social Welfare Fund (Künstlersozialkasse or KSK). In contrast, project workers in assisting positions are employed for the duration of the project, and are therefore subject to social insurance withholding and may qualify for unemployment benefits if they work for at least 360 days within two years prior to unemployment. This requirement, however, can hardly be met given the irregular employment of media workers. Income between two projects therefore largely depends on the income paid during a project and on the regularity of employment.

The collective interest representation of media workers is rather fragmented, consisting of the Services Trade Union and various small professional associations which tend to focus on establishing professional norms or on labour market closure. Although employees and even freelancers who work

<sup>&</sup>lt;sup>7</sup> Since the established standardized instruments for studying the structure of ego-centred networks (Wellman 1979; Ibarra 1995) are hardly compatible with more open interview forms that aim at biographical narratives (see Schütze 1983; Holtgrewe 2002), network-related questions were asked at the end of the interview. Also, personal networks were reconstructed during the analysis of biographical narratives (for a similar approach see Kühn 2002).

for public broadcasters are covered by collective agreements, most content production is now carried out by independent production firms that lack collective agreements (Windeler/Wirth 2004). In addition, those working for independent production firms are rather detached from firms, and the firms are predominantly small, making it hard to establish works councils that might help to enforce labour protection laws and collective agreements. Regulations in the field of architecture are oriented toward the ideal of the self-employed, autonomously working "independent architect," and architectural chambers concentrate on the control of professional practice and the regulation of access to the field of architectural services (Apitzsch 2010). As a result, in both fields the working hours are barely regulated collectively and the terms of employment deviate markedly from what Streeck (1996) called the "limited and negotiated involvement" of workers.

However, architecture and media differ markedly in the way training is organized. The standardization and regulation of training and access to the labour market for architects can be traced back to the efforts of the Prussian administration to ensure the competence of civil servants who plan and supervise the construction of public buildings (*Baubeamte*), as well as to the struggle of private architects in the late-19th and early-20th century to establish and legitimize a market monopoly of architectural services for private, bourgeois clients (Bolenz 1991, 1994). Today, only university graduates who successfully complete an architecture course of study at university or at a university of applied sciences (*Fachhochschule*), and two years of supervised professional practice, are allowed to become members of the chamber of architects. They are then entitled to use the title "architect" and have access to the field of architectural services. In particular, "[they] are entitled to draw up plans for approval of building projects and submit them for permission to the local construction authorities" (see the description of the Federal Chamber of German Architects, http://www.bak.de, last accessed on 06-06-2011). Their professional practice complies with the specific regulations of the federal-state building laws. Adherence to these regulations is supervised by the chambers.

In contrast, labour market entry in the television and film industry is only marginally regulated. While occupations were differentiated already in the 1920s (Iljine/Keil 2000: 27)<sup>8</sup>, entry paths into employment at independent production firms are extremely heterogeneous still today, with an emphasis on experience rather than credentials. Training is conducted rather informally, and on the job, under the supervision of those in the respective higher-level positions during subsequent projects. During the 1990s, however, several universities and vocational schools established degree programmes for occupations such as director of photography (DoP), focus puller, director, or scriptwriter, thus challenging the established model of informal training and gradual advancement through assistant positions. Because of the many different and competing training and entry opportunities, the qualification structure of this field remains highly heterogeneous (see also Baumann/Voelzkow 2004).

# 5. Work, skill demand and recruitment in architecture and media

# 5.1 Organisation of project work

In general, projects in architecture can consist of all or some tasks defined in the Regulation of Fees for Architects and Engineers; tasks such as design, shop drawing, preparing bid sets and construction documents, and construction management. An architect also has a coordinating role in the planning and construction process on behalf of the client and that of a mediator between planning and construction, and between the various construction firms and the public authorities (see also Syben 1997: 13ff). Standardized training qualifies architects for this broad range of tasks, the fulfilment of which is also regulated by codified professional rules. This qualification allows for firm-internal flexibility; especially the small architecture firms, being less likely to be specialized in a certain task (see also Raabe 2004), can assign a broad range of tasks to their employees.

<sup>&</sup>lt;sup>8</sup> In the earliest film productions, directors, photographers, authors and developers of the technical equipment were frequently the same persons (Neubauer 1996: 29f).

Also, professional standards make permanent personal communication in project collaboration less important. Therefore, while architects' activities centre on a certain construction site, they nevertheless do not always have to be present in order for the planning and construction process to advance. Except for meetings that allow project members to coordinate their activities and to plan the next steps, they can work fairly autonomously, and architects frequently work concurrently on different projects. As a result, whether or not an architect collaborates with other architects in order to complete a project depends on the size of a project and his or her integration into an architectural firm, rather than on the task content and skill requirements.

Film projects consist of different departments such as camera, set, and costumes, which are hierarchically broken down into different ranks of assistants and supervisors. The duration of filming, which is the most labour-intensive project phase, varies from a few days (for commercials) to 6–8 weeks for a movie, or several months for a television series. All the members of the different departments work together at the same time and in the same place, which is chosen according to the script and usually far from the project members' homes.

In contrast with architecture, the coordination of a film crew's work cannot rely on codified professional norms. The training and entry paths of media workers in the industry are extremely heterogeneous, because on-the-job training and different forms of formal rather than standardized training coexist. Personal control by direct supervisors and mutual adjustment through informal communication between team members are the dominant control mechanisms. Accordingly, the work of project members is highly interactive and interdependent and media workers enjoy considerably less autonomy at work than architects.

#### 5.2 Recruitment practices

Since the interviewees were not newcomers to the labour market and because of the peculiarities of organizations in both industries, most of them were experienced in making decisions on the hiring and promotion of assistants (interns, camera loaders or focus pullers in the media; associates, student assistants or interns in architecture). In film projects, production firms, while functioning as the employer, usually delegate the selection of staff to the heads of department, who recommend assistants, who in turn propose second assistants or interns. Architecture firms are usually small and not strongly hierarchically differentiated so that architects are able to recruit their staff directly.

With respect to recruitment channels, informal recommendations or direct contacts with colleagues, former fellow students or former co-workers play a significant role in the field of architecture and media production. In architecture, however, formal recruitment strategies such as cold calls or job ads were used as frequently as informal contacts in hiring student assistants, employees or freelancers. In comparison, media workers rely almost exclusively on recommendations and direct contacts in filling vacancies. These contacts involve former assistants, colleagues, and equipment rental agencies, which train assistants in handling cameras.

This mirrors in the role of networks in career trajectories. Architects enter the labour market after a lengthy training phase in which practical work in an architectural firm and examinations follow university studies. Partly, they gain their first as well as later jobs through recommendations by other students or professors, or by direct recruitment to firms they worked for as interns or student assistants. However, one third of the interviewed architects applied successfully without using personal contacts, and only half of the 39 movements between firms that the 24 interviewed architects undertook as employed, and subject to social insurance, were mediated by personal contact. This indicates that dependency on personal relations to gain access to employment is limited. In addition, careers in architecture typically involve setting up an independent architectural practice after a few years of gaining experience as an employed architect. Accordingly, the dependence on informal hiring and on relations formed at university, or during their first jobs, further decreased throughout their careers.

In contrast, work-related contacts seem necessary for securing employment and improving career prospects in the film industry. Impersonal forms of application were viable for the lowest levels in team hierarchies, such as unpaid internships. However, later on, networks are inevitable for getting a

job. As a result, the interviewed film workers experienced a devaluation of their formal qualification, as exemplified by the following:

There was a big production, using 35mm film for a TV series. They hired me, and I earned quite a lot of money. Since then, studying has become secondary. While attending university I realized pretty soon that a diploma [Master's equivalent] is not the key to gaining access to this industry. My diploma was worthless, so to say. Since then I have earned money and only studied on the side. (Camera assistant)<sup>9</sup>

Interestingly, a comparison of the entry into the labour market of media workers with and without a university degree showed that informal networks are not superseded by formal degrees. Even those who graduated from universities reached their first positions exclusively by the hiring or recommendation of formers fellow students or teachers (who are frequently hired practitioners), whereas one interviewee who graduated from a prestigious film school abroad had to enter the industry in assistant or entry positions. Therefore, the mechanism of transition was very similar to that of training on the job. The growing formalization of training left informal recruitment through networks untouched and personal evaluation and communication of the suitability of candidates for a given job remained the dominant way to reduce uncertainty about qualifications. Instead of enhancing the evaluation of skills, training sites were converted into arenas of networking and thus rather reinforced than changed informal recruitment (see Apitzsch/Piotti 2012).

Which skills are evaluated through these recruitment channels? Basic professional skills and also extra-functional skills were mentioned as recruitment criteria by all self-employed architects, and, if specified, they corresponded to the nature of the assigned task, as is clearly defined in the Regulation of Fees for Architects and Engineers. For instance, the self-employed architects who were interviewed expected freelancers or other employees to be communicative and to be able to guide craftsmen and handle clients if the position to be filled required such contacts. Those architects who hired for positions that meant close cooperation or working closely together from a spatial standpoint also mentioned such criteria as a sense of humour, "being on the same wavelength," and having the "right chemistry," as illustrated in the statement of one architect:

Of course I will meet him [the applicant] first, talk to him. And of course the first impression is critically important, that has to be right. [...] And if the chemistry is right, that is enough to start. (Architect)

In comparison, however, the members of camera crews who were interviewed placed greater emphasis on criteria such as perceived similarity of work attitudes, liking each other, being friends and having fun with each other at work. They attached as great, or even greater, importance to these extra-functional (Dahrendorf, 1956, Offe, 1970: 91ff) criteria, especially to those that were diffuse and particularistic (Parsons 1951: 64ff)<sup>10</sup>, rather than to professional qualifications. Personnel would not be recruited if they are not considered a convenient company:

An assistant can be as good as he wants, if he does not suit me personally, I would never take him (Camera assistant)

You are glad once you found somebody with whom it works, personally -I do not want somebody who works perfectly but who I cannot bear. The personality is almost most important - you spend so much time together. (Camera assistant)

If it is someone I enjoy having a beer with at night, I made the right decision (DoP)

<sup>&</sup>lt;sup>9</sup> All interview quotations presented here are translated by the author.

<sup>&</sup>lt;sup>10</sup> Furthermore, ascriptive criteria such as gender and age matter, especially indirectly. The gender segregation of vertical positions seems to be strongly related to the interdependency of the work process, the lack of effective working time restrictions, value homophily in recruitment, i.e. perceived similarity of life styles and interests, and diffuse evaluations of availability (see for a more detailed analysis Apitzsch 2010: 73ff, 110ff, 153ff).

These preferences result from the duration and intensity of collaboration. As is illustrated by the interviewees, spatial proximity and long working hours spent distant from non-work related contacts contributes to particularistic and diffuse recruitment criteria:

A working day during shooting lasts ten hours, as specified in the contract, often it takes longer. [...] And if you spend that much time at work, personal contact is very important. If good friends get on each other's nerves, it does not matter. (DoP)

I try to keep familiar personnel in my department. Because they are just so close, physically, and then these 25 days you are shooting – it is like a family, with all pros and cons. (DoP)

In sum, the interdependent and interactive production process in the media industry, which can be explained by the lack of professional control, especially the lack of codified professional norms and of the restriction of labour market access on the basis of standardized professional qualifications, together with the long working hours which result from the lack of regulations and rule enforcement regarding working hours, contribute to the observability of team members and extend expectations beyond specific task requirements to particularistic and diffuse criteria. These criteria however, develop and/or are evaluated only in the course of collaboration, resulting in value and status homophily of recruitment networks (Lazarsfeld/Merton 1954). The lack of universal standards further adds to this particularism. Since the evaluation of both professional skills and extra-functional criteria are communicated by informal, personal communication, observability increases and networks always transfer information on extra-functional criteria such as attitudes, life style, and other diffuse and particularistic aspects. Functional and extra-functional skills become inextricably tied to each other, thus further contributing to the dominance of informal networks.

Conversely, the professional control and regulation of labour market access decreases the need for personal forms of control and for informal communication in the labour process. As a result, the evaluation of workers will more likely concentrate on specific functional and universalistic criteria, and the work results can be more easily attributed to individual performance. Moreover, the uncertainty about their qualifications is reduced by certificates that reliably signal broad and standardized occupational skills. The codified professional norms function as more or less transparent standards for evaluating architectural practice, and their adherence is controlled by the architectural chambers. Also, although we see extra-functional criteria as gaining importance when architects work close to each other (e.g. during working long hours in a shared office space), the particularism of recruitment is constrained by the existence of those universalistic and codified criteria for professional evaluation which take precedence over networks.

# 6. Conclusion

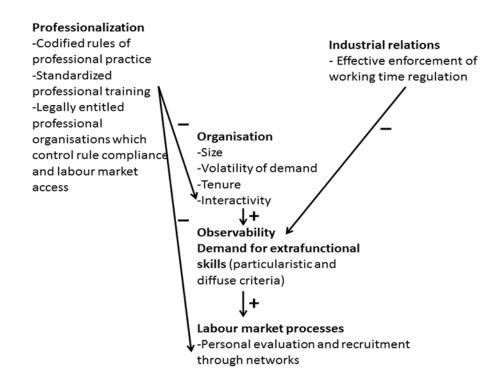
The aim of this paper has been to shed light on the functioning of flexible work arrangements in order to further our understanding of recent changes in the sphere of work. To this end, it has attempted to clarify the relation between distinct modes of work control and labour market control and their institutional underpinnings.

It suggested that the dominance of informal hiring can in large part be explained by the characteristics of the organization and the institutional set-up of a given labour market segment, in particular training and the regulation of working conditions. In industries where the standardization of skills or processes is not feasible due to a lack of institutionalized professional control, or a lack of continuous demand and routines of production, work is coordinated by personal forms of control and is therefore highly interactive. In addition, a lack of regulation of the terms of employment, and in particular of working hours, increases the time that workers spend with each other. As a result, "observability" increases beyond what is of immediate relevance for production, and extra-functional, diffuse and particularistic criteria such as sympathy, humour, lifestyle or "being on the same wavelength" become more important. These, however, can be evaluated and communicated only personally and therefore require networks for hiring. Also, if there are no institutionalized universalistic and functionally specific criteria to evaluate qualifications and achievement outside work, and training is not standardized, professional qualifications can be evaluated and communicated

only personally, i.e., via networks. These evaluations are likely to be linked to subjective assessments of diffuse and particularistic criteria, making professional skills hardly transferable beyond the given relational context. I argue that networks are more likely to be used under the conditions described above, and, additionally, contribute to the particularism of recruitment.

Due to the restriction of access to the labour market based on formal professional qualifications and their greater autonomy at work, architects are less dependent on networks in getting a job. In contrast, establishing and maintaining informal networks is the only possibility for securing employment and income in the film and television industry. The absence of professional institutions increases the dependency on personal evaluations, whereas professionalism allows for a qualitative limitation of the claims on project workers where the regulations of the standard employment relationship do not apply.

Accordingly, the institutional configuration of a given labour market segment, in particular the professionalization and the regulation of employment, as well as characteristics of the organization of work, account for the use of informal modes of labour market closure, such as networks. Both not only exert an independent influence on hiring practices by providing or detaining universal and specific evaluation criteria; they are also interrelated insofar as the absence of professional regulation favours personal forms of control and informal recruitment and increases the relevance of extra-functional criteria and personal evaluation of achievement (see figure 1 below for a Summary). These findings help us to understand when networks are more important than other means of recruitment, as well as the conditions under which workers can adjust to volatile labour markets and the limits of individual entrepreneurial strategies in volatile environments.



# Figure 1: Proposed relations between the institutional set-up of a given labour market, the organisation of work, skill demand and recruitment.

This account of the interrelationship between the organization of work and the functioning of the labour market has aimed to shed light on informal recruitment practices, which have been viewed as characteristic for project-based labour markets in creative industries. Rather than viewing networks as defining elements of otherwise peculiar and idiosyncratic sectors (such as creative industries), and rather than viewing them as universally important in any labour market, it specified the institutional and organisational conditions of their use. To this end, it focused on the social-relational context of

skill production and recognition by explicating the skill demand and evaluation which so far have been neglected: the extension of observability in interactive work settings and the demand for extrafunctional, particularistic and diffuse criteria. The suggested mechanism that links organisational characteristics, institutional conditions and labour market functioning opens up possibilities for further research both into other areas of work and into well-grounded generalizations of the causal link.

#### References

- Apitzsch, Birgit. 2010. Flexible Beschäftigung, neue Abhängigkeiten. Projektarbeitsmärkte und ihre Auswirkungen auf Lebensverläufe. Frankfurt am Main: Campus.
- Batt, Rosemary, Susan Christopherson, Ned Rightor, and Danielle van Jaarsveld. 2000. "Net Working. Work Patterns and Workforce Policies for the New Media Industry." CAHRS Working Paper Series. Paper 97.
- Baumann, Arne. 2002a. "Informal Labour Market Governance: The Case of the British and German Media Production Industries." *Work, Employment and Society* 16(1):27-46.
- Baumann, Arne, and Helmut Voelzkow. 2004. "Recombining Governance Modes: The Media Sector in Cologne." pp. 261-82 in *Changing Governance of Local Economies: Responses of European Local Production Systems*, edited by Colin Crouch, Patrick Le Galés, Carlo Trigilia, and Helmut Voelzkow. Oxford: Oxford University Press.
- Becker, Howard S. 1974. "Art As Collective Action." American Sociological Review 39(6):767-76.
- Betzelt, Sigrid, and Karin Gottschall. 2004. "Publishing and the new media professions as forerunners of pioneer work and life patterns." pp. 257-80 in *Changing Life Patterns in Western Industrial Societies*, edited by Janet Zollinger Giele and Elke Holst. Oxford: Elsevier.
- Blair, Helen. 2001. "You're Only as Good as Your Last Job': the Labour Process and Labour Market in the British Film Industry." *Work, Employment & Society* 15(1):149-69.
- —. 2009. "Active Networking: Ation, Social Structure and the Process of Networking." pp. 116-34 in *Creative Labour. Working in the Creative Industries*, edited by Alan McKinlay and Chris Smith. Houndsmills/New York: Palgrave Macmillan.
- Blossfeld, Hans-Peter, and Karl Ulrich Mayer. 1988. "Arbeitsmarktsegmentation in der Bundesrepublik Deutschland. Eine empirische Überprüfung von Segmentationstheorien aus der Perspektive des Lebenslaufs." Kölner Zeitschrift für Soziologie und Sozialpsychologie 40(2):262-83.
- Bolenz, Eckhard. 1991. Vom Baubeamten zum freiberuflichen Architekten: Technische Berufe im Bauwesen (Preußen/Deutschland, 1799 1931). Frankfurt/ Main: P. Lang.
- —. 1994. "Baubeamte in Preußen, 1799-1930: Aufstieg und Niedergang einer technischen Elite." pp. 117-40 in *Ingenieure in Deutschland*, 1770-1990, edited by Peter Lundgreen and André Grelon. Frankfurt/ Main, New York: Campus.
- Bourdieu, Pierre. 2001. "The Forms of Capital." pp. 357-75 in *The Sociology of Economic Life*, edited by Mark Granovetter and Richard Swedberg. Boulder/ Oxford: Westview Press.
- Bridges, William P., and Wayne J. Villemez. 1986. "Informal Hiring and Income in the Labor Market." *American Sociological Review* 51(4):574-82.
- Casciaro, Tiziana, and Miguel Sousa Lobo. 2008. "When Competence Is Irrelevant: The Role of Interpersonal Affect in Task-related Ties." *Administrative Science Quarterly* 53(4):655-84.
- Caves, Richard E. 2003. "Contracts between Art and Commerce." *The Journal of Economic Perspectives* 17(2):73-84.
- Coser, Rose Laub. 1961. "Insulation from Observability and Types of Social Conformity." *American* Sociological Review 26(1):28-39.
- Dahrendorf, Ralf. 1956. "Industrielle Fertigkeiten und soziale Schichtung." Kölner Zeitschrift für Soziologie und Sozialpsychologie 8:540-68.
- Doeringer, Peter B., and Michael J. Piore. 1971. *Internal Labor Markets and Manpower Analysis*. Lexington: Heath Lexington Books.
- Edwards, Richard C. 1984. "Forms of Control in the Labor Process: An Historical Analysis." pp. 109-42 in *Critical Studies in Organization and Bureaucracy*, edited by Frank Fischer and Carmen Sirianni. Philadelphia: Temple University Press.

- Elbing, Sabine, and Helmut Voelzkow. 2006. "Marktkonstitution und Regulierung der unabhängigen Film- und Fernsehproduktion Staat, Verbände und Gewerkschaften im deutsch-britischen Vergleich." *Industrielle Beziehungen* 13(4):314-39.
- Faulkner, Robert R., and Andy B. Anderson. 1987. "Short-Term Projects and Emergent Careers: Evidence from Hollywood." *American Journal of Sociology* 92(4):879-909.
- Fernandez, Roberto M., Emilio J. Castilla, and Paul Moore. 2000. "Social Capital at Work: Networks and Employment at a Phone Center." *American Journal of Sociology* 105(5):1288-356.
- Finlay, William. 1982. "Workers' Control and Control of Workers: The Case of West Coast Longshoremen." *Critical Sociology* 11(2):51-61.
- Fligstein, Neil. 2001. The Architecture of Markets. An Ecoomic Sociology of Twenty-First-Century Capitalist Societies. Princeton/ Oxford: Princeton University Press.
- Freidson, Eliot. 2001. Professionalism. The Third Logic. Cambridge: Polity Press.
- Girard, Monique, and David Stark. 2002. "Distributing Intelligence and Organizing Diversity in New Media Projects." *Environment and PlanningA* 34(11):1927-49.
- Goodman, Richard Alan, and Lawrence Peter Goodman. 1976. "Some Management Issues in Temporary Systems: A Study of Professional Development and Manpower - The Theater Case." Administrative Science Quarterly 21(3):494-501.
- Gottschall, Karin. 1999. "Freie Mitarbeit im Journalismus. Zur Entwicklung von Erwerbsformen zwischen selbständiger und abhängiger Beschäftigung." *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 51(4):635-54.
- Gottschall, Karin, and Daniela Kroos. 2007. "Self-Employment in Comparative Perspective: General Trends and the Case of New Media." pp. 163-87 in *Gendering the Knowledge Economy. Comparative Perspectives*, edited by Sylvia Walby, Heidi Gottfried, Karin Gottschall and Mari Osawa. Basingstoke: Palgrave Macmillan.
- Grabher, Gernot. 2002a. "Fragile Sector, Robust Practice: Project Ecologies in New Media." *Environment and PlanningA* 34:1911-26.
- —. 2002b. "The Project Ecology of Advertising: Tasks, Talents and Teams." *Regional Studies* 36(3):245 - 62.
- Grabher, Gernot, and Oliver Ibert. 2006. "Bad Company? The ambiguity of personal knowledge networks." *Journal of Economic Geography* 6(3): 251-71.
- Granovetter, Mark S. 1995. *Getting a Job. A Study of Contacts and Careers, 2<sup>nd</sup> edition*. [first edition 1974]. Chicago: The University of Chicago Press.
- —. 2002. "The Strength of Weak Ties." pp. 60-80 in *Social Networks. Critical concepts in Sociology*, edited by John Scott. London/ New York: Routledge. [Original: 1983]
- Granovetter, Mark, and Charles Tilly. 1988. "Inequality and Labor Processes." pp. 175-221 in *Handbook of Sociology*, edited by Neil Smelser. Newbury Park, CA: Sage Publications.
- Haak, Carroll. 2006. "Von Künstlern lernen: Mehrfachbeschäftigung, Bildung und Einkommen auf den Arbeitsmärkten von Künstlern." *WZB-Discussion Paper SP I 2006-123*.
- Hall, Peter A., and David Soskice. 2001. "An introduction to varieties of capitalism." pp. 1-68 in *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*, edited by Peter A. Hall and David Soskice. Oxford/ New York: Oxford University Press.
- Haunschild, Axel. 2004. "Employment Rules in German Theatres: An Application and Evaluation of the Theory of Employment Systems." *British Journal of Industrial Relations* 42(4):685-703.
- Haunschild, Axel, and Doris Ruth Eikhof. 2009. "Bringing Creativity to the Market: Actors as Self-Employed Employees." pp. 164-73 in *Creative Labour. Working in the Creative Industries*, edited by Alan McKinlay and Chris Smith. Houndsmills/New York: Palgrave Macmillan.
- Henninger, Annette, and Ulrike Papouschek. 2008. "Occupation matters Blurring work life boundaries in mobile care and the media industry." pp. 153-72 in *Work Less, Live More? A Critical Analysis of the Work-Life Boundary* edited by Chris Warhurst, Doris Ruth Eikhof and Axel Haunschild. Basingstoke: Palgrave Macmillan.
- Holtgrewe, Ursula. 2002. "Das narrative Interview." pp. 71–102 in *Methoden der* Organisationsforschung, edited by Stefan Kühl and Petra Strodtholz. Reinbek: Rowohlt.

- Ibarra, Herminia. 1992. "Structural Alignments, Individual Strategies, and Managerial Action: Elements toward a Network Theory of Getting Things Done." pp. 165-88 in *Networks and Organizations: Structure, Form and Action*, edited by Nitin Nohria and Robert G. Eccles. Boston: Harvard Business School Press.
- —. 1995. "Race, Opportunity, and Diversity of Social Circles in Managerial Networks." Academy of Management Journal 38(3):673-703.
- Iljine, Diana, and Klaus Keil. 2000. Der Produzent. Das Berufsbild des Film- und Fernsehproduzenten in Deutschland. München: TR-Verlagsunion.
- Jacobs, David, and Benjamin Cornwell. 2007. "Labor markets and organizations: A screening theory of hiring networks and racially homogeneous employment." *Research in Social Stratification and Mobility* 25(1):39-55.
- Jones, Candace. 1996. "Careers in Project networks: The Case of the film industry." pp. 58-75 in *The Boundaryless Career. A New Employment Principle for a New Organizational Era*, edited by Michael B. Arthur and Denise M. Rousseau. New York: Oxford University Press.
- Jones, Candace, and Lichtenstein, Benyamin B. 2008. "Temporary Interorganizational Projects: How Temporal and Social Embeddedness Enhance Coordination and Manage Uncertainty." pp. 231-55 in *The Oxford Handbook of Interorganizational Relations*, edited by Steve Cropper, Mark Ebers, Peter Smith Ring and Chris Huxham. London: Oxford University Press.
- Kalleberg, Arne L. 2009. "Precarious Work, Insecure Workers: Employment Relations in Transition." *American Sociological Review* 74(1):1-22.
- Kerr, Clark. 1954. "The Balkanization of labor markets." pp. 92-110 in *Labor mobility and economic opportunity*, edited: Massachusetts Institute of Technology.
- Kmec, Julie A. 2007. "Ties That Bind? Race and Networks in Job Turnover." *Social Problems* 54(4):483-503.
- Koppetsch, Cornelia. 2006. "Zwischen Disziplin und Kreativität. Zum Wandel beruflicher Identitäten im neuen Kapitalismus." *Berliner Journal für Soziologie* 16(2):155-72.
- Kühn, Thomas. 2002. "Soziale Netzwerke im Fokus qualitativer Sekundäranalysen: Am Beispiel einer Studie zur Biografiegestaltung junger Erwachsener." pp. 391–415 in *Qualitative Netzwerkanalyse: Konzepte, Methoden, Anwendungen,* edited by Betina Hollstein and Florian Straus. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Lazarsfeld, Paul F., and Robert K. Merton. 1954. "Friendship as social process: A substantive and methodological analysis." pp. 18-66 in *Freedom and control in modern society*, edited by Morroe Berger, Theodore Abel, and Charles H. Page. New York: D. Van Nostrand.
- Lin, Nan. 1999. "Social Networks and Status Attainment." Annual Review of Sociology 25:467-87.
- Littek, Wolfgang, Ulrich Heisig, and Christel Lane. 2005. "Die Organisation professioneller Arbeit in Deutschland. Ein Vergleich mit England." pp. 73-118 in *Organisation und Profession*, edited by Thomas Klatetzki and Veronika Tacke. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Manwaring, Tony. 1984. "The extended internal labour market." *Cambridge Journal of Economics* 8(2):161-87.
- Marsden, David. 2000. "A Theory of Job Regulation, the Employment Relationship, and the Organisation of Labour Institutions." *Industrielle Beziehungen* 7(4):320-47.
- —. 2004. "The 'Network Economy' and Models of the Employment Contract." *British Journal of Industrial Relations* 42(4):659-84.
- —. 1999. A Theory of Employment Systems. Micro-Foundations of Societal Diversity. Oxford: Oxford University Press.
- Marsden, Peter V., and Elizabeth H. Gorman. 2001. "Social Networks, Job Changes, and Recruitment." pp. 467-501 in *Sourcebook ofLabor Markets*, edited by Ivar E. Berg and Arne L. Kalleberg. New York: Kluwer Academic/Plenum Publishers.
- Menger, Pierre-Michel. 1999. "Artistic Labor Markets and Careers." *Annual Review of Sociology* 25:541-74.
- Merton, Robert K. 1957. "The Role-Set: Problems in Sociological Theory." *British Journal of Sociology* 8(2):106-20.

- Mintzberg, Henry. 1979. *The Structuring of Organizations. The Synthesis of the Research*. Englewood Cliffs: Prentice Hall.
- Müller-Jentsch, W. 2005. "Künstler und Künstlergruppen. Soziologische Ansichten einer prekären Profession". *Berliner Journal für Soziologie* 15(2):159-77.
- Nelson, Bruce. 2001. *Divided We Stand. American Workers and the Struggles for Black Equality.* Princeton and Oxford: Princeton University Press.
- Neubauer, Michael G. 1996. Kameraleute im aktuell-dokumentarischen Bereich. Qualifikationen -Tätigkeiten - Perspektiven. Konstanz: UVK Medien.
- O'Mahony, Siobhan, and Beth A. Bechky. 2006. "Stretchwork: Managing the career progression paradox in external labor markets." *Academy of Management Journal* 49(5):918-41.
- Offe, Claus. 1970. *Leistungsprinzip und industrielle Arbeit*. Frankfurt /Main: Europäische Verlagsanstalt.
- Parsons, Talcott. 1951. The Social System. New York: The Free Press.
- Pettinger, Lynne. 2005. "Friends, relations and colleagues: The blurred boundaries of the workplace." pp. 29-55 in *A New Sociolgy of Work?*, edited by Lynne Pettinger, Jane Parry, Rebecca Taylor, and Miriam Glucksmann. Malden/Oxford/Carlton: Blackwell.
- Podolny, Joel M., and James N. Baron. 1997. "Resources and Relationships: Social Networks and Mobility in the Workplace "*American Sociological Review* 62(5):673-93.
- Raabe, Beate. 2004. "Architekten. Lage weiterhin schwierig." edited by. Bonn: Bundesagentur für Arbeit, Zentralstelle für Arbeitsvermittlung (ZAV).
- Roethlisberger, Fritz J./William J. Dickson. 1975. *Management and the Worker: An Account of a Research Program conducted by the Western Electric Company, Hawthorne Works, Chicago.* Cambridge, MA: Harvard University Press [Original: 1939].
- Schütze, Fritz. 1983. "Biographieforschung und narratives Interview." *Neue Praxis. Kritische Zeitschrift für Sozialarbeit und Sozialpädagogik* 13: 283–93.
- Sengenberger, Werner. 1987. Struktur und Funktionsweise von Arbeitsmärkten. Die Bundesrepublik Deutschland im internationalen Vergleich. Frankfurt/ New York: Campus.
- Smith, Chris, and Alan McKinlay. 2009. "Creative Industries and Labour Process Analysis." pp. 3-28 in *Creative Labour. Working in the Creative Industries*, edited by Alan McKinlay and Chris Smith. Houndsmills/New York: Palgrave Macmillan.
- Statistisches Bundesamt. 2005. "Strukturerhebung im Dienstleistungsbereich 2002. Architektur- und Ingenieurbüros."
- Stinchcombe, Arthur L. 1959. "Bureaucratic and Craft Administration of Production: A Comparative Study." *Administrative Science Quarterly* 4(2):168-87.
- —. 1990. Information and organizations. Berkeley: University of California Press.
- Streeck, Wolfgang. 1996. "Lean production in the German automobile industry. A test case for convergence theory." pp. 138-70 in *National diversity and global capitalism*, edited by Suzanne Berger and Ronald Dore. Ithaca/ NY: Cornell University Press.
- Streeck, Wolfgang. 2011. "Skills and Politics. General and Specific." MPIfG Discussion Paper 11/1.
- Stroink, Klaus. 1992. "Hierarchie und Kontrolle in der Bauproduktion." pp. 81-101 in *Marmor, Stein und Computer. Beiträge zur Industriesoziologie des Bausektors*, edited by Gerd Syben. Berlin: Edition Sigma.
- Syben, Gerd. 1997. "Integration and Disintegration of Roles and Actors: The German Contracting System under Change." *Le Groupe Bagnolet, working paper No. 10.*
- —. 1999. *Die Baustelle der Bauwirtschaft*. Berlin: Edition Sigma.
- Sydow, Jörg, and Udo Staber. 2002. "The Institutional Embeddedness of Project Networks: The Case of Content Production in German Television." *Regional Studies* 36(3):215-27.
- Thelen, Kathleen. 2012. "Varieties of Capitalism: Trajectories of Liberalization and the New Politics of Social Solidarity." *Annual Review of Political Science* 15:2.1-2.23.
- Tilly, Chris, and Charles Tilly. 1994. "Capitalist work and labor markets." pp. 243-312 in *Handbook* of *Economic Sociology*, edited by Neil Smelser and Richard Swedberg. Princeton: Princeton University Press/Russell Sage Foundation.
- Tunstall, Jeremy. 1993. Television Producers. London/ New York: Routledge.

- Tünte, Markus, Birgit Apitzsch, and Karen Shire. 2011. "Neue Beschäftigungsstrategien jenseits von interner und externer Flexibilisierung." *Berliner Journal für Soziologie* 21 (3): 363-81.
- Voß, G. Günter. 2001. "Der Arbeitskraftunternehmer und sein Beruf." pp. 155-72 in *Globalisierung, veränderte Arbeitsorganisation und Berufswandel*, edited by Werner Dostal and Peter Kupka. Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung.
- Wellman, Barry. 1979. "The Community Question: The Intimate Networks of East Yorkers." American Journal of Sociology 84: 1201–31.
- Windeler, Arnold, and Carsten Wirth. 2004. "Arbeitsregulation in Projektnetzwerken. Eine strukturationstheoretische Analyse." *Industrielle Beziehungen* 11(4):295-319.Zelizer, Viviana. 2009. "Intimacy in Economic Organizations." pp. 23-55 in *Economic Sociology and Work*, edited by Nina Bandelji. Bingley: Emerald.
- Zelizer, Viviana. 2009. "Intimacy in Economic Organizations." pp. 23-55 in *Economic Sociology and Work*, edited by Nina Bandelji. Bingley: Emerald.

