Work, Human Agency and Organization Forms: An Anatomy of Fragmentation

Jannis Kallinikos (*)
London School of Economics

To the memory of Richard Sotto

Abstract

The article is concerned with the changing premises of human involvement in organizations underlying current employment and labour trends. The appreciation of these trends is placed in the wider historical context signified by the advent of modernity and the diffusion of the bureaucratic form of organizations. The article attempts to dissociate bureaucracy from the dominant connotations of centralized and rigid organizational arrangements. It identifies the distinctive mark of the modern workplace with the crucial fact that it admits human involvement in non-inclusive terms. Modern humans are involved in organizations qua roles rather than qua persons. Innocent as it may seem, the separation of the role from the person has been instrumental to the construction of modern forms of human agency. An organizational anthropology is thereafter outlined based on Gellner’s (1996) conception of “Modular Man”. Modernity and bureaucracy construe human beings as assemblages of relatively independent behavioural modules that can be invoked individually or in combination to respond to the differentiated character of the contemporary world. While the occupational mobility and organizational flexibility currently underway presuppose a model of human agency that recounts basic attributes of the modular human, they at the same time challenge it in some important respects.

Descriptors: bureaucracy, contingency, employment and organization forms, human agency, selectivity, work.

Introduction

The shifts in employment forms that have been taking place during the last two decades or so bear increasing evidence that the very terms by which contemporary people are involved in formal organizations are irrevocably changing. Labour contracts other than traditional, the flexibilization of work time and the dissociation of work from particular sites stand as the epitomes of these changing premises by which increasing numbers of people are currently tied to organizations (Beck 1992; Carnoy 2000; Rifkin 1995; Sennett 2000). Destandardization of labour, as Beck (1992) summarizes this tripartite development, impinges upon society
as a whole. But it is unmistakably associated with major shifts in work habits and the institutional or organizational forms that have, during several decades, sustained lifetime employment and clear-cut job assignments. On the one hand, current changes in employment forms do challenge some of the older premises (e.g. stability, continuity, career and loyalty) on which the making of occupational and professional identity was based. On the other hand, they destabilize the institutional forms (i.e. rights, commitments or obligations) and processes (i.e. collective negotiations) that have shaped or regulated the terms by which individuals have traditionally been tied to organizations (Beck 1992; Rifkin 1995).

The developments in work and employment currently underway are commonly associated with the overall shifts in the modes of economic involvement that coincide with the emergence of the information economy in this late industrial age (Bell 1976; Castells 1996, 2000; Rifkin 2000). They are also related, albeit less often, with the overall cultural reorientation of contemporary societies, manifested, among other things, in the growing individualism and the widespread distrust to social institutions (Bauman 1992; Beck and Beck-Gernsheim 1996, 2002; Sennett 1992). Taken together, the current trends in employment forms suggest a conception of work that is predicated upon an understanding of human agency that puts a premium on the qualities of malleability, flexibility and adaptability. The terms by which people are currently involved in organizations seem to differ in some substantial respects from the stable forms of human involvement in organizations that have been dominant during the last hundred years or so (Beck 1992, 2000).

The present article sets out to address some of the issues associated with the mentioned developments. It is more precisely concerned with the changing premises of human involvement in organizations underlying the employment and organization trends described above and the very assumptions about human agency on which they are predicated. The very momentum of current developments suggests, however, that the emerging employment forms and the organizational changes with which they are associated need to be placed in their wider historical context and evaluated accordingly. The consideration of the models of human agency, underlying the constitution of the workplace during the last hundred years or so, seems to be essential to the project of understanding the key behavioural premises of the current economic and labour developments. The rather broad orientation of the present work should make clear that its focus is on delineating a few basic ideas that capture the core terms by which contemporary humans are implicated in organizations. Despite its focus on forms of human agency the article is not concerned with the subjective work experiences of particular persons or groups but with the anatomy of the very terms governing human involvement in organizations. In
other words, the focus is on the forms of human participation, which current processes of formal organizing admit, not on subjective experiences. Furthermore, the article aims at contributing to an understanding of contemporary modes of work and human involvement in organized systems. It is not concerned with advancing evaluative statements as to what is good or bad, though some judgements of this sort are by necessity involved in the course of developing the major claims of the present work.

The article is structured as follows. First, the current developments in work, organization and employment forms are briefly reviewed and the changing terms by which individuals are tied to organization are identified. Next, the network-form of organization, commonly associated with the changing terms by which people are tied to organizations, is examined and the claims concerning the drift away from the bureaucratic organization are subjected to scrutiny. The article dissociates bureaucracy from the dominant connotations of centralized and rigid organizational arrangements. It connects the emergence of the bureaucratic form of organization with the establishment of modernity and the mobility across classes, occupations and institutional boundaries, which modernity introduced. Mobility is however only a precondition for the emergence of the modern workplace. Drawing on a number of prominent scholars (e.g. Gellner 1983, 1996; Luhmann 1982; 1995), bureaucracy is identified with the non-inclusive terms by which individuals are tied to organizations. The distinctive mark of the modern workplace is the fact that humans are involved in it qua roles not qua persons. Bureaucracy regulates work but leaves other aspects of a person’s life, i.e. family, community or public life, outside of its immediate jurisdictions. Modern human agency is constituted as modular (Gellner 1996), i.e. modern humans are capable of mobilizing in a piecemeal fashion various segments of themselves, in response to the demands raised by the distinct institutional realms of modern life. The last section brings together the various claims of the article in an attempt to make sense of the current developments in work, organization and employment forms. It traces much of the contemporary mobility to the models of human agency introduced and established by bureaucracy but identifies important differences between the organizational order of first (early) and second (late) modernity. The modular constitution of human agency does not any longer accommodate the different demands of the institutional realms of work, family, community and public life. It looses its anchoring into these institutions of modern polity and tends to end up as a sheer functional device that serves the purpose of adaptability in a perpetually changing world.
Interpreting Current Employment Trends

The emerging employment forms that we previously summarized, following Beck (1992), under the label of destandardization of labour comprise several distinct developments. Traditional forms of work in the industrial age have been usually identified with particular sites and fixed time schedules. They have often been thought to involve lifetime employment or, in any case, enduring affiliation with the institution in which work is performed. Therefore, duration and location could be used as basic dimensions to differentiate between the various work patterns currently underway, and the employment forms that seek to accommodate them. A few observations should be made in this context. Traditional labour contracts have been closely associated with what historians of technology call the factory system, i.e. the spatio-temporal concentration of the production of goods and services, the discipline and control of work. However, the relationship between the conditions of work and the forms of employment is historically contingent. Different conditions of work could be accommodated within the same labour contract and perhaps vice versa. The employment contract is after all a social relationship whereas work is heavily conditioned by social but also technological and material conditions (Arendt 1958; Zuboff 1988). While being aware of the differences involved, for reasons of convenience we would not draw a sharp line between the two in the context of this article.

A typical employment trend that is often thought to contrast sharply with traditional lifetime employment is represented by the increasing diffusion of time-limited contracts. Time-limited forms of employment are not entirely new but they have become increasingly legitimate in recent years. Most significantly, they have increasingly diffused beyond contingent work or specific industries (e.g. art or performance industry) to involve highly skilled professionals across various domains (Carnoy 2000; Tilly and Tilly 1998). Telework or deterritorialized forms of work represent another relatively recent trend in work and employment. Deterritorialized or virtual work does break with the time patterns (thirty-five to forty-hour per week and fixed schedule) of standard labour contracts. But above all, it violates the sense of particular location and proximity to fellow workers or peers that have always been accompanied the meaning of work in modern times (Blocklehurst 2001; Sotto 1997).

While analytically distinct, limited-duration and location-independent forms of work re-enhance one another and can be combined into particular employment contracts. A distinctive technical quality of labour contracts of this sort is the grouping of tasks into modules that can be detached from particular contexts and be assigned to people with small or no acquaintance...
with specific organizations. They thus contribute to mobility and exchangeability of labour. In this respect, the term destandardization of labour may be quite misleading. While duration and location are destandardized in the sense of being subject to variation (varying times, no institutional work site), the content of work itself may be rendered increasingly standardized to become independent from those who are to be called upon to perform it. Standardization is essential to exchangeability. Indeed, a requirement of many time-limited jobs seems to be the standardization of the work content that renders the execution of work independent of the skills and abilities of particular people. While temporary work in technologically advanced projects may not conform to this claim, other so-called contingent work (Matusik and Hill 1988; Tilly and Tilly 1998) may be subject to severe standardization, consequent upon its low skill variety.

Limited-duration and location-independent forms of work have combined with other social or cultural factors to reduce the commitment of employers and employees vis-à-vis one another and vis-à-vis the state. They have thus contributed to the formation of non-traditional labour contracts that contrast with those that dominated the largest part of the preceding century. It is a well known fact by now that the legal edifice of work that regulated labour contracts in Europe during the last sixty years or so has been revised in most European countries to accommodate flexible forms of employment (Beck 2000). What is often less apparent, however, is that changes in work legislation do not simply promote the flexibilization of employment forms. They redefine as well the jurisdictions and responsibilities of the institutional actors (i.e. labour unions, employer association, state agencies) that have been involved in the making and regulation of labour markets (Hasselbladh 2000).

The changing jurisdictions and responsibilities of the institutional actors are clearly manifested on what is often referred to as the individualization of labour (Beck 1992; 2000; Castells 1996; Carnoy 2000). By individualization is meant the transference of a growing part of the responsibility for the conditions and content of work away from the institutions of the welfare state and the trade unions to the individual. Obviously, flexibilization and individualization feed upon one another. This is particularly evident in the case of self-employment whose hesitant re-emergence in North Europe and North America signifies yet another development that leads to the erosion of the employment forms associated with standard labour contracts. Self-employment has always been a highly diffused form of work in Mediterranean Europe. In countries like the USA it has, however, been reduced from eighty percent in 1780 to ca ten percent in 1980, almost the reverse relation with the development of wage and salaried labour during the same period (Tilly and Tilly 1998). Self-employment represents the complete negation of commodified labour and the institutional forms it has been associated with. In one sense it has more the character of business venture rather than that of employ-
ment. To these developments must be added the diffusion of *part-time work* and the increasing so called *feminization of labour markets* with which part-time work seems to be positively related.

Empirical data compiled by Carnoy (2000) using OECD statistics on these emerging forms of employment in the years 1983, 1994 and 1997 or 1998 support some of the claims advanced above, yet they need to be interpreted with care. With the exception of US, part-time and temporary employment have increased in many economically developed nations, though there is spectacular variation in the percentage they represent in employed labour force in each nation. In some nations, temporary employment and part-time employment have considerably diffused while in others, like for instance the US, they have remain rather limited. Self-employment, on the other hand, does not reveal a unified development. It has increased in some countries like the UK but remained largely stable in US, Germany and Netherlands and diminished in Japan and France. Taken together, however, all these non-standard contracts represented already in 1994 a significant portion of total employment reaching up to fifty percent in some cases (e.g. Spain) and nearly forty percent in some others (e.g. Australia, Japan, Netherlands, Italy).

Most of these trends are claimed to have diverse origins. On the one hand, they can be attributed to the ongoing economic, technological and institutional developments. As briefly mentioned in the introduction, rapid market and institutional change in global scale combines often with the increasing organizational and business involvement of information and communication technologies to bring about conspicuously new employment and organizational forms. The emergence of a new internet-based economy further accentuates the demands for flexible, boundary-crossing activities in a global scale (Castells 1996, 2000). On the other hand, these developments cannot simply be reduced to the needs of industrial-technological-economic complex, no matter how important the interests and priorities of the industry and economy may be. Other, mostly cultural factors have been involved as crucial driving forces behind the mentioned trends. As already indicated, individualism has been a major force in many contemporary people’s favourable orientations towards non-collective, non-institutional ways of deciding over crucial issues of their lives (Beck 1992; Beck-Gernsheim 2002; Dumont 1983; Sennett 1992). The emerging employment forms are clearly associated with the growing individualism of contemporary societies, even though individualism itself must be explained in the very end.

A remarkable paradox, directly associated with the core issues of this article, seems to be underlying individualism and the emerging work and employment forms. On the one hand, individualism represents a major driving force behind the variability and flexibility of current
work and employment practices. On the other hand, the increasing diffusion of these novel forms of employment challenge the behavioural and existential unity/continuity the relatively stable employment relations and career paths of bureaucratic organizations have sustained (see, e.g., Blocklehurst 2001).

The standard notion and the practice of career development presuppose a coherent behavioural and existential unit, a solid individual capable of constantly assimilating and accumulating the lessons of a long lasting occupational journey. Most significantly, knowledge thus acquired is contextually conditioned and, by extension, contextually sensitive. Yesterday’s experiences are meaningful to present engagements and to future orientations, while they bear high contextual relevance (Zuboff 1988). Enlarged spheres of responsibility and higher pay that are usually associated with career development are by and large justified on this ground. Lifetime employment precisely represents the institutional form that ties these aspects together. Now, all these basic organizational and human premises would seem to be threatened by the cultural, economic and institutional changes mentioned above. Frequent occupational change, transient organizational affiliation and cross-contextual mobility would seem to challenge the anthropological foundations of the solid and sovereign individual and the instrumental significance of experiential or organization-specific knowledge. As cogently remarked by Sennett (2000:43) stability ‘can demean, but it can also protect. Routine can decompose labor but it can also compose a life’.

It would be possible to suggest against the background of these observations that the behavioural and existential unity/continuity associated with the modern occupational identity is becoming problematic. The concept of career as quasi-linear march forwards must be significantly qualified to accommodate the current trends (Beck 2000; Carnoy 2000; Sennett 2000). Indeed, an important outcome of the current developments in employment and organization forms is the gradual undermining of the coherent system once formed by occupational identity, career development and personal identity. In the emerging post-disciplinary societies of frequent change and boundary crossing, individuals, Deleuze (1995) suggests, are better seen as individuals. Current employment forms are just the expression of these wider economic, institutional and cultural developments that put a premium on temporary and shifting forms of involvement. It is often assumed that these developments are manifested in the drift away from the basic premises underlying the modern workplace and the bureaucratic form of organization with which traditional labour contracts have been associated. It is thus necessary to turn to the critical examination of these trends.
Work and Organization Forms

As already indicated, the developments described above are believed to break with the organizational patterns inherited from the industrial age. However, despite such a widespread belief, there is scarcely any agreement as to how these developments should be interpreted and less on the organization forms to which they are getting crystallized. It is commonly assumed that the increasing diffusion of decentralized, network-like forms of organization represents the clearest expression of the changing orientations underlying the current age (Castells 1996, 2000; Fukuyama 1997; Heckscher and Donnellon 1994; Rifkin 2000). However, it is not entirely clear in which sense the widely acclaimed organizational characteristics of boundary crossing, flexibility and decentralization, underlying the emerging organization forms, may constitute an alternative organizational paradigm that breaks with the work and managerial conventions that dominated the western world, during the past century.

If taken together, current changes in forms of employment do break with the inherited work conventions. Other developments, however, like those captured by the recent waves of mergers and acquisitions in crucial industries – e.g. banking, insurance or the automobile industries- and the construction of huge organizational empires do not precisely conform with the claims of decentralization, flexibility and small scale (Sennett 2000). Operational decentralization and the decline of establishment size (Kelly 1998) cannot unproblematically be separated from ownership concentration (Harrison 1994). Most importantly, the emergence of a new organizational paradigm cannot be accounted for by reference to isolated dimensions of a structural configuration, e.g. degree of centralization (Kallinikos 2001).

As it is currently described, the notion of the network-formed organization offers a useful contrast to the standard, hierarchically organized and functionally differentiated organization of the industrial age (Castells 1996; Messner 1997; Rifkin 2000). Nevertheless, in its present conceptual stage the notion of the network fails to stand as a clear alternative to the dominant organization form of the industrial age, i.e. the bureaucratic organization. It offers no more than a suggestive set of images for conceiving current organizational practices but lacks the conceptual elaboration of principles of governance and institutionally supported rules of conduct that would justify considering it as an alternative to bureaucracy (Arrow 1974). Let me attempt to explain this claim.

Bureaucracy is certainly associated with specific modes of organization but it is above all an institutional form that embeds core cultural values and social practices. It represents the joint
outcome of several axial principles, such as the legal-rational type authority, separation of office duties from personal life, meritocracy and universalism (Weber 1947, 1978). An institutional form of that momentum may well accommodate significant variation in modes of organization. Indeed, the organizational experience of modernity reveals an amazing diversity of structural profiles that could be considered as variations of the bureaucratic form (Chandler 1977; Pugh et al. 1968; Scott 1981, 1995). Only the radical remaking of the core characteristics of an institutional form may therefore justify the claim of its decline. Variation of single characteristics (e.g. degree of centralization) may be of crucial importance indeed but such variation may lack the momentum necessary to demarcate an age underlain by specific institutional forms.

Little wonder, interaction and communication across the boundaries of organizations and institutions is increasingly taking place these days. Yet, it is far from clear whether networking practices of this sort may constitute an alternative model of economic and social organization that challenges the foundations of the bureaucratic order. Networking describes interaction and communication patterns of spatio-temporally scattered actors. It is after all, as Castells (2000, 2001) himself is prone to recognize, a very old form of communication. The sheer pattern of message transmission does not therefore suffice to define an alternative organizational order. Only the major forms by which people are involved in organizations can deliver the criteria on the basis of which it would be possible to judge the momentum of organizational and institutional change. For instance, markets and organizations are commonly considered as alternative forms of governance based on the axial principles of free exchange and authority-governed relationships respectively (Arrow 1974; Kallinikos 1996). Furthermore, as we will claim in some detail in the next section, bureaucracy emerged as major institutional form through the very separation of the role from the person and the authority-based organizational governance of the former rather than the latter.

Key elements of the current developments like the detachment of work processes from particular settings and the de-institutionalization of the terms by which these processes are negotiated and made socially available may well constitute the core of such emerging organizational paradigm. However, the axial principles of such a paradigm must be thoroughly examined, conceptually and empirically, and systematically juxtaposed to the behavioural and institutional foundations of the bureaucratic form of organization. In the process, the temptation to construe bureaucracy in simplified, one-dimensional terms must be avoided. Short of the detailed examination of the institutional premises governing the current practices across organizational boundaries, the concept of network remains a technically laden metaphor of hu-
man communication. It most probably fails to emerge as the organizational core of a new social and economic order that breaks with modernity and the principles of the bureaucratic organization.

These rather crucial issues remain suspended, more than everywhere else, in the managerialist discourse that has enormously popularized the very idea of a new organizational era, marked by flexible, decentralized and ‘outward’ looking organizations. As pointed out by du Gay (1994, 2000) and Kallinikos (2001), managerialism sketches these emerging organizational patterns in highly stylised, normative and almost ideological terms. Most of the times, it delivers without hesitation and question marks, the recipe of corporate success, in an age it construes as being marked by one and single imperative, i.e. that of market adaptation (e.g. Hammer and Champy 1991; Womack et al. 1991, Womack and Jones 1996). It should be obvious that the treatment of the current developments in managerialist terms alone does not allow for the appreciation of the deep institutional issues that seem to be associated with them. After all, the implications of the changing employment and organization forms cannot adequately be gauged in terms of a narrow managerial rationality of the type captured in re-engineering and lean production models.

Treating work as simply a resource, managerialism fails to appreciate that it has always been tied with core societal issues in modern times. It would be perhaps possible to trace, as it is often done, the central position work assumed in modernity back to the entire cosmology that Weber once attributed to the protestant ethic (Tawney 1990; Weber 1978). Cultural forms, institutions and social practices are thereby tied to work. The central place of work in the contemporary world suggests that the employment relations that are currently emerging are bound to have far-reaching organizational, individual and social implications. They strike a new balance between forms of living and forms of work and redefine the bond between work, welfare state and democracy that dominated the Western world, during the last century (Beck 2000). As suggested above, new employment forms mark a decisive turn in the orientations of contemporary societies that is most clearly manifested in the redistribution of life responsibilities away from the state to the individual (Beck 1992, 2000). They thus contribute to the emergence of a risky and rather uncertain social territory, traversed by myriad individual initiatives that increasingly replace the regulative role once played by the institutions of the welfare state and other social organizations.

Juxtaposed to commonsense views with respect to the organizational patterns and employment relations entertained by the modern workplace and the bureaucratic form of organization, the developments described above do seem to represent a radical rupture. However, the
appreciation of the ongoing occupational and organizational trends and the models of human agency they implicate necessitate the careful reconsideration of the modern workplace and the terms by which individuals have been implicated in bureaucracies. Though, stability and continuity do describe salient features of the occupational and organizational order associated with the bureaucratic form, they fail nonetheless to unravel the distinctive character of the bureaucratic organization. The claim itself of the an emerging bureaucratic age, and the organization forms underlying it, makes necessary the careful appreciation of the distinctive modes by which the bureaucratic form admits human participation. It is therefore of utmost significance to trace the historical antecedents of the current situation. Seldom are the developments, which were only briefly sketched above, tied to the thorough consideration of bureaucracy as the major organization form of modernity (du Gay 1994; 2000; Kallinikos 2001) and the modes of human agency it sustains.

Social and Anthropological Foundations of the Bureaucratic Form

Counter-intuitive as it may seem, the transient and fragmented character of the contemporary work can nevertheless be traced back to the establishment of the bureaucracy, and the mobility of social relations coinciding with modernity. The emergence of the bureaucratic form of organization was predicated on a major anthropological innovation (i.e. a new way of conceiving humanity and institutionally embedding it) that we tend to take for granted these days, namely the clear and institutionally supported separation of work from the rest of people’s life. The conception of work as a distinct sphere of social life, sufficiently demarcated vis-à-vis other social spheres, has had a decisive significance for the constitution of the modern workplace.

The severe separation of work from family, community and public life in general represented the confluence of several social and economic processes (Gellner 1983). However, it would be possible to distinguish out of this complex tangle two crucial social innovations that made a decisive contribution to the emergence of the modern workplace and the form of organization that came gradually to be designated as bureaucracy. The first of these innovations is associated with the well-known decoupling of people’s life chances from status or other hereditary social relations and the stepwise dissolution of status-based stratification as a basic principle of social organization (Gellner 1983; 1996; Luhmann 1995, 1996; Tsivacou 1997). The gradual embeddedness of the polity of bourgeois democracy and the dissolution of stratifica-
tion brought about the growing social mobility of individuals across classes, territories and also institutions. Obviously, the dissolution of stratification was not an instantaneous act but a complex, time demanding social process that continued throughout the greatest part of the twentieth century.

Social mobility is a necessary, though not sufficient, condition for the construction of the modern workplace and the bureaucratic form of organization. A second crucial innovation has therefore been instrumental to these ends. It follows from the first but it is considerably more elusive and, for that reason, easy to overlook. Once mobile people could become divisible as well. As alluded to earlier, mobility between work, family and community and the criss-crossing of institutional boundaries presuppose different roles and faculties, at the same time as the invocation of roles within one context demands the other roles and faculties to be temporarily suspended. Modern people came increasingly to be characterised by the capacity to enact roles in a piecemeal fashion, a condition that was only elementarily present in pre-modern contexts (Gellner 1983; Luhmann 1996; Tsivacou 1997).

In an age in which the core characteristics of the modern workplace are easily discarded as old fashioned, it is of utmost importance to appreciate the far-reaching organizational consequences that are associated with the mobility and the divisible constitution of modern individuals. The so much praised quality of adaptability to changing conditions is dependent on the organization’s ability to try out alternative courses of action. This, in turn, implies human agents capable of easily moving between varying and shifting roles, i.e. divisible and mobile humans (Luhmann 1982, 1995). It is furthermore crucial to recognize that the terms by which the bureaucratic form tied organizational processes to human agency were bound up with the core characteristics of human mobility and divisibility. The distinctive mark of the bureaucratic legal-rational order is the widely acclaimed dissociation of the requirements of organizational role taking and performance from the particular mode of being of a person and the social circumstances surrounding it. The bureaucratic form of organization marks indeed the entire predispositions of an age that strives to separate the workplace from home, work from family, community and public life in general. It represents one of the major institutional vehicles for expressing these predispositions and embedding the forms of human agency they implicate (Gellner 1983).

It comes therefore as no surprise that the bureaucratic form of organization and the constitution of the modern workplace coincide with a set of premises on the basis of which individuals have come to be tied to organizations in terms other than inclusive (Kallinikos 2001). The non-inclusive way of modulating the contributions of people in the modern workplace sug-
gests that contemporary humans are not contained (i.e. included) as behavioural and existential totalities in organizations (Luhmann 1982, 1989, 1995, 1996). Despite the impressive crowds of people traversing everyday the sites of work, organizations are not made of humans qua persons. Bureaucracy introduces an organization form marked by highly selective action and communication patterns. Task-structured action/communication and specialization are clear expressions of the high degree of selectivity that govern human behaviour in bureaucracies.

The bureaucratic selectivity in action and communication is expressed in a complex edifice of formal roles (e.g. job description and specification, jurisdictions, accountability) that are supposed to codify the operational requirements underlying the organizational system. Now, roles are enacted by the intrinsically modern capacity of contemporary human beings to systematically and consistently suspend all other personal or organizational aspects that do not bear upon the role. Such a capacity enables the execution of highly specialized tasks in the workplace and is essential to the exchangeability of organizational roles (i.e. recall the concept of job rotation). It is also associated with the keen awareness of the largely different demands underlying the institutional domains of work, family, community and public life in general (Kallinikos 2001).

Bureaucracy is thus predicated on an abstract conception of work, namely work as a range of actions or duties that can be dissociated from the totality of the lifeworld and from the distinctive mode of being of every person. Being in principle detachable from individuals, work roles become behavioural moulds (admittedly with a variable degree of freedom) that can be designed in advance and without regard for the person (Seyer 1991; Tsivacou 1997). This is, perhaps, one of the major reasons why bureaucracy and the constitution of the modern workplace along the lines suggested here have often been seen as inimical to individuality and personal fulfilment. However, bureaucracy’s relationship to individuality and individualism is both complex and ambiguous. A major objective and an important consequence of the innovative character of the bureaucratic modulation of the individual-organization relationship is that individuals join the organization not on the basis of general psychological or social characteristics (e.g. the logic of status-based or class stratification). Rather, individuals assume organizational roles on the basis of formal merits and other indicators of adequate performance. At the same time, bureaucracy makes individual achievement a salient characteristic of the organizational order it builds. Promotion, career development and stable employment itself are depending on individual achievement (Weber 1947, 1978).
The modulation of the individual-organization relationship in non-inclusive terms is a clear expression of the cultural orientations of modernity and the conception of work as a separate sphere of sociality. Bureaucracy thus refrains from determining other aspects of people’s life that remain unrelated to organizational role performance. Little wonder that employment and the significations associated with occupational or professional identity have remained extremely important to modern people. They structure their expectations to a considerable degree and they forcefully impinge upon a large spectrum of their life chances (Beck 1992). Yet, no matter how important, the personal characteristics that derive from vocational education, professional specialization and working experience they cannot exhaust the amazing diversity of roles, interests and projects underlying modern people. After all, modern society is not a working barrack, though it has sometimes been likened to it (Bauman 1992). An entire universe of individual interests and undertakings are assumed in the context of institutions that are clearly and unambiguously differentiated from work organizations, e.g. family, community, art and public life.

These observations suggest that the very separation of the role from the person that epitomizes the bureaucratic form has had far-reaching anthropological implications. The belief that humans can systematically and consistently isolate or repress those aspects of their character that do no bear on the execution of organizational roles introduces crucial elements of a distinctive anthropology. The category of the person as a unique identity is rendered redundant within the context of the organization and the instrumental conditions of work performance. By the same token, such a way of understanding and instrumenting human agency makes, perhaps for first time in history, enclaves of behavioural pieces (rather than the person) the basic anthropological input of organizational action/communication. The bureaucratic organization thus becomes the embodiment of important modern anthropological predispositions that are most forcefully revealed by the assumption that the circumstances of work can be severely isolated from the rest of a person’s life. Accordingly, work must be executed in keeping with a logic, dictated not by the meaningful horizon of the person but by a significantly narrower ensemble of skills that recounts the operational requirements of object manipulation or the demands of a significantly narrower domain of experience. These claims must be further clarified.

Modular Man
What has been said so far suggests that far from being the natural state of the world, the separation of work from the other private or public contingencies of people’s life (not simply the home) is an essential requirement for the establishment of the bureaucratic form of organization. We must not lose sight of this claim that appears to be crucial for understanding and appreciating the current shifts in employment and organization forms. The very assumption that work can be separated from the rest of people’s life or the organizational role from the person marks the entire predispositions of an age and signifies a new way of understanding and embedding humanity that is instrumental to the construction of the modern workplace. As briefly indicated earlier, such a separation is part of an elaborate set of basic and partly overlapping distinctions (e.g. privacy-publicity, work-leisure, workplace-homeplace, male-female, family-community, education-occupation) that construe human life as a series of separate realms that implicate distinctive expectations and modes of conduct. It is crucial to stress the multiple differentiation of work from other aspects of modern life. The distinctive status of modern work does not simply entail its differentiation, as it is often assumed (see, e.g. Blocklehurst 2001; Grint 1991; Sennett 2000), from home and the gender distinctions thus imposed.

The proclivity of contemporary people to assume different and often divergent roles suggests that the modern human is not precisely understood as being the essence of a unit. Modern people are conceived and fashioned as though they were made of relatively independent number of behaviour sets that could be invoked individually or in combination to respond to the varying demands, produced by the deeply differentiated and dynamic character of the contemporary world. The constitution of modern humans as loose assemblages of various roles precisely allows for the piecemeal mobilization of particular faculties and thus enables action along highly selective paths. The everyday transgression of the various demands that are underlying the spheres of private, communal, social, and working life represents evidence that contemporary humans are capable of isolating non-context demands and mobilize selectively particular faculties or roles. But even within the formative context of each social sphere, roles vary significantly in ways that accommodate the details of particular situations, i.e. mother, housewife, lover in the context of family or employee, union member, departmental or group member in the context of work. The capability of modern people to shift easily between various demands and roles cannot but rest on the very decomposability of their constitution. The various bits and pieces, so to speak, they are made of enjoy a relative independence from one another. Without this fundamental condition, human faculties would be possible to enact only en block (all in one blow) rather than in a piecemeal fashion.
The sort of human being we call modern is therefore better seen as an amalgamation of distinct sets of skills and behaviours, a collage, as it were, of different pieces and materials that can be augmented or deleted, remade, restructured and so forth. Before entering the highly selective and purposeful world of the modern workplace, modern humans have been forged in a fashion that makes them capable of decomposing the bits and pieces that they are made of, leaving behind all those materials (i.e. roles and skills) that do not fit the context they are called upon to monitor. Modernity prepared the requirements for this sort of human being and it was itself embedded as a cultural system by it. As cogently put by Ernest Gellner contemporary man is modular, i.e. is composed of bits and pieces that are agglutinative and can be supplemented but also reshuffled, recombined, replaced and modified as the circumstances may demand. This sort of human being, Gellner (1996: 101-102) goes on to claim, is:

‘(T)ransplantable and replaceable...capable of performing highly diverse tasks in the same cultural idiom, if necessary by reading up manuals and specific jobs in the general standard style of the culture in question.’

The distinctive character of the modern workplace is inextricably bound up with the anthropological construct of modular human, which the bureaucratic form of organization helps to embed. Only modular humans can respond to the widely varying and shifting demands underlying the contemporary world and fit the operational requirements of modern organizations. The highly selective and standardized behaviour underlying the bureaucratic form of organization is inconceivable without the decomposability of human agency and the proclivity of contemporary humans to suspend non-role demands when enacting particular roles. But the model of human agency fashioned by modularity is not simply a presupposition for successful role taking that responds to the internal contingencies of the workplace. It also circumscribes the assignment of environmental events to various realms. It thus contributes to the disambiguation of the premises of interaction with other purposeful agents in the environment of the organization. The organization’s interaction with the environment takes place along highly selective paths too (Luhmann 1995).

The adaptive significance of the modular constitution of modern humans spans the entire spectrum of contemporary life and is by no means restricted to formal organizations. An important message of this article is that the anthropological foundations of the bureaucratic organization are part and parcel of the social order of modernity. In a minutely differentiated socio-economic world, whose various contexts demand specific responses, modularity be-
comes the *sine qua non* of adaptability and survival. The adequate separation of the role from the person represents the anthropological invention through which modern humans become fit to live a life that involves frequent criss-crossing of different contexts. By assuming various roles that remain loosely connected to their core personality (or the illusion of such a core), contemporary humans can fashion themselves in ways that respond to the specific functional and normative requirements of individual contexts and specific situations. Existential ambiguity is thus mastered with a sort of loose coupling at the anthropological level. Paraphrasing March and Olsen (1989), it would be possible to claim that life events are segmented and dealt with concurrently or sequentially, by invoking different courses of action that derive from various ‘regions’ of the contemporary person.

Modern human beings can thus be seen as portfolios of roles, to use another imagery, invested in different projects. The varying significance attached to these projects is partly the outcome of the various contingencies surrounding the individual biographies and partly the expression of the cultural orientations underlying distinct historical periods. While modernity itself fashioned modern humans as modular, the relative significance attributed to various modules and the life projects associated with them signifies perhaps distinct phases of modernity itself (e.g. early, middle and late modernity). As we will claim in the last section, the distinctive mark of the current age is the *expanding importance of decisions associated with work and occupation issues*, at the expense of the relative importance traditionally attributed to family and community (Carnoy 2000). Despite the fact that this claim needs to be empirically substantiated, the way the relative issues are conceptually framed is of decisive significance with respect to which aspects of the referential reality will eventually come to enter into consideration and subjected to measurement. For that reason alone, they deserve a serious pre-empirical treatment.

The conception of contemporary humans as modular comes to a sharp contrast with pre-modern ways of being human. Pre-modern life undoubtedly contained contexts of achievement marked by different presuppositions that thus demanded various specialized responses. Yet, as indicated in the preceding pages, pre-modern people were modular only in an elementary fashion (Gellner 1996). Home and workplace were not often adequately differentiated from one another while status-based stratification severely limited individual mobility and shifting commitments. The major qualities and characteristics of pre-modern humans were tightly coupled to one another and enacted, by and large, *en block*, a condition that significantly inhibited the formation of specific responses, and limited adaptability and the easy criss-crossing of social contexts.
The conception of modern humans as modular may even contrast with neo-romantic psychology that sustains an image of man as *monolithic, coherent substance* in a command (admittedly incomplete) of a private and interiorized space. The conception of contemporary humans as modular is not however a description of a psychological process, even though it may have consequences for the way we understand the modern self. It does not even refer to the microtechniques of subjectivity making (Foucault 1977, 1980, 1988; Rose 1996; Townley 1995), widely debated these days. Rather, it is here offered as an anatomy of the anthropology of modernity and the organization forms it accommodates. Microtechniques of subjectivity making usually develop within the wider context of relations brought about by the anthropological predispositions of modernity and the conception of modern humans as modular (Hirschman 1977; Luhmann 1995; Pottage 1998).

The fashioning of modern humans as modular involved a series of liberations from forces that precisely inhibited their mobility and adaptability (Gellner 1983; Giddens 1990, 1999). To be fashioned as modular, modern people had to be *de-substantialized* (Pottage 1998), i.e. de-anchored from the limitations which tradition and nature imposed on them. This way they became ready to act on the basis of considerations exclusively fabricated by the social order into which they found themselves. Sociality thus emerges as freedom from necessity (Arendt 1958). Most significantly, human behaviour in modern life had to become increasingly de-emotionalized and decoupled from the complex and time demanding processes of psychological or personal reorientation. The separation of the role from the person is essential to the *de-emotionalization* of social action. While ultimately unsurpassable, emotions like grief, passion or joy should be refrained from contexts other than deeply private. They could be perhaps tolerated if they were expressed with moderation. Yet, in general, emotions of this sort should not determine human behaviour in public places. In the wider public sphere and the workplace, human behaviour ought to obey the logic of tempered consideration, task orientation and calculation (Hirschman 1977).

It goes perhaps without saying that the prospect of the behavioural machine that seems to coincide with the conception of contemporary humans as modular may be far from an attractive portrait of the humankind (Mangham 1995). It certainly violates a widespread though perhaps naïve ideal of humanism. Let it be clear, though, that the fashioning of modern humans as modular is essential to the separation of the various spheres of social life sustaining modern liberty (du Gay 2000; Gellner 1996). Despite that, the conception of modular human is not offered here as an ideal to be pursued, at least no without qualifications. Rather it is intended as a description of the unspoken anthropology of modernity and the bureaucratic organiza-
tion, closely tied to key elements of current developments in employment and organization forms. The institutional construction of modular persons contains undoubtedly positive and negative elements together and must be evaluated against the complex background of relations, which it presupposes. Says Gellner (1996: 104) himself:

‘(T)here is the price of isolation of one activity from another, a kind of fragmentation which leaves each activity unsustained by the others, cold and calculated by its own clearly formulated end, rather than part of a warm, integrated “total culture”. Such “alienation” or “disenchantment” is a price which some consider too high.’

**Addendum on Modularity**

The social innovations of the bureaucratic form of organization and the model of human agency associated with it constitute part of the wider historical context within which current trends in work and employment develop. The understanding of the distinctive qualities of key historical antecedents of current developments provides an essential means for appreciating the impact they are bound to have on individuals and organizations. Despite widespread overtones tying bureaucracy to stability, rigidity and centralization, we have endeavoured to show in the preceding sections that mobility, selectivity and adaptability are essential elements of the organizational order of modernity. They are reflected in the ways human agency and organization are fashioned to deal with the shifting states of a world that is constantly underlain by contingencies of various kinds. The bureaucratic form accommodates and is being accommodated itself by the model of human agency we subsumed under the notion of modular man.

However, the overtones of stability and inertia associated with bureaucracy and the modern workplace have not been wholly unjustified. The significance which enduring occupational and organizational relations normally assumed in modern people’s life combined with the legal regulation of work and the formation of labour contracts through collective bargaining to obscure the malleability and adaptability of the social conventions tying humans to organizations (Hasselbladh 2000). Other social institutions like the nuclear family constrained the occupational mobility of women, while surviving elements of class identification, corporatism and the segmentation of labour markets limited the social and, by extension, the occupational mobility of individuals in general (Beck 1992; Gellner 1983). These constraints have
nevertheless been loosened considerably in the course of modernity to allow increasingly
greater human mobility and frequent institutional boundary crossing. Indeed, part time work
and other time-limited forms of employment have been around for more than half a century
and modern capitalism has always entertained a pantheon of labour contracts and employ-
ment relations, the centrality of the standard labour contract notwithstanding (Tilly and Tilly
1998). The employment forms that have been emerging during the last two decades and the
feminization of labour markets could therefore be seen as rooted in developments that have
been taking place for quite long time.

Thus, current trends would seem to entertain a rather complex and ambiguous relationship to
the organizational order of modernity. Indeed, it would be possible to claim, contrary to
widespread assumptions on the decline of bureaucracy, that current developments mark the
accentuation of the core characteristics of the bureaucratic order that were here identified
with mobility, selectivity and adaptability. Only if bureaucracy is identified with fordism or
taylorism could one perhaps infer the close of the bureaucratic age. But this basically indus-
trial model of organization (i.e. fordism or taylorism) always entertained a tense relationship
to the bureaucratic form (du Gay 2000). The unquestionable administrative innovations intro-
duced by fordism or taylorism (Chandler 1977) were always underlain by a sort of paternal-
ism and custodial practice that carried into modernity cultural conventions and significations
with clear pre-modern origins. As the history of trade unionism shows, paternalism and cus-
tody often violated not only labour law but even constitutional rights (Perrow 1986). Organ-
izational practices of this sort bypassed the egalitarian ethos of the bureaucratic form and
constrained human mobility so essential to the modular anthropology onto which the organ-

And yet, in another sense current developments do seem to challenge the foundations of
modernity and the bureaucratic form of organization. Aligned with the claims put forth in the
preceding sections, we would like to stress that the shifts in employment and organization
forms currently underway could not be adequately understood in sheer functional terms
alone. Rather, they are the sign of wider cultural and social change that finds its expression in
the reordering of the relative significance of the components that have comprised the typical
portfolio of individual life projects in modernity. Modular man is refashioned to express and
accommodate the priorities of an age that reorders the significance which work, family,
community and wider social involvement have traditionally assumed. Several interrelated
trends can be distinguished in this respect. The first relates with the decline of the nuclear
family consequent upon gender equality, the feminisation of labour markets and the eventual
de-collectivization of family relations, where family members increasingly decide and carry out individually their own decisions (Beck 1992; Giddens 1999; Fukuyama 1997). A second trend concerns the considerable weakening of the sense of community (e.g. neighbourhood relations, local engagement) as the result of contemporary people’s frequent geographical moves (Beck 1992; Carnoy 2000; Sennett 2000). Two crucial and separate spheres of social life (i.e. family and community) that conditioned work, employment and organization forms rather heavily are thereby changing, both requiring and producing increasingly mobile and flexible relations.

A third group of developments derives from work itself and concerns the rising importance, which issues of work and occupation currently obtain in the life space of individuals. Major individual decisions are increasingly made on the basis of expectations about future employment and the pay-offs thereby calculated. Education is regularly framed in terms of investment in vocational skills, while training and occupational experience are evaluated in terms of their contribution to better and financially more rewarding future possibilities. Once, an important yet single section of life, work, conceived now as investment in occupational skills and experiences, tends to monopolize the entire horizon of individual’s decisions. It subsumes an impressing array of issues, deriving from other domains (including family and community) with distinct priorities and modes of conduct, to its own model of calculation (du Gay 2000; Gordon 1991; Hasselbladh 2000). The separation of work from the rest of people’s life is thereby undermined, and the anthropological foundations of the bureaucratic order are subject to a remarkable twist. A paradox is seemingly involved in this respect. The expanding significance of decisions related to work and occupation goes hand in hand with the decline of the work ethic of enduring physical or mental exertion and asceticism that after Weber has been associated with modernity (Sennett 2000). Calculative regulation tends to replace the normative prescriptions of the protestant ethic (Luhmann 1982, 1995), as the practices and significations that derive from the conception of life as investment in occupational skills or experiences are gradually disseminating across the social fabric.

Whether these trends signify the intrusion of market relations into individual life situations that have remained beyond the regulative jurisdiction of market governance (Beck 1992; Gordon 1991; Luhmann 1982) remains to be seen. What is however evident is that the boundaries of major yet separate institutional domains of contemporary life are substantially redrawn. In this process, the premises underlying the modular constitution of modern humans, essential to accommodate the distinct logic and modes of conduct associated with each one of these domains, are by necessity redefined. Modularity is loosing the social anchoring it has
had into the separate realms of work, family and community. It is less and less fashioned to accommodate the distinct logics and modes of conduct associated with these separate realms of social life. Modular human agency is increasingly framed in terms of the enterprising of life (du Gay 2000). Instead of guaranteeing the freedoms of modern polity, it tends to end up as a sheer functional devise of adaptability that no longer recognizes the distinct demands associated with work, family, community and public life in general.

The increasing significance of work and the redrawing of the boundaries separating it from other social domains is also expressed by a number of subtle and apparent innocent shifts in managerial modes of governance. Subsumed often under the label of human resource management, a new system of practices and significations seeks to reshape the terms by which contemporary humans are involved in organizations. It does so in ways that question the separation of the working self from people’s other faculties and projects. Reversing the traditional modern and bureaucratic recipe by which humans are involved in organizations qua roles, contemporary human resource management appears to demand their participation qua persons of a very specific kind (Hasselbladh 2000). A whole arsenal of techniques prescribes, recommends and eventually fashions a model of human agency that conceives humans as resources that must be effectively utilized and continually developed to contribute to the welfare of the organization.

In contemporary human resource management, the category of resource dissolves the distinctive practical status underlying most human faculties and the differential semantics associated with them. It thus becomes the common denominator to which they must ultimately be reduced. Nearly all human skills, proclivities or experiences can be employed and utilized with the exclusive purpose of expanding their individual and organizational utility, without immediate concern for the widely different domains of personal and social life with which they have been traditionally associated. For instance, sociability (i.e. a characteristic of communal life) or sexuality (private life) can be employed to promote the interests of the organization (e.g. sales, business relationships) while education and knowledge acquisition must steadily prove their instrumental and commercial viability, beyond any contribution to personal welfare. Similarly, free time, dedicated to family or other personal interests, can ideally be given to the organization in exchange for better present rewards or future opportunities. While these characteristics were certainly present in the typical order of modernity, they are not viewed as aberrations any longer. They have diffused throughout the social fabric and have become legitimate and normal ways of conducting one’s life.
HRM represents a separate and quite complex chapter of organizational practice that undeniably deserves its own lengthy treatment. However, we cannot avoid mentioning the consequences HRM has for the central issues that concern us here, most notably the social and anthropological foundations of the bureaucratic form of organization. Though perhaps not immediately evident, the impressive diffusion of HRM during the last two decades is closely associated with the recent developments in employment forms that were considered in this article. On the one hand, HRM practices and recommendations of the sort mentioned above tend to blur the boundaries of separate domains of social life. They thus indirectly challenge the modular constitution of humans and the selective, mobile and reversible terms by which they have been tied to organizations. On the other hand, techniques and recommendations like outsourcing, contingent work utilization and rentable labour treat work as any other input, i.e. as a utilizable and substitutable resource. They thus re-enhance the exchangeability of human involvement in organizations and promote a functional and rather dry model of modularity (Carnoy 2000). Both options seem to violate crucial principles of the bureaucratic organization and the forms of human agency that have been associated with it. They induce the categorization of employees to two distinct groups to be treated in a diametrically different fashion (Tilly and Tilly 1988).

Thus understood the meaning of the celebrated word ‘flexibility’ becomes an ambiguous one. It would be perhaps possible to conjecture that novel employment forms may contribute to the liberation from older institutional and organizational forms of subordination and the empty rituals of formality that are often thought to accompany the bureaucratic form of organization (Kelly 1996; Lash and Urry 1994). But bureaucracy, as we have tried to show here, is much more complex social accomplishment than what is often implied by stereotyped images of rigidity and centralization. Indeed, the shifts in work, employment and organization forms that are built solely on the isolated premise of flexibility may threaten important foundations of liberty and pluralism underlying the modern social edifice (du Gay 2000, 2001). The separation of work from other crucial domains of modern life that sustained the bureaucratic order was certainly a functional principle. However, above all, it was a way of living, in a world with many and competing sets of values.

Conclusion
In the present article we have endeavoured to show the social and cultural complexity that is associated with current developments in employment and organization forms. Despite impressive historical variation, the organization of work has always been a key aspect of life, ramifying into a complex web of relations with other social and cultural institutions or processes (Arendt 1958). Not surprisingly, then, the consequences of current developments and the issues that are stake must be appreciated on the background of sober reflection over the distinctive character of the bureaucratic order and the institutional or social relations that have supported it. Current shifts in employment and organization forms do not simply accommodate the need for greater individual and organizational flexibility. They cannot be gauged in functional or managerialist terms alone. Rather, they are themselves the manifestation of a deep going cultural reorientation that brings about important changes in the institutional edifice (i.e. employment and organization forms, models of human agency) that has regulated or shaped work in modernity. They must be ultimately evaluated against the background of the complex web of institutional relations out of which they have emerged and which they nevertheless cannot help but challenge.

References

Arendt, Hannah

Arrow, Kenneth, J.

Bauman, Zygmunt

Beck, Ulrich

Beck, Ulrich

Beck, Ulrich and Beck-Gernsheim, Elisabeth

Beck, Ulrich and Beck-Gernsheim, Elisabeth

Bell, Daniel

Blocklehurst, Michael
Carnoy, Martin

Castells, Manuel

Castells, Manuel

Castells, Manuel

Chandler, Alfred

Deleuze, Gilles

Du Gay, Paul

Du Gay, Paul

Du Gay, Paul
2001 ‘How responsible is “responsive government”? Public service, constitutional practice and the bureaucratic ethos’. *17th EGOS Colloquium, The Odyssey of Organizing*, Lyon 5-7 July.

Dumont, Louis

Foucault, Michel

Foucault, Michel

Foucault, Michel

Fukuyama, Francis

Gellner, Ernst

Gellner, Ernest

Giddens, Anthony
Giddens, Anthony
1999 Runaway world. London: Profile Books

Gordon, Colin

Grint, Keith.

Hammer, Michael and Champy, James

Harrison Bennett

Hasselbladh, Hans

Hecksher, Charles and Anne Donnellon (eds.)
1994 The post-bureaucratic organization. London: Sage

Hirschman, Albert

Kallinikos, Jannis

Kallinikos, Jannis

Kelly, John E.

Kelly, Kevin

Lash, Scott and John Urry
1994 Economies of signs and space. London; Routledge.

Luhmann, Niklas

Luhmann, Nicklas

Luhmann, Niklas

Luhmann, Niklas

Luhmann, Niklas

Mangham, Iain L.,

March, James, G. and Johan, P. Olsen

Matusik, Sharon, F and Charles, W. L. Hill

Messner, Dirk

Perrow, Charles

Pottage, Alain

Pugh, Derek, Hickson, David et al.

Rifkin, Jeremy

Rifkin, Jeremy
2000 The age of access. London: Penguin

Rose, Nikolas

Scott, Richard

Scott, Richard

Sennet, Richard

Sennet, Richard

Seyer, Derek

Sotto, Richard

Tawney, R. H.

Tilly, Chris and Charles Tilly

Townley, Barbara

Tsivacou, Ioanna
1997 With the eye of the observer. Reflections on the design of social organizations. Athens: Themelio (in Greek).

Weber, Max

Weber, Max

Weber, Max

Womack, James, P., Daniel, T. Jones, and David Roos

Womack, James, P. and Daniel, T, Jones

Zuboff, Shosana
1988 In the age of the smart machine. The future of work and power. New York: Basic Books
Bio-note
Jannis Kallinikos (PhD Uppsala University, Sweden) is currently affiliated with the Department of Information Systems, London School of Economics. His major research interests involve 1) the institutional construction of predictable worlds, i.e. the socio-cognitive means, technologies and formal languages by which formal organizations are rendered predictable and manageable, and 2) the investigation of the modes by which the current institutional and technological developments challenge the organization forms that dominated modernity. Kallinikos has published numerous articles in journals, collective works and conferences and is the author of *Technology and Society: Interdisciplinary Studies in Formal Organization*, Munich: Accedo, 1996 and *The Age of Flexibility: Managing Organizations and Technology*, Lund: Academia-Adacta, 2001.

Postal address: London School of Economics, Department of Information Systems, Houghton Street, Tower One, London, WC2A 2AE, UK.

E-mail: J.Kallinikos@lse.ac.uk

Office telephone number: 44 20 7852 3622

*Also affiliated with the Athens University of Economics and Business.*

*I am indebted to Hans Hasselbladh for the thorough reading of this article and his recommendations. I would like also to extend my indebtedness to the anonymous reviewers of OS. As always, the author retains the full and exclusive responsibility of his ideas.*