Bureaucracy under Siege: On Information, Collaboration, and Networks

JANNIS KALLINIKOS

Introduction

The convergence and gradual solidification of the socio-technical changes associated with the diffusion of information over the last few decades are establishing a new socio-economic environment in which information-based tasks and services acquire central importance. Information and the technologies and artefacts by which it is produced and disseminated penetrate deep into the social fabric, mediating a wide range of new cultural impressions and promoting novel modes of living, acting, and communicating. At the same time, these developments impinge upon the production apparatuses of modern societies, redefining the nature of organizations and the structural scaffolds upon which organizational operations have been crafted since the consolidation of the present regime (e.g. Castells 1996; Sassen 2001; Webster 2002).

The cultural and technological shifts that characterize the present age have frequently been tied to the diffusion of networks as organizational arrangements for producing goods and services, an idea that has been articulated as a compelling claim by Castells (1996), and his theory of the way informational capitalism operates as socio-economic system. Just a decade after Castells’ seminal contribution (1996), this idea has been given a new push by Benkler’s influential portrayal (2006) of the collaborative arrangements that mark the production of information-based goods and services, for example, open-source software production and Wikipedia. Benkler’s key claim is that these developments instantiate an epochal change characteristic of a mode of producing goods and services that no longer needs to rely on the institutional framework of markets and corporations. Social production, as he refers to it, is the joint outcome of several developments, among which figure (a) the publicly available and non-rival nature of much information, (b) the diffusion of information resources across the population, (c) the distinctive character of computational technology, and
the low capital necessary to sustain network associations over the Internet. Combined with the circumvention of property rights (through e.g. GNU/GPL), these conditions give rise to distributed, modular, and flexible arrangements of collaboration by which the accomplishment of information-based products or services can be pursued.

Whether and the extent to which these arrangements will change the prevailing institutional landscape associated with markets, corporations, and property rights remains an open question. Most probably, they will not. Or, as the ongoing debate on collaboration suggests (Von Hippel 2005; Tapscott and Williams 2006), they will be consolidated into the prevailing institutional framework bringing along important changes. Irrespective of how things may turn out, the open, and fluid patterns of collaboration that social production occasions do epitomize wider cultural and technological shifts. In this respect, Benkler’s claim is indicative of a growing awareness associated with these developments. Similar ideas have undoubtedly been around for quite a while and key parts of Benkler’s claim undeniably owe much to scholars such as Lessig (2002), Raymond (2001), Von Hippel (2005), Wenger (1998), and others.

The claims that tie social production to the prospect of an entirely different organizational order, marked by openness and flexibility, are closely associated with the fact that these collaborative arrangements cross the divide between the social and the economic. In so doing, collaboration transforms sociality to an important source of productive capacity and innovation. In conventional accounts of networks that divide is never really questioned. In Castells’ account of informational capitalism, for instance, networks are predominantly seen as organizational arrangements that seek to bypass some of the rigidities of the prevailing institutional framework and accommodate the commercial and coordinative possibilities mediated by the new technologies of computing and communication (see Castells 1996, ch. 3; 2000, 2001, ch. 3). By contrast, the concept of social production transcends that divide, suggesting that Internet-based communities and associations (often no more than informal and episodic) can become powerful producers of information-based goods and services. Online sociality can under specific conditions become a potent productive force, thus challenging the rigid institutional boundaries that modernity constructed around the pursuit of economic versus social objectives. The diffusion of information and the cultural orientations with which it is associated establish a new socio-economic environment, a habitat, as it were, in which the line between working and living, producing and consuming become increasingly blurred.

In this chapter, I am concerned with the prospects of social production and the developments with which it is associated, in a context that takes
the institutional complexity of the modern social arrangement\(^2\) more fully into account. Benkler (2006, ch. 4), along with many others, attributes the dominance of corporations to the high capital requirements of industrial production and the prevailing regime of property rights. According to this view, concentrated systems, of which corporations are a case \textit{par excellence}, require high fixed costs necessary to establish and run them successfully, and the motivational structure (profit seeking and appropriation) that the prevailing regime of property rights helps set in place. The concentration of resources, which the collaborative arrangements of social production challenge, is thus predominantly attributed to the economics of production and the institutional framework (power, corporations, and property rights) within which production takes place.

Corporations are certainly economic institutions and their rise and institutional dominance are bound up with the economics of production and the prevailing regime of property rights (Roy 1997; Perrow 2002; Heugens 2005). It would be foolish to claim otherwise. Yet, the organization form which corporations by necessity assume (i.e. formal organization) stretches beyond the interpretive horizon of capital requirements and property rights. The pursuit of economic goals which corporations exemplify takes place within normative and regulative frameworks that reflect the solidification of cultural orientations and the negotiating outcomes of interests and power over a long historical period. Such frameworks constrain, shape, and, to a certain degree, constitute all those operations by means of which profit is pursued. Corporations are accordingly economic and social units at the same time. Unless one sees the normative and regulative edifice of modernity as a secondary and irrelevant epiphenomenon, something important gets lost when the understanding of corporations is exclusively framed in economic terms.

In what follows I first present the key ideas that make up the claim of social production and outline some of the organizational and institutional implications that are associated with it, as these have predominantly been formulated by Benkler (2002, 2006). I then make an effort to place the understanding of the current developments within the wider context of modernity. In so doing, I give due consideration to the organizational innovations brought about the diffusion and embeddedness of the modern social arrangement and the establishment of organizations as formal entities, distinctively different from physical persons. Thus construed, the similarities and differences of formal organizations and the collaborative arrangements of social production are cast into new light. In the last section of the chapter, I therefore attempt to discover the thread that runs through these developments and to reflect on the nature of social and organizational changes underway.
Social Production and Collaboration

Social production epitomizes the linking of individual contributions and collective engagements in new ways that are made possible by the cultural orientations associated with the diffusion of information and the technologies by which information-based goods and services are produced and disseminated. Internet-based collaboration demonstrates that the establishment of collective arrangements and the pursuit of collective goals (e.g., Wikipedia) can significantly be dissociated from the steady and regular supply of individual inputs (e.g., a contribution to Wikipedia). This is an important organizational innovation that breaks with the concentrated nature of organizations (place, fixed work schedules, amassing of resources) and the bounded and hierarchical forms of governance by which goods and services have commonly been produced since the consolidation of the capitalist mode of production. An organization such as Wikipedia or Flickr, for instance, is no longer dependent on inputs delivered in fixed time schedules by a finite and well-defined number of individuals who are employees in the standard sense of the term. While the steady and comprehensive supply of inputs is critical for the system, it does not really matter who provides these inputs, when, and under which conditions. Social production then coincides with the establishment of loose collaborative networks in which individuals can join the pursuit of collective goods in variable patterns that shift considerably in intensity, commitment, and durability. A new paradigm for constructing collective arrangements is thus emerging.

While many factors converge to support the diffusion of such collaborative arrangements in which individuals are loosely tied to collective pursuits, two among them are worth mentioning (Benkler 2006; Kallinikos 2006b). These are:

1. the highly diffused character of computational resources and information across the population, and
2. the distinctive nature of computation as technology; more particularly the modular and granular nature of information systems and processes, which are composed of smaller and easily aggregated or dissolvable subtasks and routines that admit fine-grained and individualized initiatives.

The highly diffused status of information and communication resources (computers and computer-based artefacts) across the population gives individuals the opportunity to undertake a wide range of activities and execute a substantial range of information-based tasks and operations that have not been possible before. Despite important differences between economic classes that become even more substantial in the context of global inequalities (Avgerou 2002), a significant and growing number of individuals across the globe are able to acquire the necessary resources to accomplish a wide range of information tasks over the Internet. The relatively low cost of supporting this
individualized possession of computational resources contrasts sharply with the substantial capital investments necessary to build up and operate firms and organizations under those conditions commonly associated with modern industrial capitalism and scale economies.

According to this view, the construction of organizations as bounded, hierarchical, and concentrated systems is predominantly driven by the economics of production and the high costs that the establishment of economic organizations incurs. By the same token, it is associated with the institutionalization of a regime within which property rights can be asserted. This last offers individuals with access to resources the incentives and institutional protection against the risks the establishment of economic organizations implies. By contrast, those that lack the necessary resources to pursue such an objective have to subordinate themselves to the fixed work schedules and the hierarchical forms of governance necessary to operate the system. The high capital requirements for establishing economic organizations then combine with the prevailing regime of property rights to drive the construction of concentrated organizational arrangements in which the majority of individuals are tied to the system in wholesale, inflexible, and, if one wants to go a little bit further, unequal terms (Clegg et al. 2006). A system of social subordination ensues from these differences that limits a deeper division of labour and may stifle creativity and initiative taking, and ultimately freedom.

The conditions epitomized by the growth of the Internet and the diffusion of computational resources across the population substantially lowers the capital requirements for establishing and maintaining associations and are thus important drivers behind the emerging patterns of collaboration. These claims constitute what I would call the economic–technological explanation of social networks and social production. Left on their own, these claims provide the necessary but not the sufficient conditions for the emergence and diffusion of social production and the association networks by which it is sustained. Resources must themselves be divisible, amenable to unbundling, and, crucially, freely distributable across space and time. Industrial plants, for instance, are often made up of bundled resources and tightly coupled operations that drive concentration and the construction of large systems, quite independently of the capital requirements and the proprietary framework to which they may be tied. Information and computational resources and operations differ in this respect and the analysis of the distinctive character of computation adds to the claims advanced so far an explanation of social production in technological and cognitive terms (Benkler 2006; Kallinikos 2006b).

The accomplishment of information tasks may acquire distributed forms by virtue of computational operations being modular and considerably granular. Modularity concerns the packaging of operations in relatively independent modules that allow for operational adequacy within a larger network of functional interdependencies. Granularity refers to the minute and piecemeal
character of information-based operations that make up batches and modules. In this respect, granularity recounts the analytical status of information-based operations and their procedural character. Being digital, rather than analogue, technological information is granular by its very nature (Borgmann 1999; Kallinikos 2006b), yet different batches or modules can exhibit varying granularity in the sense of being composed of more or less inclusive steps or bundled operations. Open-source software production usually requires working on batches of code while Flickr, Wikipedia, or YouTube may admit more fine-grained operations such as minor revisions and smaller uploads or downloads.

Thus viewed, computation provides the premises for constructing a techno-cognitive universe in which a fine-grained division of labour prevails. Larger tasks can generally be broken down to smaller units and undertaken and executed in different times and with varying intensity by a widely dispersed population of individuals, as is often the case with open-source software production. Or, to refer to another context, contributions to Wikipedia can be made in one blow or in a piecemeal fashion that fits the time availability or other conditions of the contributing individual. Similarly, videos, pictures, photos, or scientific chapters can be uploaded/downloaded from or onto corresponding websites and virtual associations, massively or in smaller doses, in regular intervals or in an episodic fashion.

The granularity and modular character of information and computational tasks therefore dispense with an important technical precondition (i.e. the bundled, indivisible character of resources) behind the emergence of concentrated systems. By disentangling resources and uncoupling them from their attachment to particular locations and people, computation offers a new technological paradigm of resource dispersion, recombinability, and distribution. This is clearly evidenced by the spectacular diffusion of service outsourcing within the traditional regime of markets and corporations (Kallinikos 2006b; Clegg 2007). Coupled with the freely and publicly available nature of information and the diffusion of computational resources across the population, the decomposable character of information-based tasks and operations establish the conditions for the emergence of new modes by which individuals can be tied to complex and aggregate ventures.

The modular and granular nature of information and the ability to transact and communicate over the electronic medium have been instrumental in unbundling work processes and distributing work over sites and organizations long before the recent advent of open collaborative networks. The relative processes have accordingly been observed and studied by many scholars (see e.g. Schmidt and Bannon 1992; Ciborra 1996; Wellman et al. 1996; DeSanctis and Monge 1999; Knorr-Cetina and Bruegger 2002; Hinds and Mortensen 2005). However, studies of this kind have for the most part focused on the investigation of patterns of work, interaction, and
collaboration occurring within finite and relatively well-defined populations of individuals, often embedded in particular institutional settings. Such a research orientation differs substantially from the open character of the collaborative transactions that social production occasions (Iannacci 2005). It is the open and *non-determined* nature of the population of participating individuals that enable the different patterns of social production to emerge. While not everyone actually participates in the collaborative arrangements of social production, anyone can potentially do so. In this respect, Internet-based collaboration stretches beyond the coordinative template of tasks and operations usually associated with distributed work and interaction.

The open collaboration over the Internet that coincides with social production is certainly dependent on the fine-grained and modular division of labour which computation as technological paradigm provides. However, open collaboration is a social project made, *inter alia*, possible through the construction of a navigable infospace and the social choices this inevitably implies (Bowker and Star 1999). The developments that render open collaboration over the Internet feasible are crucially depending on the ability to cross the cultural boundaries of text, sound, and image (Kittler 1985; Jenkins 2006) and the different semiotic traditions (e.g. writing, filming, composing, or arranging) developed around them over the years, as the outcome of strong technical and institutional compartmentalization. In this respect, the Internet and the ensemble of technologies by which it is supported occasion the construction of a techno-cultural universe in which such diverse activities and skills as those associated with the production of text, image, and sound are rendered technically interoperable (Borgmann 1999; Manovich 2001; Kallinikos 2006b, 2009). Without the possibility of technologically crossing that cultural space smoothly, the prospects of social production and open collaboration would have been considerably truncated. Far from being a technical project alone, the navigable infospace that coincides with media convergence results from cultural predilections and economic and political bargaining by means of which the patchwork of systems, technologies, and information sources underlying the Internet is rendered interoperable (Bowker and Star 1999; Hanseth 2004; Pollock and Williams 2009). It is poignant in this respect to recall that much of the navigability of the Internet and the possibility of exchanging information is contingent on the degree to which information-based products and cultural artefacts remain shared resources, free from the restrictive bounds of copyright and other property-related matters. As the fight over the institutional environment of the Internet demonstrates, huge interests currently coalesce in their effort to substantially delimit the free circulation of information and information-based culture (see e.g. Lessig 2002; Benkler 2006; Zittrain 2006).
The Institutional Matrix of Modernity

While the outcome of diverse technological, economic, and cultural forces, the innovative character of the collaborative networks of social production are most clearly shown in the highly personalized terms by which individuals are able to contribute to collective pursuits. Internet-based collaborative networks accommodate the varying proclivities of individuals, their time availability, and motivation brought together in scalable arrangements that are not any longer dependent on the steady supply of individual inputs. Individual contributions vary not only among individuals but also between different life situations, stages, or projects of the same individual. Such flexible and shifting involvement in collective value-producing pursuits would seem to contrast rather sharply with the concentrated nature of organizations and the enduring and strictly scheduled patterns of employment underlying them.

True as it may be, the contrast of the organizational arrangements of social production with formal organizations exclusively in these terms nevertheless conceals a deeper layer of relations that is essential to the adequate understanding of Internet-based collaboration and its prospects. The stereotypical depiction of formal organizations as concentrated, monolithic, and inflexible does not do justice to the complexity, subtle character, and adaptive capacity of this institution, evident in the substantial transformations it has undergone over time. Seen from a larger time perspective, formal organizations represent a historically innovative mode of fashioning membership that makes individual participation in the organization contingent and variable at the same time as it subjects it to regulations of various kinds. As a matter of fact, the regulative frameworks that govern formal organizations reflect, inter alia, the need to shape the premises of individual participation in the organization rendered contingent and variable, as the outcome of the progressive detachment of social life from the invariable bonds of Gemeinschaft and the normative regulation they afford (Gellner 1983, 1995; Luhmann 1998). Let me elaborate.

The constitution of formal organizations as institutional entities presupposes the establishment of an operational sphere, a jurisdiction, within which an organization is assigned the responsibility to operate, according to standards, laws, and regulations that render such responsibility accountable (Weber 1978). Formal status cannot be assumed unless an organization has been assigned, through legal or political processes, responsibility to operate within a particular area (e.g. an industry, government department, health care, education, the church). This applies as much to state agencies and corporations as to trade unions, professional associations, or voluntary organizations. To assign jurisdiction to a collective unit, as opposed to physical persons, and render it legally or politically accountable, it is necessary to institutionally separate its collective status from the persons and things to
which it could be related (Roy 1997; Kallinikos 2004, 2006b). Obvious as it may be, it is nonetheless worth stressing that formal organizations are not natural but institutional (reified) entities, that is, *contrived social regimes established by human, collectively based decisions to serve particular purposes*. Thus conceived, formal organizations are a qualitatively different species from all other manifestations of organized order found in nature and made popular over the last decades by complexity science.

An inevitable consequence of the institutional separation of the collective status of an organization from physical persons and things is that individuals are admitted into the organizational system not as full-blown persons but as *social categories, specializations, or roles* (employees but also owners and managers), on the basis of formal or socially certified criteria provided by education, professional ability and experience, or access to resources as in the case of corporations. Organizations, *qua* institutional entities, are not populated by flesh and blood people. Such a claim may be hard to accept in view of the massive presence of people in organizations, and the entanglement of abilities with personal characteristics and social or ideological identifications, so typical of human beings (Walzer 1983). And yet, modern organizations as institutions are made possible by what Searle (1995) calls institutional facts entailing the contrivance (meaning associated) and imposition of a set of relations and functions upon more primary social or natural entities (Kallinikos 2006b). The abstract social maps formal organizations instantiate are clearly manifested in the fact that individual jobs and positions are, within the lifetime of an organization, frequently assumed by a number of individuals. The impersonal order that rules formal organizations and the pervasiveness of routines and standard operating procedures are the inevitable outcome of such an abstract conception of social relations institutions instantiate (Meyer and Jepperson 2000).

To conceive and construct organizations this way, it is necessary to render social relations mobile and adaptable to contingencies and, thus, free from the invariable bonds of kinship, fixed social stratification, or other non-negotiable social (not natural) attributes of individuals, characteristic of premodern social arrangements. In this regard, formal organizations are inseparable from the establishment of modernity, its cultural predispositions, and socio-political arrangements (Gellner 1983; Kallinikos 2006b). Placed in this context, formal organizations should be understood not only as instrumental but also social and political institutions (in the broad sense the term “political” carries). Much of their distinctive operative profile derives from an amalgamation of sheer functional prerequisites with key polity concerns and the effort to align the pursuit of efficiency with key values of the modern social arrangement, for example, accountability, meritocracy and impartiality, transparency and universalism (Beck 2000; du Gay 2000, 2005; Kallinikos 2006a, 2006b). The safeguarding of these values has been inextricably bound
up with the establishment of a rational–legal framework (opposed to tradition and personal charisma) of organizational governance that since Weber (1947, 1970, 1978) has been known as bureaucracy.

In thus describing formal organizations, I do not want to deny the social and economic practices, occasionally pervasive (e.g. family business, political patronage), that have persisted alongside the prevailing institutional matrix of the modern social arrangement. Nor do I wish to underestimate the social skills, techniques, programmes, or schemes by which these abstract ideals, principles, and cultural orientations are turned to reality (see e.g. Walzer 1983; Hasselbladh and Kallinikos 2000). The practices by which formal organizations are made accountable and the personnel policies and procedures by means of which organizations seek to address the principles of meritocracy, transparency, and impartiality in hiring and promotion entail a variety of subtle and elaborate operations. Distributed among different agents, these operations are undeniably subject to the local interpretation and, not infrequently, deliberate manipulation of the regulative frameworks in which they are ingrained. But my purpose here is primarily to paint in brush strokes the prevailing institutional matrix in which formal organizations, and corporations as a subspecies of formal organizations, are embedded. Principles are, alas, turned to reality by social practices but such a state of affairs does not deny the decisive role principles play in shaping these practices. The institutional matrix of which formal organizations are part and parcel is essential to constituting them as collective entities of distinctive, historically embedded kind and for shaping their operations.

The institution of property rights is undeniably a critical component of that framework but it does not exhaust its multivalent constitution and institutional coverage. The separation, for instance, of ownership from management that coincides with the institutional prevalence of the corporation (Chandler 1977; Roy 1997) reflects the same cultural developments of unbundling the construction of institutional entities and processes from real persons and things (Giddens 1990; Meyer and Jepperson 2000). The same holds true for authority and the ways modern hierarchy as opposed to fixed stratification operates. The formal nature of modern organizations is part and parcel of the effort to produce general principles and standards for constituting and regulating social relationships in such stringent, goal-oriented collectives. Employees, civil servants, professionals, owners, managers are all constructed social categories, institutional roles whose involvement in the organization is legally based and regulated. It is of utmost importance to uphold these claims, given the character of many recent developments (including those associated with social production) away from the forms of membership which formal organization has historically occasioned.
Organizing Logics: Stratification versus function

The regulative order ruling formal organizations is closely associated with the contingent and variable forms which individual involvement in organizations acquires as the inevitable outcome of the relations I have sketched in the preceding section. While relying on standardized job categories and skill profiles, the formal status of collective institutional entities is nonetheless an essential medium of social pliability and institutional flexibility (Pottage 1998; Meyer and Jepperson 2000; Feldman and Pentland 2003). By detaching individual involvement to the organization from personal predispositions and the invariable bonds of community and tradition, formal organization renders it potentially pliable, adaptable to the contingencies it addresses, and therefore variable. Placed in this context, the individual/organization relationship entails an element of choice on both sides, that is, the organization and the individual. Even though individuals may be driven to join an organization by a variety of compelling reasons (e.g. employees for reasons of subsistence) that may leave in practice little space for choice and freedom (Perrow 1986, 2002; Clegg et al. 2006), it should, at least in principle, be possible to do otherwise. Without the availability of such an option, we are brought back to social arrangements of premodern and patrimonial type that base individual’s involvement in the organization on invariable individual and social characteristics (Weber 1947, 1978).

Contingency, choice, and formality are therefore tied together in ways that may not be evident at first glance. Formal status reifies organizations and separates them from the whims and dispositions of various organizational stakeholders. By the same token, individuals are admitted to the organization *qua* occupational roles rather than *qua* persons (in the sense of psychological and existential wholes), which makes them less dependent on the organization. Against this background, it comes as no surprise that hiring or appointment in formal organizations assumes a *contractual* status that renders individual participation *specific*, *time-limited*, and *revocable*. The contract is a legal and functional medium at the same time. It provides the means for making the hiring or appointment of personnel contingent on functions or tasks that incumbents are expected to perform in the organization. Hiring or appointment is always task or function driven and therefore specific. It is also revocable, at least in principle (for various reasons, including the violation of duties), and, for that reason, time-limited. Revocable individual involvement in the organizations most clearly epitomizes the separation of duties from personal characteristics and social identifications and fulfills various objectives among which figure the frequent renewal of manpower, the reconfiguration of roles, and the updating of skill profiles in the organization. At the same time as they address the goals of efficiency and environmental adaptation, the terms of
the contract and the standards and principles governing hiring, appointment, and promotion ensure the reasonable alignment of organizational practices to the wider institutional environment of the modern social arrangement.

Thus defined, organizational membership is predicated on the aforementioned distinction between the person as whole and the band of the vocational roles or duties the person may assume in her lifetime, a condition with far reaching social and political implications well understood by Weber (1947, 1978) and Simmel (1971) but largely overlooked these days. The distinction of the person from the vocational duties and the concomitant non-inclusive organizational involvement of individuals make modern formal organizations quite a different species from patrimonial systems, army or work barracks, prisons, religious sects, or any other kind of organization (e.g. family business) or practice (e.g. economic or political patronage) in which the basic principle of contingent and non-inclusive membership characteristic of an open, non-coercive society is suspended (Walzer 1983; Kallinikos 2004, 2006b). These observations make clear the restrictive interpretive horizon on which the understanding of corporations as predominantly economic entities is based.

Formal organization and the distinctive nature of the membership model on which this institution is based cannot fully be appreciated apart from the shift of the social order away from the principle of stratification to that of function coinciding with the establishment and institutional embeddedness of the modern social arrangement (Luhmann 1995; Heller 1999). Stratification is premised upon hereditary social relations (kinship and class belongingness) and, for that reason, bounds social arrangements to non-negotiable individual characteristics that rule out social mobility and deeply constrain adaptability and the pursuit of alternative courses of action (Weber 1947, 1978; Gellner 1983). Function, on the other hand, is the accomplishment of education, training, and learning and, for that reason, changeable and renewable. As with the individual involvement in the organization, the hierarchical order of functions that is ubiquitous in formal organizations is time-limited and crucially revocable. Modern hierarchy is an altogether different order than stratification derived from non-negotiable social characteristics. By shifting the principle of social organization to function, the modern social arrangement gets rid of one of the most rigid set of impediments (tradition and stratification) to social change and adaptation.

Social organization based on function and set free from the dictates of rigid cultural principles and non-negotiable social attributes needs extensive and detailed regulation. Hiring and appointment principles and procedures, promotion and career paths, reward systems, authority and decision-making principles all reflect the construction of a governance regime that encodes legal and cultural norms and principles. Corporations are no doubt economic institutions that must satisfy the imperative of profit. But this is a goal statement and not a statement of the legal and cultural
conditions (legitimacy) under which such a goal has to be accomplished. Small wonder that means and ends are often related to one another and, in this respect, the economic nature of corporations makes them different from public agencies and other types of organizations (see e.g. Hannan and Carroll 1992; Carroll and Freeman 2000). And yet, corporations are public not private entities. The so-called private sphere of the economy is in fact a public sphere. Similarly to public agencies, the operations of corporations are for this reason regulated by a complex regime of rules, laws, and socially legitimated modes of conduct. Such a regime provides the framework of rights and obligations that govern the individual/organization relationship and is, at the same time, an important vehicle for shaping behaviour and expectations in the corporate workplace. Such a portrait of modern formal organizations entails admittedly strong elements of an ideal depiction that contrasts with the ruthless practices of power and the relentless pursuit of profit characteristic of the sphere of economy (Perrow 2002; Clegg et al. 2006). True as this may be, such an ideal description is far from an epiphenomenon. It recounts widely diffused cultural and normative orientations against which these practices may be judged as non-conformant to the legitimate social order of democratic societies, ruthless or socially insensitive, as the case may be. The portrait of formal organization I draw provides the legal framework and the yardstick by means of which such practices can be critiqued, brought to court, and eventually corrected and held accountable.

The constitution of modern formal organizations on a contractual basis has accordingly deep cultural roots that invoke a particularly and historically unique understanding of collective entities and the ways individuals are involved in them. The dissociation of the function(s) an individual can perform in the context of work from other personal and psychological predispositions of that individual that are the outcome of lifelong and not easily changeable experiences and structures of motivation occurs first time in history in the social arrangement we call modernity. As Hirschman’s work (1977) on ‘the passions and the interests’ suggests, such an understanding of being human goes back to the Scottish enlightenment and a long-standing cultural struggle to shape instinctually based, passion-driven acts by a model of being a person that put tempered, mildly calculative modes of human conduct at a premium. Ultimately, the dissociation of the person from the function furnishes the behavioural model of neutral proceduralism governing modern formal or bureaucratically constituted organizations that Weber describes ‘Sine ira et studio, without hatred or passion and hence without affection or enthusiasm’ (Weber 1947: 340).5 Formal organizations are indeed the social technology through which the separation of vocation from other aspects of a person’s life and personality is instrumented in massive scale. No matter how fragile and incomplete it may remain in practice, this dissociation is a normative milestone in modernity. It is intimately tied to the dynamics of the modern, social arrangement and the requirements for

**Crossroads**

The ideas put forth so far suggest a mutually reinforcing relationship between the culture of modernity, the institutional framework it fashioned, and the constitution of modern organizations as formal, bureaucratic systems. The contingent, variable character of the organizational involvement of individuals is the key to understanding formal organizations and the entire framework of relations that celebrates individuality, meritocracy, and freedom (du Gay 2005). How can we relate these ideas to the concept of social production and the proposition that social networks epitomize an alternative model of value creation that exhibits considerable more individual variation and freedom than what has been hitherto the case?

Social production refashions the terms by which individuals are involved in organizations in the direction of an informal, shifting, and (online) transaction-based model, which no longer relies on occupational categories nor it distinguishes between owners/managers versus employees. Such models seem, as Benkler and others suggest, to expand the bounds of individuality and enhance freedom. In bypassing the constraints associated with the institutional embeddedness of formal organizations, the forms of collaboration social production occasions hold the promise of liberating individual membership in collective pursuits from the elaborate web of institutional relations in which it has been embedded in modernity. In a perhaps analogous fashion to that of formal organization and the ways it sought to break away from the tight bonds of a stratified, fixed, and hardly negotiable social order, social production-driven models of collaboration seek to suspend the restrictive power of the regulative regimes that have governed social relations in formal organizations.

Social development is of course never as linear and monicausal as such an account seems to suggest. Laws and regulations are certainly associated to the negotiating power of the social groups whose affairs they seek to govern but they cannot straightforwardly be deduced from the power differentials of these groups. In sketching the institutional matrix in which formal organizations in general and corporations in particular are embedded, I have been at pains to show that such a matrix is the outcome of social and cultural concerns, some of which celebrate equality, freedom, and individual sovereignty. Socio-cultural concerns of this sort are not straightforward derivatives of power. Modern regulative regimes have grown out of large
range of contingencies and entailed considerations that to a certain degree have given expression to the ideal of a fair social order (Walzer 1983) laying down the premises upon which social relationships should be predicated. In this respect, regulative regimes restrict but protect too.

Table 6.1 presents a schematic and descriptive account of some of the key claims I put forward in this chapter. I would like to use the relationships depicted in the table as the reference point in my brief effort to summarize, *sine ira et studio*, the nature of the social changes associated with the refashioning of formal organizations over the last few decades (Castells 1996, 2001; DiMaggio 2001), of which social production (Benkler 2006) seems to be a highly interesting and relatively recent manifestation.

The table depicts three epochal forms of organization (patrimonial systems, formal organizations, collaborative networks) and the distinctive features (membership type, social relations, source of legitimacy, and spatio-temporal model) underlying each of them. The first three of these features are indissolubly bound with one another while the fourth (spatio-temporal model) is subject to variation and should therefore be seen as a tendency. Professions, for instance, are species of formal organization that draw on concentration and distribution at the same time. Similarly, premodern or early modern commercial networks that were based on friendship, kinship, or patronage and other invariable social characteristics utilized a spatio-temporal model of dispersion. It is though a distinctive feature of collaborative networks to rely on distribution, both in terms of geographical dispersion and also in terms of a division of labour that moves away from the principles of succession and sequentiality. In this respect, collaborative networks are inimical to concentration and cannot exist apart from the distributed nature of the tasks with which they are associated. To the degree that distribution relies on the simultaneous execution of tasks in a population of dispersed individuals, it transcends the meaning of dispersion *qua* geographical feature and tends to become a mode of organizing collective pursuits.

The relationships depicted in Table 6.1 stretch over an extended timescale that covers the last two or three centuries and thus invoke a developmental trajectory of a sort. But such a trajectory should not be understood in terms of succession. The diffusion of the collaborative arrangements of the type discussed in this chapter may challenge but do not replace formal organizations. At least this remains to be seen. In a sense, collaborative networks entail the return to some of the features distinctive of patrimonial systems (see e.g. Tilly 2001). In yet another sense, they epitomize the fusion of bureaucratic principles with social relations of an informal or peer-based nature (e.g. Piana 2009). Indeed, the claim of a post-bureaucratic age in which key bureaucratic principles are transformed, bent, or reconfigured as a means of addressing the demands of the current age has been around for some time. While occasionally tied to the diffusion of information and communication technologies and
the cognitive and behavioural habits they introduce (e.g. Kallinikos 2006; Harris 2008), the transformation of or drift away from bureaucracy has commonly been associated with one or another aspect of what I have here referred to as the institutional matrix of modernity (see e.g. Heckscher and Donnellon 1994; Fukuyama 1997; Courpasson and Reed 2004; Greenwood and Lawrence 2005; Newman 2005; Walton 2005; Olsen 2008). The ideas I pursue in this text suggest, however, that the transformation of bureaucracy and the organizational template to which it has given rise may occur via the less conspicuous route that entails the redefinition of the terms by means of which people are involved in collective pursuits. Bureaucracy (formal organization) is the particular type of social entity in which the coupling of individual goals and collective pursuits assumes the form of the contract, regulated by an elaborate regime of rules, laws, and regulations. Part of this regime is certainly associated with the institution of property rights and the power consolidation that allows public agencies to operate as the extended arm of the state. The open and transient nature of the bond underlying the online collaborative arrangements social production occasions challenges the contractual nature of organizations and, thus, represents a specific case of the wider shift away from bureaucracy characteristic of the present age.

From a certain point of view, social networks provide a complement rather than a full-fledged alternative to standard, proprietary modes of producing goods and services and the structural scaffolds associated with formal organizations. It is quite probable that key elements of the collaborative arrangements associated with social production will be assimilated in the established framework of markets and corporations, as cases like Flickr, YouTube,
Facebook, and the for-profit customization/implementation of Linux attest.\textsuperscript{6} Popular management books (Anderson 2006; Tapscott and Williams 2006) outline scenarios in which open forms of collaboration become a widespread practice within the proprietary framework of markets and organizations. Management fads come and go, and no more than an indicative value should be attributed to these claims. While difficult to predict the organizational implications of these developments, it would seem nonetheless reasonable to conjecture that once introduced into the existing framework for running concentrated systems (corporations and public agencies), collaborative practices may bring along important changes. The massive invasion of the relatively well-defined jurisdictional space of formal organizations by relations of an entirely different type significantly erodes the contractual terms by means of which they are constituted as social entities and the rationalized regime of governance (e.g. assignment of responsibilities, accountability, and control) underlying the monitoring of their operations (Newman 2005; Contini and Lanzara 2009; Piana 2009).

A more radical take on these matters could suggest that social production and the open and fluid collaborative arrangements it occasions are just the beginnings of a long-wave change. The diffusion of social production could go as far as to obliterate the institutional logics separating economic and social life, public activities from private initiatives, and formal organizations from informal associations. The challenge of these distinctions, so characteristic of the modern social arrangement, occurs via the medium of coupling individuals to collective pursuits in new ways. In this process, the dissociation of the function (or the organizational role) from the person that occurs first in modernity and is socially instrumented through the institution of formal organization is given a new twist by the collaborative arrangements social production instantiates. The contractual relation, as analysed above, equally detaches and attaches, unleashing at the same time as it is constructing a bond, an institutional receptacle, as it were, that fashions expectations and shapes rights and obligations. The contract recognizes an open future (the need to change the terms of the contract if it is found inadequate) at the same time as it constructs a stable present. Shifting and changing as it may be, the contractual basis of individual involvement in organizations presupposes a minimum of predictable relations by means of which expectations are fashioned and individual contributions are monitored, rewarded, and held accountable.

Social production seems to dispense altogether with the contract understood in these terms. In its place, it inserts a fragile and transient network of interacting individuals tied together by online exchanges. The stability of the missing contract is counterbalanced by the permanent nature of the technological arrangements, a minimal set of rules concerning individual contributions, and the associated authentication/identification procedures
(login names and passwords; Deleuze 1995). This is undeniably a flexible and much more open form of coupling but it is the one that is based on much thinner social ties.\(^7\) Despite the aura of collaboration, peer-reviewing, and online sociality that is associated with social networks, a closer look suggests that the key element in social production is no longer the social relation but the online transactional exchange, made possible by the construction of an open bond and an invitation addressed to anyone. One could certainly invoke here the historical analogy of the shift between strong and weak ties that the transition from small, locally based communities to large social aggregates (nation states) signified. Social networks are primarily transactional machines. Relations are ephemeral and extremely functional. A proper understanding therefore of the social networks of collaboration and the organizing logic they promote must entail their assessment against the background of the wider institutional relations I have tried to summarize in this chapter.

Is ‘freedom just another word for nothing left to lose’?

Placed against the thick institutional framework of corporate capitalism, the restructuring potential of the developments brought about by social production, Web 2.0, and the Internet may be seen as a frivolous and transient episode. But it is reasonable to assume that they are not. Important technological, cultural, and economic changes, some of which I have outlined in this chapter, are constructing a new socio-economic habitat. The relationships I have described are better appreciated if related to the current and comprehensive informatization of social and physical relations that tends to produce an affluent universe of electronic tokens, a profusion of signs set free from any pretension to describe or represent reality (Kallinikos 1995, 2006b; Borgmann 1999). As suggested earlier in this chapter, the diffusion of information across the social fabric is not just a technological fact. It constitutes a destination (one among several) of a long cultural journey (Goody 1986; Bowker 2005) that bespeaks the prevalence of artifice over reality, and the dominance of representation over what once might have been thought as its origin (Lyotard 1984). The modular and granular nature of information is the outcome of this virtual and pliable universe. The unbundling of resources, the penetration of the social fabric by all sorts of information services, and the circulation of information in larger social and geographic space are all closely associated with the comprehensive informatization of reality.

Another group of changes that suggest distributed collaboration as something more than a fleeting episode in the history of capitalism relates to the key claim made in this chapter concerning the premises by which the bond between the individual and institutions is reconstituted. The developments associated with the growing involvement of information in social life vastly expand users’ points of contact with the world and produce a wide range of electronically constituted interfaces whereby individuals are coupled with social pursuits in shifting and transient forms (Manovich 2001). Under
these conditions, a new post-bureaucratic regime takes shape. Collaborative arrangements of a shifting and transient nature increasingly diffuse, while the standard bureaucratic form is massively invaded by short-lived projects that defy its specialized, rule-based, and enduring forms by which, up to our own days, individual contributions have been admitted to formal organizations.

Concluding Remarks

I have sought in this chapter to review the ideas about social production and assess the validity of the proposition concerning the institutional significance of the collaborative arrangements with which it is associated. There is little doubt that open, fluid, and shifting collaborative, Internet-based groups increasingly cluster around the development of new services and the creation of value by means of exchanging and reshaping information. A large majority of these collaborative arrangements break with the enduring schedules characteristic of traditional organizations and their considerably denser social space. In their place they introduce loose, piecemeal, and transient ways of connecting individuals to organizations, relations that address the temporary and shifting nature of many of the projects that increasingly underlie contemporary life. While representing the confluence of several cultural and economic developments, these trends have been made possible by the technological breakthroughs that have occurred over the last few decades. Two among them seem to have been crucial: (a) the distinctive nature of the computational paradigm as this is reflected in the modular and granular nature of information and (b) the diffusion of information-processing resources across the population.

The appreciation of the organizational implications of these developments is intimately tied to the consideration of the institutional matrix associated with corporations and more general formal organizations in modern times. I have therefore sought to revisit and reconstruct not only the complex but also the subtle character of this matrix. I have claimed that the defining characteristic of formal organizations (bureaucracies) coincides with the contractual basis of individual participation in the organization that represents a historical break with inclusive forms of involvement. The terms on which individuals join work organizations in modern times are negotiable, concern specific contributions or functions that the individual is expected to perform, are time bound, and, crucially, revocable, even in cases that may entail lifetime employment. The contractual nature of individual involvement in organizations is associated with wider cultural orientations concerning individual freedoms and the operations of social institutions (du Gay 2005).
Formal organizations operate within a complex regime of rules, laws and regulations, and socially legitimate modes of conduct. These provide the framework of rights and obligations that govern the individual/organization relationship and are at the same time an important vehicle for shaping expectations in the workplace.

The degree to which this edifice is seriously challenged by the trends associated with social production and the collaborative arrangements it engenders is, of course, an open question. There are plenty of signs suggesting that these changes are far from transient and episodic (Benkler 2006) and, crucially, indicative of wider shifts that betray a drift away from formal organization (bureaucracy) as the dominant organizational template in modernity. For some time now, the core operations of a growing majority of formal organizations have increasingly been invaded by a variety of specific projects clustering around tasks of limited duration in which participants gather and disband rapidly after project completion (Castells 2000; Newman 2005; Clegg 2007; Contini and Lanzara 2009). Perhaps, as Lyotard (1984) perceptively saw more than thirty years ago, temporary relationships increasingly erode the relatively stable social fabric of modernity and become the currency of the age. A hybrid organizational landscape is taking shape in which many constraints to the free flow of people and resources are lifted. Corporations, but even more so public agencies, increasingly remind of the open nature of public squares where each can stroll, sample the wares, and have refreshment—a new agora, perhaps? The collaborative arrangements of social production are part and parcel of this wider institutional landscape in the making and its double-edged nature. Their prospects are certainly depending on the open character of the information habitat, itself an issue hanging on the outcome of the battle over digital copyright and other impediments to the free exchange of information (Lessig 2002; Benkler 2006).

NOTES

1. Castells (1996, 2001) no doubt extends the concept of network to the operations of the state and to global civil movements. Yet, the understanding of online community as a potent productive force and the conception of social production as a mode of producing goods and services as analysed by Benkler (2006) have escaped him. The same applies to research on networks conducted within the tradition of organizational sociology and organization studies (see e.g. Powell 1990, 2001; Ahuja 2000).

2. Following Agnes Heller (1999), I will throughout this text deploy the singular form ‘the modern social arrangement’ to refer to modernity as a distinct cultural and institutional formation.

3. Recall that the corporation is a legal entity.

4. As a matter of fact, the birth of the individual in the modern sense of the world is inextricably bound up with these values and the identification of individuality on the basis of acquired
rather than inborn or socially non-negotiable (e.g. stratification) characteristics (Heller 1999).

5. See Paul du Gay in this volume.


7. The rules governing individual contributions to the collaborative projects of social networks have been lively debated. As the case again of Wikipedia suggests, they are subject to change with stricter regimes replacing the terms by which individual contributions took place in the early stages of the encyclopedia. It is reasonable to conjecture that the more important a social network is becoming, the stronger the stakes that develop around it and the greater the need for some form of regulation (see e.g. Terdiman 2009). Regulation, however, does not need to lead to centralization (see e.g. Forte and Bruckman 2008).

8. Lyotard’s book was published in France in 1978.

BIBLIOGRAPHY


BUREAUCRACY UNDER SIEGE: ON INFORMATION, COLLABORATION, AND NETWORKS


Author Queries

[AQ1] The heading ‘Preamble’ has been changed to ‘Introduction’. Please check.
[AQ2] Please check the sense of the sentence ‘Irrespectively of…technological shifts.’
[AQ3] The year in ‘Schmidt and Bannon’ has been changed from ‘2002’ to ‘1992’ as per the reference list. Please confirm.
[AQ4] The year in ‘Wellman et al.’ has been changed from ‘1966’ to ‘1996’ as per the reference list. Please confirm.
[AQ5] The year in ‘DeSanctis and Monge’ has been changed from ‘1991’ to ‘1999’ as per the reference list. Please confirm.
[AQ7] Please check the sentence for completeness: ‘While the outcome…collective pursuits’.

[AQ8] ‘Carroll and Hannman 2000’ has been changed to ‘Carroll and Freeman 2000’ as per reference list. Please check.


[AQ10] The year in ‘Powell has been changed from ’1991’ to ’1990’ according to the reference list. Please confirm.

[AQ11] Please check if the inserted year of publication is correct.

[AQ12] Please check if the inserted page range is correct.

[AQ13] Please provide conference date and location for reference Forte and Bruckman (2008).