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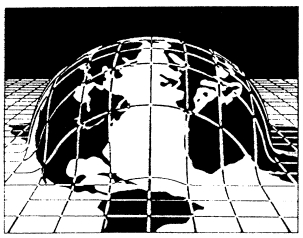

PERSPECTIVE

Professional Work: The Emergence of Collaborative Community

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This paper traces the main lines of evolution of the organization of professional work. The argument is illustrated with material on the case of doctors and hospitals. While market and hierarchy principles have become progressively more salient in professional work, we argue that, in parallel, the community principle has been growing more influential, too. We further argue that professional community is mutating from a *Gemeinschaft*, craft guild form, via Gesellschaft forms, toward a new, collaborative form. This evolution, however, is a difficult one, and the outcome is uncertain. We identify some implications for future research.

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Professionals constitute an increasingly important occupational category. Historically, the professions date back to the late medieval period, when divinity, medicine, law, and the associated university faculty first acquired a status distinct from other occupations as learned professions (Carr-Saunders and Wilson 1933). With the emergence of capitalism came new groups claiming professional status: military officers, architects, scientists, and humanist scholars. In the nineteenth century, these occupational groups actively mobilized in search of professional prerogatives, notably a monopoly over their domain of practice. In these efforts, they were soon joined by other occupations increasingly central to capitalist growth, such as engineering and accounting. The rise of the welfare state in the twentieth century institutionalized teaching, social work, and public health as professions (Watkins et al. 1992).

Much of the scholarly interest in professionals has focused on their relative independence from market and hierarchical pressures, and on the centrality of community in the organization of their work and occupational governance. A rich tradition of research has debated whether this independence and community are destined to erode, or whether they are more likely to generalize across the growing number of knowledge workers and expert occupations (Giddens 1991, Reed 1996, Sullivan and Hazlet 1995). The stakes for organization theory are high: The organization of professional occupations has been a long-standing focus of organizational research (Miner et al. 1994, Pickering and King 1995, Van Maanen and Barley 1984). Professionals are key actors in knowledge-intensive organizations (Bell 1973, Powell and Snellman 2004, Quinn et al. 1996). They play a central role in the accelerating generation and diffusion of innovations within and among organizations (Scott 1995, Swan and Newell 1995). The stakes for organizing practice are high, too, as the welfare of contemporary society depends on the effective organization of professional work.

The thesis of this article is double. First, the ascendance of market and hierarchy principles in the organization of professional work has not diminished the role of community. Instead, all three principles are becoming simultaneously more salient. Second, in this process, community itself is being profoundly transformed. In developing this thesis, we review a broad range of relevant literature, reframe key debates, and identify some issues for future research. Our primary goal is to develop a better conceptual map of the terrain being traversed and the main directions of change; we leave for another paper more thorough discussion of the dynamics of the change process.

We use doctors and hospitals to illustrate and ground our argument. This choice is motivated by the status of physicians (along with lawyers) as the most highly professionalized occupational category, and by the status of hospitals as a locus classicus of research on professional organizations (Flood and Fennell 1995, Freidson 1963, Scott 1982, Strauss et al. 1963). Moreover, health care has been subject to intensified performance pressure from outside and inside the industry (Scott et al. 2000). The resulting tensions, while in some ways unique to health care, are surprisingly similar to those experienced in other professions such as law (Nelson and Trubek 1992), consulting and accounting (Hinings et al. 1999), and teaching (Porter 1989, Rosenholtz 1987). We will intersperse illustrations from these other professions where useful.

Three Organizing Principles

Our analysis is framed by the contrast between three coordinating principles and their corresponding mechanisms: (a) the hierarchy principle, which relies on the authority mechanism, (b) the market principle, which relies on price competition, and (c) the community principle, which relies on trust; see Table 1. (Some authors replace "community" with networks in this tripartite structure; networks, however, seems to us less precise because markets and hierarchies are also tie networks.)

The three organizing principles have different strengths and weaknesses. Hierarchy's comparative advantage is control, market's is flexibility, and community's is trust and knowledge growth (Adler 2001, Dore 1983, Eccles and White 1988, Ouchi 1980, Powell 1990). The hierarchy principle is effective in disseminating codified knowledge, but it offers only weak incentives to create new knowledge and it does not handle well tacit knowledge's embeddedness in practice (Lave and Wenger 1991). The market principle creates strong incentives to create knowledge, but only under strong appropriability regimes, and such regimes impede the socially optimal dissemination of knowledge (Arrow and Hurwicz 1997, Arrow 1962). Community is thus typically prominent in collectivities—like professions, universities, and corporate R&D units—where knowledge-creation and -diffusion are critical.[1] Community's main weakness is the risk of closure and insularity (Freidson 1970).

We use this three-dimensional representation to reframe two key debates surrounding professionals. First, as we will argue below, professionals increasingly work in organizations rather than in solo practices, and these organizations increasingly take a hierarchical form and have come under increasing market pressure; these trends have provoked considerable debate over the emerging organizational form of professional work. One line of

Table 1 Community, Hierarchy, and Market as Three Organizing Principles

	Community	Hierarchy	Market
Social mechanism is:	Trust	Authority	Price competition
Control exercised over:	Inputs	Process/behavior	Outputs
Fits tasks that are:	Interdependent	Dependent	Independent
Best supports goals of:	Innovation	Control	Flexibility
What is exchanged?	Favors, gifts, know-how	Obedience to authority for material and spiritual security	Goods and services for money or barter
Are terms of exchange specific or diffuse?	Diffuse (A favor I do for you today is made in exchange for a favor at a time yet to be determined. Reciprocity is generalized rather than specific.)	Diffuse (Employment contracts typically do not specify all duties of employee, only that employee will obey orders. Other hierarchical relations imply a similar up-front commitment to obeying orders or laws, even those yet to be determined.)	Specific
Are terms of exchange made explicit?	Tacit (A favor for you today is made in the tacit understanding that it will be returned someday somehow.)	Explicit (The employment contract is explicit in its terms and conditions even if it is not specific. Ditto for other kinds of hierarchical relation.)	Explicit

Source. Adapted from Adler (2001) and Cardona et al. (2004).

thought assumes that the three organizing principles we have identified are mutually exclusive ideal types, and that therefore the rise of market and hierarchy must mean the demise of community. We follow an alternative line of thought in arguing that the three principles are better understood more abstractly, and that in real institutions they typically coexist. The ascendancy of market and hierarchy has not meant the retreat of community: The community principle appears to be growing in salience alongside the other two principles.

Second, there is considerable debate over the meaning of community when market and hierarchy become so influential. We argue that this changing constellation leads to a profound mutation in the form of community. Using Tönnies's (1957) classic distinction, we argue that professional community has long embodied a mix of the features of Gemeinschaft-like craft guilds on the one hand and Gesellschaft-like individualistic associations on the other. The emerging forms of professional organization suggest that a transition is under way toward a form of community that transcends the Gesellschaft antinomy, a collaborative form (building on Adler and Heckscher 2006).

In the following sections, we first lay some foundations, then present these two steps in our argument. We then discuss the dynamics of change and why the emergence of this new form of professional organization is so difficult and uncertain. We conclude with some implications for future research.

Community, Dominant

The distinctiveness of professionals' work has been characterized in terms of three main sets of attributes: (a) non-routine tasks requiring expertise based on both abstract knowledge and practical apprenticeship; (b) occupational monopoly over this practice jurisdiction and individual autonomy within it; and (c) legal and ethical responsibility for this practice that is typically reflected in values of service.[2] There has been considerable disagreement on the direction of causal ties among these three sets of attributes. (For a masterful review, see Freidson 2001.) For the purposes of the present essay, however, what is striking is the extent of agreement: The three sets of attributes all point to the centrality of the community principle in the organization and experience of professional work. Professional tasks and expertise requirements make community a particularly efficient organizational principle, as argued in the previous section (e.g., Parsons 1968b). Professionals rely on a collegial community structure to mobilize power in asserting their jurisdiction over such tasks and in governing themselves in the performance of these tasks (e.g., Barber 1963, Freidson 1992, Starr 1982, Waters 1989). Values constitute the normative dimension of the professional community and are a key mechanism for ensuring its capacity to guide their work and govern themselves (Barber 1963, Hall 1968, Parsons 1968a).

Occupations differ in the relative salience of the community principle, and—precisely to that extent—in their degree of professionalization. Reed (1996) distinguishes three broad categories among the more-professionalized occupations: independent professions (doctors, architects, lawyers), organizational professions (managers, salaried engineers, technicians, teachers), and knowledge workers who function as experts for hire (consultants, project engineers, computer analysts). He notes that coordination among the first group relies primarily on collegial relations; among the second group coordination relies more on hierarchy; and among the third group coordination relies more on a network of market relations. The second and third of these groups encounter difficulties in asserting the claims to professional status to the extent that community is a less influential principle in organizing the groups' work.

Some scholars attribute considerable efficacy and virtue to professionals' reliance on the community principle. A strong version of this view sees professional community as a form of organization overlooked by Weber. Spencer (1970), Satow (1975), and Rothschild-Witt (1979) point out that, whereas three of the four types of social action and associated normative bases identified by Weber (affectual, traditional, purposive-rational) are associated with corresponding forms of authority and administration (respectively, charismatic, traditional, and rational-legal), Weber identifies no form of authority corresponding to the fourth type of social action: value-rational. According to Weber, value-rationality (*Wertrationalität*) provides an underpinning of legitimacy for a social order "by virtue of a rational belief in that order's absolute value, thus lending it the validity of an absolute and final commitment" (Weber 1964, p. 130). Satow (1975) and Sciulli (1986) argue that professions are characterized by a normative commitment to values (e.g., health or scientific progress) that transcend organizational imperatives; that these normative commitments have enabled professions—relatively large collectivities—to govern themselves; and that their collegial form of governance might therefore plausibly be interpreted as exemplifying Weber's "missing type."

Other Weberian scholars are less sanguine about professional community (e.g., Waters 1989). If value-rationality did not figure in Weber's typology of forms of organization, it is arguably because value-rationality affords only an unreliable foundation for the legitimate domination (authority) required of any robust form of administration. Effective administration requires that subordinates accept the legitimacy of orders from authorized superiors, but value-rationality accords no legitimacy to orders since all members are assumed equal in their exclusive subservience to the absolute value to which they are all devoted. Weber thus sees collegial

community as effective only in small organizations and in the small group at the top of large organizations (Noble and Pym 1970). Skeptics such as Waters (1989) refer to the critical accounts of the medical profession offered by Starr (1982) and Freidson (1975) to argue that the collegial form of governance does not appear to have allowed professions to steer their members toward policies that favor broader social interests when those interests conflict with members' narrow self-interests.

As discussed in the following sections, the professions have, over the past few decades, come under increasing performance and accountability pressure. Whatever judgment we might formulate concerning the conduct of the professions in the past, these mounting pressures pose a serious challenge to the professions' traditional value-rational, community-based form of organization. As a result, new patterns are emerging in the organization of professional work.

Market and Hierarchy, Ascendent

An accumulating body of evidence shows that, over the past few decades and across a broad range of more and less professionalized occupations, market and hierarchy pressures have been mounting (Leicht and Fennell 1997). These pressures are external, coming from clients, courts, and regulators (Scott et al. 2000); they are internal, due to competition from other practitioners (Gaynor and Haas-Wilson 1999); and they are interprofessional, as categories jostle over jurisdictions (Bechky 2003, Halpern 1992, Zetka 2001).

As a result of these combined pressures, a growing proportion of formerly independent professionals are working in large corporations as salaried employees or partners; if they are partners, the old collegial norms of governance are increasingly giving way to hierarchical forms; and across the board, the ethic of service is being displaced by a commercial spirit (Brint 1994, Robinson 1999). Whatever protection of the public interest had been afforded by professional governance in the past is rapidly eroding (Nanda 2003). Looking to the future, the liberal professions seem doomed to a fate similar to the craft guilds.

Certainly the tendencies in the legal profession in the United States today suggest as much (Kritzer 1999). The traditional legal partnership is under attack. To protect themselves from personal liability, partnerships are being reorganized as professional corporations and limited liability partnerships. To deal with the growing scale of the larger law firms, partnerships are being restructured to create tiers of nonequity partners and to centralize more authority in the hands of CEO-style managing partners and executive committees (Crain 2004). A growing proportion of lawyers work in large firms, where they are increasingly subject to hierarchical norms of productivity, revenue-generation, and quality (Galanter 1983, Spar 1997, Wallace 1995). Barnhizer (2004) argues that the legal profession has lost all capacity for self-governance, and should therefore be regulated like other forms of commerce.

Accounting, too, is under attack. Big corporate clients appear to have captured their auditors (Suddaby et al. 2005). Big accounting firms are diversifying into multidisciplinary practices, and, in the process, losing the ability to socialize young professionals into any distinctively professional—as distinct from commercial—norms and ethics (Toffler 2003). Suddaby et al. (2005) argue that the internationalization of accounting firms' practice has ruptured the regulative bargain between the state and this profession, and that, on the global plane, there is no agency capable of representing any interests other than those of the large corporate clients in the negotiations over international regulation.

Medicine, too, is mutating. Physician-owned facilities are multiplying, turning physicians into capitalist investors (Hackbarth 2005). In areas heavily populated by HMOs, the traditional fee-for-service model is now less common than capitation or nonproductivity-based salary (Robinson 1999). A growing number of hospitals no longer function on the traditional medical staff model, but instead employ physicians directly and/or contract with medical groups (Casalino and Robinson 2003, Robinson 1999). In both cases, hierarchical and market pressures come to bear far more powerfully on physicians. A growing category of physician-managers blurs the boundaries between bureaucratic authority and professional relations. (On clinical directors in the United Kingdom, see Ashburner and Fitzgerald 1996, Bloomfield and Coombs 1992, Cohen and Musson 2000, Doolin 2002, Fitzgerald and Ferlie 2000; on the United States, see Hoff 1999.) Traditional professional values of autonomy are being challenged by the demands for collaboration in bureaucratically structured service delivery and collective process improvement (Audet et al. 2005, Lohr 1995, Panush 1995).

Trends such as these accelerated in the latter decades of the previous century, and have fueled an animated debate over the extent to which professionalism and its distinctive reliance on the value-rationality of professional community is compatible with advanced capitalism and its characteristic emphasis on the formal rationality embodied in both markets and hierarchy (Ritzer and Walczak 1988). In this debate, several broad positions can be discerned (on the corresponding positions in debates on the evolution of medicine, see Hafferty and Light 1995, Hafferty and Wolinsky 1991, Light and Levine 1988, Light 1993, *Milbank Quarterly* special issue 1988, Wolinsky 1993). First, with Bell (1973), some advance a professionalization thesis according to which professions will gradually supersede corporations as the dominant organizing principle in society—a view whose antecedents go back to Durkheim

(1997/1893). Second, against the professionalization thesis, some observers highlight the shift from the more autonomous form toward the more heteronomous form of professional organization (using Scott's 1965 distinction). Some (e.g., Haug 1973, Pfadenhauer 2006, Rothman 1984) interpret this as deprofessionalization, attributing the trend to exacerbate rivalry between professions, diffusion of expertise, and rising levels of public education and skepticism. Others (e.g., Derber et al. 1990, McKinlay and Stoeckle 1988) advance a proletarianization interpretation that highlights professionals' progressive subordination to hierarchical and market rationality. Finally, there are those who see the central vector of change not in the displacement of community, but rather in its mutation. Freidson (1984), for example, argues that there is little empirical support for the idea that professionalism's distinctive features have eroded, but much evidence that regulation within professions has become more rationalized and formalized (see also Wallace 1995).

We submit that the professionalization, deprofessionalization, and proletarianization theses all miss key considerations. The professionalization account understates the growing power of market and hierarchy relative to community in capitalist society. Conversely however, the deprofessionalization and proletarianization accounts miss the factors within a capitalist society that constantly reproduce and indeed magnify the need for the knowledge-creating power of professional community. Capitalist development is increasingly knowledge-intensive, and, as discussed above, effective knowledge-work needs community. Knowledge-workers need community within which to learn the craft elements of their skill sets and within which they can continually advance and share knowledge, both theoretical and practical (Lave and Wenger 1991). The forces of capitalist competition themselves simultaneously tend both to destroy and to recreate community (Adler 2001).

Moreover, with the exception of mutation theory, the contending theories are vitiated by their common assumption that professionals would cease to be true professionals if their governance ceased being exclusively under the community principle and if market and/or hierarchy principles were to come into play. Indeed, Krause (1996, p. 1) asserts: "Visualize a triangle, with the state, capitalism, and the professions at the corners." He believes the professions are losing out to a combination of state and capitalist forces. Savage (1994, 2004) makes a similar assumption in arguing the opposite thesis: Seeing markets, hierarchies, and networks as mutually exclusive forms of organization, she argues that the technical uncertainty of medical professionals' work explains and ensures the persistence of the liberal professional model over corporatized forms of practice. Puxty et al. (1987) draw a triangle whose apexes are market, state, and community, and locate forms of professional regulation within this space. We argue that such analyses fall prey to a fallacy of misplaced concreteness: They treat their three components as mutually exclusive ideal types. As a result, they truncate the space of possible combinations by making it impossible to imagine that two or three of the elements could be simultaneously at work in structuring concrete collectivities such as professions. (Our criticism echoes Eccles and White 1988, Ouchi 1980, and Powell 1990.)[3] They assume that the strengthening of one principle must imply the weakening of at least one of the others, forgetting that the overall degree of organization of a collectivity is itself variable.

In practice, it is precisely such combined forms that seem to be proliferating (see, e.g., Brock et al. 1999). Thus, while the archetypical form of organization of professional work—the independent liberal profession and the small-scale professional partnership—is slowly disappearing, the new forms often reflect greater salience of all three principles. Consider the portraits of the traditional professional partnership and emerging managed professional business (MPB) form offered by Cooper et al. (1996). The professional partnership's interpretive scheme, systems, and structure all reflect the community principle. The MPB introduces the market and hierarchy principles in all three domains: Its interpretive scheme redefines client service in market terms as value for money, and introduces concerns for hierarchical rationalization and effective management; its systems introduce tight accountability for specific market and finance targets and more centralized hierarchical decision making; its structure introduces more market alignment of specialized skills and subunits and more hierarchical integration devices. At the same time, however, community is preserved and even strengthened in the MPB. It is preserved because the managing partner and executive committee are still elected, thus their policy direction is subject to collective control. And community is strengthened because the MPB's more-complex compensation systems now reward partners for mentoring and practice development activities that were ignored under the "eat what you kill" norms of the traditional professional partnership. These mutations are visible in the evolution described in the various cases in Brock et al. (1999): Studies of accounting, consulting, health care, and law all show a shift from the traditional professional partnership model to an MPB model that is distinctive in its combination of all three organizing principles. (See also Hargreaves 1994 on schools, Pinnington and Morris 2002 on architecture, Wallace 1995 on law firms.)

Even as the independence of the liberal professionals recedes, community appears to be strengthening among both the remaining liberal professionals and across other types of relatively professional occupations. Perhaps the most visible manifestation of this is the growing interest in communities of practice (Davenport

and Prusak 1998, O'Dell et al. 1998). While this trend may seem like a fad, we submit that it also reflects a real need in the modern capitalist world for stronger mechanisms by which knowledge-workers can maintain and develop their working knowledge. Both within and across firms and not-for-profit organizations, there is considerable institutional innovation under way to create fora and networks—communities—that can support this need. A growing number of firms are bringing engineers, scientists, and other experts together, within and across their traditional functional groups, to share information about innovations and practice-based insights. Agencies such as the World Bank, the U.S. Army, and the U.S. Navy have been investing considerable resources in facilitating the emergence and work of communities of practice (Snyder and Briggs 2003). Similarly, among consulting firms and other experts for hire, collaboration in such cross-cutting communities is increasingly seen as a valuable tool to foster greater knowledge-sharing (Adler 2006, Davenport and Prusak 2005, Fulmer 2001, Leonard and Kiron 2002, Wenger et al. 2002, Wenger and Snyder 2000).

In health care and law, even as the traditional liberal professional model recedes, the popularity of such communities of practice has grown. Accountability pressures for greater efficiency and quality call for more systematic innovation that is more closely grounded in daily practice (Frankford et al. 2000). Medicine has long relied on upstream, off-line R&D in universities or in the medical device and pharmaceutical industries, but pressures for cost-effectiveness, safety, and quality have stimulated the emergence of community-based performance-improvement practices that engage the rank-and-file practitioner (Audet et al. 2005, Swan et al. 2002). Similarly, in law firms there is growing interest in creating internal communities and knowledge management infrastructure for sharing working knowledge (Lamb and Davidson 2000).

Community, Transformed

The previous section argued that the new emerging form of organization of professional work combined rather than replaced community with market and hierarchy. We are, however, still left with the question of the meaning of community in this new constellation. It is not at all clear what community means when the pressures of market and hierarchy are so strong.

The problem is posed most starkly for the liberal professions: For many observers the liberal professions embody community in its purest form. As Gordon and Simon (1992) observe, the collegiality of a small partnership of autonomous professionals doing intrinsically meaningful work stands as a prefigurative model of a utopia of a free association of producers. From this vantage point, the adoption by liberal professions of corporate forms represents a further extension of Weber's iron cage. Certainly it feels that way to many physicians and lawyers who bemoan the corporatization and bureaucratization of their professions.

This section contests the assumption that the liberal profession is the highest expression of community. For this argument to proceed, we need a typology of forms of community. We build on Adler and Heckscher (2006), who contrast the two traditional forms of community—Gemeinschaft and Gesellschaft as described by Tönnies (1957)—with a new, collaborative form.[4] They argue that the two traditional forms are limited in their ability to support the development and diffusion of knowledge, and that, as a result, functional pressures are encouraging the emergence of the collaborative form. Their analysis did not, however, address the specific forms of community in professional work. In the following paragraphs, we argue that important forces are indeed pushing professional community in the direction of a more collaborative form. If the liberal professions are doomed, it is not because the rise of hierarchy and market threatens community. It is because they embody a form of community that is increasingly obsolete.

Gemeinschaft and Gesellschaft in Professional Organization

Krause (1996) characterizes the liberal professions as guilds. This is half correct. The medieval craft guilds were largely Gemeinschaft-type collectivities, and some semiprofessional occupations today still resemble closely these guilds (e.g., real estate agents and screen actors); but the modern liberal professions embody a mix of Gemeinschaft and Gesellshaft forms of community (as noted by Parsons 1939). As such, the liberal professions are somewhat more effective knowledge-ecologies than were the guilds—but not effective enough to deal with the pressures on them today.

On the one hand, the liberal professions embody some elements of Gemeinschaft that were prominent in the medieval guilds. Like guilds, the liberal professions are characterized by occupational closure and monopolistic competition. Like the guilds, too, the practitioners of the liberal professions employ a limited number of workers. The lawyer may employ associates, but, as with the guilds, these apprentices are limited in number because they require the lawyer's direct supervision. An individual doctor may employ some office assistants and technicians, but, as with the guild workshops, these assistants serve only to enhance the doctor's task performance, not as a direct source of profit.

On the other hand, the modern liberal professions also evidence some Gesellschaft characteristics (Mellow 2005). Where the craft guilds remained small-scale operations, modern law firms and medical groups, adapting to the exigencies of the market, have grown enormously in scale and have introduced rational administration—although, like guilds, their authority structures remain

relatively flat. Whereas craft guilds relied on tradition-based apprenticeships, the liberal professions rely on rational university training—although this is combined with apprenticeships as resident doctors and associate lawyers, etc. As Parsons (1939) points out, modern liberal professionals are universalistic in their orientation compared to the particularism of the guild craftsmen's world; they are more functionally specific and demonstrate greater affective neutrality—although, like the guilds, they preserve something of Gemeinschaft's collective orientation. Gesellschaft is even more influential in the categories of organizational professions and experts for hire: Here the guild elements of professionalism have been largely eradicated by the corrosive effects of formal rationality, market, and hierarchy.

These various mixes of Gemeinschaft and Gesellshaft forms of community are limited in their capacity to develop and diffuse knowledge: The Gemeinschaft bond is too insular and traditionalistic (Waters 1989), and the Gesellschaft bond is too narrowly self-interested (Sharma 1997). Craft guilds were not entirely technological conservative (see Epstein 1998, against the received wisdom summarized by Mokyr 2002), but they offered little support for the development of new technology because they had no differentiated research functions, and they offered little support for the diffusion of new technologies because this diffusion relied on the migration of skilled practitioners. In contrast, the modern professions, based in universities, are equipped with a specialized knowledge-creation capacity, but this capacity is far removed from the problems of daily professional practice (Sternberg and Horvath 1999). When this distance is combined with strong professional autonomy, the result is predictable. Even when professionals are obliged to regularly update their technical know-how in continuing professional education classes, there are tremendous lags and unwarranted variations in professional practice.

Medicine illustrates the problem. (On the parallel problems of law firms, see Maister 2006.) Quality assurance in medicine was long dominated by a philosophy akin to manufacturing's minimum acceptable quality approach—long after large swaths of manufacturing had adopted continuous improvement practices (Buetow and Roland 1999). Continuing medical education is notoriously ineffective in disseminating new technologies and practices (Oxman et al. 1995). The profession's inability to ensure appropriate quality levels and diffusion rates has increasingly been challenged by a growing public demand for accountability (Emanuel and Emanuel 1996). It is, after all, these deficiencies that explain why avoidable medical errors in the U.S. healthcare-delivery system kill the equivalent of "two 747s crashing every three days" (Leape 1994).

These deficiencies are in considerably measure a reflection of the nature of medicine's professional community. Consider the community formed by doctors at a hospital. Most doctors are not employees of the hospital, but rather are independent professionals who are afforded privileges to practice there (Perrow 1965). The doctors collectively govern themselves and their relation to the hospital administration through the leaders they elect and the committees they create in a formally constituted medical staff. This structure might in principle support a vibrant community of practice dedicated to continuous improvement, but, in many cases, it has supported parochial egoism. Decisions by the credentials committee to refuse or revoke privileges are sometimes simply anticompetitive and self-interested (Blum 1991). It was not until recently that doctors applying for privileges were even required to reveal prior disciplinary or legal actions against them. Peer reviews by the quality committee are sometimes muted because the income of staff members depends on a referral stream from the subject of the review (Baldwin et al. 1999). White's (1997) characterization of what he calls the traditional Joint Commission [JCAHO] model of the medical staff is eloquent.[5] Department committees often function as a club for mutual protection and advancement. Because leadership is voluntary and rotating, there is often no long-range planning "other than to try to preserve the status quo" (White 1997, p. 306). There is often an entrenched aversion to resource management and outcomes measurement systems since they threaten individual autonomy (Freeman et al. 1999, Wynia et al. 2000). There is little loyalty to the staff as a whole. The participatory, one-person-one-vote approach gives equal power to members who may practice only rarely in the hospital. These members often block any changes that they see as threatening in any way. Committees accumulate in response to JCAHO requirements or internal needs, but are rarely reviewed for effectiveness.

The Emergence of Collaborative Community

While there are important countervailing forces (which we discuss below), the demands on contemporary professional work for greater accountability and for more effective knowledge generation and diffusion are stimulating the emergence of a new form of community, one that transcends the limitations of the craft guild and the liberal profession. This appears to be the common thread running through some of the most striking innovations in the organization of professional work.

Adler and Heckscher (2006) argue that some such transformation of the nature of community is operative across a broad range of relatively knowledge-intensive occupations and organizations. They argue that the community/market/hierarchy framework we have used in this paper needs extension because community itself can take qualitatively different forms, and that a new form is emerging that they call collaborative. This new form contrasts with the two earlier ones in several ways; see Table 2.

Table 2 Three Forms of Community

	Gemeinschaft	Gesellschaft	Collaborative
Structure			
Division of labor (using Durkheim's 1997/1893 categories)	* Mechanical division of labor coordinated by common norms	* Organic division of labor coordinated by price or authority, or both	* Growth in organic division of labor coordinated by conscious collaboration
Nature of interdependencies	* Vertical dependence	* Horizontal independence	* Collaborative interdependence, both horizontal and vertical
Tie network structure	* Local, closed	* Global, open	* More global, open ties, as well as stronger local ties
Values			
Basis of trust	* Loyalty * Honor * Duty * Status deference	* Integrity * Competence * Conscientiousness * Integrity	* Contribution * Concern * Honesty * Collegiality
Basis of legitimate authority	* Tradition or charisma	* Rational-legal justification	* Value-rationality
Values	* Collectivism	* Consistent rational individualism	* Simultaneously high collectivism and individualism
Orientation to others	* Particularism	* Universalism	* Simultaneously high particularism and universalism
Orientation to self	* Dependent self-construals	* Independent self-construals	* Interdependent self-construals

Source. Adapted from Adler and Heckscher (2006).

Collaborative community is distinctive, first, in its social structures that support horizontal coordination of interdependent work processes. In contrast, Gemeinschaft relies on what Durkheim (1997/1893) calls a mechanical division of labor—pooled in J. D. Thompson's (1967) terminology—where coordination relies on traditional norms. Gesellschaft's division of labor is organic—interdependent—but relies on market prices and hierarchical authority to ensure coordination. Collaborative community, like hierarchy, supports interdependence with formal procedures. Whereas under the hierarchy principle these procedures are defined by hierarchical superiors and used by them to monitor performance and drive improvement, under collaborative community the procedures are designed collaboratively and used by peers to monitor each other and to work together to improve performance. Compared to other forms of community, collaborative community is distinctive in its reliance on value-rationality—its participants coordinate their activity through a shared commitment to a set of ultimate goals. In short, they form a community of purpose (Heckscher 1995). Its highest value is therefore interdependent contribution to these shared goals. In contrast, Gemeinschaft values loyalty and Gemeinschaft values rational consistency, individual integrity, and autonomy. Subjectively, collaborative community is distinctive in its reliance on interdependent self-construals, rather than on the dependent self-construals characteristic of traditional Gemeinschaft or the independent self-construals characteristic of modern Gesellschaft.[6]

When viewed through the lens of this typology, it becomes clearer why the community of the liberal professions is seen a prefigurative (Gordon and Simon 1992). In at least one key respect, professions already embody the collaborative form, namely in the central role played by value-rationality. In other respects, however, as argued in the preceding paragraphs, Gemeinschaft and Gesellschaft prevail in the liberal professions. Our thesis here is that the emerging type of professional community more fully embodies the collaborative form.

We should note, however, one caveat. The collaborative model as characterized by Adler and Heckscher and summarized in Table 2 understates a key feature of challenge currently facing professional work. The discussion above makes clear that the collaboration demanded of professionals today is not restricted to peer professionals, but increasingly embraces peers from other professions (surgeons, for example, need to develop more comprehensive collaboration with anesthesiologists), with lower-status colleagues (with nurses), with clients (patients), with administrators (hospitals management), with organized stakeholders (patient rights groups), and with regulators (JCAHO, government). Collaboration circumscribed by Gemeinschaft insularity will not satisfy the demands currently weighing on the professions. A more outward-looking, civic kind of professionalism seems to be on the agenda to more fully embody the collaborative ideal (see Hargreaves 2000, Sullivan 2005).

Table 3 expands on the key features of this new, collaborative, and civic form of organization of professional work, using medicine to illustrate. The following paragraphs elaborate.

In contrast to the traditional model of the medical staff described by White (1997), consider the portrait

Table 3 Three Forms of Professional Community: The Case of Medicine

	Medicine as a craft guild	Medicine as a liberal profession	Medicine as a collaborative and civic profession
Task expertise	* Tacit knowledge * Expertise acquired in apprenticeship	* Mix of tacit and explicit knowledge * Expertise acquired in university training plus apprenticeship, with limited continuing education updates and journal reading	* Expertise acquired in university training plus apprenticeship plus actively managed continual learning both on and off the job * Faster rate of growth in technical knowledge * Practitioners need new skills: teamwork, learning, information systems, managerial
Structure			
Division of labor	* Mechanical division of labor coordinated by common norms: Every practitioner is a generalist * Earnings based on individual patient fees	* Organic division of labor between generalists and specialists, coordinated by referrals and dyadic social exchange * Organic division of labor between practitioners and specialized university and corporate researchers, coordinated by market and social ties * Earnings based on patient fees plus profit sharing among partners	* More extensive specialization of practitioners * Organic division of labor coordinated by conscious collaboration: medical groups/staffs ensure planned collaboration between primary care and specialists and among specialists * Emergence of new professional-managerial roles * Salaried doctors rewarded both for individual and group performance, both cost-effectiveness and quality, both clinical work and organizational roles, both patient care and community health
Nature of interdependencies	* Vertical dependence of patient on doctor and of apprentice on doctor * Horizontal independence of doctors from each other * Limited size of practice: One doctor can supervise only few apprentices * Direct democracy in governance of guild * Autocratic relation to apprentices	* Vertical dependence of patient on doctor * Entrants to profession undergo both rationalized formal training and craft type apprenticeship * Horizontal independence of doctors from each other * Limited size of practice, few economies of scale and little role for leadership * Direct democracy among medical group partners and medical staff members	* Collaborative interdependence of doctor and client * Collaborative interdependence within professional organization: Medical group/staff have formal, participative structures and enabling procedures for managing workflows and for reviewing quality and utilization; group/staff leadership plays key role * Strong economies of scale in management infrastructure * Representative democracy among partners allows for high levels of consistency and coordination plus high levels of participation * Legitimate participation extends to lower-status collaborators (e.g., nurses) and to external stakeholders
Structure of tie network	* Local, closed: Doctors have little communication with any others outside their locale	* Greater opening toward world of science during university training, occasional continuing education, and journals	* Doctors also linked to global databases of best practices * Stronger ties to broader range of actors in the local community * Records are open to patients and peers
Values			
Basis of trust	* Deference of patient to doctor * Deference of apprentice to master * Honor among masters	* Deference of patient to doctor * Deference of apprentice to master * Profession assures minimum level of competence by review of exceptional incidents * Reliance by peers and clients on personal integrity of the professional	* Transparency to peers and patients * Professional colleagues regularly review each other's cost-effectiveness and quality to identify and disseminate best practices * External stakeholders engage regular dialogue with professionals about cost and quality

Table 3 (cont'd.)

	Medicine as a craft guild	Medicine as a liberal profession	Medicine as a collaborative and civic profession
Basis of legitimate authority	* Authority of master based on mastery of traditional know-how	* Professionals are independent of hierarchical authority * In theory, the legitimacy of orders is based on value-rationality; in practice, based on formal credentials and reputation for expertise	* Value-rational authority based on validity of evidence; evidence-based medicine
Values	* Technical prowess and commercial success	* Technical prowess and commercial success	* Contribution as part of an interdependent effort on behalf of patients
Orientation to others	* Collectivism in loyalty to guild * Plus individualism in pursuing personal interests within collective norms * Particularism in commitment to individual patients and personal practice patterns	* Collectivism in loyalty to the profession: No public criticism of colleagues * Plus expectation of consistent rational individualism in pursuit of personal gain * Tension between collectivism and individualism managed by monopolistic competition * Universalism (in principle) in commitment to science combined with particularism (in practice) in commitment to practice patterns based on personal experience	* Transcends tension between collectivism and individualism in ethos of collaborative interdependence * Simultaneously high particularism and universalism: Doctors are responsible for both individual patient and community health
Orientation to self	* Belonging, guild membership plus private property	* Autonomy plus collegiality	* Interdependent collaboration; teamwork

Source. Adapted from Institute of Medicine (2001), Maccoby et al. (1999), and other references in text.

painted by the Institute of Medicine (IOM) of a new health system for the 21st century (IOM 2001). Where the traditional care delivery model is one in which "individual physicians craft solutions for individual patients" (p. 124), in the model advocated by the IOM

> the delivery of services is coordinated across practices, settings, and patient conditions over time. Information technology is used as the basic building block for making systems work, tracking performance, and increasing learning. Practices use measures and information about outcomes and information technology to continually refine advanced engineering principles and to improve their care processes. The health workforce is used efficiently and flexibly to implement change. (p. 125)

The IOM report describes an evolution path from the guild-like form of medical practice beyond the liberal profession form toward a collaborative form. Collaborative learning is the heart of the new model. Its procedures support a focus on patient service; utilization management is a responsibility shared by all physicians; information systems support both individual physician decision making and collective discussion of individual performance differences; strong leaders develop relationships of trust and communicate a vision (Maccoby et al. 1999). Healthcare organizations such as Intermountain Health Care and the Mayo Clinic exemplify aspects of the emerging model, although neither of them appears to have implemented all its features (Bohmer et al. 2002; Maccoby 2006, Maccoby et al. 1999). Robinson (1999) describes the mutation under way in these terms:

> The now passing guild of autonomous physician practices and informal referral networks offered only a cost-increasing form of service competition and impeded clinical cooperation among fragmented community caregivers. The joining of physicians in medical groups, either multispecialty clinics or IPAs, opens possibilities for informal consultation, evidence-based accountability, and a new professional culture of peer review. (p. 234)

The leitmotif of the new form of professionalism is collaborative interdependence (see, e.g., Silversin and Kornacki 2000a, b). A growing number of hospitals are drawing physicians into collaboration with nurses and other hospital staff to improve cost-effectiveness and quality, often bringing together previously siloed departments in the process (Gittell et al. 2000). Bate (2000) described the new form of organization that emerged at one United Kingdom National Health Service hospital as a network community, characterized by constructive diversity rather than unity, by transdisciplinary forms of working rather than tribalism. A recent report describes the creation at Riverside Methodist hospital in Ohio of clinical operating councils that brought cross-functional and cross-status groups together to examine improvement opportunities in broad service lines

such as primary care, heart, and women's health (Hagen and Epstein 2005). Other hospitals have found that such committees are the ideal vehicle for developing and tracking the implementation of clinical pathways (Adler et al. 2003, Gittell 2002). Here, guidelines are not imposed on physicians by insurance companies aiming ruthlessly to cut cost; instead, they are developed collaboratively by teams of doctors, nurses, and technical and administrative staff aiming simultaneously to improve quality and reduce cost. In these new structures, physicians are drawn out of their fiefdoms and beyond their "captain of my ship" identity. Intermountain Health Care (Bohmer et al. 2002) and San Diego Children's Hospital (March 2003) exemplify such collaborative approaches to pathway development. These two cases are also notable for the important role played in each by staff functions that facilitate efforts to generate practice-based knowledge. Where Freidson (1984) feared that such staff functions would fragment the profession and erode the autonomy of the practitioner, the experience of hospitals such as these that have been most successful in implementing guidelines and pathways suggests that strong collaboration between staff and line organizations is a crucial success factor (Kwon forthcoming, Tucker and Edmondson 2003).

Some of the larger medical groups, too, have been developing new organizational forms to support the collaborative learning needed in the new competitive environment. Governing boards are evolving away from simple partnership meetings toward more complex, articulated structures capable of exercising effective leadership (Epstein et al. 2004). At groups as different as the Mayo Group and Permanente Medical Group, an explicit ethic of collaborative interdependence has emerged (Olsen and Brown 2001, Pitts 2003). New organizational structures and processes link previously autonomous physicians and departments in improvement efforts (Gittell et al. 2000, Norton et al. 2002). The corporate form appears to facilitate these changes. Best practices such as disease management programs, quality-oriented practice pattern information, and financial bonuses for quality are far more common in large, integrated medical groups such as Permanente than in the cottage industry of private practitioners in small offices (Rittenhouse et al. 2004).

Beyond the individual hospital, communities of practice are increasingly being used in lieu of conventional continuing medical education to accelerate learning and diffusion (Endsley et al. 2005, Frankford et al. 2000, Parboosingh 2002). Quality improvement collaboratives have attracted considerable attention as a way to bring together a broader community around specific improvement goals. (For an overview, Massound et al. 2006; for an example, Mills and Weeks 2004.) The most ambitious of these brings together a variety of stakeholders from different hospitals, medical groups, health plans, and employers to learn from each other (Solberg 2005).

Alongside these cases in health care, other professions also provide examples of collaborative community. Numerous professional service firms are working toward what Maister (1985) called the one-firm firm (see also McKenna and Maister 2002 for an update). Here, the emphasis is on teamwork rather than the "eat what you kill" ethos of the Gesellschaft partnership that still prevails in the vast majority of U.S. law firms (Poll 2003). As Cooper et al. (1996, p. 631) note,

> the meaning of the term "partner" has also changed. In the MPB, a partner is a team player, one who trusts the leadership and works for the common good, for example by transferring work to the person in the firm who is most competent or short of work.

A growing number of professional firms in law and accounting are now seeking performance improvement through collaborative community approaches to practice management (Lambreth 2005, Lambreth and Yanuklis 2001, Yanuklis 2005). Some in-house legal departments are using participative approaches to Six Sigma (Sager and Winkelman 2001).

Teaching is another illuminating case. According to Hargreaves (1994, 2000), teaching once relied on a craft-type community. Beginning in the 1960s, teaching moved into the age of the autonomous professional. Although this brought greater status, more technical knowledge, and higher salaries, it also inhibited innovation by impeding the diffusion of superior practices. By the 1990s, a new age had begun, that of the collegial professional. In the current period, the sphere of collaboration is broadening, drawing teachers into more active civic engagement with the wider community (see also Nixon et al. 1997).

Toward Collaborative Professionalism?

We should not underestimate the difficulties facing the propagation of this new form of professional organization. The ethos and structures of autonomy among the liberal professions create a powerful counterweight to any move toward the broader and denser interdependencies characteristic of collaborative community. Robinson (1999) dissects the multiple economic, legal or regulatory, and organizational impediments that slow the emergence of larger medical groups and other forms of corporate—i.e., organized—medical practice. Leape and Berwick (2005) analyze the multiple factors that explain why progress on quality in medicine has been so slow in recent years, and highlight the role of the culture of medicine and its "tenacious commitment to individual, professional autonomy (p. 2387)" as a "daunting barrier to creating the habits and beliefs . . . that a safe culture requires (p. 2387)." Indeed, even when the appropriate formal structures are in place, the new models face deep resistance:

> Many physicians, however, are individualistic in orientation and do not necessarily enter group arrangements very easily or comfortably. . . . [B]uilding physician groups is a

> difficult process. Most of the groups visited [in this study] are not well organized—they are groups in name only. Whatever group culture does exist is often oriented to preserving this loose-knit affiliation rather than developing a stronger organization. This culture of "autonomy," however, is not conducive to building an organization that encourages the development of physician-system integration or care management practices. (Gillies et al. 2001, p. 100)

Cooper et al. (1996) delineate the complex dynamics of change in the presence of sedimented organizational archetypes and active resistance. The professional categories whose market and political positions are most entrenched—such as specialist doctors—can mount formidable opposition to the forces of change. This resistance gains strength from professionals who feel that the attack on the liberal profession model is an attack on the quality of professional service (Fielding 1990, Hoff and McCaffrey 1996, Warren and Weitz 1999). Their concerns are not without foundation. Managed care companies attempt to influence treatment decisions through denials of payment authorization, and drug formularies restrict the range of medications physicians can prescribe (Himmelstein et al. 2001, Warren et al. 1998). A wave of hospital conversions to for-profit status have increased profits, but also have led to reduced staffing and salary rates and to increased mortality rates (Picone et al. 2002). Resistance by physicians and public revulsion at some of the denials of treatment imposed by insurance companies seem recently to have slowed down the trend to capitation of fees and corporatization of organization that had accelerated during the 1985–2000 period (Cunningham 2004).

Moreover, the emergence of collaborative community in professional work has not yet shown the way to a new form of regulative bargain for liberal professions. In the case of medicine, notwithstanding the unfolding crisis of healthcare costs, the American Medical Association has been resolutely opposed to any regulatory changes that might involve cost containment (e.g., Council on Ethical and Judicial Affairs 1995). For several years, the American Institute of Certified Public Accountants (AICPA) resisted pressure from the Securities and Exchange Commission to separate accounting and consulting and to tighten oversight to ensure the independence of auditors. It was only after the Enron scandal that Congress acted via the Sarbanes-Oxley Act (2002) to subordinate the AICPA to an independent board, the Public Company Accounting Oversight Board (U.S. Securities and Exchange Commission 2003).

Some professionals, however, have taken a more proactive stance toward the new accountability demands. Berwick and his colleagues at the Institute of Healthcare Improvement (IHI) orchestrate several programs aiming to radically improve health care through collaborations between physicians, hospital executives, patients, employers, and other stakeholders (see www.ihi.org). Sachs (2003) argues for an activist teaching profession. Nixon et al. (1997) describe key elements of this profession in terms consistent with our model i.e., collegiality, negotiation, collaboration, and partnership. They also emphasize the interdependence of teachers with students, community, and other professions and agencies. Peters et al. (1999) argue for a more publicly engaged professional practice of science. These struggles within professions are not new (see, on law, Halliday and Karpik 1997, Shamir 1995), but they appear to have taken on new urgency in the face of the mounting challenges to the more traditional forms of professional community.

Among the organizational and expert-for-hire professions, collaborative community appears to be making more headway (see, e.g., Adler 2006 on the case of software services consulting). In these occupations, the counterweight of entrenched autonomy is reduced by previously established hierarchical and market structures and by the direct pressures for improved performance. (On the other hand, these same features give instrumental market rationality greater weight relative to value-rationality, and this limits the development of a properly civic ethos.) We lack reliable data on the ecology of these various organizational forms, but our review of the main books and case collections suggests that examples of communities of practice are disproportionately more common within corporations and bureaucratic agencies than among the liberal professions. It is often examples from the former sectors that are used as templates in efforts to legitimize the new form among liberal professions (see for example Bate and Robert 2002; Institute of Medicine 2000, 2001).

Conclusion

Within the liberal professions as well as across the broader spectrum of relatively professionalized occupations, external and internal pressures for greater accountability, quality improvement, and cost reduction are intensifying. Neither hierarchy nor market alone affords very effective responses to these pressures. Hierarchy creates vertical authority structures that are ineffectual in supporting rapid knowledge growth. The market principle, while popular in the current wave of neoliberalism, is ineffectual because the market for reputation fails in the presence of deep asymmetries of expertise in the professional-client relationship. From the social welfare economics point of view, the fact that this expertise asymmetry has been somewhat reduced by higher education levels and increasing client sophistication does not suggest that market or hierarchy should replace professional governance, but rather that clients should play a more active role in this professional governance—considerably more active than was allowed by the earlier

forms of professional community that left professionals almost entirely autonomous, regulated, and accountable only from a distance.

Our analysis suggests that a new form of community may indeed be taking shape in the organization of professional work in response to these pressures. This analysis suggests some directions for future research at both the organizational and the individual levels. At the organizational level, the Adler-Heckscher characterization of forms of community and our extension to the professions in this essay need more scrutiny, both from a theoretical and an empirical point of view. The theoretical argument needs testing. For example, a strong implication of our analysis is that communities of practice in knowledge-intensive contexts will be more effective when they take a collaborative, as distinct from a Gemeinschaft or Gesellschaft, form. A key step will be to operationalize the distinctions so they can be unambiguously deployed in empirical research. Research instruments designed to capture the salience of community controls need to be sensitive to the different textures of Gemeinschaft, Gesellschaft, and collaborative forms. Tables 2 and 3 suggest several dimensions along which differences in structure could be captured. These include the nature of the division of labor, the nature of interdependencies, and the structure of the tie network. It would be particularly useful to test whether the proposed collaborative form took a similar shape in the liberal professions and in the organizational and expert-for-hire categories.

Our paper has not devoted much space to the individual's subjective experience of these different forms of professional work, but if our analysis captures real organizational differences, we should expect to find corresponding differences in professional self-identities. In the collaborative form, we expect to see more interprofessional cooperation as professionals learn to work in more heterogeneous teams and learn to see other professional communities and nonprofessionals as sources of learning and support rather than as interference. Research to date has focused mainly on the barriers, status tensions, and jurisdiction disputes that impede collaboration; future research could usefully focus on how more collaborative forms give rise to new identities. A related question is how to prepare new professionals by training and socialization to participate in this new form.

However, we do not want to overstate our case. The move toward a form of professionalism based on collaborative community is a difficult one, and the outcome is far from certain. It is not inconceivable that under the pressures of hierarchy and market forces the professions' commitment to value-rationality be further eroded, that the trust nexus be displaced by the cash nexus, and that the quality of professional services progressively degrade. However, the alternative scenario we have sketched also seems possible, where professions abandon the insular, elitist model and embrace greater interdependence with a broader range of stakeholders. Many professionals would experience this move as a stressful destruction of their traditional independence (e.g., Swan et al. 2002), but, as Marx noted, history often progresses by its bad side (Marx 1976/1847, p. 174).

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Endnotes

[1]Differentiating input, behavior, and output controls within organizations leads to a similar conclusion (Abernethy and Brownell 1997; see review by Chenhall 2003, Eisenhardt 1985, Ouchi 1978, Snell 1992, Thompson 1967). Input controls (selecting staff for values compatibility and ensuring strong socialization) imply reliance on community, behavior controls are classically bureaucratic-hierarchical mechanisms, and output controls resemble the market's reliance on price or quantity assessments. Input controls are relied on when there is incomplete knowledge of cause-effect relations and ambiguous performance standards—which are precisely the conditions that prevail in highly professionalized, knowledge-intensive tasks.

[2]We should note that this characterization is largely restricted to the situation in the United Kingdom and United States (Freidson 1994). In continental Europe, government's role is stronger and more direct in shaping the structures and values of professions. A higher proportion of professionals are employed by the state; many are educated at prestigious, state-controlled institutions of higher education; and it is with these institutions rather than with a corporate professional body that they identify. The viability of this weaker form of professionalism has led European scholars to see more compatibility between bureaucracy and professionalism than is commonly asserted in Anglo-American research. It has also occasioned an on-going debate about the historical-sociological significance of the profession as a construct (see, for example, Sciulli 2005). In the present essay, we leave aside these concerns to focus on the Anglo-American constellation.

[3]Our argument is similar to that of Snell (1992), Cardinal et al. (2004), Roth et al. (1994), Kirsch (1997), and Jaworski (1988): They focus within organizations and contrast informal and formal control systems, and show that these can be combined within the one organization. Their informal controls resemble what we have called community, and their formal controls are a mix of hierarchy and market.

[4]Where many commentators interpret Tönnies's Gemeinschaft/Gesellschaft contrast as one between community and its absence in anonymous market transactions, we follow Adler and

Heckscher (2006) in arguing that Gesellschaft too is a form of community, one based on shared values of consistent, instrumentally rational, self-interested, action. These values constitute crucial background conditions for market and modern bureaucracy in their real instantiations. Gemeinschaft, by contrast, is a more traditional form of community based on strong personal bonds of loyalty and values of honor and shame.

[5]The Joint Commission on Accreditation of Healthcare Organizations evaluates and accredits nearly 15,000 healthcare organizations and programs in the United States. Formed in 1951, it is an independent, not-for-profit organization. Among the criteria for accreditation, hospitals must show an effectively functioning medical staff structure.

[6]This concept of collaborative community is quite different from that of network sociality (Wittel 2001) and related concepts that celebrate the proliferation of weaker ties supported by information technology and broader social trends such as globalization. Most of the accounts of such network communities suggest more than anything the further development of classical Gesellschaft. In some cases, of course, even online communities also develop Gemeinschaft and collaborative qualities (e.g., De Cindio et al. 2003).

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