

# *Quarterly Journal of Ideology*

*A Critique of Conventional Wisdom*

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## **Organizing Knowledge Workers: An Ideological Reading of 'Communities of Practice' (CoPs)\***

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### Abstract

This paper explores the purported advances knowledge workers employed in knowledge-intensive firms have made over white collar workers in bureaucratic organizations and blue collar workers employed in industrial firms. We employ the emerging literature on communities of practice (CoPs) applied to organizations as a means of assessing these advances. In this literature, organizations which sponsor CoPs are viewed as democratizing the workplace, liberating and empowering knowledge workers, enhancing organizational learning and conferring a sustainable competitive advantage upon both the knowledge generating firm and the knowledge workers therein. Taking the knowledge worker's view on CoPs, not the knowledge sponsor's, we argue that CoPs mask the asymmetric power relations between manager/administrators and knowledge workers. By romanticizing the notion of "community" and placing "practice" in the hands of the sponsors, the literature on CoPs downplays the manner in which CoPs permit sponsors to control knowledge obsolescence, engage in knowledge work and speed up and cut

back on sponsorships when the CoP uses its knowledge to push in directions which fail to serve the sponsors.

(Key terms: workplace ideology, communities of practice, knowledge workers)

“But a new organizational form is emerging that promises to complement existing structures and rapidly galvanize knowledge, sharing, learning and change. It is called community of practice.” (Wenger and Snyder, 2000:131)

In the world of ideas, it is vital to disentangle a concept that gives rise to a discourse which, while rooted in the same concept, addresses two distinct audiences. The contemporary literature on “communities of practice” (hereafter CoPs), an important literature for understanding the organization of knowledge work, is just such a concept. Jean Lave (1990; 1991) and Lave and her colleagues (Chaiklin and Lave, 1995; Holland and Lave, 2001; Lave and Wenger, 1991; Rogoff and Lave, 1984) employ CoPs as a descriptive theoretical lens to examine how, and to some extent why, learning is situated. Lave and her colleagues argue that learning is a collective, not individual, endeavour which occurs most effectively when naturally-occurring communities grounded in respect, tolerance and trust, motivate apprentices to learn from veteran knowledge practitioners or elders. This CoPs literature, we believe, is open to issues of conflict, power and the role of the neophyte or apprentice in either slavishly adhering to the traditions of the past or nervously quarrelling with the status quo in an attempt to innovate. Lave and her colleagues address educators. In their work, CoPs address learning as a contested terrain. In it we study self-sponsoring CoPs and how they generate, disseminate and merge knowledge.

The second literature on CoPs and the focus of this ideological reading grows out of the collaboration between Lave and Wenger (1991) and is clearly discernible in the work of Wenger (1998, 2000a, 2000b) and Wenger et al. (2002). This work has been given theoretical depth and legitimizing ties to the field of organizational studies by John Seely Brown and Paul Duguid (1991, 2000, 2001, 2002). Wenger’s corpus of work on CoPs, tied to Brown and Duguid’s, takes Lave and her colleagues’ situated learning through a series of conservative assumptions and redirects the discourse from an audience of educators to one of business managers, administrators and consultants. While both are eager to help develop effective means of enhancing learning, each does so for very different motives. Educators’ concerns entail empowering knowledge

practitioners or learners so that, in developing themselves, they can nurture a sustainable and just community.

CoPs in their application to commercial settings are sponsored and cultivated by those who seek to increase the competitive advantage of increasing intellectual capital in knowledge-intensive organizations (Alvesson, 1995; Brown, 2004; Stewart, 2002). The narrative tone here, unlike the first CoPs literature, is no longer descriptive. The question “How can we learn and effectively transfer, store and stabilize knowledge for use by future generations?” is modified. The tone in CoPs in the second literature turns prescriptive. The question becomes, “How and where can one group (managers/administrators/consultants) mobilize situated learning to provide a competitive advantage to the firm or organization and, in so doing, enhance the power of those who sponsor CoPs?” We shall argue that this literature, like Frederick Winslow Taylor’s (1967) notion of scientific management, frames administrators and managers as a benevolent group sharing a common interest in bolstering labour’s productive capacity. Rather than employing science or the call to standardization as the rallying cry for their benevolence, advocates of CoPs applied to organizations romanticize the notion of community. They downplay the power differences between knowledge workers and those who sponsor the CoPs in which they work. Advocates of CoPs argue that those who join CoPs will be far better off than those knowledge workers who do not.

To cock an ideological ear to CoPs and the organization of knowledge workers, we set a four-fold agenda. First, from an advocate’s point of view, we define and set the parameters for an understanding of CoPs. Second, we look at the thin conditions under which, in sponsoring CoPs, both sponsors and knowledge workers win, and the rather thick and more likely conditions in which the benefits to sponsors are at the expense of knowledge workers. Third, we attend to why, despite the lack of apparent benefits to knowledge workers, champions of CoPs pre-empt critics and have established CoP as the predominant means of organizing knowledge work. The paper

concludes with recognition that the future of work in the knowledge-intensive firm may be far closer to the digital factory than the virtual community.

### **What are CoPs?**

What do Peter Drucker (1969, 1994), Michel Foucault (1972, 1980), Jeremy Rifken (1998, 2000), Anthony Giddens (1991, 2002) and Daniel Bell (1973, 1976), all theorists from a diverse set of ideological backgrounds, have in common? Each, in a very distinct style of narrative, addresses how citizens in post-industrial or post-modern societies are reconfiguring culture, cities, the economy and personal identities in a manner which privileges and rewards the creation, transfer, use and claim to own knowledge. In a semiotically-poised world, power turns its back to land, labour and the remnants of industrial capital. In a socially-constructed web or nest of symbols and signs, we reside in a habitat in which the spoils go to those who control intellectual capital. It is not simply that knowledge is power, but more accurately that those who organize and manage knowledge design the context in which power is allocated.

It is not, therefore, at all accidental that those who manage contemporary organizations prize the licensing, creation, translation, ownership, sale, distribution and protection of data, information and knowledge (Burton-Jones, 1999; Stewart, 2002). The subtext of the quest for power in the emerging “zeitgeist” is being written in the new and, to advocates of CoPs in organizations, emancipatory techniques of the management of knowledge. The new “enlightened” manager is increasingly recognized as a knowledge manager (McKeen, 2002; Ndofo and Levitas, 2004); the new “liberated” worker is the knowledge worker (Desouza and Awazu, 2004; Horwitz et al., 2003). In this context, intellectual capital (Amidon, 2003; Teece, 2000) joins financial capital in determining the agenda of what it is that is worth knowing. Universities are arguably no longer the sole or primary institutions heavily invested in knowledge creation, management, dissemination or transfer. One might say that, while universities are becoming more entrepreneurial, corporations are attempting to push towards a more university-

like position. Increasingly, managers and administrators in contemporary organizations look upon knowledge and its control as a means of creating intellectual capital and, within the information age, very real power and material wealth. The strategy, as articulated by those pursuing knowledge management as a means of creating a competitive advantage, is to marry the learning organization (Bennett and Bennett, 2004; Senge, 1999) to state of the art technology (Hislop, 2003; Knechtli, 2004) via a dedicated pool of committed knowledge workers (Cortada, 1998; Haribe, 1999) organized into collegial-like peer group clusters called CoPs (Heiskanen and Hearn, 2004; Wenger et al., 2002).

The CoPs literature argues that those who sponsor informal clusters of knowledge workers—both face to face or in the virtual realm—will generate more valuable knowledge and accelerate organizational learning, manage knowledge more effectively and become winners in the emerging knowledge-based information society (Snyder et al., 2003; Wenger, 2000a, 2004; Wenger and Snyder, 2000; Wenger et al., 2002). CoPs are informal groups of knowledge workers in a firm who share an interest or passion in a particular problem set or knowledge domain. Three elements bind sponsored CoPs. First, the sponsors must locate knowledge domains or knowledge problem areas germane to the future strategic success of the sponsoring organization. Then the sponsors, while investing time, money and energy in the CoP, provide incentives enabling a community of knowledge workers keenly interested in the sponsored knowledge domain to emerge. To be effective, the sponsoring organization must take a hands-off position with regards to the use of direct control or supervision of the emerging CoP. In the CoP, members who elect to join and tie their CoP participation with their regular workload create relationships vested in particular work practices. These practices, insist CoP champions, provide intrinsic satisfaction to the CoP members and useful intellectual property to those who sponsor the community. In CoPs, sponsors create the opportunity for knowledge workers to marry a pragmatic problem domain with a knowledgeable community in the quest for useful practices that solve workplace problems and therein stimulate innovation.

The term “practice” alluded to in the phrase communities of practice, is less a call to question power, authority and privilege than a recognition that knowledge is valuable when it is used to solve problems in the marketplace. CoPs are presently being used in a vast array of varying knowledge-seeking firms looking to bolster their potential to innovate, compete in knowledge markets and maintain an ongoing edge by turning knowledge into intellectual capital (Lesser and Storck, 2001; Vestal and Lopez, 2004). Daimler-Chrysler, the World Bank, Eli Lilly and British Petroleum use CoPs (Wenger, 2004). Fontaine and Millen (2004:2) discuss the manner in which Shell, Siemens, Johnson and Johnson and Bristol-Myers-Squibb are investing in and apparently reaping satisfactory returns on their investments. In the public sector, Tam et al. (2004) make the business case for the use of CoPs in the Federal Public Service of Canada. In all these organizations there is a concerted effort to provide knowledge workers with the time, access and resources to interact with others who are motivated to work together in order to solve or push potential solutions to work-related problems. The reasoning in CoP logic is simple and, on the surface, politically correct. Therein lies a good deal of its appeal.

By sponsoring an informal network of highly-motivated individuals within a communal or clan governance structure, the organization redresses the stiff-necked bureaucratic propensity of letting specialized experts ensconced in knowledge silos from attempting to lead in the knowledge-generating process (Brown and Duguid, 2000; Wenger et al., 2002). Efforts are made to make large bureaucratic firms imitate the nimbleness of smaller organizations (Donaldson et al., 2004; Garrety et al., 2004). In lieu of delegating the knowledge function to assigned teams, project groups or special taskforces, with CoPs it is distributed to trust-based, dialogue-centred knowledge workers. To offset the routinization and mindless or self-protective aspects of knowledge management when in the hands of experts, advocates of CoPs turn to the power of knowledge imbedded in the informal organization of the firm (Brown, 2002); Davenport and Hall, 2002). CoPs serve as an antidote to knowledge-dulling routinization (McDermott, 1999; Tieglund, 2000). CoPs stimulate dialogue. Normatively-based and peer-focused, CoPs act as

highly-egalitarian and motivated shadow organizations which, when sponsored by those at the helm of the firm, serve as a generative knowledge incubator. The sponsored CoP brings together three elements—a domain of knowledge or problem area, a community of knowledge workers who develop meaningful relations and, lastly, an accumulation of practical knowledge about how to solve real and persistent workplace problems.

Sponsors of CoPs, the managers and administrators of formal organizations, invest resources in CoPs that have strategic implications and high probability of payoff. The sponsor provides the CoP with the time, space, place and technology with which to interact and form meaningful relations (Wenger, et al., 2002; Wenger, 2004). In this manner, advocates portray CoPs as a win-win outcome. Certainly the sponsors of CoPs win. For a relatively small investment of capital and a willingness to enforce the discipline required to keep CoPs at arm's length, the sponsor receives a state-of-the-art, highly-malleable source of potential solutions to such thorny problems as corporate innovation, organizational learning and the retention, motivation and attraction of leading-edge knowledge workers. Similarly, insist CoP champions, knowledge workers who elect to join sponsored CoPs win. CoPs empower workers. They are a means of democratizing the workplace. They enhance trust. CoPs stimulate and challenge bright, motivated and collaboratively-oriented knowledge workers and provide them with a source of intrinsic satisfaction. New ideas that originate in a CoP are, over time, transferred throughout the workplace (Becker, 2001; Fontaine and Millen, 2004; Lesser and Fontaine, 2004).

In this win-win CoP scenario, enlightened management acting in its own self interest leaves those whose situated knowledge best solves problems with increased discretion, autonomy and exploratory power. Knowledge workers in CoPs are supervised less directly than knowledge workers who do not join CoPs. These workers are not, as we shall discuss, given increased decision making power or power in any “formal” organizational sense. This is retained by administrators and managers. What knowledge workers in CoPs receive is less supervision, access to colleagues with whom they share interests and the freedom to make contributions as

members of a CoP. In the eyes of CoP advocates, not only is this a fair exchange, but one which knowledge workers would be foolish to bypass. Both knowledge sponsors and workers win. They become, in the context of firms which sponsor CoPs, genuine associates and partners. They share a common destiny so that what benefits one, once CoPs are in place, benefits the other.

Is this so?

### **Knowledge Workers Versus Sponsors**

In the classic treatment of management-labour relations, despite the two sharing membership in the same organizational culture, labour and management more often than not discover that their interests are not usually similar (Delbridge, 2003; Manheim, 2001; Rainwater, 2002). A class-based analysis rooted in a vertical logic (hierarchical with a strong sense of who is on top) explores the ongoing relationship between labour and management as an ongoing struggle for scarce resources, power and the determination of who gets what, when, where and why. The CoP literature reformulates this vertical, power-based logic. This literature portrays management and the new face of labour (the knowledge worker) as embracing a horizontal logic grounded in clan-based governance, trust and dialogue. In this conceptualization, greater wealth, whether it be in profits garnered from the creation of software programs (Manville, 2004) or accruing patents in bio-technology (Mytelka, 2004), provides gains for both managers and labour. The horizontal logic stresses that through the CoP and its generative capacity, knowledge workers, unlike their blue collar colleagues, not only work in structurally-flattened knowledge-intensive industries, but as well become fully empowered partners in the enterprise. Knowledge workers are associates. They join management in effectively running knowledge-intensive organizations.

In the CoP literature, using the notion of the knowledge worker as a special class of labour and the knowledge-intensive organization as a breed of organization allegedly set apart from the old industrial command and control firm, scant attention is paid to the potentially adversarial role of knowledge workers and sponsors of CoPs (Contu and Willmott, 2003; Fox,

2000; Gee et al., 1996:36). We join McKinlay (2004:406) in his reasoned analogy that the literature on CoPs treats knowledge workers just as Frederick W. Taylor in the early years of scientific management treated blue collar workers. In 1911, when the puzzle of how best to organize blue collar workers was open to full-fledged conjecture, Taylor argued that managers, using science, should aid labour in standardizing, specializing and engaging in time and motion studies (Taylor, 1967, orig. 1911). These studies, Taylor and his followers argued, would not only raise the firm's efficiency and in so doing bolster profits, but would also democratize the workplace. As a result of the rise in profits due to management's sponsoring of the scientific study of work and the worker, not only would both managers and blue collar workers be far better off, but labour which generated results would in time find its way into the ranks of management..

Now let us look at the alleged win-win formulation between members of CoPs and those who sponsor them (Alvesson, 2004; Fox, 2004). CoPs' version of the win-win, we argue, is suspect. Let us tread warily upon the assumption that: (a) CoPs will be kept at arm's length from ongoing supervision, accountability and the management matrix used to govern the organization; (b) members of sponsored CoPs can develop knowledge in ways that satisfy their own members; and (c) CoPs will be used by enlightened firms seeking to build intellectual capital and effectively manage their knowledge resources. In directing attention to the "versus" in the ongoing relationship between sponsors and knowledge workers in CoPs, we are not arguing that CoPs are not useful in enhancing learning any more than the latter day critics of Frederick W. Taylor were arguing that scientific management would not raise profits. Rather, like Taylor's critics, we are interested in whether or not labour comes out nearly as sweetly as the theories (vested in this version of practice) would have us believe.

In market terms, the privileges accorded to members of sponsored CoPs is commensurate with the potential returns that management believes will be garnered from the empowered, hands-off or velvet glove treatment of the knowledge workers. From a sponsor's position, CoPs are being sold and adopted as a smart business proposition. The "smartness" of the business

proposition emanates from the relatively low cost of the investment, its reversibility and its potential to attract both more committed knowledge workers and, even more importantly, shareholders. Let us look at each in turn, albeit briefly, and then turn to why intelligent knowledge workers buy in to CoPs when and if there is not nearly as much here as both the sponsor and the champion of CoPs intimate.

All CoPs are composed of employees of a firm who are members of at least two entities. They are all employees in the formal organizational structure of the firm. As such, they have a job description. They report to others or are reported to by others. Their performance in the organization is remunerated and assessed upon this formal position in the organization. Then some percentage of knowledge workers elect to join a firm sponsored CoP. In this informal structure, the knowledge rewards are intrinsic. The motivated knowledge worker is not paid for his or her participation in the CoP. Indeed, this would make it a project team and in the logic of CoP advocates violate the hands-off approach so critical to the generative capacity and exploratory potential of the CoP.

The need to pay no extra salary, or even bonuses, to motivate knowledge workers to join and become part of a CoP not only keeps its cost down, it makes the sponsoring of CoPs by management easily reversible. When CoPs do not over time return intellectual capital to those who sponsor them, they can be neglected. This neglect need not entail an abandonment of all CoPs sponsored by the firm, but only those who, even with the relatively low cost, fail to pay their way or those that, in their self-governance, challenge the formal organizational power structure. Sponsors, after all, continue with their sponsorships when CoPs remain subservient and bring in more benefits than costs. This simultaneous sponsoring of multiple CoPs enables the sponsors to both hedge their bets over time and to control CoPs by creating a competition wherein some CoPs are relatively neglected and others receive a cornucopia of privileges. This competition is never surfaced as an overt tactic by those who champion and sponsor CoPs, but follows from the very economics of rational sponsorship.

The ability of the sponsors to control CoPs at arm's length or without direct supervision is a cost-cutting device and a move which increases the commitment of CoP members. It enables the downsizing or, as many would-be sponsors prefer, "right-sizing" of firms. After the firm sponsors CoPs, fewer middle managers or those with direct supervisory functions are required. CoPs are self-managing. As time is shaved off the knowledge worker's formal task and shifted to his or her CoP membership, less supervision is required. Not only does this save money on salaries, benefits and pensions, but it is sold to knowledge workers as proof of their increasing autonomy. It is framed as a means of increasing the commitment of the firm to its knowledge workers. It is marketed to potential shareholders as an indicator of a cost-conscious and stockholder-friendly management.

Shareholders and would-be investors in a firm are drawn to managers in knowledge-intensive industries who can show that the firm of which they are in charge has great potential for the future. Normally this requires that management invest heavily in research and development. CoPs offer a much less costly, more easily reversible, and "off the books" solution. While CoPs never fully replace research and development, they offer a new way to supplement this function. If knowledge workers, when given the opportunity, create communities around domains of knowledge which interest sponsors and via their relationships act as catalysts for learning and corporate innovation, management can, with a bit of fanfare, highlight this to investors. Management has a vested interest in lauding the success stories of CoPs. This not only serves to reinforce knowledge workers in CoPs, but attracts investors eager to put their money in a firm whose pipeline is full of potential and which apparently possesses a process for generating cost-efficient forms of innovation.

### **Why Do Knowledge Workers Elect to Join CoPs?**

If, as we are suggesting, knowledge workers benefit far less than sponsors in CoPs, why do they join them? We believe the answer to this is simple, yet the story beneath it is complex.

We will give the answer, then unpack the story. The paper concludes with a discussion of the ideological implications of this story. In a nutshell, the answer as to why knowledge workers join is that advocates of CoPs understate the real cost of knowledge workers joining CoPs. This is aided and abetted by the fact that CoPs are new and that knowledge workers to date have little history with them. Knowledge workers are told that they are free to join and partake in them at their own rate and with as much commitment as suits their needs. Membership in CoPs is held out as a perquisite to potential members who have had little or no previous experience with them.

When sponsoring CoPs, management does not offer knowledge workers the option of foregoing this and, in lieu, either joining a project-based team, acting as a paid consultant to the firm, or working on cross-functional teams in new product development. CoPs are, in effect, tools of those who sponsor them. They are employed because they “set up” a signal and an obligation. Sponsoring CoPs signals to third parties—stockholders, knowledge employees and potential knowledge employees—that the organization is interested in experimenting with ways to bolster organizational intelligence and stimulating the firm’s potential to innovate. Second, and most germane in this discussion, sponsoring CoPs establishes obligation upon those who elect to join them. Those who join CoPs ought, as a consequence of being provided with this perquisite, return the kindness with a recommitted dedication to their work. Moreover and more relevant to the sponsors, those who join the sponsored CoP have a duty to turn their discovered or invented knowledge over to the sponsoring firm rather than maintain it for themselves or claim a portion of it as their intellectual property (Gherardi and Nicolini, 2002; Swan et al., 2002).

Once one poses the question of who owns or legally possesses the intellectual property generated by a CoP, one moves into the issue that sponsors work most arduously at omitting in their concerted efforts to sell CoPs to knowledge workers. Two issues imbedded in CoPs help CoP advocates in selling them to knowledge workers. The first is that CoPs are informal, thereby providing members of the CoP with the means to develop a community capable of bypassing the structured organizational routines. The informality of the CoP, when framed in a more

ideological, pertinent manner, provides the CoP with no structured presence or formal voice in the organization. As an informal “off the book” entity, CoPs have no legal status. They are neither established by contract or recognized as a formal or official entity by the corporation. In legal terms, the CoP provides little countervailing power when and if managers, as sponsors of CoPs, claim intellectual property which an individual in a CoP believes is either his or hers (Gee et al., 1996:64; Grabner, 2004). Unlike unions in the hands of blue collar workers or professional associations in the hands of many white collar workers, CoPs do not, when the conditions call for it, support knowledge workers when they conflict with sponsors. While advocates of CoPs highlight the informality of the CoP as a strength, they neglect to underscore its failing when it comes to providing knowledge workers with a means to develop an effective countervailing power and voice to CoP sponsors. The more informal the structure, the less effective it is in mobilizing third parties like the courts or media to intercede on its behalf.

The second premise that advocates of CoPs frame as a feather in the cap of knowledge workers but which actually turns out far more costly, is the notion that effective organizational learning takes place in the context of a distributed mind (Becker, 2001; Gherardi et al., 1998). In Wenger’s characterization of the CoPs (Wenger, 1998, 2000b; Wenger et al., 2002), learning in and by organizations is made all that much more effective when the unit of learning is not the individual but the community of knowledge workers drawn from varying situations and perspectives within the firm. Wenger (2000a, 2004) speaks to the added input, synergies and dialogue arising when individuals form learning communities within the firm. The group or distributed mind not only adds to the intellectual capital of the firm, but also suits the technology of virtual group use and the use of the Internet as a means of building viable CoPs.

The sponsors are drawn to this talk like flies. It reasons that the knowledge created by individuals in the community is neither owned nor controlled by individuals. Knowledge is a joint production. Those who sponsor the community cultivate the knowledge benefits accrued. The individual’s claim to ownership of the intellectual capital generated by his or her contribution

is forfeited. The intelligent entity in the CoP literature is not the individual, but the community—a community, as we have seen, which has no formal structural status but defers to its official sponsor. Moreover, the entire package—low-priced, reversible, technologically-oriented—is attractive to investors or shareholders of the firm.

Knowledge workers eager to establish their careers, contribute to the firm that hires them, and establish a reputation for leading-edge work are easy pickings. They are eager to hear how, after joining CoPs, the weights upon their careers will be removed and how they, in the company of others like themselves, will pioneer new fields, reap great benefits, and build stellar reputations. This leaves them both vulnerable to power imbalances within organizations sponsoring CoPs and, ironically, awaiting the promised rewards.

### **Conclusion**

Our understanding of the future of work is increasingly bound up with the story of how we organize knowledge workers. We worry that in the CoP version of this story, a very popular one at this time, knowledge workers are portrayed as all too willing to turn their intellectual property over to those who sponsor CoPs. Knowledge workers are, if anything, aware that as they turn tacit knowledge into codifiable knowledge useful to the firm, they lose their power to negotiate. CoPs accelerate the age-old phenomenon of deskilling. As the sponsoring firm knows more about the practices of knowledge workers, those practices become less rather than more marketable. The deskilled knowledge worker will not be taken care of by the CoP. When push comes to shove, those whose talents no longer remain on the leading edge will find that, as their knowledge becomes obsolete, they also become expendable. CoPs create a knowledge speed-up for workers. Those who cannot keep up are pushed aside.

This ideological reading is totally at odds with CoP advocates' depiction of the CoP as engendering trust, openness, learning and dialogue. We must be reminded that, like science in the hands of scientific managers, the means are not the ends. The advocates of CoP use informal

communities in organizations, trust, meaningfulness, openness, learning and dialogue to push a class-based notion of the corporation. The spoils, however, go to the sponsors. The changes created by new knowledge are in the hands of those who will use it to perpetuate the goals of the official corporate structure. In the end of this story, the digitalized workplace of the future is a knowledge factory where knowledge workers speed up their generativity to avoid knowledge obsolescence and work hard to stay within the good grace of the best funded and most recognized CoPs.

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- \* The research team would like to thank the Social Sciences and Humanities Research Council of Canada for its support and Ms. Jean Donald for her secretarial assistance.
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