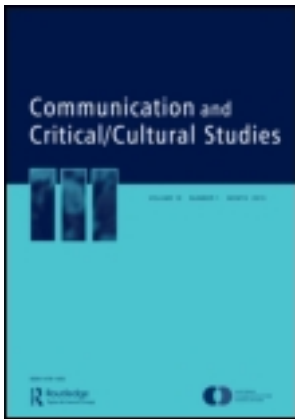


This article was downloaded by: [George Mason University]

On: 21 April 2014, At: 15:21

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Communication and Critical/Cultural Studies

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rccc20>

Power from the C-Suite: The Chief Knowledge Officer and Chief Learning Officer as Agents of Noopower

Robert W. Gehl

Published online: 17 Apr 2014.

To cite this article: Robert W. Gehl (2014) Power from the C-Suite: The Chief Knowledge Officer and Chief Learning Officer as Agents of Noopower, *Communication and Critical/Cultural Studies*, 11:2, 175-194, DOI: [10.1080/14791420.2014.905694](https://doi.org/10.1080/14791420.2014.905694)

To link to this article: <http://dx.doi.org/10.1080/14791420.2014.905694>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Power from the C-Suite: The Chief Knowledge Officer and Chief Learning Officer as Agents of Noopower

Robert W. Gehl

This essay critically considers two corporate executive positions: the Chief Knowledge Officer (CKO) and the Chief Learning Officer (CLO). I argue that these positions are key instantiations of noopower, or power over thoughts, perceptions, and memories. Theorized by Deleuze, Arquila and Ronfeldt, and Lazzarato, noopower is an assemblage of older forms of power such as sovereign and disciplinary power into a new form that is prevalent in a time where knowledge, perceptions, and images are the hegemonic forms of value. This essay traces the CKO and CLO literatures' theorization and suggested deployment of this form of power in global corporations.

Keywords: Chief Knowledge Officer; Chief Learning Officer; Noopower; Knowledge Economy; Critical Organizational Studies

Introduction

This essay explores two key executive positions articulated in the 1990s and now established in many corporations: the Chief Knowledge Officer (CKO) and the Chief Learning Officer (CLO). As I will show, the literatures describing these positions are caught up in larger histories of information and training, but strive to move past those histories into the production of particular knowledges via learning. This mirrors a shift from older forms of power (sovereignty and discipline) to *noopower*, or power in and through thought. Noopower is an assemblage of sovereign power, discipline, and modulatory power, taking as its object minds and thoughts, perceptions and memories. As such, it is a form of power prevalent in a time where

Robert Gehl is at the Department of Communication, University of Utah. He is the author of *Reverse Engineering Social Media* (2014, Temple). Correspondence to: Robert Gehl, Department of Communication, University of Utah, 2400 LNCO, 255 South Central Campus Salt Lake City, UT 84112-0491, USA. Email: robert.gehl@utah.edu.

knowledge, perceptions, and images are the hegemonic forms of value; in other words, a time of CKOs and CLOs.

Any corporation that takes the CKO and CLO positions seriously is an institution of noopower. Knowledge-centric corporations desire power over heterogeneous thoughts, perceptions, memories, as well as subsequent actions. They want to *modulate* such thoughts, directing them to specified goals and making them less heterogeneous and more predictable or, if not predictable, at least more probable. They want power over *nous*, the mind, with all its entropic and infinite permutations.

To explore the articulation of noopower and corporate power, I first survey the theory of noopower. I then trace the genealogies of the CKO and the CLO through a close reading of the business, popular, and academic knowledge management literatures articulating those positions.¹ These literatures' claims are important because (1) they are key ways in which corporate culture and corporate subjects (such as the CKO and CLO) get articulated, and (2) they are where the larger theories of the knowledge economy get put into practice in the form of day-to-day knowledge management. I then use the CKO and CLO as a means to explore various assemblages of noopower, including sovereign, disciplinary, and modulatory forms.

Noopower: A Theory of Power Through Thought

Theorists of noopower are indebted to Foucault. For Foucault, power

is a set of actions on possible actions; it incites, it induces, it seduces, it makes easier or more difficult; it releases or contrives, makes more probable or less; in the extreme, it constrains or forbids absolutely, but it is always a way of acting upon one or more acting subjects by virtue of their acting or being capable of action. A set of actions upon other actions.²

Foucault argues that the basic unit of analysis is the power relationship that

can only be articulated on the basis of two elements that are indispensable if it is really to be a power relationship: that 'the other' (the one over whom power is exercised) is recognized and maintained to the very end as a subject who acts; and that, faced with a relationship of power, a whole field of responses, reactions, results, and possible inventions may open up.³

There are two key points here. First, power is as much about *incitement* and *making easier* as it is about constraint. Power is about shaping probable actions, rather than violently dominating or simply forbidding. Power is productive; it produces and is produced by subjects who are "capable of action." In this view, power is not a negative, brutal force, but a vitalizing one. Second, power is constituted by heterogeneous possibilities. The subject of power is free: free to act, think, speak, or move in nearly infinite directions, even free to resist. However, this free subject operates within a system that seeks to direct it: There are subtle and not-so-subtle techniques to conduct the subject in her freedom (and thus to have the subject internalize what is proper conduct). This is thus a move to *conduct*

heterogeneity, to make it productive. In sum, power is the modulation of heterogeneity.

Foucault considers power in different forms such as sovereign power and discipline. Sovereign power is the form that opens *Discipline and Punish*. This is the power of death, where a head of state can publicly torture and execute criminals, demonstrating for all to see the terrible, Hobbesian might of the sovereign.⁴ In contrast, discipline is the form that Foucault argues replaced sovereign power by the nineteenth century: It is the humane form of power that trains individuals to be productive and normalized through education, physical exercise, psychological intervention, surveillance, and correction. The symbols of discipline are private, enclosed spaces such as prisons, schools, factories, and army barracks. Within enclosures, subjects are arranged in hierarchies, monitored for performance, and sutured to materials (such as machines in factories or pencils and paper in school).

Because of Foucault's historical periodization, as well as his argument that discipline is no longer the form of power dominant today,⁵ theorists have sought the form of power that replaces discipline as the power *du jour*. This brings us to noopower, the power over minds and thoughts. Three documents are key here. First is Deleuze's famous "Postscript on the Society of Control," which argues that enclosure (i.e., institutional forms such as schools and prisons) is dead, replaced by what he calls "control."⁶ Control is the modulation of flows of information and perception. For example, rather than going to work from 9 to 5 in a factory, a contemporary worker is "always on," always connected to flows of production emanating from the workplace (think of networking, with emails from the boss arriving at 10 o'clock at night). Or, to use another example, rather than going to an enclosed space such as a school, today's subject undergoes continual training (a point I will pick up on in this essay). Enclosure is out; continuity is in, and thus Foucault's arguments are now, simply put, outdated (and this is another point I will pick up on below).

The second key document is not nearly as cited by poststructuralists but is just as important as Deleuze's famous "Postscript": Arquilla and Ronfeldt's *The Emergence of Noopolitik*.⁷ This book examines American statecraft after the Cold War. The authors argue that the future of international relations lies not in the hard, kinetic military power of realpolitik, but rather in the soft power of perceptions, diplomacy, values, and ethics. Statecraft must embrace noopolitik, "an approach to statecraft, to be undertaken as much by nonstate as by state actors, that emphasizes the role of soft power in expressing ideas, values, norms, and ethics through all manner of media."⁸ Whereas Deleuze draws on his friend Foucault, Arquilla and Ronfeldt draw on the mystical theorist de Chardin's concept of the noosphere, "the globe-girding realm of the mind."⁹ However, despite the very different intellectual genealogies, both Deleuze and Arquilla and Ronfeldt make similar arguments: Enclosed spaces (such as prisons or the "billiard ball" state) operating on bodies (as in physical training or dropping bombs) are not the (optimal) forms of organization, political action, and expressions of power today. Rather, networked forms that take on perception, thoughts, and feelings are.

Today, looking back at these works produced in the 1990s, it is hard to agree entirely with Deleuze and Arquilla and Ronfeldt. Post-9/11 America has conducted very kinetic, hard wars on bodies, our surveillance state is increasingly pervasive, and our prison population remains massive. It is hard to believe the old instantiations of power, such as “billiard ball” states and enclosures, are dead! Thus, the most important document explicating noopower is by Lazzarato.¹⁰ Drawing on Deleuze and Tarde¹¹ and engaging with the idea of *nous* (albeit not in the same manner as Arquilla and Ronfeldt), Lazzarato agrees that the dominant form of power today is in fact noopower, the power over thoughts, perceptions, and memories. Like Deleuze, Lazzarato argues that this is a technique of control, a means to constrain and contain what Neidich calls “the unruly body/mind of the multitude, in all of its possibilities.”¹² Like Arquilla and Ronfeldt, we can conceive of Lazzarato’s noopower as a “softer” form of power than using kinetic weapons.

However, Lazzarato differs from Deleuze and Arquilla and Ronfeldt in his refusal to argue that older forms of power are dead. For him, noopower is not a radical break with the past or a new form of power that simply displaces sovereignty or discipline. Rather, it is imbricated with these. Lazzarato argues that sovereignty, discipline, and noopower are assembled together in various forms. Certainly, one form may appear to be dominant in one institution or organization, and for Lazzarato, due to the spread of networks, the use of media, the advanced techniques of marketing, and the primacy of the brand over “hard” capital, the mind is a privileged target of power. But importantly, Lazzarato never denies that this object is targeted by multiple techniques: sovereign, disciplinary, and modulatory. I will return to this idea below.

Noopower and the Knowledge Economy

Noopower is a useful concept for thinking about the knowledge economy. We live, and many organizations function within, a highly mediated, globalized system, where the ability to create and circulate knowledge qua information is the hegemonic form of power and value production. This “knowledge economy”¹³ was first theorized in the 1960s by Machlup¹⁴ and further developed by Toffler¹⁵ and Bell.¹⁶ These theorists began our commonsensical contemporary focus on intellectual labor, creativity, and knowledge work.

This essay’s engagement with noopower and the knowledge economy picks up with a literature that emerges after Machlup, Toffler, and Bell’s foundational work: the knowledge management literature. This is a second wave of knowledge economy scholarship,¹⁷ emerging in the 1990s and centering on the practical aspects of management in a knowledge economy.¹⁸ Whereas Machlup and others established the hegemony of knowledge in economic production, the knowledge-management literature asks: How do we go about managing knowledge production and knowledge workers within the firm? How do we increase the flow of knowledge among workers

and into goods and services? In other words, the knowledge management literature is where the theory of Machlup, Bell, and Toffler is put into practice.

To illustrate the theory of noopower's usefulness for understanding organizations and knowledge management, I turn to two key subjectivities: the CKO and the CLO. The next section traces their construction through textbooks, scholarly articles, magazine articles, interviews, Web sites, and academic programs, followed by a discussion of how these officers use various forms of power to shape heterogeneous thoughts, memories, and ideas within organizations in which they are involved.

CKO and CLO Genealogies

Concomitant with the interest in "soft" power in the 1990s, new managerial subjects appeared in the business literature: the CKO and CLO. These executives begin appearing in corporate boardrooms in the mid-1990s in a wide range of industries, including manufacturing, food, telecommunication, software, automotive, chemical, energy, insurance, marketing, and the law.¹⁹ These new corporate officers were drawn from academia (as in the case of the first CLO, Steve Kerr, who left a deanship at the University of Southern California for General Electric in 1994) or from the ranks of senior systems analysts, information technology executives, and marketers. Today, those seeking to become a CKO or CLO can attend conferences,²⁰ study in academic programs,²¹ and subscribe to journals and magazines such as *Chief Learning Officer* and the *Journal of Knowledge Management*, and they can cut their teeth in companies that engage in knowledge and learning management.²²

The next two sections trace the genealogy of these positions. It is useful to keep these genealogies in mind, because they tell us much about how the CKO and CLO literatures operationalize definitions of "knowledge" and "learning," respectively, and these definitions are keys to understanding how these positions build assemblages of noopower in organizations.

CKO

A cursory glance at the CKO literature reveals a repeated protest: The CKO is decidedly *not* a Chief Information Officer (CIO) in disguise. The CKO is not meant to manage computer and telephony networks or decide which information technology tools the company will purchase; that is the purview of the CIO. And yet, a review of the literature reveals a relationship with the CIO, a genealogy starting in 1960s and thus preceding the invention of the CKO. Metaphorically, the CKO is a child of the CIO.

And it is a rebellious child: The literature bristles at the reduction of "knowledge" to its parent's "information." As Tiwana argues, "The fundamental mistake that companies repeatedly make is that of equating information and knowledge."²³ Information has a history of being a measurable, technologically deliverable object. Knowledge, on the other hand, does not. According to the often-cited definition in

Davenport and Prusak, knowledge is “a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers.”²⁴

Here, in contrast to information, knowledge is the possession of human minds, hard to measure, or transfer. Moreover, according to the CKO literature, knowledge management is not a *technological* problem (thus being solvable by CIOs and IT) but is rather a *cultural* one best solved by “soft” means.

What is fascinating about the CKO rebellion against information is that the literature produces an implied hierarchy: Those who use knowledge are the leaders of the firm. They produce value by using knowledge to create new products and services, maintain or improve the market position of the firm, create brands, communicate internally or externally, or deploy the firm’s assets in creative ways. In contrast, those who work with mere information (or worse, mere data) are positioned as non-knowledge workers, far less valuable to the firm. Here, a data-entry clerk or someone who compiles mere information is not producing value; value is produced when these lower forms are transformed via judgments into knowledge within the heads of executives, managers, sales representatives, and designers.²⁵

Yet, despite the protestations about knowledge being not-information, clearly the CIO parent influenced the CKO child. While the CKO literature gestures towards philosophical understandings of knowledge and epistemology, it also forges ahead with the *informationalization* of knowledge.²⁶ A fundamental tension in the CKO literature is the acknowledgment that knowledge is tacit (as it is often put, it “lives in your employees’ heads”), versus the repeated call for *explicating and abstracting* such knowledge into processes, commodities, or services. Indeed, the second half of Davenport and Prusak’s definition is: “In organizations, [knowledge] often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms.”²⁷ (p. 5). As Tiwana argues,

The process of externalization results in the conversion from a tacit, unarticulated form to an explicit form of representation, which is easier to move across communication networks when compared to tacit forms that cannot be penned down in any readily explicated form. ... Knowledge management creates value by actively leveraging the know-how, experience, and judgment resident within and outside an organization. The initial key to knowledge creation thus lies in mobilization and conversion of this tacit knowledge into a form of explicit knowledge.²⁸

This is the goal of the CKO literature: Translate the knowledge inside the knowledge worker’s head into something that can be transmitted, sold, or controlled.

The desire to explicate, measure, and transmit knowledge is strong, and information theory’s proven ability to quantify text and data (by reducing them to 1s and 0s) and distribute them as information is ultimately irresistible to CKO theorists. Indeed, it is difficult to see how the above definition of “explicated knowledge” is different from theorists’ definition of “information”: a “message, usually in the form of a document or an audible or visible communication....

Information is meant to change the way the receiver perceives something, to have an impact on his judgment and behavior.”²⁹ Compare that with this recent definition of knowledge in the knowledge management literature: “knowledge is information that enables the individual to act.”³⁰ Often, the CKO literature is not advocating for improving a firm’s tacit knowledge (that is, the stuff inside employees’ heads), but rather for using it to create information embedded in databases, processes, texts, services, or commodities. Here, the CKO owes much to its parent, the CIO, despite its protestations to the contrary.

CLO

Just as the CKO rebels against its parent, so too does the CLO literature have a tense relationship with its genealogy. The CLO grew out of positions such as Director of Training, Training Manager, as well as various positions in Human Resources. Despite this, the CLO literature argues repeatedly that training is not synonymous with learning.³¹ Training—both in the older forms of training departments and in traditional higher education—is seen as incapable of helping workers handle the information economy. Here, sitting in a room listening to some boring lecturer talk about how to do a specific job or task is not *true* learning, and it is inadequate for today’s fast-paced economy. As Barley argues, in the knowledge economy, “learning became not a one-time instructional endeavor but a continuous process that required employees to learn quickly and regularly in order to keep pace with technological advancements and global competition.”³² The “L” in “CLO” indicates an interest in employees as continuous learners, rather than machines to be trained. Ekeles and Phillips argue, “Using the term *learning* broadens the scope of CLO’s responsibilities to include all opportunities—formal and informal, planned and unplanned, on the job and off the job—that lead individuals to learn and develop new knowledge and skills, as well as change their perceptions, attitudes, and behaviors.”³³ As Sherman forcefully puts it:

To put a punctuation point on this issue, I would argue that training is something better directed toward our household pets than to our corporate colleagues! Wherever possible, use of the term “training” should be banished from the job description of the CLO.³⁴

Ideally, the CLO focuses on the processes by which knowledge (in the dual sense of tacit and explicated) is produced and ways attune learning to the strategic objectives of the firm. Sherman argues that the goal is to teach employees until they obtain “the mastery and business judgment to know when and which relevant skills should be applied to achieve the best outcome in dynamically changing situations.”³⁵ The goal of learning is to produce the knowledge workers idealized in the CKO literature.

Thus, as in the CKO literature, the CLO literature produces its own hierarchy. Naturally, training is the lowest level: Training happens, certainly, but it is short-term, done not by “coaches” or “teachers” but by mere “trainers.” Training is short-lived and static; lessons are not retained. Moreover, the task a worker is being trained

for will be obsolete in a matter of minutes, anyway (to echo the hyperbole of this literature).³⁶ Learning, in contrast, is long-term and dynamic; those in charge of learning are thinking about the future and how to command it. Trainers cannot think past the next task they must train others to do. The “learning champions” of the firm, on the other hand, are valuable, because they always seek to tune employee knowledge production towards the strategies of the firm.

And yet, similar to information in CKO literature, the older form of training repeatedly rears its head in the CLO literature. A sort of Freudian slip appears in Sherman’s argument only two pages after he relegates training to the dogs: He called for “rigorously [measuring] the impact of all *training* on business outcomes.”³⁷ A bit more subtle is in Elkeles and Phillips’s book *The Chief Learning Officer*, which calls for “fast-paced programs delivered to employees as needed for new assignments.”³⁸ These programs speed up worker performance improvements:

With focused learning on an accelerated basis—perhaps using technology and e-learning delivered just in time to the target audience and tailored to the individual (“just for me”)—not only can the performance be achieved much sooner, but often higher levels of performance can be achieved and sustained. The difference in accelerated, targeted, fast-paced learning compared to the traditional method is the value added and can be highly significant for an organization.³⁹

Much as it is hard to distinguish explicated knowledge from information in the CKO literature, here it is hard to distinguish lifelong learning from short-term training. This “just-in-time” learning means there is a perceived need *right now*, rather than a desire to improve the worker for life.

Thus, for all their protestations about reductive ideas such as “information” and “training,” both the CKO and CLO literatures end up replicating these reductions.

And yet, all of that said, there is something emerging within these literatures. These literatures are key texts in the institutionalization of noopower, a contemporary form of power over thoughts. This form of power emerging within the knowledge management and corporate learning literatures takes the ideal forms of knowledge and learning seriously. The literature’s lament that knowledge and learning are held back by the old ideas of information and training is heartfelt; CKO and CLO theorists genuinely want to move past them. Indeed, there are moments when they do so. Those moments are moments when new forms of noopower are theorized within the corporate literature.

Thus, echoing Lazzarato’s point about assemblages of forms of power, these literatures are caught up in the older paradigms of information and training as well as attempting to overcome them. This is useful to keep in mind as I work through the next part of this essay: the increasingly sophisticated forms of power that CKOs and CLOs implement and represent. The following forms of power, each one more complex than the last, reflect the literatures’ desire to move past simplistic ideas such as information and training to subtle forms of power centered on knowledge and learning, even as each form of power relies on forms that came before it.

Noopower: Ways of Controlling Thoughts

As noted above, Lazzarato presents noopower as an “assemblage” of different forms of power such as discipline and biopower.⁴⁰ Unlike Deleuze or Arquilla and Ronfeldt, Lazzarato refuses to see our contemporary moment as one completely divorced from the past. Rather, older forms of power appear even today: sovereign power in the form of executions and torture, discipline in the form of factories and prisons, biopolitics in the form of insurance systems. Rather than leave these forms behind, noopower is ascendant largely “because it operates at the most deterritorialized level (the virtuality of the action between brains).”⁴¹ Noopower is a communicative organization of older forms of power achieved by coordinating the thoughts and perceptions of subjects.

In keeping with this concept of assemblage, the next sections trace the ways in which the CKO and CLO literatures assemble older forms of power (specifically sovereign and disciplinary) with thought and perception as their objects. This section ends with the more sophisticated form of power, modulatory power, and explores the ways in which this complex form of power appears in the CKO and CLO literatures.

Sovereign Power

There is a nightmare haunting the CKO literature. Every night, all the company’s knowledge walks out the door. It may never return, thus destroying the competitive advantage of the firm. “When an experienced employee leaves your company,” warns Tiwana,

two threats emerge. The first threat is that she might have intricate tacit knowledge from which your company derived a fair part of its competitive capabilities. Since tacit knowledge is located between her ears and is difficult to articulate, that knowledge leaves the company with her. The second threat is that she could join your competitor. The critical piece of knowledge that worked for you will then begin working against your company.⁴²

This is a fear of loss of competitive vitality, a fear of betrayal. It extends to the unforeseen consequences of laying off workers: There are repeated tales of firms that fired large numbers of their workers, only to have to re-hire them later as expensive consultants because these laid-off employees had previously unrecognized, valuable knowledge.⁴³ This fear reveals a lack of a fundamental source of power: *sovereign power* over the lives of employees, wielded by hiring and firing. If the employee has valuable knowledge stored in her mind, and if the firm does not know what she knows, she gains power over the firm because she cannot be (safely) fired. This is indeed a nightmare.

A way the literature allays this fear is to assert the old paradigm of informationalization. For example, consider a technique proposed in the CKO literature: the “knowledge map.” The knowledge map is a tool of noopower that can aid sovereign power over thought by doing the basic task of revealing the firm’s “knowledge stock.” Knowledge maps reveal who knows what in the firm as well as

where information is stored.⁴⁴ Like any map, they are political: they define what knowledge is, rate sources of knowledge, and produce ideals for employees to strive for in their competency area.⁴⁵

Thus, while the knowledge map can reveal where knowledge is located in a firm, it also reveals gaps and limitations. If the mapping is done and knowledge is informationalized, obsolete, valueless knowledge can be removed. This could mean several things:

- the sale of intellectual property (patents, especially) to other firms if the cost of maintaining that IP exceeds its value;⁴⁶
- the removal of explicated knowledge from a repository—although computers have much storage space, old, valueless documents should be removed to avoid information overload;⁴⁷
- most relevant for this discussion, *firing people with outdated knowledge*.⁴⁸

As Tiwana argues, “tacit knowledge, like all other types of knowledge, can become outdated, hence invalid; therefore, it is critical to ensure the applicability of tacit knowledge to *current* situations.”⁴⁹ Recall that throughout the CKO literature, tacit knowledge is the sole property of *people*—it has not been explicated into machines or commodities. If tacit (read: people-based) knowledge is mapped and found to be obsolete, it can be removed (read: people get laid off; positions get outsourced). This allows the firm to reassert its sovereign power over the very lives of its employees. It even allows the firm to avoid hiring people with useless knowledge: “Ideally, unnecessary knowledge should not have been acquired in the first place—the organization should put into place processes to clearly discriminate between forms of knowledge that can be leveraged and those that are of limited use.”⁵⁰

Now the nightmare is abolished: when the employees walk in the door in the morning, they know that the firm knows what they know. And they also know one more thing: If their knowledge is not valuable, they can lose their livelihoods.

Is this truly sovereign power? Sovereign power is the power to mete out pain and death. Being fired is not the same as being killed; it is not physically painful. Yet there is a primitive violence in firing: the same violence that animated the transition to capitalism in the first place, the process Marx called “primitive accumulation,” in which capitalism destroys alternative economic forms such as commons-based animal husbandry and farming.⁵¹ This process was marked by sovereign power.

After capitalism destroys alternatives, what option do most of us have but to work for someone else? For centuries now, the answer is: none. You may survive being fired because you can find a new job. But when the firing happens at age 55—right before retirement, too late to retrain, too expensive to maintain with medical insurance—firing can in fact mean death. Or, if you are fired after going deep into debt to finance an education, firing may not mean death but it may mean the end of a livelihood. Firing threatens life because it threatens livelihood.

Thus in the CKO and CLO literatures, if one's knowledge is not deemed valuable, then the pink slip is not far behind. Moreover, employees *know* this: The greatest expression of precarity is heightened productivity and gratefulness to have a job, any job. Being fired may not be the same as being sent to the scaffold, but deep down employees know their live(lihood)s are at stake. Any discussion of the power of a firm in capitalism must consider the role of hiring and firing in power relations.

Discipline

But sovereign power—firing—is crude and distasteful (which is likely why it is rarely explicitly discussed in either the CKO or CLO literature). Far better to avoid turnover and to *monitor* and *train* workers who do not have the knowledge needed to produce value for the firm. This is of course a disciplinary instantiation of power over thoughts. Disciplinary power has been well explored by critical organizational communication scholars.⁵² Training bodies, surveillance, producing docility, and the metaphor of the Panopticon are well known in organizational studies. As Trethewey and Corman argue, knowledge management almost inevitably takes on a panoptic shape in order to most efficiently control knowledge workers.⁵³ This is enclosure of the organization and supervision of individuals inside it, training them to be more productive, ensuring docility with a perpetual gaze.

This is illustrated in the CKO and CLO literatures. The former calls for linkage between human and machines such as software packages like IBM *née* Lotus Notes. Employees must be trained to produce standardized sets of knowledge to be entered into knowledge repositories.⁵⁴ Such processes require fluency with file formats and metadata conventions. Employees are trained how to route ideas through intranets and computer interfaces. Knowing where to click, where the navigation menu is located, and how to upload files is crucial. The field of human-computer interaction comes into play here: Interfaces are optimized for efficiency. Foucault calls this process “body-object articulation.”⁵⁵ Here, “discipline defines each of the relations that the body must have with the object that it manipulates.” This is “the instrumental coding of the body,” linking parts of the body to the parts of the object to be manipulated. This is monitored and measured against a correlated number of simple gestures.⁵⁶ Although software use is of course complex, it is also engineered to be intuitive, which is to say standardized and templated, tying eye to screen and hand to mouse.

However, the most recognizable instantiation of discipline appears in the CLO literature, because that position has grown out of the field of corporate training. Again, “training” is somewhat of a bad word among CLOs, but the influence of training on them (like the influence of information theory on the CKO literature) is palpable. The articulation between learning qua training and metrics bears this out.⁵⁷ As Kiely argues, “We know how to assess whether new software does the job, whether a pilot can demonstrate increased skills on the simulator, or whether a repairperson can effectively troubleshoot a piece of equipment.”⁵⁸ To follow this

logic, conversely “we know” (thanks to constant surveillance and assessment) when these subjects cannot do these tasks properly, and thus we know when and how to train them, asking them to take online courses with instant assessments.⁵⁹ The ease with which the effectiveness of training for specific tasks can be measured makes it an attractive element of this literature. Here, Foucault’s emphasis on record-keeping and hierarchicalization—key aspects of discipline—are enhanced with computer-mediated training.

But how is this linked to thought? Where is the mind, the *nous*, here? Turning to Foucault, part and parcel of discipline is *internalization*. Whereas sovereign power elicits a crude thought (“I don’t want to be fired!”), discipline is more subtle. Monitoring employees via panoptic technologies limits what is said and thought within the enclosure of the surveillance system. Metrics in training provide powerful means to discipline employees; bending the arc of employees’ thoughts to the effort to increase sales by a certain percentage or to help more customers per hour are well-documented methods of rational, managerial power.⁶⁰

Modulatory Power: From Heterogeneity to Control

Although discipline appears exhaustive, modulatory power is a far more pervasive and subtle form of noopower. Following Deleuze, Lazzarato conceptualized the metaphor of modulation. In telecommunications, modulation is the practice of having one signal carry the informational contents of another. Thinking of the human mind as a sort of “carrier frequency” for other thoughts, Lazzarato argues noopower “involves above all attention, and is aimed at the control of memory and its virtual power. The modulation of memory would thus be the most important function of noo-politics.”⁶¹ This is achieved through mediated messages. Savat builds on this metaphor by citing physicist Fourier’s principle of superposition, where “two waves, each with an amplitude and frequency different from the other, can travel through one another and appear as one, yet still retain the effects and characteristics that are unique to each of them.”⁶² In this sense, individuals retain their own perceptions, memories, and thoughts, but those characteristics can be modulated, made to carry external perceptions, memories, and thoughts.⁶³ The object of noopower thus thinks of his or her own accord and yet is acted upon by others’ thoughts. Power is exercised as thought-before-thought: carefully crafted persuasive messages that can be transmitted via a huge array of communication technologies.

Modulatory power is clearly distinguishable from sovereign power but might be hard to distinguish from discipline, which also seeks to have subjects internalize and freely act out the desires of those doing the disciplining. However, modulatory power is distinguishable from discipline in three key ways: it is *highly networked*, it is *oriented towards freedom*, and it *seeks to leave the subject behind entirely*.

First, in the CKO and CLO literature, modulation differs from discipline because it is networked. The literatures look beyond the enclosed employer/employee dyad to external power relationships with suppliers, vendors, consultants, buyers, and

consumers. Thus, modulatory power is highly relevant to an economy of global supply chains, outsourcing, customer feedback via social media, just-in-time production, and branding. For example, as Elkeles and Phillips argue, part of the CLO's job is to extend "the learning enterprise beyond the traditional target groups of employees to include customers, suppliers, and the community as well."⁶⁴ In other words, the CLO is a key agent in the production of a brand, a strategically ambiguous real abstraction that is aimed at shaping the perspectives of subjects within and without the organization. Another example: In an interview, Steve Kerr argues that *ex-employees* must be taught how to interpret the decisions made by their former employers. "So, not only is your audience expanded as a chief learning officer from some elite group at the top to everyone, it is also expanded well beyond the walls of the organization."⁶⁵ Everyone within and without the corporation must be taught to understand and support it. Customers, once sovereign, external determiners of the fortunes of firms, are instead targets of learning and training via classes both online and off.⁶⁶ Thus, whereas discipline and sovereignty work *within* an enclosed corporate organization, modulatory noopower takes the globe as its field of operation. The organization is not a container within which employee knowledge is monitored, abstracted, and directed; rather, from this perspective, the organization is articulated in a series of networks, and modes of learning help cohere and maintain these networks.

Second, modulatory power differs from discipline because it is far more oriented towards freedom than docility. Recall Foucault's argument that power "incites and seduces."⁶⁷ The CKO and CLO literatures are rife with the idea that employees should not merely be constrained by the threat of firing for inadequate knowledge, nor simply trained in immediately needed job skills; they should be *incited* to constantly think, learn, and share knowledge with one another freely across the organization (especially across hierarchies). "The favored vocabulary [of knowledge management]—community, sharing, caring, nurturing social relations—is far from conventional ideas of management as a bureaucratic phenomenon associated with hierarchy, formalization, control, and direction from above through 'rational' measures."⁶⁸ Compared with sovereign power and discipline, this is enlightened: each employee is a valuable container of knowledge. If only employees would keep thinking and talking!

This appears in a key problem the CKO and CLO literatures identify: the tendency for employees to "hoard" knowledge.⁶⁹ The literatures call not only for C-level executives to incentivize employees to share knowledge freely, but for managers to share knowledge, too.⁷⁰ Rather than top-down training offered by those who have power/knowledge and can define what it is to have knowledge, modulatory power assumes that knowledge is a non-rival, public good that increases in value as it is "consumed" through sharing.⁷¹ Thus, modulatory power is in part incitement to think; this is its thought/action before the thinking action, a means to create an organization as a thinking machine producing heterogeneous thoughts, rather than simple (as in sovereign power) or docile (as in discipline) thoughts.

Modulation's final difference from discipline is the most radical: In its most developed form, modulation leaves the subject behind. Rather than operate on individuals, modulatory power works on *probabilities* and *flows*. As Savat argues, discipline is meant to make the individual productive.

Modulation, on the other hand, has no interest in the actual production of such outward manifestations. Instead, it is solely interested in the patterns of code that are generated—in part because it is interested in predicting rather than producing specific forms of behavior, and in part because, depending on the code that is generated, a given pattern is allowed or enabled to continue or not.⁷²

As Clough argues, such patterns arise from

a never-ending modulation of moods, capacities, affects, and potentialities, assembled in genetic codes, identification numbers, ratings profiles, and preference listings, that is to say, in bodies of coded data (including the human body as coded data), such that we no longer find ourselves dealing with the mass/individual pair.⁷³

These codes and flows are the frequencies to modulate: *whether they are carried by a group of subjects, a collection of documents, or a database becomes immaterial.*

Here, finally, knowledge and learning escape the subject. This is why the CKO and CLO literature can speak of things like “corporate memory,” “corporate learning,” and “corporate knowledge,” all of which are idealized goals that transcend mere information, mere training, or the mere knowledge worker. Here, knowledge work is not a laborer/capitalist relation, but “an encounter between a flow of money and a flow of knowledge.”⁷⁴ “Today’s business must go from being a mob of functioning individuals to being a learning organization, and then to being a collective, ‘thinking’ mind.”⁷⁵ This echoes Arquilla and Ronfeldt’s emphasis on the noosphere, the “globe-girding realm of the mind.”⁷⁶

Even the ideal subjects imagined by the CKO and CLO literatures are presented as transient. In a profile in *Workforce Management* magazine, CLOs John Coné (of Dell) and Steve Kerr (of Goldman Sachs) argue that any CLO should try to make him- or herself “obsolete” by imbuing learning into the very cultural fabric of the organization.⁷⁷ Even the high turnover rate in these positions is almost welcomed by the literature, which stresses flexibility and job-changing over long-term stability.⁷⁸ In addition, the CKO and CLO literatures are adverse to titles; it does not matter what one’s title is as long as one is using knowledge and learning. These are the distinguishing features of the “knowledge worker”: the expectation that he will change jobs many times throughout a career and the expectation that she will “invent” her own job. The individual filling the role is not important so long as value is being produced. The subject may dissolve so long as stock prices go up.

Thus, this modulatory form of noopower is the most flexible form; it is clear why the CKO and CLO literatures desire it above older forms like informationalization and training. After all, as the literatures repeatedly state, we live in flexible, unpredictable, globalized, always-changing times. The successful corporation must

be constantly attuned to new ideas arising from the free-flowing sharing of knowledge within and without the firm.

But clearly, highly networked, modulatory noopower is also dangerous. Inciting employees to think freely can backfire; they can unionize, goof off, make a parody of a mission statement, or disclose corporate secrets.⁷⁹ Likewise, inciting customers to discuss freely your products and services is risky: They can spread negative reviews easily through social media. How can this be a form of control?

The answer lies at the very heart of corporate organization: The corporation has strategic goals in mind. Despite the incitement to share knowledge, the CKO and CLO literature repeatedly argue that there are such things as *too much knowledge and learning*. The way to judge whether knowledge or learning is valuable or not is to tie them continually to strategy. As Tissen *et al.* argue, strategy is “essential ... for helping create, structure and harvest company knowledge. For giving a sense of purpose to knowledge workers.”⁸⁰ Strategies, visions, and mission statements help delimit the contours of what is and is not valuable learning and thought as well as determine the metrics used to measure and prove the existence of these unquantifiable phenomena.⁸¹ Here, the highest form of knowledge and learning is that which leads to profits; anything less must be avoided as pointless.

Moreover, the CKO and CLO literature’s networked view of where knowledge comes from and who should be taught links this literature up with the larger histories of marketing and branding as well as new social media technologies. Practices such as monitoring and shaping social media flows for customer insights,⁸² teaching various publics via Web 2.0 systems,⁸³ and branding as the pinnacle of knowledge production⁸⁴ all appear in the CKO and CLO literatures. These are efforts to increase the probability that external publics hold the corporation in high emotional esteem.

Thus, while an immediate goal of these literatures is to incite heterogeneous thought in employees, vendors, suppliers, and customers, the long-term goal is to capture these thoughts, informationalize them, judge which are valuable, and use this information to teach employees, vendors, suppliers, and customers how to think about the corporation, its products, and services. This is a constant process of experimentation and modulation tied to a strategy, a message, or a brand.⁸⁵

This form of power is communicative. It can be comprehended within the “communication-as-constitutive” model in organizational communication: “In a constitutive model ... the primary question is one of *influence* and *possibility*: How does communication constitute the realities of organizational life?”⁸⁶ There are many possibilities imagined in corporate noopower. Through strategic communication, the corporation seeks to modulate many heterogeneous elements: percentages of customers who buy the product, the number of those who hold the brand in high esteem, the likelihood that a government regulator will interpret an action favorably, the odds a government will spend on infrastructure, the odds that fuel prices will go down in the next four months if the firm announces a pledge to use alternative energy, perceptions of the stock by traders in Hong Kong, the merits of one slogan over another in the minds of investors, the likelihood that service calls are handled

slightly faster. “The continued (re)creation of these organizations depends on their ability to identify complementary resources distributed across a field of potential participants, and to assemble these resources in a strategically useful way.”⁸⁷ In other words, modulation is organization in action.

Conclusion

In the CKO and CLO literatures, these C-level executives are presented as central to efforts to shape the thoughts of internal and external publics. The consultants and academics producing this literature are articulating their arguments with the emphasis on the importance of knowledge and learning in our contemporary economy. These literatures describe ways for corporations to institutionalize power over thoughts.

Taking a wider view, these literatures reflect many discourses playing out in myriad arenas. The emphasis on measuring knowledge and learning, the praise of “just in time” e-learning, and, in the extreme, the elimination of fields of knowledge due to a lack of “return on investment” are key parts of the debate over the future of higher education. Data-mining patterns of interaction happening within firms are mirrored by the desire to do the same within social media. Governments around the world are investing in so-called “creative industries,” often at the expense of social safety nets. Marketing’s turn to neurological research technologies such as fMRI is the latest in that field’s desire to know how we think about brands.

The turn to knowledge in the literatures I have explored here is caught up in these larger contexts. By studying the CKO and the CLO from the perspective of noopower, we can learn much about how powerful actors in the knowledge economy seek to shape our very thoughts.

Notes

- [1] The sources for this work are discussions of CKOs and CLOs as they appear in books, journals, magazines, newspapers, and Web sites between the 1990s and today. My archive is approaching 200 items and I can share it with others upon request. My method supporting my theorization of power is inductive, close, critical reading of these sources.
- [2] Michel Foucault, “The Subject and Power,” in *The Essential Foucault: Selections from Essential Works of Foucault, 1954–1984*, ed. Paul Rabinow and Nikolas S Rose. (New York: New Press, 2003), 138.
- [3] *Ibid.*, 137.
- [4] Michel Foucault, *Discipline and Punish* (New York: Vintage, 1979).
- [5] Foucault, “The Subject and Power.”
- [6] Gilles Deleuze, “Postscript on the Societies of Control,” *October* 59 (Winter 1992): 3–7, doi:10.2307/778828.
- [7] John Arquilla and David Ronfeldt, “The Emergence of Noopolitik,” 1999 Product Page, http://www.rand.org/pubs/monograph_reports/MR1033.html.
- [8] *Ibid.*, 29.
- [9] *Ibid.*, 4.

- [10] Maurizio Lazzarato, "The Concepts of Life and the Living in the Societies of Control," in *Deleuze and the Social*, ed. Martin Fuglsang and Bent Sørensen (Edinburgh: Edinburgh University Press, 2006), 171–90.
- [11] Gabriel Tarde and T. N. Clark, *On Communication and Social Influence: Selected Papers* (Chicago: University of Chicago Press, 1969); Gabriel Tarde, *Monadology and Sociology* (Victoria, Australia: re. Press, 2012).
- [12] Warren Neidich, "Neuropower," *Atlántica: Magazine of Art and Thought*, Spring 2009, http://www.warrenneidich.com/wp-content/uploads/2010/03/Warren_Neidich_Neuropower_Atlantica1.pdf, 135.
- [13] For a recent overview of this literature, see Walter W. Powell and Kaisa Snellman, "The Knowledge Economy," *Annual Review of Sociology* 30 (2004): 199.
- [14] Fritz Machlup, *The Production and Distribution of Knowledge in the United States* (Princeton, NJ: Princeton University Press, 1962).
- [15] Alvin Toffler, *Future Shock* (New York: Random House, 1970); Alvin Toffler, *The Third Wave* (New York: Morrow, 1980).
- [16] Daniel Bell, *The Coming of Post-Industrial Society* (New York: Basic, 1973).
- [17] Powell and Snellman, "The Knowledge Economy."
- [18] Key texts here include Ikujiro Nonaka and Hirotake Takeuchi, *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation* (Oxford: Oxford University Press, 1995); Thomas H. Davenport and Laurence Prusak, *Working Knowledge: How Organizations Manage What They Know* (Boston, MA: Harvard Business School Press, 1998).
- [19] Ernest Holsendolph, "The CKO: Channeling a Torrent of Information, Chief Knowledge Officers Are Helping Corporate America Work Smarter," *Atlanta Journal-Constitution* (1996); Leah Beth Ward, "In the Executive Alphabet, You Call Them C.L.O.'s," *New York Times*, February 4, 1996; Martha M. Hamilton, "Managing the Company Mind: Firms Try New Ways to Tap Intangible Assets Such as Creativity, Knowledge," *Washington Post*, August 19, 1996.
- [20] See for example *Chief Learning Officer* magazine's CLO symposium, now in its 13th year. Also, a wide range of knowledge and learning management papers get presented at conferences centering on information technology, health, law, business, and economics.
- [21] See, for example, George Mason University School of Public Policy's Master's in Organizational Development and Knowledge Management or Kent State University's Knowledge Management program.
- [22] For example, see a recent overview of knowledge management in the law: Elana Zeide and Jay Liebowitz, "Knowledge Management in Law: A Look at Cultural Resistance," *Legal Information Management* 12, no. 1 (2012): 34–38, doi:10.1017/S1472669612000126.
- [23] Amrit Tiwana, *The Knowledge Management Toolkit: Practical Techniques for Building a Knowledge Management System* (Englewood Cliffs, NJ: Prentice Hall PTR, 2000), 64, <http://dl.acm.org/citation.cfm?id=323909>.
- [24] Davenport and Prusak, *Working Knowledge*, 5.
- [25] *Ibid.*, 6.
- [26] Mats Alvesson, Dan Karreman, and Jacky Swan, "Departures from Knowledge And/or Management in Knowledge Management," *Management Communication Quarterly* 16, no. 2 (2002): 285, doi:10.1177/089331802237242.
- [27] Davenport and Prusak, *Working Knowledge*, 5.
- [28] Tiwana, *The Knowledge Management Toolkit*, 67.
- [29] Davenport and Prusak, *Working Knowledge*, 3.
- [30] Jeffrey T. Child and Michelle Shumate, "The Impact of Communal Knowledge Repositories and People-Based Knowledge Management on Perceptions of Team Effectiveness,"

- Management Communication Quarterly* 21, no. 1 (August 1, 2007): 31, doi:10.1177/0893318907301987.
- [31] Timothy T. Baldwin and Camden C. Danielson, "Building a Learning Strategy at the Top: Interviews with Ten of America's CLOs," *Business Horizons* 43, no. 6 (November 2000): 5, doi:10.1016/S0007-6813(00)80016-6.
- [32] Karen Barley, "Corporate University Structures That Reflect Organizational Cultures," in *The Corporate University Handbook: Designing, Managing, and Growing a Successful Program*, ed. Mark Allen (New York: AMACOM, 2002), 43.
- [33] Tamar Elkeles and Jack J. Phillips, *The Chief Learning Officer: Driving Value within a Changing Organization through Training and Learning* (Oxford: Butterworth-Heinemann, 2007), 7.
- [34] Len Sherman, "Lies about Corporate Learning Officers," in *Lies About Learning: Leading Executives Separate Truth from Fiction in a \$100 Billion Industry*, ed. Larry Israelite (Alexandria, VA: American Society for Training and Development, 2007), 71.
- [35] Ibid.
- [36] Laree Kiely, "Measurement in Corporate University Environments: Is It Gonna Show? Do We Wanna Know?," in *The Corporate University Handbook: Designing, Managing, and Growing a Successful Program*, ed. Mark Allen (New York: AMACOM, 2002), 165–95.
- [37] "Lies about Corporate Learning Officers," 73, my emphasis.
- [38] Elkeles and Phillips, *The Chief Learning Officer's Critical Role*, 18.
- [39] Ibid.
- [40] Lazzarato, "Concepts of Life," 186.
- [41] Ibid., 187.
- [42] Tiwana, *The Knowledge Management Toolkit*, 53.
- [43] cf. Davenport and Prusak, *Working Knowledge*, x.
- [44] Ibid., 72.
- [45] Ibid., 75.
- [46] Ibid., 85.
- [47] Kimiz Dalkir, *Knowledge Management in Theory and Practice*, 2nd ed. (Cambridge, MA: MIT Press, 2011), 42.
- [48] Angela Trethewey and Steve Corman, "Anticipating K-Commerce: E-Commerce, Knowledge Management, and Organizational Communication," *Management Communication Quarterly* 14, no. 4 (May 1, 2001): 621, doi:10.1177/0893318901144005.
- [49] Tiwana, *The Knowledge Management Toolkit*, 83.
- [50] Dalkir, *Knowledge Management in Theory and Practice*, 42.
- [51] Karl Marx, *Capital, Volume I: A Critical Analysis of Capitalist Production* (Moscow: Progress, 1965), chap. 23; Jason Read, "Primitive Accumulation: The Aleatory Foundation of Capitalism," *Rethinking Marxism* 14, no. 2 (2002): 37.
- [52] James R. Barker and George Cheney, "The Concept and the Practices of Discipline in Contemporary Organizational Life," *Communications Monographs* 61, no. 1 (1994): 19–43; Angela Trethewey, "Disciplined Bodies: Women's Embodied Identities at Work," *Organization Studies* 20, no. 3 (1999): 423–50; Dennis K. Mumby, "Theorizing Resistance in Organization Studies A Dialectical Approach," *Management Communication Quarterly* 19, no. 1 (August 1, 2005): 19–44, doi:10.1177/0893318905276558; Stanley Deetz and Dennis K. Mumby, "Power, Discourse, and the Workplace: Reclaiming the Critical Tradition," *Communication Yearbook* 13, no. 1 (1990): 18–47; Stanley A. Deetz, *Democracy in Age Corporate Colonization: Developments in Communication and the Politics of Everyday Life* (New York: SUNY Press, 1992).
- [53] Trethewey and Corman, "Anticipating K-Commerce," 624.

- [54] Tiwana, *The Knowledge Management Toolkit*, chap. 11; Debbie Richards, "A Social software/Web 2.0 Approach to Collaborative Knowledge Engineering," *Information Sciences* 179, no. 15 (July 4, 2009): 2515–2523, doi:10.1016/j.ins.2009.01.031.
- [55] Foucault, *Discipline and Punish*, 152.
- [56] *Ibid.*, 153.
- [57] Elkeles and Phillips, *The Chief Learning Officer's Critical Role*; Donald L Kirkpatrick, *Evaluating Training Programs: The Four Levels* (San Francisco, CA: Berrett-Koehler, 1994).
- [58] Kiely, "Measurement in Corporate University Environments," 186.
- [59] Sherman, "Lies about Corporate Learning Officers," 72.
- [60] Deetz and Mumby, "Power, Discourse, and the Workplace."
- [61] Lazzarato, "Concepts of Life," 186.
- [62] David Savat, "Deleuze's Objectile: From Discipline to Modulation," in *Deleuze and New Technology*, ed. David Savat and Mark Poster (Edinburgh: Edinburgh University Press, 2009), 59.
- [63] Robert W. Gehl, "What's on Your Mind? Social Media Monopolies and Noopower," *First Monday* 18, no. 3–4 (March 2013), <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/4618/3421>.
- [64] Elkeles and Phillips, *The Chief Learning Officer's Critical Role*, 11.
- [65] Steve Kerr and Mike Prokopeak, "A Conversation with Steve Kerr: CHIEF LEARNING OFFICER Magazine Catches up with the First CLO," *Chief Learning Officer* 6, no. 10 (October 2007): 54.
- [66] Juan Gabriel Cegarra Navarro, Frank W. Dewhurst, and Steve Eldridge, "Linking Chief Knowledge Officers with Customer Capital through Knowledge Management Practices in the Spanish Construction Industry," *International Journal of Human Resource Management* 21, no. 3 (February 15, 2010): 389–404.
- [67] Foucault, "The Subject and Power."
- [68] Alvesson, Karreman, and Swan, "Departures from Knowledge And/or Management," 288.
- [69] Rene Tissen, Daniel Andriessen, and Frank L. Deprez, *Creating the 21st Century Company: Knowledge Intensive, People Rich, Value-Based Knowledge Management* (Amsterdam: Longman, 1998), 28.
- [70] Zeide and Liebowitz, "Knowledge Management in Law," 35.
- [71] Child and Shumate, "Impact of Communal Knowledge Repositories."
- [72] Savat, "Deleuze's Objectile," 54.
- [73] Patricia T. Clough, "(De) Coding the Subject-in-Affect," *Subjectivity* 23, no. 1 (2008): 144.
- [74] Jason Read, "The Fetish Is Always Actual, Revolution Is Always Virtual: From Noology to Noopolitics," *Deleuze Studies* 3, no. 2 (2009): 91.
- [75] Kiely, "Measurement in Corporate University Environments," 166.
- [76] Arquilla and Ronfeldt, "The Emergence of Noopolitik," 4.
- [77] Sarah Fister Gale, "For Some Chief Learning Officers, One of the Goals Is Job Insecurity," *Workforce Management*, October 2003.
- [78] cf. Baldwin and Danielson, "Building a Learning Strategy at the Top," 8.
- [79] cf. James Tucker, "Everyday Forms of Employee Resistance," *Sociological Forum* 8, no. 1 (1993): 25–45.
- [80] Tissen, Andriessen, and Deprez, *Creating the 21st Century Company*, 95.
- [81] Sally Davenport and Shirley Leitch, "Circuits of Power in Practice: Strategic Ambiguity as Delegation of Authority," *Organization Studies* 26, no. 11 (2005): 1603–1623; Michael G. Murphy and Kate Mackenzie Davey, "Ambiguity, Ambivalence and Indifference in Organisational Values," *Human Resource Management Journal* 12, no. 1 (2002): 17–32.
- [82] Navarro, Dewhurst, and Eldridge, "Linking Chief Knowledge Officers with Customer Capital."

- [83] Alexandros Soumplis et al., "Learning Management Systems and Learning 2.0," *Web-Based and Blended Educational Tools and Innovations* (2012): 197; Manuel London and M. J. Hall, "Web 2.0 Support for Individual, Group and Organizational Learning," *Human Resource Development International* 14, no. 1 (2011): 103–13; Bill Sherman, "When the Bird Tweets, Does Anyone Learn," *Chief Learning Officer* 8, no. 8 (2009): 36.
- [84] Elkeles and Phillips, *The Chief Learning Officer's Critical Role*, 54; Cushing Anderson, "The Road to Recovery," *Chief Learning Officer* 36 (September 2011): 7.
- [85] Gehl, "What's on Your Mind?."
- [86] Karen Lee Ashcraft, Timothy R. Kuhn, and François Cooren, "Constitutional Amendments: 'Materializing' Organizational Communication," *The Academy of Management Annals* 3, no. 1 (2009): 5. doi:10.1080/19416520903047186.
- [87] Trethewey and Corman, "Anticipating K-Commerce," 621.