Dualism at Work: The Social Circulation of Embodiment Theories in Use

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ABSTRACT

This thirteen-year ethnography investigates how two Wall Street banks instantiated dualism in practice and what the evolving consequences were for bankers and the organizations that they joined after their careers at the banks. The banks dualistically split visible controls that targeted the mind, such as autonomy and work-life balance narratives, from unobtrusive controls that targeted the body, bypassed the mind, and intensified the pace of work in ways that bankers experienced as self-chosen. These practices caused evolving forms of dualistic embodiment. During the first four years, bankers identified with their minds and treated their bodies as unproblematic objects. Starting with year 4, body breakdowns occurred; the body imposed itself as an antagonist. Desperate to perform, bankers pushed harder, which caused more severe breakdowns that eventually forced some to treat the body as a knowledgeable subject that can direct action. The bankers implemented the banks' practices in the organizations they joined subsequently, intending to enhance autonomy, but unintentionally replicating indiscriminate overwork for all participants. As they experienced more severe breakdowns, some bankers followed their bodies' guidance into new ways of living. Dualism thus followed a dialectic pattern, first intensifying the body repression until breakdowns turned passive bodies into revolutionary forces.

artesian dualism—the identification of the person with the mind and its separation from the body as the mind's unproblematic instrument has been circulating through Western culture. From its early origins, including Descartes (1960) and Kant (1965), who conceptualized the person primarily in terms of cognitive processes, it then circulated into society as "cultural modernism" (Harvey 1989) and inspired the cognitive revolution that

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refocused psychologists and organizational scholars on the individual mind in the form of cognitive theory.

I use the term *cognitive theory* as an umbrella for approaches that assume an "unabashed commitment to mentalism" (Fiske and Taylor 1991, 14; see also March and Simon 1958; Simon 1976). Cognitive theory is dualistic because it assumes that cognition is the property of individual minds. The body and the social context are conceptually separate and studied only "through [their] residence in the mind of individuals" (Anderson et al. 1997, 11).

Scholars have mostly construed cognitive theory as a theoretical framework, as a lens that scholars use to understand the world, and they have evaluated it on logical coherence and accuracy (Wittgenstein 1973; Anderson et al. 1996, 1997). But dualism is also instantiated in the world as a practice. In fact, organizations' focus on the individual mind has intensified in our knowledge economy. For example, academics teach managers that knowledge work is a disembodied "thinking for a living," in which "knowledge workers primarily rely on their brains rather than their bodies" (Davenport 2005, 15). Many knowledge-based organizations act as if this dualistic conceptualization were true. They recruit individuals based on intellective qualities and encourage allencompassing work hours-bankers, lawyers, doctors, and software engineers can work up to 100 hours a week-ignoring the body's needs and failing to acknowledge its contribution, for example, in the form of health and stamina. Because people thus enact Cartesian dualism, it is important not only to study the theory as a framework about the world and evaluate it on its accuracy. We must also study it empirically, as a thing in the world, and evaluate it on the kind of world that it creates for the persons and organizations who act as if it were true, which is this study's purpose.

Dualism as Generative Theory

I build on a set of approaches across disciplines that study scholarly theories as generative, including the history and archeology of science (Kuhn 1970; Foucault 1973, 1979), social constructionism (Gergen 1978), sociology of knowledge (Habermas 1968), critical social theory (Horkheimer 1972), performativity (Callon 1998; MacKenzie et al. 2007), ideational scholarship (Blythe 2002), practice theory (Giddens 1986), and the self-fulfilling prophecy of academic theories (Frank et al. 1993; Ferraro et al. 2005, 2009). Such approaches question the traditional view that theories are merely logical and explanatory systems. Instead, they are "idea technology" (Schwartz 1997): in our expert society, lay persons use academic theories in action and to construct themselves, independently of how accurate the theories are. They thereby enact the world that scholars then "discover." Scholarly theories thus can be understood as forms of culture that circulate through the world (Urban 2001).

Much prior research has focused on the circulation of theories as text, such as categories and narratives. Less is known about their material instantiation in routines, technology, and bodies. Organizations play a critical but so far underexamined role in this social circulation. They structure assumptions about persons and bodies into activities, giving these assumptions a culturally and historically situated expression. Because people are shaped by the activities that they engage in repeatedly and because people often spend a lot of time at work, organizational participants come to embody these assumptions, exhibiting tendencies that support and reproduce the assumptions. Culturally shaped scholars then describe this world and the make-up of its participants as a fact versus as a cultural choice (Dreyfus 1999). Research thus is needed about the socially situated processes that make theories come true and about their effects for participants.

Wall Street's Social Circulation of Dualism

I examine Cartesian dualism as it is instantiated in the work practices of Wall Street investment banks. Investment banks are the epitome of the modern knowledge-based organization, which is important to study because it is increasingly prevalent and economically important. They are also an ideal setting for this study because they represent an extreme case of dualism in its valorization of the mind and neglect of the body, as compared to, for example, manual work or athletics, where the body's contribution is more salient.

One novel aspect of modern knowledge work is that while employees in most countries work less when they become wealthier, US knowledge workers work more (Mandel 2005). They work over schedule and on weekends, citing "self-imposed" pressures (Society for Human Resource Management 2009). Paradoxically, it is the most highly educated individuals, including software engineers, consultants, investment bankers, hedge fund managers, and law-yers—with the most attractive employment options—who appear to choose to work up to 120 hours per week (Kunda 1992) and voluntarily make themselves electronically available 24/7 (Mazmanian et al. 2005). These employees work as if the biological needs of the body, such as sleep, did not exist.

Modern knowledge work's extreme body suppression is not sustainable, however. The ideal investment banking candidate has a perfect GPA from an elite school, while also being a leader in extracurricular activities. Yet even

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these unusually resilient and motivated individuals leave banking after about seven years, partly because they cannot sustain the intense pace of the work, resulting in an average age in investment banking of thirty-five years. Some stay longer, but at a high price to an ailing body, as the following remark demonstrates, in which Robert Rubin, the former Treasury Secretary, recalls his time as a co-senior partner at Goldman Sachs:

I was intent on not letting my back pain interfere with . . . Goldman . . . , so I did everything I could to keep functioning. For many months, I'd have to lie down at the office on a couch. . . . I was in the hospital three times . . . and each time I ran the arbitrage business from my bed. I was on the board of Studebaker-Worthington, and I participated in one meeting lying on the conference table. Once, the CEO of the company . . . called and asked me to meet him at his office on a Saturday to talk about selling the company. . . . I couldn't walk for more than a few yards at the time, or even sit, but I went to [his] office and lay on the window seat . . . trying not to miss a beat by working from a horizontal position. (Rubin 2003, 88)

Exhausted bankers leave Wall Street to assume leadership positions in other organizations, taking their Wall Street socialization with them. Examples include Henry Blodget, Jon Corzine, Michael Lewis, Michael Milken, Hank Paulson, Donald Regan, Robert Rubin, John Thain, and Gary Winnick. Goldman Sachs supplies so many employees to government that it has been nicknamed "Government Sachs."

These dynamics suggest that to understand how dualism is instantiated in modern knowledge work requires studying the longitudinal coevolution of various cultural elements, including narratives, actions, routines, and bodies. Banks and bankers have narratives about what matters to the performance of knowledge work, for example, when they hire prospective candidates based on intellect. These narratives may change over time as bankers' bodies decline, as illustrated by Rubin above, suggesting that narratives do not exist in a vacuum of pure text. The banks' practices compel overwork, as evidenced in routine banker burnouts. Even if one chose to ignore the body, defining the person solely in terms of intellectual achievement at some point forces the body itself into awareness, here through breakdowns, in a way that would be hard to conceptualize as text acting on text. To examine dualism as a socially circulating situated practice, I tracked four cohorts of Wall Street bankers for thirteen years. I studied how they engaged in the banks' activities differently over time, including when they left the banks and took the banks' practices with them to other organizations.

Contributions

Prior organizational work has studied the social circulation of theories but construed them in a disembodied way, as text. For example, the institutional literature has examined how categories diffuse across society and influence organizational forms but has lacked empirical work on micro-foundations (cf. Barley and Tolbert 1997; Scott 2008). It has focused mainly on aggregate and abstract data, which are difficult to relate to employees' daily actions and embodied experiences. We consequently do not know what the theory looks like in practice and what its consequences are for participants. The institutional approach also provides an incomplete understanding of circulation because circulation entails change. The causes of change are likely to be situated. Theories change over time partly because persons use them in action and experience and respond to the consequences, mediated by the culture of the particular organization. I extend this prior research by investigating how dualism maps onto organizational activities. The ethnographic methods I use are ideal for examining the micro-processes within organizations that induce participants to use dualism in action and the evolving consequences.

My approach also differs from prior work in generative theory, which has examined the circulating of theories between academia and practice, partly with the aim to ascertain the direction of influence. For example, some research found that scholarly theories were the causes of managerial practices (e.g., Abrahamson 1991; Zbaracki 1998), while other research also showed how practitioners can influence scholars (Barley et al. 1988). In contrast to this prior work, I do not study directionality of causal influence. Because dualism has been circulating back and forth through the cultural fabric for decades, the direction of influence is difficult to ascertain. I examine dualism as an implicit part of a cultural background that both scholars and organizations share.

In summary, my research questions are:

- How is Cartesian dualism instantiated in modern knowledge-based organizations, including in practices, narratives, and forms of embodiment?
- 2) How do these situated elements (practices, narratives, forms of embodiment) coevolve over time and across different contexts?
- 3) What are the evolving consequences for participants?

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Method

Setting

This article is based on an ongoing study of how work transforms employees. I studied two investment banking departments, which I refer to as Bank A and Bank B to protect their identities, in two different banks. Investment bankers advise corporate clients on financial transactions such as the sale of a company or the public offering of securities. Described by bankers as "boot camps" and "grind mills," the banks present extreme cases of the long working hours observable in modern knowledge-based organizations. Extreme cases render focal dynamics salient and thus facilitate theory building. The banks served Fortune 500 companies; each had more than sixty employees, recruited from top business schools through similar practices; used 360-degree performance reviews (a 360-degree performance reviews includes feedback from subordinates, supervisors, internal, and external clients); and paid a base salary and performance-contingent bonus.

Participants and Personal Background

I tracked four associate cohorts (two in each bank), which entered during the study's years 1 and 2. Observing bankers from entry ascertains that I would capture socialization's effects. The banks forbade me to reveal cohort sizes, attrition rates, or dates of the study. Throughout the study, the sample was in the double digits. At entry, associates were on average twenty-eight years old, had MBA degrees, and were about 50 percent female. Starting in year 5, about 65 percent were white males. Associates became vice presidents (VPs) after four years and directors after three more years. Before entering academia and starting this study, I was an associate at a Wall Street bank, where I cultivated relations that facilitated access for this unpaid research. Because of my background, bankers treated me as an in-group member, invited me to work and nonwork activities, and trusted me with sensitive details involved in their changes over time.

Data Sources

I used four overlapping data sources, which I triangulated to bolster validity: observation (two years; about 7,000 hours), over 700 formal, semistructured interviews, informal interviews with about 200 informants, and analysis of company materials.

Participant and Nonparticipant Observation

The banks allowed observation for two years. In year 1, I observed five to seven days a week (80–120 hours), mirroring bankers' schedules, and then at least

three days a week. To balance my deep familiarity with investment banking, I chose the observer as my primary role, jotting down notes. As participant, I helped with minor tasks, a standard practice that allowed me to ask otherwise intrusive questions. I sat close to bankers, noting what they said and did. To sample and balance observations, for each banker, I recorded (1) the observations' log page numbers, (2) data sources I had used, (3) activity types, and (4) observation times and length. I opportunistically joined meetings, phone conversations, social functions, and training sessions. I was able to observe about 50 percent of the bankers at their new organizations, sometimes repeatedly. On these occasions, I was introduced to coworkers and clients as an executive coach, which allowed me to participate in internal and client meetings. This allowed me to witness how the bankers' daily activities evolved over time, what the practices in their new organizations were, how these practices evolved, and what the bankers' role in this evolution was.

Semistructured, Formal Interviews

During year 2, I conducted 136 formal thirty- to forty-five-minute interviews. The banks did not allow me to tape-record the interviews. I jotted down notes during the interview, completing them immediately after each interview. Concerned about the bankers' time, the banks allowed only one formal interview per banker. Given this constraint, I conducted the formal interviews during year 2 because by that time my theoretical categories were more refined. I interviewed sixty bankers from Bank A and forty-eight bankers from Bank B. This sample included bankers from the focal cohorts and colleagues with whom they interacted frequently. Because we had established personal relations over time, some of the bankers allowed me to interview them repeatedly on their own time. I continued to interview all bankers during years 3 and 13, usually in a restaurant, tracking the banks' changing practices and the bankers' recent experiences, including leaving the banks and joining new organizations. During this time, I completed over 600 one-to-three-hour interviews, including two to four yearly interviews with every focal banker.

Informal Interviews

I also regularly updated a list of informal interview questions to reflect the evolving themes that my ongoing data analysis yielded. I conducted informal interviews with over 300 informants, including the bankers' spouses, friends, sports and yoga coaches, clients, industry experts, and specialists, such as Wall Street clinical psychologists. Clients sometimes talked about bankers' physical problems (e.g., "He could not control his nervous ticks") and strain (e.g., "He

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kept falling asleep"). Bankers' friends and family provided insight into how work demands affected bankers' bodies and relationships. Industry experts as well as employees from other parts of the banks and other banks provided diverse perspectives on the banks' practices. Psychologists and coaches helped me to understand how work affected bankers' mental and physical health and how bankers tried to cope. To ensure validity, bankers who were not part of my sample helped interpret the data throughout the study and commented on papers.

Documents

I analyzed (1) yearly performance reviews for all bankers as long as they were at the banks and (2) documents about training, selection, socialization, and change in practices, such as the dress code at the banks and at some of the new organizations that the bankers joined.

Findings

The Banks' Practices

Throughout the study, the banks' practices constituted a relatively unchanged background. They consisted of (1) visible controls that targeted bankers' minds, in the form of explicit narratives about work-life balance and autonomy, which conflicted with (2) less visible controls that targeted bankers' bodies in the form of routines that compelled bankers to overwork indiscriminately. This section describes these practices. The next sections outline how bankers took up and embodied the practices differently at different points throughout their careers, first at the banks and then in influential positions in other organizations.

The banks' narratives emphasized bankers' autonomously chosen hard work and the bank's commitment to ensuring work-life balance. For example, during a recruiting event at a top MBA program, a Bank A director addressed the attending MBA students:

We all work very hard. No doubt. But we do so because we choose to. It is our choice, our judgment. Investment banking is still very different from many companies that will be your clients. At a traditional company, you will come in at an entry level position with very limited responsibilities. You basically observe and learn and claw your way up for years. People will tell you when to come and when to leave, how much vacation to take, and whom to report to. There is none of this with us. With us, you hit the ground running. From day one on, you will have important re-

sponsibilities toward your client. You will interact with the top management teams of the most important companies worldwide. The learning curve is an arrow pointing straight up. The client will rely on you, entrusting you to inform the firm's most important decisions, such as how it will finance its future and whether to sell itself. There are no fixed working hours or limited vacation times. We hire you for your judgment and then trust you to deliver superior work to your clients. The firm offers you everything you need to do your best work. You decide your schedule. We do everything in our power to support you. The firm takes good care of its people. We will do everything we can to free up your time so that despite your hard work you have time for your family. We have an extraordinary support staff that goes beyond the call of duty. Some of our secretaries are so well trained and ambitious, they will be helping you with your financial modeling. When you work late, we will drive you home. We have meals delivered to your desk so you don't have to worry about anything. When you have an important family event, others on your team take over and you will do the same for them.

Another Bank A managing director echoed these ideas at a different recruiting event: "We respect and support our bankers' need for a harmonious and balanced work-family life," as did the recruiting brochure of Bank B: "We value our bankers' health and support their family commitments."

The banks' narratives are aligned with academic conceptualizations of knowledge work and recommendations on how to structure it. For example:

Knowledge workers like autonomy. One important aspect of knowledge workers is that they don't like to be told what to do. Thinking for a living engenders thinking for oneself. . . . They would like autonomy as to the detailed processes they follow in doing their work. Tell them what they need to get done and when it needs to be finished, and they will, if they have their preference, figure out the details. They know the circumstances in which they think best. They also like to decide their own work locations and schedules. If a computer programmer tells the boss that he is most productive working from 8 p.m. to 4 a.m., a smart boss would try to facilitate that arrangement. (Davenport 2005, 15–16, emphasis in original)

Like Davenport, the organizational literature argues that today's knowledgebased organizations need to dismantle traditional controls, such as hierarchies

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and direct supervision, because they are too rigid in dynamic environments and because they engender reactance in autonomy-cherishing knowledge workers. Evidencing a dualistic split between mind and body, this literature argues that one can control knowledge workers best by winning their minds, for example, by inculcating shared concepts, such as autonomy values (Alvesson and Robertson 2006). These academic narratives about modern knowledge work, in turn, reflect earlier dualistic stories in the organizational discipline, which conceptualize organizations as consisting of an aggregation of individual minds (e.g., Simon 1991) that in turn consist of concepts, such as norms and values. In summary, the organizational literature and organizational practice construe organizations and their participants primarily in terms of disembodied concepts.

This collective focus on the mind and narratives directs analytic attention away from the material aspects of work and experience, including routines and the body. When one includes these material aspects into the analysis of organizational life, as I do here, a different picture emerges. Specifically, the banks' autonomy narratives stated that the banks had no controls and primarily offered support to its workers, who voluntarily chose to work hard. In contrast, my research showed that the nature of the banks' controls had merely changed. Instead of the visible controls of traditional organizations that banks and bankers used as a reference standard, such as direct supervision or rules about when to come and leave, the banks had invisible controls that bypassed the bankers' minds and targeted their bodies, compelling indiscriminate overwork.

One example of these invisible controls was the banks' self-monitoring practices. (For a more comprehensive outline of the banks' practices, see Michel [2011].) Self-monitoring entailed that management systems gave bankers feedback on the consequences of their actions, but no goals or standards, and trusted them to self-adjust. This differs from the control practices of traditional organizations because it takes control from managers and places it in the hands of the workers themselves: "We have no use for managers. Our systems ensure that people control themselves, sometimes without knowing it. We just feedback to people how well they are doing and we leave it at that. We don't even set targets. People compete against themselves" (Bank A director). For example, bankers recorded billable hours on time sheets. The banks did not track hours, but the bankers felt compelled to: "The number matters to you just because you attend to it daily" (Bank B associate). To associates, time sheets were a "kind of game." They tried to "beat their personal best," which caused indiscriminate overwork that felt "self-chosen," concealing the banks' influence.

In the above example, the banks intentionally used self-monitoring practices, partly to cater to bankers' autonomy needs and partly to intensify the pace of work. But the compelling aspect of the banks' practices was that they constituted a cultural background in which numerous overlapping practices reinforced one another. Only some practices were visible to the bankers and created intentionally. The following example illustrates a less visible self-monitoring practice that emerged unintentionally, as the unintended outcome of a practice designed for training purposed. As noted, there were no managers at the banks. Bankers made managerial decisions collectively. In one instance, they dispensed with offices and seated all bankers in an open floor, including low cubicles or trading-floor-like tables without separations between bankers; offices were for confidential conversations. This layout was designed to enhance communication and train juniors, who could overhear senior bankers' conversations. Because senior and junior bankers did not know if they were being watched, they behaved as if they were and thus monitored themselves. A Bank A director said: "Because I know that everyone around me can listen to what I am saying, I keep observing myself from their perspectives."

The notion of a cultural background of mutually reinforcing practices that intensified the pace of work also matters because this background provided the frame for experiencing new practices, potentially changing their dynamics and consequences. Within this background, practices that were explicitly intended to achieve work-life balance ended up achieving the opposite, intensifying the pace of work even more. For example, the banks explicitly stated such worklife balance values as "ensuring that our bankers have time to rejuvenate and spend with their families" (Bank B director). Yet services designed to free up time achieved the opposite: they habituated bankers to long hours and erased work-leisure distinctions. For example, a Bank B associate commented on the 24/7 administrative support: "It is like a psych experiment where the light is always on. The only temporal markers are secretarial shifts. And they make it possible to work around the clock and isolate you from the outside's rhythms." Senior bankers mentioned how others' constant presence implied that it was always time to work. Because such embodied cues could bypass conscious processing, they prevented perceptions of control. The banks also erased workleisure distinctions by encouraging leisure at work. Unlike clients' focus on efficiency, bankers could chat, play, and go outside anytime. A Bank A director explained: "There is no need to focus on efficiency. You don't pay by the hour.

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If they take longer, as long as they meet deadlines, you just habituate them to being at work and getting all their needs met there." The banks' free car services, meals, health clubs, and dry cleaning valets mimicked homey bodily comforts: "This is like an artificial world. Instead of going home, after 5 PM people here just switch into leisure clothes, turn on the music, and the firm orders dinner for you. Ironically, you end up working a lot more because it is so convenient" (Bank B associate). "Feminists used to say that every woman could work if they had a wife to take care of chores. The bank is my wife's wife." This quotation by a Bank A associate's spouse reflected the banks' framing of these conveniences as supporting bankers' career needs, like a spouse would. This framing further highlighted bankers' autonomy and hid the banks' controls.

These invisible controls became visible to the bankers only retrospectively, usually when physical breakdowns forced them to either leave the banks or to temporarily work differently, thereby creating a cultural distance that resulted in an expanded perspective. For example, this VP explained: "It was only when I got so sick that I could not pull the same hours that I used to and was forced, literally forced, to work differently by my body that I saw that there are different and better ways of working that I had not seen." Researcher: "Why did you not see these different ways of working?" VP: "Because the things that drive you to work so hard are not readily visible. So you think it is you who is making the decisions. There is no one standing over you and telling you what to do. It is the entire pace of work and cues from clients, competitive colleagues, the building that is always open that make you do things without you wanting to or even noticing the pull."

In summary, the banks circulated narratives about the bankers' autonomous control that were supported by the dismantling of traditional, visible controls, such as direct supervision. Spurred by the absence of visible controls, bankers no longer held back work effort because of reactance. Focused on the task rather than on power struggles or resisting organizational control, they did not notice how their collective decisions created invisible structures that had the unintended consequence of intensifying work effort. The following sections depict how the bankers took up the banks' narratives in their actions and what the evolving social consequences were over a period of thirteen years.

How Bankers Embodied the Banks' Practices

Overview

During the first three years, the bankers enacted a dualistic split between the mind and the body. They narrated themselves in terms of their mental attri-

butes. Their self-narratives did not mention the body. In action, they treated the body as an unproblematic instrument of the mind. I refer to this implicit conceptualization of the body as the "body-as-object" pattern. This form of selfnarrative and action was possible partly because the bankers' youthful bodies could endure the extreme pace of work. Starting in year 4, the bankers' bodies started to break down under overwork, causing bankers' self-narratives to change. The body now became a frequent theme. Its role changed from that of an unproblematic object to being a hostile antagonist. Between years 4 and 6 all bankers had proceeded to this stage, which I refer to as "body-as-antagonist." Committed to their work, bankers responded to the body's rebellion by pushing harder to maintain performance. Starting in year 6, for about 40 percent of bankers, the breakdowns were so severe that they had to give up fighting their bodies. The only way they could continue to perform was by treating their bodies as a knowledgeable subject that could guide action, replacing the banks' controls. I refer to this as the "body-as-subject" pattern. Because I have described these patterns extensively elsewhere (Michel 2011), I present only illustrative data below. My focus will be on how these patterns evolved in bankers who left the banks, presenting three primary findings.

First, the majority of bankers exhibited the body-as-antagonist pattern in their new work contexts, even when they had previously treated their bodies as subjects and even when they had selected themselves into organizations that were less work intensive. This is because bankers recreated in their new context the banks' routines, typically in order to enhance the new organization's performance. The bankers did not understand that these routines unintentionally also functioned as invisible controls, intensifying the pace of work. The second major finding is that by recreating the banks' routines in a new context, the bankers also intensified the pace of work for everyone else. Third, I found that bankers could only sustain the body-as-subject pattern when they left organizations and were free to structure their own work.

Body-as-Object (Years 1–3)

During the first three years, the young associates echoed the banks' narratives as their own: "This job grinds you to the bones but at least the firm is committed to giving you full autonomy. Not like clients where they check up on you in every possible way and where you have a boss, where you have to be in at a certain hour" (Bank A associate). This quotation shows that the bankers judged their own autonomy partly in relation to a social standard, such as the management system they learned about in class or their clients' processes. Reflecting social psychological narratives about autonomy as an essential value,

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one Bank B associate said, "I could not work for an organization that required me to come at 9 a.m. and leave at 5 p.m. I want to be in control of my schedule." When the researcher commented that the banker worked a lot longer than forty hours a week, the banker replied, "Yes, but this is my choice. I decide when the work gets done." This remark also hints at the young bankers' selfdefinition as a disembodied choosing will. In contrast to later years and to concerned relatives, bankers rarely said "my body." When they said "I," they referred to the mind, often in opposition to the body. For example, initially relatives joked about the bankers' lack of concern for their body: "Your body is just a way to carry Hermès ties to you." A fiancé said, "You cannot treat your body like a machine." The Bank A banker rephrased by highlighting the mind's will, without reference to the body: "I choose to live and work in a disciplined manner." Similar to how dualistic cognitive and organizational scholarship construes the person, the bankers looked inside themselves toward their goals, plans, and values to identify themselves, believing that those were the primary determinants of behavior. Bankers only made reference to the body when prompted, for example, by concerned relatives as above or by me in the following example. When I asked bankers about physical needs such as sleep, they made stark distinctions between the body and the mind, giving priority to the mind, like the following Bank A vice president: "I totally believe in mind over matter. There are no such things as physical needs. Tell me one physical need and I can tell you a culture in which they have controlled it."

These dualistic narratives had a dynamically evolving relation to the bankers' practices. During the first three years, the narratives informed the bankers' attempts to control biological needs, such as experimentation with polyphasic sleep, in which bankers tried to enhance productivity by suppressing their need for prolonged sleep, instead taking "naps at 11 p.m. and then again at 1, 3, and 4." During the first few years bankers could sustain these narratives partly because their youthful bodies submitted to the bankers' will. They could sleep and work in ways that they had not anticipated before they started working on Wall Street, as this Bank B associate explained: "I have learned that there is nothing you cannot do. I also learned about my amazing capacity for work. I would not have thought that I could go without sleep for such extended periods of time. But that's just because I have never pushed myself to that extent." This means that the banks' extreme work cultures manifested Cartesian dualism in a comparatively new way. Not only did the bankers identify with their minds and thought that their bodies were inferior objects, they also learned that their bodies were even less consequential than they had previously

thought, posing fewer constraints than imagined to their ambitious minds. The bankers' extreme experiences are evident in the broader society, for example, in Internet conversations about "biohacking," which, in the culture of knowledge workers, refers to attempts to enhance one's biology for higher productivity through medical and nutritional techniques. The computer metaphor "biohacking" suggests that the body is not unlike software that savvy individuals can fundamentally alter. Relatives often observed this orientation toward the body in the bankers, such as this wife of a Bank B associate: "Everything he does, how he eats, sleeps, exercises, only has one purpose: to work longer and better." This culture is cognizant about the body but conceptualizes it as the malleable object of the mind. The mind influences action; the body is merely the inconvenient constraint.

Body-as-Antagonist (Year 4 Onward)

Starting in year 4, the bankers' narratives about themselves changed in two ways. First, they now mentioned the body frequently, even without prompting. Second, the role of the body changed. The bankers retained a dualistic split between mind and body, continued to identify with the mind, and even intensified their attempts to control the body. But the body now changed from a passive object that allows the mind's control to a hostile force that undermined the bankers' cherished goals. Bodies forced themselves into awareness through sometimes incapacitating problems: "I am the most disciplined person I know. But sometimes it's like my body is running the show and doing things for which I loathe myself but I just cannot stop it. I am desperate" (Bank A associate). Eighty percent of bankers strongly agreed with the statement, "I am trying harder to control my body but with less success than before." The other 20 percent used different language for their antagonistic body relations, such as, "I wouldn't call it control; I am at war with my body" (Bank A VP). A Bank A vice president complained, "No matter how hard I kick my body, I can't get any energy out of it." A Bank B VP said, "It feels like my body is choking off all life force." When asked why, the VP replied, "Who cares? There is nothing I can do but plow through work." The body here is separate from and inferior to the "I," like an object one can kick. It antagonistically refused resources and even strangled bankers from inside.

Bankers tried desperately to continue to exhibit the behaviors that they believed contributed to high performance. They pushed their bodies even harder, trying to reassert control. "I still really want to go out there and be a gogetter but it gets harder and harder, I have to fight myself more and more and

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sometimes I cut corners because I am tired to the bones. I go home early or I don't go the extra mile on a pitch that doesn't look promising" (Bank A VP). The majority of the bankers (about 60 percent) continued to wage war against their bodies until they left the banks.

Body-as-Subject (Year 6 Onward)

By year 6, about 40 percent of the sample treated the body as a subject that could guide action ("body-as-subjects"), gave up control over the body, and attended to its cues. This pattern was initiated by breakdown cycles. By year 9, 98 percent of those who treated the body as subjects had given up attempting to control their bodies: "I gave up bludgeoning my body into submission for one reason only: it doesn't work" (Bank A VP). The other 2 percent preferred different language: "Control sounds so benign. I have given up completely ignoring and destroying my body for the sake of what I wrongly thought matters more . . . and started to develop a feeling for my body, a genuine interest and concern" (Bank A VP). Those who treated the body as antagonists continued to control their body, talking about "letting your body know who is in charge" and "disciplining the body into obedience." But the control of body as subjects generated escalating cycles of work-disruptive consequences and fierce control attempts, which taught bankers that the body was too complex to be controlled:

I learned the hard way that there are limits to what you can control. Everything I did to keep performing always had consequences that I did not want and that I could not anticipate. When I first got here, I worked so hard that I gained 60 pounds and got heart problems and diabetes. I picked up running to lose weight and that hurt my back and joints irreparably. [*He ran about two hours per day, often at midnight.*] Because I was in so much pain, I took pain killers that got to my liver. Then I went on a special diet and that affected my serotonin levels so that I was in a deep and dark depression. And the list goes on and on. (Bank B VP)

In contrast, those who treated the body as antagonist experienced fewer disruptive consequences ("I overdo everything, but I have a doctor who is good at fixing me up") or did not interpret breakdowns as their actions' unintended consequences ("bodies just break down").

Before, body-as-subjects implicitly meant their mind when they said "I." Starting in year 6, they construed the mind as separate and distrustfully distanced themselves from it because it could not control the body: "I have so often been convinced that I knew what I was dealing with and was dead wrong. Stress-related hair loss really was mercury poisoning until it was thyroid disease and that was before it was attributed to a special diet. These kinds of surprises were a real eye opener on how I was approaching things in general: always confident in my mind. . . . They made me vigilant toward my mind, watching it, and often choosing not to listen to it" (Bank B VP). Over time, they experienced the body as a knowledgeable subject that could guide action: "I learned from my body. Breathing, hormones all of this goes on without any of your doing. I now believe that most of life works like that. Situations have their own dynamics. Things work best if you can align yourself" (Bank A VP). For example, bankers also stopped fighting low energy and heeded it as a cue: "I learned to differentiate between being tired and drained. When I am drained, my body says that something isn't right and I stop and try to figure it out" (Bank A director). These bankers explicitly referred to the body, positioning it as a subject, an insightful advisor. Because body-as-subjects valued performance, they stopped treating their bodies as antagonists, but they sometimes relapsed: "[When I relapse], I feel the effects immediately and stop the abuse. I don't need to be hit over the head by a collapse" (Bank A director).

The Diffusion of the Banks' Routines and Embodiment Patterns

Surprisingly, all bankers who left the banks to work for a different organization predominantly exhibited the body-as-antagonist pattern, even when they had left to have more work-life balance. For continuity of presentation, I keep referring to informants as "bankers," even though they now occupied diverse professions that I will specify. The bankers worked hard partly because they gravitated toward demanding and prestigious positions, such as leadership positions at competitors, clients, or in government, as well as careers in journalism, academia, or to found their own company. But, reenacting what they learned at the banks, they also continued to work long hours when it was not necessary. For example, one banker turned consultant said: "My life is like *Groundhog Day*. I now have a new job, but I still work in the same way as I did in banking. I just can't bring myself to turn the computer off before midnight. I am just used to that kind of work ethic." This quotation evidences the continued split between the bankers' minds and the body's socialized tendencies, now in terms of habits.

But even the bankers who had exhibited a body-as-subject pattern when they left the banks fell back into an antagonistic pattern because they implemented the banks' routines in the new organizations, usually to improve organizational performance and to enhance worker autonomy. However, as

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in the banks, these practices had the unintended consequence of intensifying the pace of work for everyone. For example, one banker took over a small human resource consulting firm. He fired most existing personnel, which consisted of human resource professionals, and replaced them with bankers and business professionals because they had more of a "bottom-line" orientation. He could woo these employees away from their prior employers because he offered autonomy, a demanding job, good career prospects, and a better lifestyle than banking, which were all attributes that he valued, too. Over time, however, working hours escalated partly because the competitive employees spurred each other on.

One practice that bankers often took with them, including to this human resource consulting firm, was a variation of "results only." Before the bankers joined their new firms, these organizations dictated working effort and style. For example, employees had to work a certain number of hours at a particular time of day, usually from morning to evening, typically on site, they had a few weeks of vacation a year, and did not work on weekends. The results-only arrangement dispensed with management dictates and granted employees full autonomy on how to work. They were only obliged to complete a negotiated quantity and quality of work, such as meeting a quarterly sales figure. They could work from home and as much or as little as they wanted, not unlike some professorial positions.

One employee recounted how this practice, which was designed to enhance autonomy and work-life balance, unintentionally achieved the opposite; it intensified the pace of work and replaced management's visible control with a less visible form of collective control, in which everyone controlled everyone else:

Initially, we were all excited because we thought that this would make our life better. We thought that it would cut through the bullshit meetings and face time. We thought that we would work less because we would be more efficient. In fact, management initially did not want to implement this because they thought that everyone would be shirking. But the opposite happened. Instead of working less, this has become a race to the bottom, partly because you are rewarded based on the results. But to get respectable results or results that are at least as good as everyone else's you have to work your butt off. People hardly take any vacation. And we all try to squeeze in as many hours as we can get away with on weekends without getting divorced. At least before there was a clearly articulated standard. But now it is a race to the bottom and it poisons the atmosphere because now we all watch each other to make sure that we are keeping up. . . . Now what seems like a friendly conversation, a friendly "how was your weekend," has a subtext, something like "I hope you didn't work more than I did."

People worked hard because acceptable results were difficult to achieve. Also, competition raised what counted as an acceptable result. Worded differently, there were no absolute standards; good work was in relation to what other high achievers delivered in a given business period. Because one could not gauge what others might be able to produce in a given period, one had to work all out to not risk being left behind, as the next interviewee observation further evidences.

Similar to what had happened at the two banks (see Michel 2011), management could not stem these excesses. Attempts to do so were ineffective or backfired, fueling the intense work pace. For example, one employee at a think tank explained: "We all see the problem, but so far all of our attempts to solve it were ineffective. It got so far that we prohibited people from working on weekends, but what happened is that we now all worked secretly, just to be able to keep up with the results that others produced. When I joined two years ago, it was acceptable to complete one major project every quarter. In my recent review I heard that this is no longer enough to be counted as a top performer. Our best performers complete at least four, sometimes more projects."

Even when they were not in a leadership position and did not suggest new work practices, bankers intensified the work pace because others admired the bankers' prestigious pedigree and wanted to emulate them. For example, a new colleague at a small investment bank in Boston talked about the time when my informant Jim joined the bank: "He was the first Wall Street hire that we made and everyone looked at what he did because we just thought that he had it right and that whatever he did was what it took to be successful. I think we all stepped up our effort. No one forced us to. It was just a matter of self-respect. You don't want to be the slacker." This statement shows how bankers became part of a context that raised standards for everyone while giving the impression that people's intensification of work effort was self-chosen ("No one forced us"), even among employees who did not compete directly with the banker and who were on a different incentive system. For example, one firm hired temporary staff, which often consisted of actors, dancers, and other artists, who used corporate jobs to pay for their art. One dancer said: "I always worked the

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absolute minimum hours here because everything takes energy. I have certain financial goals and once they are met, I want to spend every waking hour advancing my dancing. But with Josh here and hearing how hard he had to work, this has changed my assessment of what constitutes exhaustion. Now when I have earned what I wanted to and feel tired, instead of going home, I just challenge myself and see how much longer I can work. I have a completely new understanding about my capacity for work." This is important because it means that the banks' work practices can spread to other areas of our society, beyond knowledge work, even to individuals with different value orientations about work than the bankers, such as this dancer.

Bankers only took time away from work to attend to other obligations, such as including health treatments and tending to family members, but not for nonessential activities. Perhaps perversely, a complete focus on obligation at the expense of pleasure was also encouraged by organizational work-life quality programs, which gave employees time off, but mostly to focus on other duties, such nursing one's own or a family member's ill health: "It is called work-life balance, but in fact you are just balancing work here with work somewhere else. It is all about work, work, work," said a banker who was now the chief financial officer of a large company.

Repeated Breakdown Cycles

Perhaps not surprisingly, many bankers experienced a second set of breakdowns during my thirteen years of observation. For many these breakdowns started within the first year at their new job, partly because they were still weakened from their work at the banks. The breakdowns differed from those they experienced at the banks, which illustrates how the cultural elements that I investigate here operated differently as they circulated over time and contexts. While at the banks, bankers were keenly aware of their breakdowns as soon as they occurred. In subsequent jobs, however, for years the bankers only admitted to themselves and others a vague sense of unease; they did not fully appreciate and reveal the deterioration of their well-being for various reasons. One, bankers were focused on the lofty career goals they had set for themselves, repressing distractions, including signals of ill health, such as this banker, who describes his experience at the private equity firm that he joined after banking: "Looking back, I was just miserable for many years: completely exhausted and depleted, constantly anxious and depressed, one health issue after the other, absolutely no joy left, but strangely enough I did not notice it at the time or perhaps I repressed it because I did not know what to do about it. I knew that I had to suck it up for a few more years until I had been promoted to managing director." Second, because the bankers believed themselves to be in ideal circumstances, they did not notice and admit to themselves their bodies' warning signs. Since they had no explanations for these signals, the signals passed as random noise:

I did not feel well even when I started my new job. I did not know what was wrong with me, I had body pain that kept moving around, my hips, neck, wrists, knees, everything was painful. I could not think right. It took me hours to get the work done that I could previously do in a few minutes. And I now know that I was depressed. But at the time I didn't really notice any of this, as strange as it may sound. I now believe that I partly repressed this because I felt that I had no reasons to feel this way. Everything in my life, all the outer circumstances seemed perfect. I had landed the job of my dreams. We had a gorgeous house. I could work from home a few days a week. And the doctors couldn't find anything and just attributed it to the stress of changing jobs and moving. I guess this was part of it, too. Since there was no medical validation, I started to doubt what I was feeling and just pushed it aside.

The second set of breakdowns was also less noticeable because at the banks the intense pace of the work had highlighted performance deficiencies, shining attention on the underlying physical and psychological causes. In contrast, the more lenient deadlines in their new work environment and results-only arrangements meant that bankers could continue to deliver high-quality work. They simply compensated for their diminishing output by working longer, which caught them in a cycle of escalating work hours and chronic physical and emotional distress.

Banking was like a conveyer belt. You had to get your work done within a specific and relatively short period of time because others are waiting for it to get their work done. If you all of sudden fell short, it made others and you ask why and made it really important to fix the problem or step away. It's different now. I am only rewarded on my results. Since most of us work from home, you can't really tell how long it would take someone else to get this done. I did notice that I work a lot and that I am constantly exhausted and depressed, but I mean who isn't?

As a result, neither bankers nor employers recognized troubling health issues as such. This was reflected in a chasm between the health issues bankers listed,

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on the one hand, and their subjective assessment of well-being, on the other. Specifically, like the banker above, bankers reported relatively severe ailments, many of them chronic, such as immune and endocrine system disorders, body pain, insomnia, anxiety, and depression, but believed that this was normal and, therefore, rated their well-being as "OK," "nothing unusual," and "fine."

Work-Life Innovations

At the time of this analysis, about 35 percent of the bankers who had left the banks and had entered a second profession were forced by their breakdowns into substantial, unanticipated, and at least initially unwelcome changes. Some were let go during the recession, partly for performance reasons; others had to cut back, take a break, or leave their job because their health problems had escalated. This second set of breakdown cycles was patterned like the breakdown cycles at the banks, only more intense because the physical issues, which had often been festering for years, were more severe. At the banks, the bank-ers had fought the breakdowns, first by pushing harder and then by trying to work differently. This time around, mere changes in how to work did not suffice and bankers often had to stop working altogether, at least for a while. Bankers felt defeat, as expressed in such phrases as "I give up," "I cannot live like this anymore," and "I am done fighting."

Similar to what happened when they were at the two banks, more than 60 percent of bankers continued to work with various degrees of physical decline, working around health issues, as described previously. For those bankers, there were few changes in how they lived, worked, and felt. This was different for the approximately 35 percent of bankers whose breakdowns were so severe that they were forced to stop working. I will focus on this group here because, as before, the bankers with incapacitating breakdowns were forced to relate to their bodies differently. They now attended vigorously to physical activity, partly because they had no work obligations, but mostly because they wanted to heal. Many of their physical ailments had come from prolonged sitting, stress, and inactivity. Activity, consequently, was a salient remedy.

Like most things in the bankers' lives, their devotion to physical activity, too, escalated, as illustrated by a banker turned consultant who had suffered from such severe back pain that he needed surgery that could potentially paralyze him. I had spoken to the banker before the planned surgery. The following excerpt is from an interview five months later. I never got the surgery. I had started to walk more during the few weeks before the surgery to be as fit as possible and hopefully recover afterward. And once I started walking, I just started to feel energy in my body for the first time since I can remember. So I walked a little more every day. Then the few days before the surgery, I decided that the one thing that I wanted to do before I may be paralyzed forever is to do a climbing tour in the Alps. Nothing too strenuous, because I was still basically an invalid. So I postponed the surgery and started training and actually did the trip. And every day I felt better and stronger both mentally and physically. And now I still have some pain but I am confident that I can control this by living differently.

In the next interview, another five months later, the banker was training for a challenging trek through the Himalayas. Other bankers had similar experiences. For example, another banker turned CFO started walking to improve his heart health after a heart attack: "After the surgery, I could barely get up the stairs without stopping constantly. So I started walking very slowly, like an old man, on flat terrain. But I kept at it and soon decided to walk a 5-K and then a 10-K and then a marathon. . . . Next year, I am planning to do the iron man." This banker decided in his forties to train for an event that requires the athletic prowess typically associated with younger people or people who have conditioned themselves throughout their lives. Anecdotal evidence suggests a similar pattern in the general population. For example, the category of people who are fifty and older is the fastest growing one in marathon (Helliker 2012). Like my informants, people often turn to strenuous sports midlife because they were previously consumed by work and therefore did not realize their interest in and talent for a particular sport.

Once the bankers were healed and could go back to work, they resisted giving up their newfound happiness and experimented with new ways of living and working. For example, one banker turned hedge fund manager explained: "I have now been off from work for almost a year and I am in better form physically than I have ever been in my life. And for the first time in my life, I am happy. I always thought that meeting one career goal after another would make me happy, but that kind of satisfaction has always been shortlived and came at an insufferable cost to everything else in my life. I want to go back to work, but I have to find a way to make it sustainable." In the case of this banker, he trained in the morning and at night, which left about four to five hours per day to work. To make this arrangement possible, he started to

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do consulting. Because of his past experience, he could command a substantial hourly rate. To increase capacity, he outsourced some of his work to virtual low-cost workers in India and Thailand. Another banker turned health care executive talked about his changing perspective on how to live and work:

We take it for granted that you work in one fixed way. Something like five to six days a week, from morning to evening, taking a few weeks of vacation, and then retire at some point. But who says that this is the only way of being productive? Or that it is the best way of being productive? Once you look around, you see that there are enormously successful people who live and work differently. Maybe Tim Ferris [the proponent of a four-hour work week] is extreme, but look at how successful he is. He has hit a nerve. There are many people looking to somehow work differently and to not be completely eaten up by work and to also develop in other areas. In my case, I want to be a serious mountaineer. And first I tried to take weekends off and go into the mountains. . . . Now I leave work Thursday afternoon and come back late Sunday night. And I take off a few months midyear to travel to some of the major mountains on this earth. . . . I could not do this as a health care executive. So I looked around and found that professors have the summer off and now I teach courses on health care as an adjunct.

In other examples, a journalist takes on projects for six months a year and travels for the other six months, partly to places that will provide input for new projects. These examples illustrate how the bankers' physical decline first detached them from the professional cultures that they had been part of and then introduced them to ways of working and living that are relatively new in these professional cultures.

Discussion and Contributions

This study documented the banks' instantiation of Cartesian dualism in practice and the coevolution and social circulation of practices, narratives, and forms of embodiment. I described how the two banks (Banks A and B) separated the control of bankers' bodies from the control of bankers' minds through contradictory and elusive practices. Visible controls exemplified by banks' official narratives targeted the mind and highlighted autonomy by explicitly valuing individual workers' autonomy and work-life balance. Unobtrusive embodied controls bypassed the mind, targeted the body, encouraged

indiscriminate overwork, and counteracted work-conflicting goals and bodily needs.

The Intensification and Dismantling of Dualism in Knowledge Work Two original contributions of this study are to show how the extreme form of dualism in our modern knowledge economy has the potential to result in its own undoing and to document the emergence of new forms of embodiment.

Cartesian dualism manifests differently in different settings of production. In the white-collar work that was prevalent in our previous industrial economy, people worked more with their minds, as compared to manual work or athletics. This setting of production thus made it possible for the body to move into the background of individual and cultural awareness, a situation that bolsters cognitive theory. Knowledge work is the recently emerging higher octave of white-collar work. According to conventional definitions (e.g., Davenport 2005), knowledge workers rely even more intensively on their minds, for example, using more specialized knowledge and performing more complex mental operations. This longitudinal study documents how this new setting first heightens the dualism between body and mind as high-intensity work practices, narratives, and subjective experiences overvalorized the mind and compelled participants to suppress bodily cues. Over time, the intensification of work pace taxed the body beyond its capabilities and thus brought about the opposite pattern, in which bankers identified relatively more with their bodies and distrusted their minds. This emerging form of embodiment is difficult to reconcile with cognitive research and invites new theorizing.

Prior work has documented mind-body split as a characteristic consequence of capitalistic production. Critical scholars argue that capitalism splits the mind from the body because of the separation of physical and mental activity, because monotonous labor drains vitality and numbs the body such that the person does not feel it, and because etiquette rules force participants to separate what they feel from what they show (e.g., Marcuse 1955; Marx 1977). Organizations create obedient bodies that reproduce existing conditions (e.g., Bourdieu 1977; Foucault 1978, 1979). My work qualifies these ideas, which only describe how organizations socialize the mind to control and dissociate from a numb and passive body. I show how over time these same forms of production can unintentionally empower the body, turning it into a force that helps people transcend socialization and dualism, for example, by exploring new ways of relating to their bodies and of living.

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Knowledge Work as a Dynamically Changing Cultural Fabric

Another set of original contributions comes from studying knowledge work as a dynamic cultural fabric that semiotically acts upon individuals. Analyzing the dynamic interrelation of its diverse-semiotic-elements has resulted in different conclusions, as compared to approaches that focus on only one element, such as only minds, only narratives, or only bodies, and redirects managerial practice. Prior organizational research on knowledge-intensive work has observed how organizations have eliminated visible traditional controls, such as hierarchies, direct supervision, and rules and norms about how to work. Informed by cognitive theory, scholars consequently have looked only toward narratives and concepts, such as autonomy norms, to understand behavior in organizations (e.g., O'Reilly and Chatman 1996). As a result, they have not noticed that organizational controls have not been eliminated but have merely changed form, targeting bodies and bypassing minds. My data thus qualify taken-for-granted perceptions of knowledge workers as more autonomous than industrial workers were thought to be, surprisingly targeting employees with the most rather than the least status, education, and options.

Organizational socialization research, too, typically studies person change mostly in a one-dimensional way, namely, as a change in concepts (Chao et al. 1994). In contrast, this study showed that work transformed participants more fundamentally. It not only changed what they knew but also how they enacted essential aspects of being, namely, the relation between mind and body and action. By studying the coevolution between bankers' self-narratives and ways of using the mind and body in action, I uncovered a conflict between these elements that altered the predictions of socialization dynamics. Because traditional cognitive socialization theories only study mental aspect and do not anticipate conflict, they predict that employees acquire culture linearly and usually stop analysis after employees' first year. This prediction failed starting in year 4, when bankers enacted a conflict-laden mind-body relation that caused nonlinear changes. Because controls stayed constant, these changes cannot be explained by changes in the cultural tool kit but must be explained by the evolving dynamic interactions between the cultural elements that I studied.

Because scholars and participants have not understood knowledge work cultures as the dynamic interplay of diverse elements, organizations have often failed to stem negative dynamics. For example, a number of investment bankers have committed suicide or died from overwork. Banks have attempted to remedy the problem through memos that forbid bankers to work during weekends. This study suggests that such an isolated practice is unlikely to have the desired effect because work pace is created and maintained by a complex web of factors.

Dualism in the Wild

Finally, this study illuminates a debate about a preeminent theory of human cognition and embodiment, namely, cognitive theory. Prior approaches have evaluated cognitive theory primarily as a logical framework, claiming that it is wrong because of its dualistic assumptions. In contrast, I studied cognitive theory as a thing in the world. This approach leads to new insights and opens up new lines of investigation. It shows that cognitive theory accurately describes how people enact cognition under certain conditions of production, such as the modern knowledge economy. Once we treat cognitive accounts as situated practices, not incorrect theories, we can explore how and why these dualistic practices and modes of embodiment are sustained and what their consequences are. We can also discover alternative choices that participants might make.

References

- Abrahamson, Eric. 1991. "Managerial Fads and Fashions: The Diffusion and Rejection of Innovations." *Academy of Management Review* 16:586–612.
- Alvesson, Mats, and Maxine Robertson. 2006. "The Best and the Brightest: The Construction, Significance, and Effects of Elite Identities in Consulting Firms." *Organization* 13 (2): 195–224.
- Anderson, John R., Lynne M. Reder, and Herbert A. Simon. 1996. "Situated Learning and Education." *Educational Researcher* 25 (4): 5–11.
 - . 1997. "Situative versus Cognitive Perspectives: Form versus Substance." *Educational Researcher* 26 (1): 18–21.
- Barley, Steve R., Gordon W. Meyer, and Debra C. Gash. 1988. "Culture of Culture: Academics, Practitioners, and the Pragmatics of Normative Control." *Administrative Science Quarterly* 33 (1): 24–88.
- Barley, Steve R., and Pamela S. Tolbert. 1997. "Institutionalization and Structuration: Studying the Links between Action and Institution." Organization Studies 18 (1): 93–117.
- Blythe, Mark. 2002. Great Transformations: Economic Ideas and Institutional Change in the Twentieth Century. New York: Cambridge University Press.

Bourdieu, Pierre. 1977. *The Logic of Practice*. Redwood City, CA: Stanford University Press. Callon, Michel. 1998. *The Laws of Markets*. Oxford: Blackwell.

Chao, Georgia T., Anne M. O'Leary-Kelly, Samantha Wolf, Howard J. Klein, and Philip D. Gardner. 1994. "Organizational Socialization: Its Content and Consequences." *Journal of Applied Psychology* 79 (5): 730–43.

Davenport, Thomas H. 2005. *Thinking for a Living*. Boston: Harvard Business School Press. Descartes, René. 1960. *Discourse on Method*. Baltimore: Penguin.

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Dreyfus, Hubert L. 1999. Being-in-the-World. Cambridge, MA: MIT Press.

Ferraro, Fabrizio, Jeffrey Pfeffer, and Robert I. Sutton. 2005. "Economics Language and Assumptions: How Theories Can Become Self-Fulfilling." *Academy of Management Review* 30 (1): 8–24.

— 2009. "How and Why Theories Matter: A Comment on Felin and Foss." Organization Science 20 (3): 669–71.

Fiske, Susan T., and Shelley E. Taylor. 1991. *Social Cognition*. 2nd ed. New York: McGraw-Hill.

- Foucault, Michel. 1973. *Madness and Civilization: A History of Insanity in the Age of Reason.* Trans. R. Howard. New York: Vintage.
 - ——. 1979. *Discipline and Punish: The Birth of the Prison*. Trans. A. Sheridan. New York: Vintage.

Frank, Robert H., Thomas Gilovich, and Dennis T. Regan. 1993. "Does Studying Economics Inhibit Cooperation?" *Journal of Economic Perspectives* 7 (2): 159–71.

- Gergen, Kenneth J. 1978. "Toward Generative Theory." *Journal of Personality and Social Psychology* 36 (11): 1344–60.
- Giddens, Anthony. 1986. *The Constitution of Society*. Berkeley: University of California Press.

Habermas, Juergen. 1968. Erkenntnis und Interesse. Frankfurt: Suhrkamp.

- Harvey, David. 1989. The Condition of Postmodernity. Oxford: Gladwell.
- Helliker, K. 2012. "Marathon Runners Stop Aging Out of the Race." Life and Style Section, *Wall Street Journal*, October 30.
- Horkheimer, Max. 1972. "Traditional and Critical Theory" (1937). In *Critical Theory:* Selected Essays, 188–243. New York: Seabury Press.
- Kant, Immanuel, 1965. *Critique of Pure Reason*. Trans. N. K. Smith. New York: St. Martin's Press.
- Kuhn, Thomas. 1970. The Structure of Scientific Revolutions. 2nd ed. Chicago: University of Chicago Press.
- Kunda, Gideon. 1992. Engineering Culture: Control and Commitment in a High-Tech Corporation. Philadelphia: Temple University Press.

MacKenzie, Donald, Fabian Muniesa, and Lucia Siu, eds. 2007. *Do Economists Make Markets? On the Performativity of Economics.* Princeton, NJ: Princeton University Press.

Mandel, Michael. 2005. "The Real Reasons You're Working So Hard . . . And What You Can Do about It." *Business Week*, October 3.

March, Jim G., and Herbert A. Simon. 1958. Organizations. New York: Wiley.

Marcuse, Herbert. 1955. Eros and Civilization. Boston: Beacon Press.

- Marx, Karl. 1977. Capital: A Critique of Political Economy. Vol. 1. New York: Random House.
- Mazmanian, Melissa A., Wanda J. Orlikowski, and Joanne Yates. 2005. "CrackBerrys: The Social Implications of Ubiquitous Wireless E-mail Devices." In *Designing Ubiquitous Information Environments: Socio-technical Issues and Challenges*, ed. C. Sorensen, Y. Yoo, K. Lyytinen, and J. I. DeGross, 337–43. New York: Springer.
- Michel, Alexandra A. 2011. "Transcending Socialization: A Nine-Year Ethnography of the Body's Role in Organizational Control and Knowledge Worker Transformation." *Administrative Science Quarterly* 56 (3): 1–44.

- O'Reilly, Charles A., and Jennifer A. Chatman. 1996. "Culture as Social Control: Corporations, Cults, and Commitment." In *Research in Organizational Behavior*, ed. B. M. Staw, 18:157–200. Greenwich, CT: JAI Press.
- Rubin, Robert E. 2003. In an Uncertain World: Tough Choices from Wall Street to Washington. New York: Random House.
- Schwartz, Barry. 1997. "Psychology, Idea Technology, and Ideology." Psychological Science 8 (1): 21–27.
- Scott, William R. 2008. "Approaching Adulthood: The Maturing of Institutional Theory." Theory and Society 37 (5): 427–42.
- Simon, Herbert A. 1976. Administrative Behavior. 3rd ed. New York: MacMillan.
- . 1991. "Bounded Rationality and Organizational Learning." *Management Science* 20 (1): 125–37.
- Society for Human Resource Management. 2009. "Pressure to Work: Employee Perspective." January 12, http://www.shrm.org/Research/SurveyFindings/Articles/Documents /OEwork.pdf.
- Urban, Greg. 2001. *Metaculture: How Culture Moves through the World*. Minneapolis: University of Minnesota Press.
- Wittgenstein, Ludwig. 1973. Philosophical Investigations: The English Text of the Third Edition. 3rd ed. Trans. G. E. M. Anscombe. New York: Macmillan.
- Zbaracki, Mark. 1998. "The Rhetoric and Reality of Total Quality Management." Administrative Science Quarterly 43 (3): 602–36.