

PERSONAL STATEMENT

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INTRODUCTION

My work focuses on two interrelated organizational trends that have become salient in the 21st century: workplace transparency (who gets to observe whom) and workplace connectivity (who gets to communicate with whom). Open offices and factories have made what was unobservable observed; advanced surveillance and tracking have made what was private public; ubiquitous communication technologies have made what was isolated connected; a surge in people-related data and analytics tools has made what was unknowable known. In particular, this evolution of the workplace has ushered in: (1) increased *transparency*—via greater *physical or digital observability* of employee activities, routines, behaviors, output, and/or performance—allowing managers to find new ways of ensuring that work gets done; and (2) increased *connectivity*—via intraorganizational network tools that structurally rewire and boost *patterns of human interaction* to facilitate collaboration and information exchange—giving rise to novel work structures and organizational forms. These two trends carry both benefits and hazards for organizations and their employees, with profound implications for scholars, educators, and managers.

Through my research, I investigate the impact of these two trends on employee behavior, organizational performance, and worker satisfaction. Specifically, I explore the dynamic interplay between the interests of the observers and the observed—often (but not always) managers and employees respectively—to better understand how leaders can avoid unintended consequences of managerial practices that are intuitively appealing but result in *too much* or *too little* workplace transparency and connectivity. This is especially important as employees who once lamented having too little visibility and connection have become more concerned about privacy and communication overload. I also aim to learn how organizations can unlock hidden benefits of seemingly counterintuitive practices around transparency and connectivity—counterintuitive because their outcomes are unexpectedly better than theory would predict. For example, my work has shown that more transparent workplaces can result in *less* transparent employee behavior (the transparency paradox); that less privacy around employee transgressions can yield *more* rehabilitation; that moves to more open workspaces can yield *less* face-to-face interaction; that less connected organizations can solve complex problems *more* ably and adaptably; and so on.

Collectively, my research and course development activities constitute an integrated body of work that speaks simultaneously to scholars, practitioners, and educators (see Appendix 1). For organizational behavior scholars, the findings and conceptual frameworks of my journal articles aim to advance how the field theorizes the impact of human interactions in modern workplaces on learning and collaboration, and on control and coordination. Because this work has implications for managers, HR systems, and employees, I have developed complementary course materials that equip students to both understand and effectively manage the effects of transparency and connectivity. I also endeavor to translate findings published in peer-reviewed journal publications into practitioner-facing print and digital articles (referenced in footnotes in this statement) to reach broader audiences and to enrich classroom discussions.

Why study workplace transparency and connectivity? There are both timeless and novel reasons why these trends form the focus of my interests. First and foremost, at an individual level, being watched (or not), watching others (or not), and having (or not having) access to interaction with others are fundamental to people's experiences at work. Second, at an organizational level, transparency and connectivity have become central to how organizations foster coordination and learning; how managers exercise control and discretion; and how workers derive more or less satisfaction. In fact, a core function of organization design is now to serve as a modulating device for increasing or decreasing workplace transparency and connectivity through adjustments in workspaces, roles, reporting relationships, and monitoring/information systems, with ensuing effects on how managers control and coordinate employee behavior while fostering collaboration and learning.

Third, as the field of organization design is gradually reshaped by increasing fluidity in how people organize and collaborate, transparency and connectivity become more theoretically critical because they reveal and channel that fluidity in organizational life. Traditionally, the field of organization design focused on the structure of work—so-called chains of command and division of tasks. My research points the way to an emerging field focused on the “structuring of work,” a dynamic process, in contrast to theoretically more fixed, formal structures. Structuring involves attention to what was once called informal organization as well as formal decision-making and command hierarchies, and it includes the experiences of workers as well as the decisions of managers. Structuring is an approach arising from and suited to the era of digital tools. Rather than focusing on boxes and lines of a hierarchical organization chart, or circles and lines in a network map, this reconceptualization of the field of organization design focuses on how managers can continually and systematically adjust transparency and connectivity to improve performance and satisfaction through the ongoing arrangement of organizational design elements.

This concept of structuring as an ongoing managerial activity requires a specific approach to research and has thus informed who I have become as a scholar: one who is in the field but uses multiple methods (with varied coauthors), from qualitative inductive studies to field experiments, to investigate the phenomena; one who is searching for the frontier example—extreme cases of novel ways of structuring work—to understand how work may be managed in the future, even in more typical settings; one who employs an integrated approach to research and course development, investigating and documenting emerging possibilities through field cases that then both extend systematic research and inspire subsequent studies, and developing course materials to make those findings real for students. To examine how ongoing structuring takes place, I have found it helpful to draw on more diverse perspectives from my international experiences and to cross levels of analysis so as to understand the relationship between the people doing the work and the people managing them.

My interest in organizational structuring, its relationship to transparency and connectivity, and their counterintuitive effects on performance and satisfaction also stems partly from my prior professional and educational experiences. When I was at the Boston Consulting Group as a consultant and project leader in the early 2000s, workplace physical spaces were opening up, and digital data (including breadcrumbs from exploding Internet and intranet usage) provided new ways of tracking and coordinating employee interactions and work. In particular, the enthusiasm around organizational networks and analytics most excited me in my client work, where I found great interest but inadequate rigor—both theoretical and empirical—to help managers make good use of the new tools at their disposal, even as we redesigned and restructured workplaces to meet their evolving needs. I was intrigued by the trends toward transparency and connectivity as vehicles for performance improvement, but I was unsatisfied by our understanding of their impact on behavior and performance—and was inclined to believe, based on my projects at BCG and the philosophical roots of transparency and privacy I had been exposed to in my JD/MBA, that there could be unintended effects. I therefore launched a research program to investigate these phenomena.

In the following pages, I outline the insights that have arisen from my research and how they have influenced practice. I then describe course materials I have developed to make these ideas accessible to students and executives in the classroom. Finally, I describe my teaching, service activities, and plans.

1. RESEARCH

My first research papers about transparency and connectivity initiated a larger, ongoing conversation about the future design of workplaces, just as hybrid work strategies, people analytics practices, and other trends began to flourish and change how people work. I have aimed to simultaneously conduct empirical work on transparency and connectivity within these emerging and evolving settings, generate conceptual frameworks to consolidate findings in the field and guide future research, and translate my findings for

educators to teach and for practitioners to understand and apply. By demonstrating the value in studying transparency and connectivity, I have ignited the interest of other empirical and analytical researchers in furthering our understanding of how these trends allow for novel ways of structuring work in the future.

1.1 Managing the Counterintuitive Effects of Workplace Transparency on Organizational Behavior and Performance

I have studied multiple ways in which workplace transparency is pursued (e.g., performance monitoring, process visibility, employee surveillance, disclosure of transgressions) and examined the impact it can have. To enhance performance at work, when is it helpful to observe employees and when not?

1.1.1 Discovering the Transparency Paradox

The first core empirical insight from my research relates to a tension between the theory and practice of workplace transparency—defined as the removal of boundaries to observation. In theory, such transparency enables the *observer* to be better informed and thus to drive a host of desired performance outcomes: compliance, productivity, learning, and innovation. But in practice, it can negatively alter the behaviors of the *observed*, impeding those very outcomes.

I have discovered that, although this negative effect can be pervasive, managers rarely see it. While they seek greater visibility into how work is done with their array of data-driven, transparency-enhancing tools, employees grapple with privacy-related questions (ranging from “How can I get them to leave me alone so I can do this job right?” to “How *much* do they know about me?”) and as a result hide in plain sight. Again and again, human ingenuity on the ground prevails over managerial efforts to monitor behavior: increasingly transparent, open, observable workplaces result in less transparent employees, who hide how work gets done from outsiders’ view. After rigorously studying this phenomenon that hadn’t yet been named, I labeled it the “transparency paradox.”

In my first paper about it, “**The Transparency Paradox: A Role for Privacy in Organizational Learning and Operational Control**,” published in the *Administrative Science Quarterly*, I describe my inductive, qualitative field research in a work environment that was the epitome of transparency: a 14,000-person mobile phone factory in China where each floor—roughly the size of a football field and populated by as many as 2,000 workers—was completely visible to all, with no walls or divisions. By embedding into the production lines five Chinese-born Harvard undergraduate researchers—who worked, ate, and lived alongside employees who knew them only as coworkers—I quickly learned that the production teams hid a great deal from their “all-seeing” observers, despite (and perhaps because of) the open environment. As the data in the paper show, there was no ill intent: employees wanted to be productive and had figured out ways to work that were more efficient than standard procedures. Because explaining even small tweaks to managers could take too much time (and might offend those who had designed the process), employees simply did a better job and found ways to hide how they did it so that their behavior met the expectations of their observers. Thus, a more-transparent work environment produced less-transparent employees—from which I derived the notion of a *transparency paradox*. The promises of increased organizational learning and operational control from transparency were more myth than reality, because higher visibility drove workers to conceal their activities through codes (i.e., nudges, signals, etc.) and other costly means. Indeed, on their very first day, the embedded researchers were trained in how to do things two ways: the better way when no one was watching and the official way when someone was. Ironically, the real benefit of a transparent workplace *to the workers* was that *they* could see when they were *being observed* and modify their behavior accordingly.

Although the employees were more productive than they would have been had they followed all standard procedures, they were less productive than they *could* have been, for a couple of reasons: They had to spend unproductive time protecting their well-meaning subterfuge, and whenever someone “official” came around, they reverted to the less-productive methods that observers expected to see. Curious about

whether creating a zone of group privacy could reverse that effect, I ran a field experiment on one floor, where 32 manufacturing lines produced similar mobile data cards. I randomly selected four treatment lines and 28 control lines. The treatment involved installing the equivalent of a hospital bed curtain to fully encircle each of the four experimental lines.¹ Over the next five months, controlling for Hawthorne effects, I found that the lines with curtains were 13% more productive than the other lines. Qualitative evidence suggests that the curtains, by shielding employees from observation, supported local problem solving, experimentation, and focus, even while work *within* the curtains became much *more* transparent: employees were freer to learn from one another how to work better. Defects remained extremely low and variance stayed constant, even as throughput rose.

In sum, there were three key findings: (1) a highly transparent workplace compelled employees to hide process improvements and revert to less efficient standard procedures when being observed; (2) that same transparency also enabled employees to gauge when to comply with standard procedures and when to deviate from them; and (3) group privacy allowed group members to share information more openly with one another, which increased productivity and learning. I concluded that group-level privacy is an important yet underused managerial lever for performance and that, paradoxically, unfettered transparency can undermine accurate visibility into employee behavior. “The Transparency Paradox” won the 2013 best published paper award in both the OMT and OB divisions of the Academy of Management.²

1.1.2 Building a Theory of Workplace Transparency

As I examined the tensions between transparency and privacy, I began to investigate the evolution of theory and research on these themes so that I could establish a foundation upon which to study workplace transparency in different contexts. I conducted the first *combined* historical review of organizational literatures on transparency and privacy to develop a deeper theoretical understanding of how the field got where it is today and to build new theory to advance it. In “**Making Transparency Transparent: The Evolution of Observation in Management Theory**,” published in the *Academy of Management Annals*, I find that recent management research on transparency has focused mostly on the observer’s perspective, while jurisprudential and philosophical research on privacy (to which I was exposed as a law student many years ago) has focused mostly on the observed party’s perspective. That distinction, I argue, has come at the cost of incompleteness in both literatures. On the management side, I note three interrelated shifts: (a) the shift (noted above) toward favoring the observer’s point of view; (b) a shift in what has been made observable, from organizational outcomes to detailed individual activities; and (c) a shift from observing technology to observing people. In short, technology is providing observers with ever higher

¹ As I explain in the second paragraph of page 195 of the article, this treatment was ‘inductive’ in that it was not my original plan but rather an idea that unexpectedly surfaced from the workers, via one of my embedded researchers.

² For practitioners, I investigated similar dynamics in other contexts—specifically, corporate offices and service organizations. When writing “**The Transparency Trap**,” published in *Harvard Business Review* (and often provided as a post-class reading for the “Trouble at Tessei” case), I detected a pattern across settings that became central to my research program. To manage transparency-related tensions around productivity and performance, people were putting up various boundaries to create one or more “zones of privacy”: zones of attention (so employees could focus on “us” and “our work together,” as in the phone factory), zones of judgment (so they could receive honest feedback without the politics or pressures of evaluation), zones of slack (so they could have sufficient freedom for productive deviance rather than pure compliance), and zones of time (so they could innovate fruitfully within time-limited windows of experimentation). As it turned out, the ideas in “The Transparency Trap” strongly resonated with management audiences. In 2014, the article won the Academy of Management Best Practitioner-Oriented Publication in OB award and was named a top-three finalist for the HBR McKinsey Award, awarded each year to the best article in *Harvard Business Review*.

To supplement “The Transparency Trap,” I also published several digital articles in *Harvard Business Review*, including “How Being Filmed Changes Employee Behavior,” “Why We Hide Some of Our Best Work,” “Why We Need to Outsmart Our Smart Devices,” and “Flat Organizations Like Zappos Need Pockets of Privacy.” To reach an even broader practitioner audience, I also published “The Smart Way to Create a Transparent Workplace” in the *Wall Street Journal*. To reach a specialized HR audience, I published “The Evolution of Transparency in Management: Get Me Everything You Can on... Me,” in *SHRM People + Strategy*.

levels of transparency at work, triggering ever deeper privacy concerns among the observed. The result is greater potential for negative consequences like those in the transparency paradox. “Making Transparency Transparent,” driven by a holistic view of both transparency and privacy, sets forth an agenda for future research to explain and address the transparency paradox.

1.1.3 Investigating the Mechanisms Behind Workplace Transparency in Different Contexts

With that theoretical grounding, it was time to empirically investigate how, in different contexts, workplace transparency counterintuitively shapes the behaviors being tracked—sometimes unexpectedly for the worse and sometimes unexpectedly for the better. I wanted to know: What is going on under the proverbial hood, even when it has seemingly been pried open for everyone to see how things work? What mechanisms (visible and hidden) are driving these behavioral and performance effects? Which transparency-related management tools and technologies are creating new problems or exacerbating existing ones? And which tools and technologies have the potential to improve outcomes?

That line of inquiry led to the following four insights:

(1) Workplace transparency in the form of employee monitoring *can* also lead to positive behaviors and outcomes—not just negative effects on autonomy and motivation: Organizational psychologists have long held that monitoring workers saps them of their autonomy and thereby reduces their effectiveness. Yet technology has intensified such surveillance in recent years: Managers now track everything from clinicians’ handwashing to truck drivers’ efficiency to customer service reps’ interactions, sometimes with no detriment to performance and with strong support, not protest, from employees. In “**Uncovering the Mitigating Psychological Response to Monitoring Technologies: Police Body Cameras Not Only Constrain but Also Depolarize,**” published in *Organization Science*, Shefali Patil (McCombs School of Business, The University of Texas at Austin) and I investigate how employees respond to close monitoring in a context where transparency has been conventionally thought to provoke negative reactions among the observed: U.S. law enforcement.

In recent years, 95% of large U.S. law enforcement agencies have either committed to or already implemented body-worn cameras (BWCs), and a majority of U.S. police officers support their use. Patil and I were intrigued by that support, because it does not (at first glance) align with the transparency paradox findings, which suggest that closely observed employees look for ways to protect their privacy. Furthermore, scholars have frequently identified BWCs as a source of decreased autonomy (and therefore motivation) for officers and have, across numerous large empirical studies, failed to show an increase in policing effectiveness. So why do officers welcome BWCs? As it turns out, the psychological effects of employee monitoring in a law-enforcement context are more complex than previously understood. In our mixed-method study (field experiment and qualitative data collection), Patil and I find that the potential for positive impact hinges on who has *access* to the gathered data. Whereas prior research assumes that access resides almost exclusively with supervisors and other evaluators, technological advances have enabled employee access as well. When employee access is allowed, although the autonomy-reducing effect remains intact, the drain it would otherwise place on effectiveness is mitigated by alleviation of employees’ perceived social and ideological gap between themselves and their evaluators—what we refer to as polarization. Surfacing that countervailing psychological effect of depolarization (i.e., reducing the delta between perceptions of the evaluator and the evaluated) helps to explain why prior studies of BWCs failed to show a consistent impact on performance: the opposing effects of decreased autonomy (with a negative impact on performance) and decreased polarization (with a positive impact on performance) had not been disaggregated and thus cancelled each other out, resulting either in non-significant results or, because the two effects were idiosyncratic in magnitude, in inconsistent results across contexts and studies. To reveal the beneficial impact on policing behaviors and outcomes, the opposing effects had to be disaggregated, which we were the first to do. This insight also expands how we conceptualize

transparency, incorporating the idea that it can include employees' access to their own data.³

(2) Transparent data can change the role managers play in delivering performance feedback: It is one thing to turn monitoring into a shared activity between the observer and the observed. It is quite another to sideline the observer by allowing employees to access—on their own initiative and without manager involvement—performance data that previously only their managers could give them, as some companies are now doing. Coauthor Shelley Xin Li (Assistant Professor, USC Marshall School of Business) and I theorize this as a partial disintermediation of traditional manager-led feedback. Similar to prior scholarship by healthcare researcher Gunther Eysenbach in nonmanagerial contexts, which argues the Internet has transformed doctors from intermediaries (who stand “‘in between’ [latin: inter- means ‘in between’] the consumer and information”) into apomediarities (who instead “‘stand by’ [latin: apo- means separate, detached, away from] to guide a consumer to high quality information and services without being a prerequisite to obtain that information or service”), we conceptualize the change in managerial roles in the delivery of performance feedback as a move from intermediary to apomediarities and investigate the implications. In a field experiment at a large service organization, we have studied the effects of that approach on employees' performance (“**The Performance Effects of Giving Front-Line Employees Direct Access to Performance Data and Thereby Limiting the Supervisor's Feedback-Intermediation Role: Evidence from a Field Experiment,**” under second-round review at *Management Science*). With the company, we co-designed an intervention that made employees' performance data—time-use analytics previously available only to supervisors—simultaneously available to the employees themselves. We do find a positive effect on productivity, but it is driven by employees avoiding the least-productive behaviors rather than increasing the most-productive ones. In their words, the employees feel motivated “to conform, not excel” when managers no longer fully intermediate the data by aggregating, filtering, and framing it prior to delivery, instead allowing employees the freedom to access it independently—an interesting extension of the transparency paradox. (Like the workers in the mobile phone factory, these workers responded to increased transparency by adopting “standard” behavior that would make them blend in, even though this transparency was not afforded solely to managers.) We find that front-line employees with low supervisor support, low intrinsic motivation, and high extrinsic motivation benefit most from accessible performance data, which suggests that the data act as a substitute for both managerial support and managerial recognition. Building on the observer/observed theorizing in “Making Transparency Transparent,” we discuss the theoretical implications for research on performance feedback and the practical implications for the design of transparent feedback systems.

(3) By making an employee's bad behavior transparent, an organization can prompt rehabilitation: Workplaces use transparency to spur learning from employee behaviors, but what if the objective is reducing bad behaviors? Organizations—particularly human resources teams—tend to address bad behaviors very quietly while raising the visibility of good ones. Indeed, the more transparent workplaces become, the harder HR has tried to keep transgressions private. Making transgressions transparent—which may result in stigmatization—is generally assumed to be purely punitive.

³ For practitioners, this paper was featured in the *Harvard Business Review* article “**A Brighter View of Employee Monitoring,**” in the Ideawatch section of the magazine. It also gave rise to the article “**How Companies Are Using Tech to Give Employees More Autonomy**” in *Harvard Business Review*, in which my co-authors Michael Lee (Assistant Professor, INSEAD) and Joost Minnaar (Doctoral Student, VU University) and I broadened the conversation to examine the popular narrative about AI, machine-based management, and other ways in which technology is affecting the relationship between managers and workers. In that article, we consider how powerful technology tools that are enhancing transparency and connectivity in the workplace can be implemented to either reduce employee autonomy, as is popularly referenced, or support it to make room for more, not less, human judgment. From the examples we explore (including Buurtzorg, which subsequently turned into an opportunity to write a case), it seems that machines can be congenial partners to greater employee autonomy and decentralized decision-making.

But in “**Scarlet Letters: Rehabilitation Through Transgression Transparency and Personal Narrative Control**,” published in *Administrative Science Quarterly*, Erin Frey (Assistant Professor, USC Marshall School of Business), Nick Rekenhaller (Doctoral Student, NYU Sociology), and I show when and how such transparency can prevent bad behavior from recurring. Drawing on a unique dataset of 23 similarly situated transgressors who were asked by their organization (a military academy) to wear a pin that signaled their transgression, we observed that their pins did not, as one might expect, lead to persistent stigmatization, ostracization, and withdrawal. Instead, the pins prompted social interaction. When people asked about the pins, transgressors engaged in a coactive process to develop a mutually acceptable narrative about their transgression. For that narrative to endure, transgressors needed to exercise self-control and avoid further transgressions, which they did even after their pins were removed, signaling rehabilitation. (In our study, rehabilitation is signaled by the absence of a recurring transgression, not by the judgment of a manager or other individual.) Our rich data allow us to induce not just the coactive process of rehabilitation via a mechanism we label *personal narrative control* but also four contextual conditions that enable transgression transparency to promote learning and improvement (versus more negative outcomes): (1) a transgression neither so egregious that the organization loses discretion in how to respond nor so trivial that investing in rehabilitation seems unwarranted; (2) a legal and privacy context that permits transgression transparency; (3) an environment that fosters coactive engagement between transgressors and non-transgressors; and (4) a context where the organization has the ability to amplify and diminish transgression transparency at relevant times. We also theorize how these conditions generalize to other organizations seeking to rehabilitate transgressors instead of taking the often easier (but more costly) approach of keeping bad behaviors hidden.

(4) Open offices can undermine the collaboration they are meant to promote: The ubiquitous cube farm is the corporate version of the production floor I studied in the Chinese phone factory. Therefore it is not surprising that every time I taught or presented my “transparency paradox” findings, one question kept coming up: What does this mean for open offices?

Not wanting to speculate, I decided to research that question directly. In partnership with Stephen Turban (Doctoral Student, HBS), I used a large-scale field experiment in two office spaces at two different Fortune 500 headquarters to produce “**The Impact of the ‘Open’ Workspace on Human Collaboration**,” published in *Philosophical Transactions of the Royal Society B: Biological Sciences*.⁴ We found that—despite intentions to the contrary—transitions to more open workspaces reduced face-to-face interaction between their inhabitants (by a rather striking ~70%), who instead turned to electronic communication (email, IM) for their interactions due to the norms that quickly emerged in those more open spaces.⁵ The transparency paradox was alive and well in these “collaborative” open offices: Once again, more-transparent environments led to less-transparent workers, despite the intended purpose of enhancing face-to-face employee interaction. And because the change in workplace behavior affected not

⁴ I selected this peer-reviewed journal—the world’s longest-running journal (and home to authors from Darwin to Faraday)—to provide this article with the broadest reach and impact it could have, even beyond a more traditional organizational behavior-focused journal. Indeed, the article won an Altmetric award for being the most-mentioned published article of 2018 in their Studies of Human Society category (13th across all published articles of 2018) and has been spotlighted by a wide variety of thought leaders, from Freakonomics to David Brooks.

⁵ For a practitioner audience, I combined that research with additional interviews and datasets to produce, with coauthor Ben Waber (Founder/CEO of Humanyze and PhD, MIT), “**The Truth About Open Offices**,” published in *Harvard Business Review*. In this article, we bring together a series of explanations for why it remains true in these particular environments that more-transparent spaces lead to less-transparent workers. Part of the problem, we find, is that open offices don’t always promote the free-flowing, serendipitous interactions that managers expect. They often, in fact, cause people to quietly hunker down to avoid appearing unfocused or disrupting others. People also choose their own channels of interaction (often digital rather than face-to-face), decide how long each interaction will last, and determine what it will entail—and managers have little if any say in shaping those exchanges regardless of any “collisions” they try to orchestrate. To prevent or mitigate unintended effects on collaboration, managers can use digital tools to capture how people are really interacting and figure out with greater precision whether, when, and how to intervene.

just transparency but also how people interacted and communicated with each other⁶, these results fed my interest, and work, on workplace connectivity, about which I will now provide more detail.

1.2 Managing the Counterintuitive Effects of Increased Workplace Connectivity on Organizational Behavior and Performance

While investigating how workplace transparency and privacy shape organizational behavior and performance, I wondered about the related effects of workplace connectivity. The technologies that were increasing transparency were also structurally increasing connectivity among employees. How were they changing patterns of collaboration? And what was the impact on complex problem-solving, routines, and organizational outcomes? With individuals using technology to span physical, structural, temporal, and other boundaries in organizations, they often experience work relationships as *unbounded* because those traditional elements of organizational design no longer as meaningfully constrain decisions about with whom they collaborate. As a corollary to my transparency work, I began to build a body of work to understand the practices and circumstances that make connectivity beneficial, drawing on—and contributing to—the literature on social networks and contingent effects on outcomes via task characteristics and interdependencies. As with transparency, I began to consider whether answers about the value of workplace connectivity would be less defined in yes/no terms (e.g., increased connectivity is good/bad) and more defined along a spectrum (e.g., how much connectivity would be productive given the contextual contingencies at play). That, in turn, led me to wonder what sorts of fluid collaborative structures—which facilitate connectivity in some parts of organizations while limiting it in others—can produce strong performance. I took a fresh look at organizational theories of how different structures for intraorganizational interaction (like the degree of clustering, centralization, or intermittency of employee interactions) affect organizational performance through their impact on connectivity. What structuring mechanisms, I asked, might managers use to dynamically regulate connectivity—in place of more static, traditional approaches to organizational design—to enhance rather than diminish performance?

1.2.1 Managing Connectivity Through Network Clustering and Centralization

In addition to taxing cognition, too much connectivity can thwart creative solutions to problems—as counterintuitive as that may seem in a world where the assumption is often “more is always better.” Through two different lines of research, one on networks and the other on centralization, I examine ways in which the structuring of relationships among people can modulate the benefits and costs of connectivity.

Using data from a laboratory experiment in which we varied the structures of collaborative networks, Jesse Shore (a research scientist at Meta), David Lazer (Professor, Northeastern University), and I investigated how the amount of transparent (shared) information and interaction in an organization’s network structure shapes problem solving. In “**Facts and Figuring: An Experimental Investigation of Network Structure and Performance in Information and Solution Spaces**,” published in *Organization Science* and winner of the 2014 best conference paper at INGroup, we argue that problem-solving tasks involve both exploration for information (“facts”) and exploration for solutions (“figuring”). We randomly assigned 51 groups of 16 people into four different network structures (with varying levels of connectivity) and asked them to solve a complex whodunit task, all using collaborative technology. Our results show that network clustering (the degree to which people overlap in their connections)—our proxy for connectivity in a problem-solving context—has opposite effects for these two forms of exploration. We find that this tighter collaboration creates less redundancy in the search for information (information

⁶ When the COVID-19 pandemic triggered a widespread transition to working from home, coauthors Hayley Blunden (Assistant Professor, American University), Andrew Brodsky (Assistant Professor, UT Austin McCombs School of Business), Wonbin Sohn (Doctoral Student, UT Austin McCombs School of Business), Ben Waber (CEO, Humanyze), and I surveyed the same 600 US-based white-collar employees every two weeks since the second half of March 2020. “**The Implications of Working Without an Office**,” published as a Big Idea in *Harvard Business Review*, summarizes this latest evolution in workplaces and highlights themes that are consistent with my open office work.

travels fast in a clustered network) but also limits interpretation of that information into theories and solutions (theories and solutions circulate quickly too, limiting the diversity of alternatives). In other words, clustering makes fact-finding better but figuring worse. Too much connectivity can be bad, then, for generating solutions—and boundaries *blocking* that connectivity can actually be productive (e.g., the boundaries that create zones of privacy as described in the *HBR* article in footnote 2, above).

To understand what that can mean in practice, I have been studying the tradeoffs and advantages of clustering. So far in my scholarly work, I have identified a couple of strategies for managing the tradeoffs:

(1) Breaking the clustering tradeoff with time-based intermittency: Building on our “Facts and Figuring” article, Jesse Shore, David Lazer, and I began investigating collaborative rhythm as a “structural” device managers can employ to help their organizations do a better job at both facts and figuring. In “**How Intermittent Breaks in Interaction Improve Collective Intelligence**,” published in the *Proceedings of the National Academy of Science*, we propose an intervention to break the tradeoff between too little and too much collaboration. We randomly assigned 514 sets of three subjects to one of three levels of collaborative interaction—none, intermittent, or constant—and asked everyone to solve the classic traveling salesperson problem (chosen for its rugged solution landscape). Participants were each given a map marked with the locations of 25 fictional cities. Their task was to find the shortest route to visit each city once and then return to their starting point. Groups with no connectivity (where each member solved the problem in isolation) came up with the largest number of unique solutions, including some of the best and some of the worst—generating a few fantastic solutions but, overall, a low average quality of solution. Groups with constant interaction, via always-on technologies, produced higher-quality solutions on average but found the best ones far less frequently—generating less variable but more mediocre solutions. Groups that interacted intermittently captured the best of both worlds rather than succumbing to the worst of either one. They preserved enough isolation to find the best solutions at least as often as the groups with no interaction, but also collaborated enough to maintain an equivalently high average quality of solution compared with the groups in constant interaction.⁷

(2) Finding new value in (certain kinds of) centralization. Extending my work on how connectivity can best be structured to foster effective problem solving, I explored the impact of often-denigrated centralization. In a world that increasingly prioritizes decentralized connectivity,⁸ it is tempting to dismiss

⁷ My coauthors and I combined the findings from these two published papers to produce “**Improving the Rhythm of Your Collaboration**,” published in *MIT Sloan Management Review*, where we describe how organizations can achieve intermittency and thus improve their complex problem solving. In effect, we explore how workplaces can use different types of connectivity to create zones of attention, akin to some of my research on transparency mentioned above. The article was awarded the Richard Beckhard Memorial Prize by the MIT Sloan School of Management. (The judges were the following members of the MIT Sloan faculty: Seley Distinguished Professor of Management Deborah Ancona, Erwin H. Schell Professor of Management John Van Maanen, and retired senior lecturer Cyrus Gibson. About the decision, they said, “The evident hyperconnectivity of so many employees these days needs attention not only for better organizational outcomes but for their own well-being. That management should step in with personal awareness and modeling is advice Dick would practice. He would say it is the right thing to do.”)

⁸ To begin exploring this phenomenon, I developed a practitioner-oriented *Harvard Business Review* article about Tony Hsieh’s Holacracy experiment at Zappos, co-authored with John Bunch, Niko Canner, and Michael Lee: “**Beyond the Holacracy Hype: The Overwrought Claims—and Actual Promise—of the Next Generation of Self-Managed Teams**.” In this article, we look at how Holacracy at Zappos rebalances two key goals in contemporary organizations: reliability and adaptability. Whereas traditional Weberian bureaucratic structures are typically stronger in reliability, self-managed teams—which have steadily grown in popularity over the past 65 years—win on adaptability. In most organizations, the two fight each other: Self-managed teams feel undermined by the red tape of matrix structures and vice-versa. But Zapponians operate in self-managed teams *without* bureaucratic structures to hold them back. Processes and technology provide collaborative structure. The processes in Holacracy are clearly defined by many rules of engagement for how to work *on* the organization (governance) and *in* it (coordination). But the technology side of the story, which has been de-emphasized by scholars and practitioners alike, is as important. Zappos has built transparency-enhancing technologies to support every HR function in its Holacratic form, from who gets assigned which roles and how teams are built to how people progress and how much they are paid.

centralized organizational structures as past their prime. But there is new value in them—if we rethink the roles they can play: While decentralization promotes individual control over communication flow in collective problem-solving, centralization actually does a better job of facilitating group learning when rapid change calls for adaptation. Those findings appear in **“Network Centralization and Collective Adaptability to a Shifting Environment,”** published in *Organization Science* and co-authored by Jesse Shore and Alice Jang (assistant professor at Virginia Tech). Previous research had shown that network centralization—the degree to which communication flows disproportionately through one or more members—interferes with collective problem-solving by obstructing the integration of ideas, information, and solutions. But my co-authors and I reconceptualized established theory, hypothesizing that the mechanisms responsible for that poor integration in relatively stable environments would nevertheless prove beneficial for adaptive problem-solving in a shifting environment. We conducted a 1,620-subject randomized online laboratory experiment, testing the effect of seven network structures on problem-solving success. To simulate a shifting environment, we designed a murder mystery task and manipulated when each piece of information could be found: Early information encouraged consensus on an inferior solution, requiring a collective shift of solution after more information emerged. We found that when the communication network is more centralized, it achieves the benefits of connectivity (promoting learning by generating an array of novel, better solutions) without incurring the costs (getting stuck on an existing, inferior solution due to conformity pressure). We also found, however, that these benefits materialize only in networks with two-way flows of information (which are sometimes impeded in hierarchical structures or digitally mediated communication). A short-form peer-reviewed article in the *Journal of Organization Design* (in an issue devoted to elaborating on the meaning of Markus Reitzig’s recent work on the topic), **“Leveling the ‘Flatter’ Playing Field”** gave me an opportunity to bring these ideas together with other research on flatter organizations and to consider how the scholarly community might further explore the combined findings.

1.2.2 Managing Connectivity through “Attentional” Boundaries, Improvisational Rules, and Teams

In a set of conceptual papers that initiated and focused my work on connectivity, I worked with several co-authors to map various ways in which the potential overload from connectivity can be managed.

In a recent theory paper, **“Collective Attention and Relational Overload: A Theory of Transactive Control in High-Permeability Intraorganizational Environments”** (R&R at *Research in Organizational Behavior*), Pranav Gupta (University of Illinois Urbana-Champaign), Paul Leonardi (UC Santa Barbara), Mark Mortensen (INSEAD), and I explain that boundaries (delineating departments, functions, geographies, teams, etc.) were intended to aid bounded rationality: employees could see and process only so much information given their limited cognitive resources, so organizations narrowed the scope of focus to conserve those resources and avoid overload. But traditional structural boundaries provide less help in a world where companies want employees to reach across them and technology makes it easier to do so. How do people manage their limited cognitive resources in this new reality with unbounded connectivity? Through local, flexible zones of collective attention, created by individuals as they interact at work (by being transparent about their availability and by explicitly or tacitly agreeing to focus on the same things and on the same people at the same time). In this way, they manage their connectivity and thereby reduce attentional and relational overload without putting at risk either productive work relationships or the benefits of more permeable internal boundaries. My coauthors and I are studying these flexible zones of collective attention to improve our theorizing about productive collaboration structures (and therefore levels and patterns of connectivity) in more transparent, less-bounded workplaces, which will in turn help us better equip employees and managers to effectively allocate their own and others’ attention across myriad connections to coworkers.

In two earlier pieces, I explored how the natural membrane of well-run teams, on the one hand, and the rules of improvisation, on the other, can regulate connectivity to the benefit of performance.

Starting with teams, the lens of connectivity helps explain their enduring importance, albeit for new reasons in a more transparent, connected world. In “**Problem Solving and Search in Networks**,” published by MIT Press in the *Ernst Strüngmann Forum Reports—Cognitive Search: Evolution, Algorithms, and the Brain*, coauthor David Lazer and I uncover a contradiction of sorts about networks and explain the functionality of teams in addressing it. A long line of network theory suggests that weak ties to diverse others provide a wider menu of ideas, and strong ties provide access to more complex information. Any boundary between individuals that constrains the network—such as a team boundary separating “us” from “them”—is therefore viewed as inefficient, especially as problems become more complex and technology makes network search easier. Yet teams—which increase connectivity locally but impede it globally—have become more prevalent. Why? Setting the stage for our empirical work described earlier, we posited that team boundaries may buffer individuals from outside attention and control, allowing for a more exploratory space—a zone of privacy that protects creative problem solving (from connectivity, not just from transparency) as it inhibits information flow. In the terms we used in our later empirical work, teams reduce facts to manageable levels while sustaining figuring at effective levels.

As for improvisation, I met Professor Frank Barrett, a jazz-pianist-turned-tenured-OB-professor, when I was an MBA in an HBS classroom. As a guest speaker, Barrett—who was never classically trained and, to this day, cannot really read music despite having played with some of the greatest jazz musicians of all time—explained what we could learn about novel organizational structures from the ways jazz musicians interact and organize. In a collaboration with Barrett (“**Strategic Change and the Jazz Mindset: Exploring Practices That Enhance Dynamic Capabilities for Organizational Improvisation**,” published in *Research on Organizational Change and Development*), we argue that genius in jazz holds lessons for organizations through seven practices that moderate the impact of connectivity on performance.

2. COURSE DEVELOPMENT

For educators, I have developed a number of course packages (see Appendix 1 for some examples) that integrate and extend my research findings and practitioner publications on workplace transparency and workplace connectivity, the two main themes I have examined as a scholar. Each package includes one or more field cases for students to analyze and discuss, a set of teaching or module notes to help faculty incorporate my research into their teaching plans, and several practitioner articles or background notes for students to reference after class so they can remember and apply key takeaways. All told, these classroom materials—on human capital management, leadership, and workplace/organizational design—have been used at more than 300 institutions around the world. I use many of these materials in my own classes as well, as they have shaped the Managing Human Capital (MHC) second-year MBA and Developing Yourself as a Leader (DYL) executive education courses that I designed and teach. In developing them, I’ve gained a deeper understanding of the workplace dynamics I’ve studied in the field.

2.1 Course Materials That Further Explore Workplace Transparency

My research on workplace transparency revealed complex, interdependent relationships between novel organizational structures and employee behaviors. I therefore set out to illustrate how those relationships manifest themselves in organizational life through my cases and to guide educators on how to teach them in my teaching notes. Although context certainly mattered in organizations I observed—new approaches do, after all, emerge to solve problems that arise in practice—I identified “transparency paradox” implications (for productivity/performance, talent management, and employee interaction) across a variety of settings.

2.1.1 Illustrating How the Direction of Transparency Matters for Performance

Two cases I co-developed—“**Jiliang Phone Home!**” and “**Trouble at Tessei**”—facilitate classroom discussion about the transparency paradox and its impact on organizational outcomes.

In “Jieliang Phone Home!”, Willy Shih (Professor of Management Practice, HBS), Nina Bilimoria (HBS MBA student), and I used data directly from my Chinese factory field site to highlight employees’ seemingly contradictory desires to improve their processes *and* hide those improvements when observed. (In fact, we actually wrote this case after the first summer of qualitative data collection for the Transparency Paradox paper to convince the leadership of the field site to allow us to conduct the field experiment the following summer.) Students consider the paradox in a real workplace, from two perspectives—that of the observer (manager) and the observed (employee)—presented separately in the (A) and (B) cases. Through the case discussion, students examine the tensions between improving *line* productivity, through a large number of small innovations, and maximizing *organizational* productivity, by spreading practices across lines and facilities (see “**Jieliang Phone Home! (TN)**”). Jieliang Hao, the (B) case protagonist, is one of thousands of operators who have discovered ways to increase line productivity under management’s radar. Globally networked manager Marty Cole, the (A) case protagonist, uses transparency-enhancing tools to simultaneously discover new improvements (learn) and push those practices (control) to every line in the organization. As the case demonstrates, managers like Cole often see only what employees *want* them to see. At the same time, transparent workplaces make managerial assumptions and expectations more transparent—further motivating employees to hide the unexpected even if it is productive. “Jieliang Phone Home!” is taught in the HBS second-year EC (elective curriculum) course Building and Sustaining Successful Enterprises (BSSE).

Subsequently, Ryan Buell (HBS) and I wrote “**Trouble at Tessei**,” a case about a shift in workplace transparency from high visibility for supervisors (as in “Jieliang Phone Home!”) to high visibility for customers at Tessei, a company responsible for cleaning the shinkansen (bullet) trains at Tokyo station. In 2005, Tessei was struggling. Operational mistakes, customer complaints, safety issues, and employee turnover were at or near all-time highs, even as demands on the company grew. Tessei was trying—and failing—to do more with less. To address this, Teruo Yabe, the new CEO, substituted oversight by managers (workplace transparency) with oversight by customers (operational transparency), as explained in “**Trouble at Tessei (TN)**.” Previously, employees would emerge head down from a Harry-Potter-like door between platforms to clean each train and then discreetly return to their posts. Now they were asked to wear bright red uniforms, do their jobs out in the open, and interact directly with customers. At the same time, Yabe reduced managerial oversight so employees could be more responsive to the needs of the customers to whom they were now so visible. The result? A more autonomous, more motivated workforce made many operational improvements (including several that employees might have rebelled against had managers tried to enforce them top-down—like cleaning toilets by gloved hand instead of with brushes), turning a failing enterprise into so-called “Shinkansen Theater,” now a source of national pride in Japan. For the past eight years, “Trouble at Tessei,” has been co-taught by LEAD (Leadership and Organizational Behavior) and TOM (Technology and Operations Management) faculty in the RC (required curriculum) at HBS. An abridged version was the basis for a Case Study article (“**Can You Cut ‘Turn Times’ Without Adding Staff?**”) in *Harvard Business Review*.

Students often see parallels between Tessei and the Chinese factory. In both workplaces, productivity rose when workers were shielded from management oversight (to avoid the transparency paradox) and instead made visible by a party (customers at Tessei, coworkers in the factory) whose observation actually enhanced motivation and performance. Through these cases, students explore how organizations can formulate a mix of privacy and transparency to drive such outcomes rather than seeking to satisfy management’s desire for control.

2.1.2 Making Effective Use of Transparent Data

As I continued to probe the transparency paradox in classrooms, a fundamental question came into view: Given the suboptimal impact on performance of worker-to-boss transparency, how might managers use transparent data constructively? For starters, they can use behavioral data to develop (rather than simply

monitor) individuals and teams, an important function that can be neglected in a transparent workplace, as shown in the research paper “**The Performance Effects of Giving Front-Line Employees Direct Access to Performance Data and Thereby Limiting the Supervisor’s Feedback-Intermediation Role: Evidence from a Field Experiment.**” To illustrate the power of combining transparent data with manager-driven development, I co-authored the case “**Candor at Clever**” with Om Lala (former HBS RA). Clever, an EdTech company based in San Francisco, had grown quickly in market share (Exhibit 1-2 in the case) and headcount (Exhibit 3). Its leaders responded to that growth spurt by giving early employees—many of whom lacked management experience—the opportunity to run their own teams, with mixed results for both company success and employee retention. Reflecting on those outcomes, co-founder and CEO Tyler Bosmeny decided to invest heavily in developing better managers. He launched a Radical Candor initiative, based on tech veteran Kim Scott’s book *Radical Candor*, to help people master the art and science of developing others. The case draws upon some of our research findings (as explained in “**Candor at Clever TN**”) about using technology and data to give accurate feedback and navigating the complexities that can arise when workplaces adopt transparency to create a culture of candor.

To expand students’ understanding of workplace transparency beyond physical space—and into digital space—co-author Stephanie Marton (HBS MBA) and I look at data-driven visibility into employee experience in the case “**Sensing (and Monetizing) Happiness at Hitachi.**” The case describes Dr. Kazuo Yano’s efforts at Hitachi to track and boost individuals’ emotional well-being at work. Dr. Yano, an expert in people analytics, huddled with Sandy Pentland’s group at the MIT Media Lab to create high-tech employee badges that capture wearers’ activity patterns. Data from these devices and from other sources, like Outlook calendars and email, revealed an unusually high correlation between certain patterns of activity and a person’s subjective sense of happiness at work. After supposedly using the badges to detect how people really felt on the job and to identify which activities, events, or even colleagues generated the most happiness, Dr. Yano created an app to provide personalized “happiness” recommendations to employees and looked for ways to bring it to scale. I use this case to illustrate how, as Ben Weber and I argue in “The Truth About Open Offices,” the physical “architecture” of a workplace and its “anatomy” (how people live into it) can diverge—and how providing employees with direct access to data on their own behaviors for the sake of improving the “anatomy” of work can boost collaboration, worker satisfaction, and ultimately performance, along with the potential dangers of doing so.

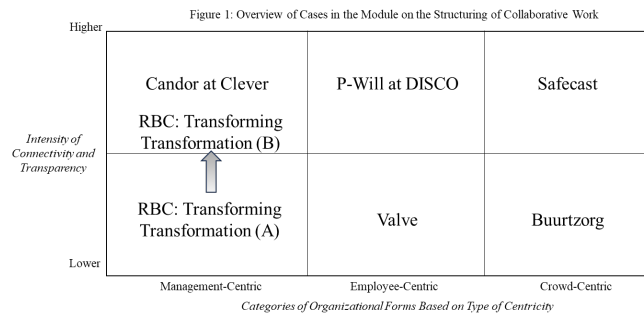
2.2 A Module on Structuring Collaboration

As I did my scholarly work on connectivity in organizations, my classroom teaching fueled my curiosity about the novel collaborative structures that organizations were trying, leading to a series of cases that then informed the scholarly investigations I was conducting. These educator materials are summarized and synthesized in my “**Module Note on the Structuring of Collaborative Work,**” where I bring together diverse materials—my own and others’—to enable faculty to teach a module on structuring collaboration in contemporary organizations. The objective of the module, which reflects and extends my research on effective management of connectivity, is to expose students to the collaborative potential and unexpected pitfalls of increased workplace connectivity across different kinds of organizations, thus preparing them to more effectively, and dynamically, structure collaboration.

The theoretical foundation for the module is provided through a revised technical note I co-authored with Nitin Nohria at HBS: the “**Note on Organizational Structure,**” which was previously used in the LEAD course at HBS and is now used in my MHC course at HBS. In it, we trace industry movement away from architected *management-centric structures* (like functions, divisions, and matrices) and toward emergent *employee-centric structures* (like self-managed teams and self-governing systems, where patterns of coordination organically appear as employees do their work) and community-driven, *crowd-centric structures* (like Wikipedia, flash teams, and hackathons, where participants collectively and iteratively self-organize as needs arise). Transparency-enhancing technologies such as social enterprise tools have enabled this trend by removing bureaucratic constraints on information and communication. Employees

now have greater responsibility for managing their own attention, albeit in a sea of potentially boundless connectivity—and managers have more freedom in how they structure work, albeit with the dangers of mismanaging transparency and connectivity.

The cases in the module explore how the intensity of connectivity affects the challenges, and opportunities, of managing within each of the three structure types described above (see Figure 1) so that people can actively engage in “structuring” the work to meet the contingencies of the context and design. Below I summarize some of the materials that focus on the newer structure types. All of the materials and their use are described in the Module Note on the Structuring of Collaborative Work.



2.2.1 Employee-Centric Organizing

In two cases, I explore employee-centric organizing in transparent environments. The first, “**Opening the Valve: From Software to Hardware**,” co-authored with Francesca Gino (HBS) and Bradley Staats (UNC Chapel Hill Kenan-Flagler Business School), is about Valve Software, one of the world’s top video game companies and an iconic example of an organization with virtually no hierarchy. A 400-person company, Valve adopted a unique organizational form that includes 100% self-allocated time, no managers (and therefore no managerial oversight), a fluid structure (and fluid office design), a hiring apparatus that supports recruitment of T-shaped individuals (who possess a broad set of skills but also have deep expertise in one area), and a purely peer-based performance review system. In 2013, market forces pulled Valve into the hardware business. With the Valve case and the classroom discussions it sparks (see “**Opening the Valve: From Software to Hardware (TN)**”), students examine the opportunities and challenges of scaling up an employee-centric model in different contexts. “Valve” has been taught in the LEAD course and the MHC course at HBS, as well as executive education programs, including the Program on Leadership Development (PLD). The research I conducted to write this case, and my classroom discussions about it with MBAs and Executive Education participants, fueled my interest in studying connectivity structures within organizations and shaped the research questions for several of my subsequent journal publications (described in section 1.2, above).

The second employee-centric case, “**P-Will at DISCO**,” co-authored with Naoko Jinjo (former HBS senior researcher) and Yuna Sakuma (HBS MBA alumnus), illustrates another way of organizing collaborative work—one that can help employees avoid feeling constrained and over-managed in a high-connectivity environment. A Japan-based manufacturer of precision tools for semiconductor production devices, DISCO had achieved 70% global market share, had lifted its profitability from 15% to 30% over seven years, and was consistently selected as a “Best Workplace” in Japan. CEO Kazuma Sekiya attributed much of that success to what the company called its “P-Will” (Personal Will) system for managing human capital. In that system, Will was a currency that enabled internal labor market transactions. Every hour of labor and every good produced was associated with a price in Will. Employees were expected to act like independent business owners, managing their own contributions and costs in Will. Four times a year, the balances of individual P-Will accounts were converted to real currency and paid out as bonuses. By asking students to evaluate the conditions under which such a system will and won’t work at other organizations (as explained in “**P-Will at DISCO TN**”), this case helps classes consider various ways in which companies can successfully execute self-management in contexts that demand high levels of interdependency and therefore controls.

2.2.2 Crowd-Centric Organizing

Even less grounded in traditional thinking about management, crowd-centric organizing can take many exciting forms. Eager to deepen my understanding of how these structures can operate and to provide other educators with rich material for classroom discussion, I co-authored the case “**Safecast: Bootstrapping Human Capital to Big Data,**” with Stephanie Marton. In the case, we explore crowd-centric organizing in the context of societal crisis response and prevention. After a tsunami ravaged the Tohoku region of Japan (on 3/11/11), the damage to the Fukushima Daiichi Nuclear Power facility was deemed a “level 7” nuclear disaster. But just how much radioactive material had escaped into the ocean and air was not clear, and sporadic disclosures of fragmented information confused matters further. Frustrated by their own desires to know what should have been knowable, three technologists founded the non-profit organization Safecast to monitor radiation levels, structuring it around a “crowdmapping” model that was soon supported by thousands of volunteers. By 2018, Safecast had become a “go to” source of information on radiation issues and a vanguard example of citizen science in action. Case discussion, as described in “**Safecast: Bootstrapping Human Capital to Big Data TN,**” helps students see how an open-data, open-platform, and open-workforce approach to organizational structure can work using high levels of connectivity between the organization’s members. Classes also consider how to manage crowdsourced human capital, from both an operating-model and a business-model perspective, especially when the two models seem to be at odds with each other.

In situations that don’t call for such high levels of connectivity, different approaches to crowd-centric organizing can be effective, even within more traditional management-centric structures. That’s one reason hackathons became popular so quickly. My “**Note on Hackathons**” is meant as a guide for both academics and practitioners to understand what hackathons are, how they work, when and how they can be useful, and how they complement other, more traditional management tools.

Managing the tradeoffs of crowd-centric organizing is no simple task. To illustrate some of those tradeoffs in another context—a Dutch home-nursing company—with a lower intensity of connectivity, I co-authored the case “**Buurtzorg**” with Tatiana Sandino (Professor, HBS), Joost Minnaar (Doctoral Student, VU University), and Annelena Lobb (Senior Researcher, HBS). Buurtzorg achieved high client satisfaction and low employee turnover with a decentralized model—10,000 nurses were empowered to manage themselves within 950 neighborhood teams. Much of what they learned on the job remained isolated within each team. While nurses would try to share useful solutions across teams, there was no systemic process for reviewing ideas and spreading best practices throughout the company, in part because it had been designed to avoid hierarchical constraints. As the Netherlands faced a dire nursing shortage, Buurtzorg’s nurses needed to work much more efficiently to serve an aging population. Would a more centralized approach to sharing knowledge work in this organization, given the teams’ genuine desire to learn from one another? Or would centralizing the flow of ideas and solutions necessitate centralizing *other* activities and functions that should remain self-managed? As detailed in “**Buurtzorg TN,**” educators can ask such questions to help students wrestle with the pros and cons of centralization in the critical context of organizational learning.

3. TEACHING

As an alumnus of the HBS MBA program, I have always derived energy from its classroom discussions. Each time I engage with our MBA, Executive Education, or Doctoral students, I learn something new.

3.1 MBA Program

LEAD. In the MBA program, I taught the RC LEAD course (the Leadership and Organizational Behavior core course) during my first three and a half years on the HBS faculty. During that period—teaching seven cohorts over four years under the direction of two course heads—I learned a great deal about using cases to grapple with tough questions in the classroom and then facilitate student advancement toward better and better answers. In that same spirit of shared exploration, I enjoyed contributing to the course’s

development, authoring a module note, two cases with teaching notes, and several supplemental readings. (These materials are still used in the LEAD course today.) Just as important, collaborating closely with the diverse faculty who taught LEAD with me gave me valuable insight into how to equip other educators to teach my cases.

Managing Human Capital (MHC). In my fourth year (2017), I transitioned to the elective curriculum to teach Managing Human Capital (MHC), a course aligned with my academic interests. Although I've missed the generativity of a teaching group, solo teaching has allowed me to shape MHC's curriculum in ways that reinforce my research and course development efforts.

The term *human capital* implies that people have the capacity to drive organizational performance. Building on a rich legacy of past versions of this course taught by Boris Groysberg, Tom DeLong, Michel Anteby, and Paul McKinnon, the current version of MHC is based on the premise that how one manages and develops others can be a source of sustainable competitive advantage for organizations and for individual leaders within them. At its core, this 28-session, six-module course is intended to sharpen three capabilities: people development, people management, and career management. It teaches students how to effectively manage others, be managed by others, and manage themselves. In the current MHC curriculum, students learn:

- Hiring: What kind of people do I need, and how do I hire them?
- Socialization: How do I effectively on-board employees, setting them up for success?
- Performance Management: How do I keep people fully engaged and productive? How do I let go those who are not contributing?
- Compensation and Rewards: How do I make sure employees are properly incented to do what the organization needs them to do?
- Talent Development: How do I develop people over time so they are prepared to take on bigger roles down the road?
- Structure: How do I design my group, team, division, or organization to make the management of human capital easier, not harder? And, as we enter an age in which technology has made the boundaries within organizations far more fluid, how do I make sure the “workplace structures” upon which organizations have traditionally relied actually yield the “collaboration structures” we need to get work done?

A general management course, MHC resides at the intersection of leadership, HR, strategy, and organization design. It draws upon cutting-edge research and field examples from a broad array of industries and geographies. We intentionally discuss cases that frame both traditional and bleeding-edge “Future of Work” approaches to each human capital challenge, with the “answer” in any particular context often lying somewhere in between.

I also enjoy working with MBA students outside my core teaching assignment. I have guest-taught cases in other classes, led lunchtime information sessions, presented my research to groups like the HBS Human Capital Club, supervised independent projects, and led sessions for HBS alumni in Japan, Toronto, and various parts of the U.S. I have chaired a former section of mine and have also returned to my former sections to lead their first-year capstone session, their second-year opening session, their closing session for the MBA program in Bridges, and their reunion gatherings.

3.2 Doctoral Program

I love working with and mentoring students in the PhD program. During spring 2014, I taught a semester of the seminar The Craft of Inductive Qualitative Research while Leslie Perlow (HBS) was in China. I have also been invited to teach sessions in the course Perspectives in Management Research and the seminar Organization and Management Theory.

I especially love working with the doctoral students I directly advise in my areas of focus⁹ and mentoring others through my long-standing leadership role in OB Lab (a doctoral seminar for organizational behavior scholars). In 2015, I was nominated for a Wyss Award for Excellence in Mentoring.

3.3 Executive Education

In Executive Education, interacting with practitioners has shaped my ongoing research and course development—especially since I began teaching courses online. At the invitation of Bharat Anand (HBS), I created and introduced the first multi-session course for the HBS Live Online Classroom (then called HBX Live),¹⁰ Managing Your Career (MYC), which has been renamed Developing Yourself as a Leader (DYL).¹¹ The HBS Online Classroom has broadened our reach a great deal: Among the 117 DYL participants (across 2 cohorts) in 2023, we taught individuals from 33 countries, bringing them “together” (virtually) from industries and roles as diverse as they come—engineer, fire station captain, naval shipyard manager, architect, doctor-turned-nonprofit-founder, village elder, and of course emerging business leader from nearly every walk of life. To my knowledge, DYL is the only executive education open enrollment program that organically enrolls more women than men. The alumni have done well, and some even return to HBS later on for a residential comprehensive leadership program. My work in the virtual classroom, which started long before the pandemic, equipped me to provide some guidance as a member of the task force mobilizing HBS’s sudden move to online teaching in 2020, and I continue to enjoy exploring innovative approaches to blended learning.

Since joining the HBS faculty, I have taught—and have tested my research—in nineteen custom and nine open enrollment programs, where I have learned the power of combining cases, practitioner publications, background notes, and research papers into an integrated set of course materials for executives. For example, I have discovered that the “Buurtzorg” case goes well with my *Harvard Business Review* article on using tech to give employees autonomy and findings from my two *Organization Science* articles, on autonomy and centralization, to illustrate how organizations can create centralized learning without imposing centralized control.

4. SERVICE

4.1 Service to HBS

Since 2014, I have served as faculty chair for the 2+2 program at HBS, working closely with the admissions team to support students before and after they come to campus. In partnership with HBS External Relations, I have presented at events for the HBS Clubs of Japan, Toronto and Boston, written entries for the *HBS Bulletin*, served on my MBA class’s 15th and 20th reunion committees, and led a teen case discussion as well as research-focused sessions at reunions. Additionally, I have served on a variety of HBS committees, including one to oversee the design of Klarman Hall (the new HBS convening center) and the advisory group for the DRFD Research Teaming initiative to promote new physical spaces for collaboration at the school. In both cases, I put my research on workplace transparency and productivity to use. I have also served on the dissertation committees of several HBS doctoral students.¹²

⁹ I have enjoyed collaborating with many HBS doctoral students, including Erin Frey (OB), Shelley Li (Accounting and Management), Mike Lee (Management), Leroy Gonsalves (OB), Eric Lin (TOM), and Michelle Shell (TOM), and a number of doctoral students from other schools, including Nick Rekenhaller (NYU and my former research associate) and Akshaya Varghese (University of Michigan and my former research associate).

¹⁰ The HBS Live Online Classroom (LOC) is HBS’s proprietary virtual classroom, now in its second iteration. See <https://www.exed.hbs.edu/videos/harvard-business-school-live-online-classroom>.

¹¹ I am grateful to my HBS colleagues—Anita Elberse, Ryan Raffaelli, Ariel Stern, Alison Wood Brooks, Ryan Buell, Francesca Gino, and Jon Jachimowicz—who have taught in DYL, as well as those who have delivered research/book talks (Ting Zhang, Ranjay Gulati, Julie Battilana).

¹² For example: Laura Weimer (Management, Academy Professor, United States Military Academy), Michelle Rigolizzo (Management, Assistant Professor, Montclair State University), Nishani Siriwardane (Strategy, Associate Professor, NEOMA Business School), Carson Phillips (Kellogg), and Jaylon Sherrell (OB). Phillips and Sherrell are expected to defend their dissertations in 2025 and 2028, respectively.

I have also enjoyed representing HBS at the Academy of Management, occasionally hosting our junior faculty recruiting event. To support the HBS Publishing team, I have participated in several AOM panels to help other faculty learn how to translate their research into various HBR media.

4.2 Service to HBS Organizational Behavior (OB)

From 2014 to 2017, I served on the OB unit's faculty recruiting committee. In my first year, I co-organized the OB Brown Bag, and for the past five years, I have organized the OB Junior Faculty Workshop, a key arena for research discussions and socialization. In collaboration with Leslie Perlow (Professor, HBS), Lakshmi Ramarajan (Professor, HBS), and Ryan Raffaelli (Associate Professor, HBS), I have organized the 10th, 14th, 18th, and 22nd Boston Field Research Conferences at HBS.

4.3 Service to Harvard University

Bringing the One Harvard concept to fruition is something I care deeply about. At the Harvard Kennedy School (HKS), Jorrit de Jong (Director of the Bloomberg Center for Cities, HKS) invited me to help craft a proposal to create the Bloomberg Harvard City Leadership Initiative and to teach a session related to my research in his Creating Collaborative Solutions course for executives. At the Harvard Law School (HLS), Gabriella Blum (Professor, HLS) and I co-chaired a session about case method teaching. At the Harvard Graduate School of Education (HGSE), I have supported the Learning Innovations Laboratory (LILA) by presenting at their events, and at the request of David Perkins (Professor, HGSE) and Daniel Wilson (Director, HGSE), I have met with a Project Zero group of independent school principals to discuss my research. At the Harvard Graduate School of Arts and Sciences (GSAS), I have taught in a doctoral course, Management Matters for Scientists. At Harvard College, I have taught case studies to undergraduates (e.g., for Harvard LEADS and the Harvard Business Leadership Program), have advised undergraduates on theses related to organizational behavior, and in 2014-2015 led a senior thesis tutorial for Adam Joseph, who created a special concentration in organizational behavior.

4.4 Service to the Academy

As one of J. Richard Hackman's last students before he passed away, it means a great deal to me to co-lead his GroupsGroup seminar, which now meets virtually to include scholars of groups and teams from around the world. For the Academy of Management, I have served on several awards committees, including the Outstanding Publication in OB award and the Outstanding Practitioner-Oriented Publication in OB award.

An active member of the Editorial Board at the *Administrative Science Quarterly*, I also regularly review articles for *Organization Science*, *Academy of Management Journal*, and *Management Science*. Additionally, I have reviewed articles for top sociology and psychology journals and for *MIT Sloan Management Review*, as well as book manuscripts for Columbia University Press. At the annual meetings of the Academy of Management, INFORMS, and INGroup, I regularly present papers, symposia, and practice development workshops.

5. PLANS FOR RESEARCH, COURSE DEVELOPMENT, AND TEACHING

5.1 Research and Course Development

I am particularly excited about two research strands that I am currently pursuing, each of which builds on insights and methodological approaches from my prior work on how workplace transparency and workplace connectivity can shape employee behavior in organizations:

5.1.1 Collective Attention in Contemporary Workplaces: New Methods and Practices

Unconventional—and sometimes audacious—field studies are an essential research tool for me, and I have designed my next one. The digital collaboration tools and office redesigns that have allowed

collective attention to become more complex¹³ have also made it even more measurable. I am exploring with several sites—including a large real-estate developer in partnership with a large global corporation—field experiments to connect performance-based dependent variables (at the team and organizational levels of analysis) to design-based independent variables that affect collective attention. Using recent research on burstiness, synchrony, and other measures that build on the value of intermittent but collective attention to others,¹⁴ and in collaboration with some of the researchers who have created those measures, I aim to empirically demonstrate the implications of more ‘open’ workplaces where individuals are less constrained, and therefore more overwhelmed, in their choices about whom to attend to and when. This project is in its data-collection phase; I had a field study ready to launch in April 2020, but due to the disruption of the pandemic, I put it on hold, prioritizing the theory paper first. Given how workplaces have transformed, the pause worked in my favor, substantially increasing the richness of the data I am now exploring with these sites via the framework in our theory paper.

Beyond the academic papers, what my coauthors and I are learning in this study, combined with my original studies on transparency and connectivity, appears ripe for the publication of a university press book on contemporary structuring of work. A book could incorporate far more of the data that I have collected, and continue to collect, on how these forces of transparency, connectivity, and attention are significantly altering the future of work and workplaces.

5.1.2 Collaboration Structures: Expanding Beyond Network Clustering and Centralization

I am, at heart, a scholar who sees the world in terms of the “conditions under which” things become more or less likely to happen. In my exploration of collaboration structures—i.e., structures that are likely to provide the conditions under which beneficial collaboration will happen—I began with network clustering and centralization, but there are more structures to be explored and more counterintuitive findings to be discovered.

For example, Siobhan O’Mahony (Professor, Boston University) and I are analyzing how an organization (and its people) shifted its form—in this case, from a non-profit organization to a for-profit corporation—by studying an Internet privacy organization as it did so. At their founding, organizations acquire structural characteristics that later persist beyond their relevance to environmental conditions. Scholars have theorized that such imprinting, at some point, decays to permit change over time, yet how this process unfolds is underexamined. With an 18-month ethnography, we show how this particular organization lifted the structural imprints that had bound it to its founding conditions. We trace the actions taken by organizational leaders, middle managers, and venture capital investors to rally against their founding form as well as the actions of board directors and lawyers who struggled to reinforce imprinting. We identify conditions under which leaders intentionally shepherd form conversion—a process that allowed the organization in our study to eventually shed its imprints. Rather than experience imprint decay as a gradual, naturally occurring process, leaders can proactively create new options and convert their founding form to achieve new goals. We unpack that process in a manuscript we intend to submit to ASQ.

I also have been investigating hierarchy (beyond centralization). Although books have been written to help managers implement less-hierarchical structures, the field lacks a useful way to theoretically *categorize* them, which makes it difficult to formulate a “conditions under which” view that would predict what these structures would be more and less capable of doing. With Michael Lee and Joost Minnaar, I am drawing on a rich new qualitative dataset and a long-established sociological literature—Relational

¹³ For more information, see my recent co-authored theory paper “Collective Attention and Relational Overload: A Theory of Transactive Control in High-Permeability Intraorganizational Environments,” in which I begin to explore the impact of workplace transparency and connectivity on organizations’ and teams’ collective attention.

¹⁴ For background, see my work on intermittency and clustering in section 1.2.2 above.

Model Theory (RMT)—to provide that lens and to highlight implications for those seeking to either study or implement less-hierarchical structures for the sake of collaboration.

5.2 Teaching

I am thrilled with the way MHC has evolved into a healthy elective course. With the addition of 11 new cases paired with 7 background notes, it provides a well-stocked toolkit for people management. I've been able to incorporate those cases and notes in a way that gives our students a sense of the HR challenges they are likely to face in today's organizations. While many students take the course to enhance their general management skills and prospects, recently there has also been increased interest in going into HR roles. For that reason, in 2023, I partnered with several former students to convene a group of alumni who are passionate about human-capital-related topics. I would be delighted to continue teaching and developing MHC, ideally collaborating with additional faculty who have related research and course development interests, to build and sustain a platform course that could serve more students.

That said, I have missed the camaraderie of group teaching and my collaborations with colleagues on courses for first-year students. It would be a real pleasure to teach RC LEAD again, if given the opportunity, and to continue building on its collaboration structure curriculum to meet our students' evolving needs in the workplace.

I have also thoroughly enjoyed creating and chairing the Developing Yourself as a Leader executive education program. It would be great to continue heading up that program—there is still so much important work to do in that area. I would be happy to support a colleague's leadership development by helping a new DYL leader step into the role as well. Mainly I want to serve our students and programs in whatever ways are most useful. I'll gladly be flexible in support of that objective.

5.3 Service

I enjoy all the ways in which I currently support OB, HBS, Harvard University, and the Academy and intend to continue those efforts while also finding new opportunities to be of service. In light of my service to both the *Administrative Science Quarterly* and *Organization Science*, the Editors of both publications have encouraged me to consider an Associate Editor position if I am granted tenure. I have also been invited to be an Associate Editor at the *Annals* and run for the OMT Chair at AoM. I do imagine taking on an editorial position in the years ahead, wherever that might be. Moreover, in collaboration with my co-author Ben Waber and my colleague Ethan Rouen, I aspire to build upon the inaugural ESG for People Institute we organized last year to convene and develop future generations of scholars who will investigate better ways of organizing people and use the tools we have to shape practice.

6. CONCLUSION

Given current technological and future-of-work trends, organizations appear to be poised for even greater workplace transparency and workplace connectivity in the next quarter of this century. That prospect is exciting for me, both because it is likely to generate new opportunities for field research and counterintuitive findings and because those findings will become ever more important for managers seeking to use transparency and connectivity for positive impact in a true partnership with employees to mutually improve learning, coordination, satisfaction, and performance. I review my time at HBS with great joy and tremendous gratitude, and I look forward to all the ways (anticipated and unanticipated) that the substantial investments the school has made in my development will continue to be realized over the coming years.

Appendix 1: Packages of Course Materials That Integrate Scholarly and Practitioner Publications, Organized by Sub-Theme

Counterintuitive Effects of Workplace Transparency on Behaviors and Performance		Counterintuitive Effects of Workplace Connectivity on Behaviors and Performance			
	Discovering the Transparency Paradox (Implications for Managing Individual and Organizational Performance)	Managing the Complex Behavioral Effects of Transparent Workplaces (Implications for Employee Control, Coordination, Learning, and Satisfaction)	Managing the Unexpected Consequences of Open Offices (Implications for Employee Interaction)	Managing the Advantages and Tradeoffs of Different Collaborative Structures (Implications for Structuring Work Using Clustering, Centralization, and Intermittency)	Other Material
Key Papers	<ul style="list-style-type: none"> The Transparency Paradox: A Role for Privacy in Organizational Learning and Operational Control [<i>Administrative Science Quarterly</i>] Making Transparency Transparent: The Evolution of Observation in Management Theory [<i>Academy of Management Annals</i>] 	<ul style="list-style-type: none"> Uncovering the Mitigating Psychological Response to Monitoring Technologies: Police Body Cameras Not Only Constrain but Also Depolarize [<i>Organization Science</i>] Scarlet Letters: Rehabilitation Through Transgression Transparency and Personal Narrative Control [<i>Administrative Science Quarterly</i>] The Performance Effects of Giving Front-Line Employees Direct Access to Performance Data and Thereby Limiting the Supervisor's Feedback-Intermediation Role: Evidence from a Field Experiment [<i>Management Science R&R</i>] 	<ul style="list-style-type: none"> The Impact of the 'Open' Workspace on Human Collaboration [<i>Philosophical Transactions of the Royal Society B</i>] Collective Attention and Relational Overload: A Theory of Transactive Control in High-Permeability Intraorganizational Environments (<i>Research on Organizational Behavior R&R</i>) 	<ul style="list-style-type: none"> Facts and Figuring: An Experimental Investigation of Network Structure and Performance in Information and Solution Spaces [<i>Organization Science</i>] How Intermittent Breaks in Interaction Improve Collective Intelligence [<i>Proceedings of the National Academy of Sciences</i>] Network Centralization and Collective Adaptability to a Shifting Environment [<i>Organization Science</i>] 	<p>3+3 case plus background note pairings for second-year human capital management courses:</p> <ul style="list-style-type: none"> Note on Coaching + Coaching Makena Lane Note on Compensation + Winning Business at Russell Reynolds Note on Shared Ownership + JTC: Stronger Together with Shared Ownership <p>Four additional background notes for human capital management courses:</p> <ul style="list-style-type: none"> Leading Teams Leader-as-Architect: Alignment Note on Managing Workforce Reductions Note on Structured Interviewing
Most Relevant Practitioner Articles	<ul style="list-style-type: none"> The Transparency Trap The Evolution of Transparency in Management: Get Me Everything You Can on... Me. Why We Hide Some of Our Best Work 	<ul style="list-style-type: none"> A Brighter View of Employee Monitoring How Companies are Using Tech to Give Employees More Autonomy How Being Filmed Changes Employee Behavior The Hidden Value of Seeing Positive Blindspots How to Manage Scheduling Software Fairly Why We Need to Outsmart Our Smart Devices The Sales Director Who Turned Work Into a Fantasy Sports Game 	<ul style="list-style-type: none"> The Truth About Open Offices The Smart Way to Create a Transparent Workplace Getting Smarter About Smart Buildings Flat Organizations Like Zappos Need Pockets of Privacy 	<ul style="list-style-type: none"> Beyond the Holacracy Hype: The Overwrought Claims—and Actual Promise—of the Next Generation of Self-Managed Teams Improving the Rhythm of Your Collaboration The Implications of Working Without an Office 	
Most Pertinent Cases and Course Materials (all cases have accompanying teaching note)	<ul style="list-style-type: none"> Trouble at Tessei Jieliang Phone Home! 	<ul style="list-style-type: none"> Candor at Clever Belk GROW 	<ul style="list-style-type: none"> Sensing (and Monetizing) Happiness at Hitachi 	<ul style="list-style-type: none"> Opening the Valve Buurtzorg P-Will at DISCO Safecast Note on Organizational Structure Note on Hackathons RBC: Transforming Transformation Module Note on the Structuring of Collaborative Work 	

Note: All co-authors are acknowledged in the text of this statement