Creative Problem Solving (CPS) in Practice: A Case Study

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Creative Problem Solving (CPS) in Practice: A Case Study

by

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A THESIS
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Abstract

Creative Problem Solving (CPS) is a structured process for navigating complex, open-ended problems and achieving creative results (Puccio, Murdock, & Mance, 2011). Although CPS has been the subject of significant scholarly attention (e.g. Parnes, 1987; Puccio et al., 2006; Isaksen & Treffinger, 2004; Puccio & Cabra, 2010), there is a paucity of research exploring the multiple outcomes that might emerge from a CPS. There is also a dearth of research that considers the context in which a CPS session occurs. This study addresses these gaps.

This study is guided by the question, “What happens when employees operating within an organizational setting engage in CPS?” It draws its theoretical foundation from workplace learning theory and practice theory. Methodologically, it uses a single, interpretive case. Generating data through onsite observation, interviews, and document analysis, the researcher considered what happened before, during, and after a vice president in a global, publicly traded aviation company facilitated a CPS session for other members of the company’s executive team. The study found that the facilitator faced multiple struggles in introducing CPS; that participants adapted and innovated the process; that participants assessed the success of the CPS session based on criteria other than whether it achieved creative outcomes; and that contextual factors influenced what was deemed a successful solution.

This study suggests that those responsible for guiding employees in introducing and facilitating CPS should consider the following:

- Practitioner resources should further emphasize the political skills needed to introduce and facilitate CPS.
- Proponents of CPS should highlight its multiple potential benefits—as opposed to focusing on the achievement of creative results.
• Proponents should consider linking CPS to the process of strategic planning, since the two practices are compatible.

• CPS-focused scholars should develop a version of CPS that might be more easily integrated into existing organizational practices.

This study contributes to academic knowledge by pioneering a new methodological approach to studying CPS, advancing the empirical application of practice theory, and providing empirical substantiation for theoretical scholarly discussions around the strengths and limitations of community of practice (CoP) theories.
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Dedication

To Gwen Sanders.
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CHAPTER ONE

Since 2011, twice a year, I have taught an MBA class in Organizational Creativity (OC) and innovation. For the capstone project, students conduct a practicum, in which they use Creative Problem Solving (CPS), an established process for navigating complex challenges that require imagination to resolve (Puccio, Murdock, & Mance, 2011), to address a challenge within a context of their choice. Because almost all students are mid-level managers, many conduct their practicums in their own organizations, which has meant that I have had the privilege of discussing and reading about the experiences of about 150 managers as they grapple with what it means, on the ground, to try to foster creativity. In so doing, I have become fascinated by the way each facilitator’s situation seems so unique and how, in running their sessions, they navigate a mess of contextual factors that are only hinted at in their CPS textbook or, significantly, in the broader OC literature. My students are drawing on the established CPS framework, but they are also transforming it, as they interact in the highly specific context of their organization, navigating the politics and personalities, and interacting with human, embodied others in real, material spaces. As I have worked with each of my students and read their post-practicum reflections, I have come to question what happens when a new process, in this case CPS, is introduced into the social, material, and political space of the organization. What happens to CPS—how is it transformed?—and what, if anything, is transformed within the organization when the CPS process is utilized? I also have come to ask questions about the learning my students experience when they facilitate CPS, and the learning that they seem to be fostering in their organizations through its facilitation.

This dissertation explores what happens, on the ground, when people engage in CPS at work. In researching CPS, I adopted a workplace learning (WPL) lens, which means that I was
less interested in identifying whether and how successful creativity had been achieved, which has been the focus of most of the existing research on CPS, than in exploring the processes of learning unfolding within organizations, when people try to be creative. More specifically, I adopted practice theory (Fenwick, 2010; Gherardi, 2006; Gherardi, 2012; Nicolini, 2012; Reckwitz, 2002; Schatzki, 2006; Schatzki, 2012; Shove, Pantzar, & Wilson, 2012), which conceptualizes the social world as made up of what Schatzki called “bundles of practices and material arrangements” (2006, p. 1863), and “take[s] learning to be the ongoing configurations and reconfigurations of practice – unfolding, emergent, situated in activity, acknowledging the important mediating function of artefacts but still focusing on the human interactions of activity” (Fenwick, 2010, p. 86). Practice theory (PT) allowed me to explore the questions I am most curious about around practitioners’ on-the-ground experiences, when they are “practically coping” (Nayak, 2008, p. 424), as opposed to enacting rationally considered premeditated plans. It also allowed me to delve into how practitioners’ social, material, and political context changed what it means to engage in CPS, and more broadly, how within this context, a person, process or idea came to be considered “creative.” From a methodological perspective, I have used a single, interpretive case to conduct this study.

This introduction begins by explaining the focus of my research and providing a rationale for why I chose to focus on CPS, as well as why I employed WPL theory and PT to do so. Next, it outlines my research questions, and elucidates my ontological and epistemological positioning.

**Research Focus and Rationale**

My research uses the lens of workplace learning (WPL), and specifically, practice theory (PT) to explore the learning that occurs when employees engage in Creative Problem Solving (CPS). In positioning my research, it is important to note the way in which it bridges disciplines,
since this bridging has impacted the choices I have made in adopting certain perspectives. Organizational creativity (OC) has been explored both by scholars of Organizational and Management Studies (OMS) studies (Zhou & Shalley, 2009) and within the discipline of Adult Education, by scholars of WPL who, in discussing, for example, developmental and generative learning (Ellström, 2005; Fenwick, 2003), have focused on the links between learning and creativity. Moreover, the Adult Education-based study of WPL is inextricably linked to the study of organizational learning, which emerged from a different disciplinary perspective within OMS (Elkjaer & Wahlgren, 2005; Jarvis, 2005).

I am thus bridging Adult Education and OMS. In so doing, I frequently draw on theorists like Lave and Wenger (1991), whose work is seminal to both disciplines, as well as work from scholars like Fenwick (2005; 2006a; 2006b; 2006c; 2008; 2010; 2011) and Gherardi (2006; 2009; 2011; 2012), who publish regularly in both Education and Management journals. When I have had to make judgment calls, I have privileged the Adult Education perspective, both because it more fully aligns with my own and because that is the discipline in which I am pursuing an Ed.D.

To provide an overview of my research focus, this section begins by explaining what CPS is and why I have chosen to position it at the centre of my research. It then explains what it meant to examine CPS through the lens of WPL theory and specifically PT, and why I have chosen to do so.

**Creative Problem Solving**

CPS is a structured process for navigating complex, open-ended problems and achieving creative results, which often are defined as results that are both novel and appropriate to a given context (Amabile, 1996). CPS originally was conceived in 1942 by Alex Osborn, a partner in an
advertising agency, who shortly after, also founded a CPS-focused research and educational center, the Creative Education Foundation (CEF). Since its inception, CPS has evolved so that multiple versions exist (Isaksen & Treffinger, 2004), but all possess two basic characteristics: first, they are comprised of discrete steps associated with the need to define problems, generate ideas, transform ideas into solutions, and construct action plans and second, each step involves a phase of divergent thinking, which involves “generating a diverse set of alternatives” (Puccio, Firestien, Coyle, & Masucci, 2006, p. 20), and then convergent thinking, which involves “screening, selecting and evaluating alternatives” (Puccio, et al., 2006, p. 20).

Puccio et al.’s (2011) Thinking Skills model (Figure 1) demonstrates these characteristics. As depicted in Figure 1, the model breaks down problem solving into three major stages, Clarification, Transformation, and Implementation, each of which involves two sub-stages (for example, Clarification involves “Exploring the Vision” and “Formulating Challenges). Each of these sub-stages is further broken down into a divergent and convergent step. The three major stages are supplemented by a fourth one, Assessing the Situation. The problem solving process is thus laid out, step-by-step, and becomes characterized by repeated cycles of divergent and convergent thinking.

A single cycle of divergence and convergence typically lasts 60 to 90 minutes, and consequently the entire CPS process cannot be undertaken in a single session (Isaksen, Dorval, & Treffinger, 2011). Rather, it is the responsibility of the CPS facilitator to decide which portion of the CPS process is needed at a given time.
I have chosen to focus my research on CPS both because CPS is of intrinsic interest and because it provides a vehicle that will enable me to explore broader theoretical issues.

**CPS as intrinsically interesting.**

A discrete body of academic literature focuses on the CPS process, and a vibrant community of practitioners engage in practicing and disseminating it. CPS has been studied continuously since the 1950s (Meadow & Parnes, 1959; Parnes & Meadow, 1959) and is backed by a robust body of research, which, for the most part, points to its efficacy in achieving creative results (for example, Firestien & McCowan, 1988; Isaksen & Treffinger, 2004; Parnes, 1987; Puccio, 2005; Puccio et al., 2006; Puccio & Cabra, 2010; Rose & Lin, 1984; Scott, Leritz, & Mumford, 2004; Thompson, 2001). From a practitioner’s perspective, it would be safe to say that many thousands of people have undergone training in CPS (Creative Problem Solving Group,
For 61 years, the Creative Education Foundation (CEF) has run an annual conference, the Creative Problem Solving Institute (CPSI), which can draw upwards of 400 attendees from industry and academia. Moreover, the International Centre for Studies in Creativity, an off-shoot of the CEF, which is affiliated with the State University of New York’s Buffalo College, offers a CPS-based Masters in Science, graduate certificates, and undergraduate courses, all in Creative Studies (International Centre for Studies in Creativity, n.d.).

Research that advances understanding of CPS would be of intrinsic interest to those within the community of CPS scholars and practitioners, since they have a stake in understanding what happens when CPS is put into practice in the workplace. In part, I have focused on CPS simply because, after having taught it and employed it myself over several years, I can see where the gaps are in the CPS research and believe I can contribute to filling them. These gaps are discussed in Chapter Two.

**CPS as a window into broader issues.**

CPS research can also serve as a vehicle to explore broader questions of how OC and, relatedly, WPL unfold within organizations.

CPS is only one of many creative process models organizations and individuals might adopt in service of fostering creative outcomes. Others include design thinking, TRIZ, and De Bono techniques (Puccio & Cabra, 2010), each which, like CPS, has been taught to thousands of people (Martin, 2009; Powell, 2007; De Bono Foundation, 2014). I have chosen to study CPS, as opposed to another model, primarily because it is more thoroughly backed by empirical scholarship (Puccio, Murdock, & Mance, 2011), but my research will prove relevant to understanding creative process models, more generally. This research is needed, since, as several
researchers have pointed out, there is a paucity of academic research on creativity models, relative to their widespread use (Birdi, 2005; Birdi, 2007; Puccio et al., 2006).

Furthermore, creative process models, like CPS, can yield insight into how abstract concepts like “creativity” and “innovation” are translated into daily, lived practice. Here, it is helpful to look toward strategy-as-practice (SAP) scholarship, and how, in focusing on the tools, such as SWOT analyses, which practitioners use when formulating and executing organizational strategies (Spee & Jarzabkowski, 2009; Whittington, 2007), SAP scholars have fostered understanding of how the desire for a strategy is translated into reality (Spee & Jarzabkowski, 2009; Whittington, 2007). Analogously, the adoption of pre-established creativity processes is how the desire for creativity and innovation is made real, and studying CPS thus provides a window into how creativity actually happens within the context in which it is embedded.

Finally, CPS holds the potential to be particularly useful in understanding how people adapt practices that possess broader cultural meaning. As explained in Chapter Three, practices can be understood as existing at the intersection of individual and collective activity (Nicolini, 2012). In engaging in a practice, we are adhering to collective norms at the same time as acting in ways that are unique to who we are and where we are contextualized. CPS is particularly well-positioned to provide insight into creative practice, because it involves brainstorming, which enjoys widespread familiarity. Many organizational employees have either participated in brainstorming sessions or heard of them, and when engaged in brainstorming, they therefore are negotiating their understanding of what brainstorming is and should be with how it might sensibly be put into practice within their specific context. CPS is thus well positioned to illuminate how practitioners negotiate the complexity of bringing practices that have been established elsewhere into their specific contexts.
In summary, my research focuses on CPS both because, as a widely practiced creative process, it is of intrinsic interest, and because it can serve as a vehicle for the exploration of broader questions.

**Workplace Learning**

In my research, I focused on the ways in which learning occurs when employees engage in CPS and not, as has been the focus of most previous CPS research, whether successful creative outcomes have been achieved. A primary catalyst for this focus has been my experience with my MBA class and my observation that, in their post-practicum papers, many of my students focus on the topic of learning, rather than that of creative outcomes.

Moreover, studying the learning associated with CPS sessions simply seems like a natural thing to do, and in fact, I wonder whether such research has not been conducted previously simply because of where, from a disciplinary perspective, CPS has historically been positioned. Because CPS primarily has been studied by those interested in creativity, it has been positioned as a creativity model. However, thinkers like Peter Senge (Senge, 2006; Senge, Kleiner, Roberts, Ross, & Smith, 1994) and Chris Argyris (1999), who have dedicated themselves to exploring the topic of organizational learning, share the same concerns as CPS-focused scholars. Indeed, many of the steps and even the specific tools recommended by CPS scholars Puccio et al. (2011) for the purposes of achieving organizational creativity are the same as those recommended by Senge (Senge, 2006; Senge, Kleiner, Roberts, Ross, & Smith, 1994) for the purpose of achieving organizational learning. Significantly, CPS can just as cleanly be conceptualized as a tool to achieve organizational learning as it can be a tool to achieve organizational creativity.

Furthermore, creativity and learning are inextricably linked. Creativity and innovation scholars frequently reference learning and vice versa (e.g. Brown & Duguid, 1991; Cohen &
Levinthal, 1990; Ellström, 2001; Ellström, 2005; Ellström & Nilsen, 2014; Fenwick, 2003; March, 1991), and within my research, I have aligned myself with scholars who conceptualize creativity as a form of learning (e.g. Ellström, 2005; March, 1991). For example, Ellström (2001; 2005) used the terms “developmental” “expansive” and “generative” learning to describe learning associated with creativity and innovation and to stand in contrast to “adaptive” or “reproductive” learning,” which is associated with the maintenance of routines. Moreover, as Ellström (2005) pointed out, the former form of learning is linked with Chris Argyris’ (1977) concept of double-loop learning, whereas the latter is associated with single-loop learning (p. 33-34). WPL theorists interested in expansive or developmental learning and who focus their attention on learning intent on “transforming rather than reproducing a prevailing situation” (Ellström, 2005, p. 34) are thus studying the same phenomenon as OC theorists who focus their attention on the way people “engag[e] in the process of trying to come up with creative outcomes” (Shalley, 2009, p. 148). Through the lens of WPL, CPS can be understood as a curriculum, which, in guiding participants through the creative process, is guiding them through a learning process, whose goal it is to yield creative and useful results.

In summary, in studying CPS through the lens of WPL theory, and not, as has been done previously, as a creativity model, I conceptualize creativity as a form of learning. Although WPL and OC are distinct areas of study, their inextricability suggests that my work within WPL should nonetheless be relevant to those working in the area of OC.

Practice Theory

Adopting a practice perspective on WPL means that, as noted above, I conceptualize learning as the “ongoing configurations and reconfigurations of practice – unfolding, emergent, situated in activity, acknowledging the important mediating function of artefacts but still
focusing on the human interactions of activity” (Fenwick, 2010, p. 86). For practice theorists, “the social world appears as a vast array or assemblage of performances made durable by being inscribed in human bodies and minds, objects and texts, and knotted together in such a way that the results of one performance become the resource for another” (Nicolini, 2012, p. 2). As elaborated in Chapter Two, the attraction of PT lies in its ability to theorize flux and change, account for the role of the material world, and analyze the workings of power (Nicolini, 2012). However, adopting PT means navigating a fair degree of complexity, since as multiple scholars have noted, (Corradi, Gherardi, & Verzelloni, 2010; Guzman, 2013; Hager, 2013; Nicolini, 2012; Reckwitz, 2002; Schatzki, 2012) it is not a unified theory but rather represents the “coming together of several distinct scholarly traditions” (Nicolini, 2012, p. 9). Various PT scholars, for example, Nicolini (2012), Gherardi (2012), Reckwitz (2002), and Buch and Elkjaer (2015) thus have differed either in the ways they have mapped its lineage or the way they have taken it up or both.

In this section I introduce PT, explain the PT perspective I adopt in this study and provide a rationale for my adoption of this perspective. I begin by providing a broad historical overview of PT, as laid out by Nicolini (2012) in his book *Practice Theory, Work, and Organization*. Given that multiple perspectives of PT’s lineage exist, I then explain why I have put forward that of Nicolini and, moreover, why, throughout this dissertation, I draw on him—as well as Sylvia Gherardi, with whom he has collaborated—as opposed to other scholars to whom I might have turned, as this dissertation’s primary PT resources. Finally, I explain how and why this dissertation specifically focuses on how PT has been taken up by workplace learning (WPL) scholars.
The multiple strands of practice theory.

According to Nicolini (2012), all contemporary PT can be traced back to the thinking of Marx, Heidegger, and Wittgenstein, who, in different ways, countered the notion that the social world could be understood through understanding human consciousness and mental activity and thus set the foundation for a focus on practice. Marx can be credited with developing the “notion of a human being as a corporeal being, mind as a feature of conduct and feature of action, and human knowledge as the result of an active and mutually determined interaction between a social subject and the object” (Nicolini, p. 33). Heidegger’s concept of “everydayness” asserted that “the basic ontological dimension of our being in the world is, in fact, meaningfully structured by a texture of social and material practices that remain unthought of as such” (Nicolini, 2012, p. 34). Wittgenstein conceptualized meaning as something that must be understood not as a property of consciousness but “relationally, as the result of the practical activity of sensuous and engaged agents” (Nicolini, p. 40).

According to Nicolini (2012), PT has gone on to be developed through the theoretical assumptions of six scholarly traditions, which are both distinct and overlapping, and are grounded in the work of the following thinkers: (1) Bourdieu and Giddens, (2) Lave and Wenger, (3) Engeström, (4) scholars of ethno-methodology, (5) Theodore Schatzki, and (6) scholars of discourse analysis. Given PT’s diverse heritage, Nicolini (2012) perceived it as appropriate for PT scholars to adopt an eclectic approach, drawing on the various threads, strategically, as needed. Despite the ontological and epistemological differences between the various scholarly traditions, Nicolini (2012) argued, “a reflective pluralist stance is perfectly legitimate as most practice theories share at least some common elements that allow them to be used in conjunction” (p. 213). In his book’s final chapter, Nicolini (2012) wove the various scholarly
threads together in order to put forward an approach that would enable combining them, while also making clear that no single PT study will draw on all scholarly traditions. Drawing on his previously published methodological innovations (Nicolini 2009a; Nicolini, 2009b), he also sketched out guidelines for conducting empirical PT research based on this eclectic theoretical perspective.

**Arriving at my perspective.**

For me, taking up PT involved an extended decision making process, with two particularly significant decision points. The first involved deciding to use Nicolini and Gherardi’s work as foundational. The second involved figuring out how to position PT vis-à-vis learning theory.

**In Nicolini’s and Gherardi’s footsteps.**

I flirted with PT for over a year before committing to it as a theoretical foundation for this dissertation. In that time, I repeatedly found myself intrigued by empirical PT research (e.g., Gherardi & Nicolini, 2000; Johnson, Prashantham, Floyd, & Bourque, 2010; Nayak, 2008; Nicolini, 2011; Price et al., 2012) and therefore delved into theoretical PT scholarship, in order to better understand it. Invariably, however, I would decide that PT was too complex—that I would not be able to grasp its various theoretical strands in the time allocated to this Ed.D.—and thus set out to find a theoretical framework that was less complex. I repeated this cycle a number of times before finally committing to PT, a decision I made because other, more straightforward, theoretical lenses did not seem to hold comparable explanatory power and because, slowly, as time progressed, the theoretical literature became more comprehensible. That said, I perceived that, in order to move forward with PT, I needed to choose a path: either I could delve deeply into a single strand of PT scholarship, or I could commit to a more eclectic approach, like the one
put forward in *Practice Theory, Work, and Organization* (Nicolini, 2012). The former path held the advantage of enabling me to gain a degree of mastery over a more tightly scoped area, but the disadvantage of requiring commitment to a given perspective, without yet fully understanding its relative strengths and weaknesses, whereas the latter path offered the opposite pros and cons.

In considering the former option, I was particularly intrigued by the work of Engeström whose cultural and historical activity theory (CHAT) built on the scholarship of Vygotsky and Leont’ev, which itself emerged from the Marxist tradition. An activity system, which for CHAT theorists is the basic unit of analysis, can be understood synonymous with a practice (Nicolini, 2012, p. 109), and CHAT can be credited for, among other things, providing a framework that theorizes expansive learning. As someone interested in creativity, I was drawn to the potential explanatory power of Engeström’s (2001) conceptualization of expansive learning. Moreover, I appreciated that Engeström had developed a robust empirical program and that, in what Nicolini (2012) referred to as his “magic triangle” (p. 119), had clearly mapped out the elements of an activity system. Finally, I appreciated that, in building on the work of Vygotsky and Leont’ev, CHAT had emerged from a clear theoretical lineage, which would enable me to position my work within a bounded theoretical sphere. That said, some of these strengths also seemed to be downsides. CHAT’s theoretical cohesiveness and well-developed empirical approach seemed to mean that adopting it would require adopting a distinct and self-contained worldview (or at least using this worldview as a reference point), which I did not feel certain I could commit to.

In considering the latter option, I was drawn to the work of Nicolini and Gherardi who, although they differ in the way they have mapped PT’s lineage, have arrived at compatible, eclectic approaches and have written prolifically about PT, both together and separately (Corradi, Gherardi, & Verzelloni, 2010; Gherardi, 2001; Gherardi, 2006; Gherardi, 2009a; Gherardi, 2010;
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Gherardi, 2011; Gherardi, 2012; Gherardi & Nicolini, 2000; Gherardi, Nicolini, & Odella, 1998; Gherardi, Nicolini, & Strati, 2007; Gherardi & Perrotta, 2014; Nicolini, 2006; Nicolini, 2009a; Nicolini, 2009b; Nicolini, 2011; Nicolini, 2012; Nicolini, Gherardi, & Yanow, D, 2003). I was drawn to them for multiple reasons. For one, their body of work includes three books intended to introduce PT to scholars just entering into it (Gherardi, 2012; Nicolini, 2012; Nicolini, et al., 2003) and, as someone who is new to social theory, I appreciated the thoroughness of this introductory material. Two, they have written extensively about both theoretical and empirical concerns, which meant that I would be able to turn to them not only for theoretical grounding but also for on-the-ground methodological guidance. Three, much of their work has focused specifically on theorizing workplace learning (e.g., Gherardi, 2001; Gherardi, 2009b; Gherardi, 2011), which is my area of concern. And, four, their work has been drawn on extensively by other scholars, most significantly, Tara Fenwick (Fenwick, 2006c; Fenwick, 2008; Fenwick, 2010; Fenwick, Nerland, & Jensen, 2012), whom I have looked towards for guidance in navigating contemporary perspectives of WPL. I thus not only perceived Nicolini and Gherardi to be good guides to an eclectic perspective of PT; I also knew that I could turn to scholars like Tara Fenwick—as well as others (Hopwood, 2014; Reich & Hager, 2014)—to help me contextualize their work.

Of course, there were risks associated with relying on Nicolini and Gherardi. Most notably, in championing theoretical eclecticism, they draw on a dizzying array of scholarly traditions. Turning to them as guides thus meant that, given the time frame of the Ed.D degree, I would be able to gain in-depth understanding of only a few of the scholars they cited, while achieving only a more cursory familiarity with others. However, despite the risks, I decided to adopt Nicolini and Gherardi’s perspectives as foundational, simply because I did not feel ready
to commit to a single perspective and because, when I read their empirical work (e.g., Gherardi & Nicolini, 2000), it resonated with me by showing me how the PT lens could illuminate aspects of experience that may not otherwise be revealed. To ascertain whether I was employing this perspective in a way that was credible to PT scholars, I presented my theoretical perspective at several conferences, including the 2016 Qualitative Research in Management and Organization (QRMO) conference (Zidulka, 2016a), which was attended by prolific PT scholars and provided me with the opportunity to engage in conversation about my approach. The conversations that I had at QRMO led me to feel reassured that I was on the right track, in that my interpretation of PT aligned with those commonly held by those researching in this area. I was reassured that the work of Nicolini and Gherardi was considered a logical and credible entry point into PT. However, speaking to scholars who have been grappling with PT for many years also led me to recognize the degree to which significant theoretical debates exist between practice theorists. In deciding to adopt PT as a foundational theoretical perspective, I therefore have come to see this Ed.D. as the start of a learning journey about PT that will extend for many years into the future. The thinking of Nicolini and Gherardi is simply my doorway. I recognize that certain nuances and debates exist within PT, which I will not be able to address in this dissertation, but with which I will grapple, as I move forward.

**Linking workplace learning and practice theory.**

In adopting PT, I faced a second decision point, which revolved around figuring out which theoretical lens—that of PT or that of learning theory—to position as primary and which as secondary. Given that “a coherent theory of learning and transmission is a requisite element of any theory of practice” (Nicolini, 2012, p. 78), I might have adopted PT as my overarching theoretical framework, and subsumed the lens of learning theory within it. Instead, I decided to
adopt workplace learning theory (WPL) as my overarching theoretical lens and position PT within it. This means that, in this dissertation, I take a specific view of PT, looking at the way it has been taken up by contemporary WPL theorists. I came to this decision because, as a student in the discipline of Adult Education, I wanted to ground myself and my work in the context of the WPL literature. Also, from a practical perspective, I have been able to turn to multiple scholars (Brandi & Elkjaer, 2011; Corradi, Gherardi, & Verzelloni, 2010; Elkjaer & Wahlgren, 2005; Fenwick, 2006a; Fenwick, 2006b; Fenwick, 2006c; Fenwick, 2008; Fenwick, Jensen, & Nerland, 2012; Gherardi, 2001; Hager, 2011) who, have clearly mapped out the historical lineage of WPL theory, as well as PT’s place within it. For now, I am more comfortable using this body of scholarship as my primary foundation. Specifically, in framing PT within the WPL context, I have drawn on the work of scholars who have framed PT as a way to respond to critiques of community-of-practice theories of learning (Corradi, Gherardi, & Verselloni, 2010; Fenwick, 2006C; Fenwick, Jensen, & Nerland, 2012; Gherardi, 2001; Gherardi, 2009; Hager, 2011). My positioning of PT vis-à-vis community-of-practice theories is elaborated in Chapter Two.

Research Questions

My research explored the following question: What happens when employees operating within an organizational setting engage in Creative Problem Solving (CPS)? My sub-questions were as follows:

- How do existing workplace practices, and employees’ perceptions of them, impact what happens during the CPS session? What happens during a CPS session will differ depending on what the existing daily practices are, outside of the session. I looked at the CPS session not, as has often been done in CPS research, as a discrete event with the sole
purpose of producing creative results. Rather, I saw it as part of the fabric of what is going on, more generally, in the workplace, inseparable from its context.

- *How do employees’ perceptions of and emotions about creativity sessions, more broadly, impact what happens during the CPS session?* In adopting a PT perspective, I was interested in how employees negotiate their perceptions about what a creativity session is or should be with what they create and experience, when putting CPS into practice.

- *How do employees participating in the CPS session come to define what constitutes a successful creative process and a successful creative outcome?* Here, issues of power and politics came into play. How is the definition of success negotiated? For example, what is considered wildly creative in one workplace might be considered conservative in another. How is what “being creative” looks like negotiated?

- *What roles do material aspects of learning play, and how do these aspects perpetuate, adapt, or introduce new practices?* This includes the objects that are used, such as Post-it notes and flipchart stands; the shape, size, and aesthetic qualities of the room they occupy; and their physical bodies, which interact, move about, and exchange glances. This question emerged from this research’s grounding in PT, which posits that attentiveness to the material aspects of learning offers a window into new insight.

- *How, if at all, are work practices impacted as a result of engaging in a CPS session?* As will be discussed in Chapter Two, CPS scholars have conducted extensive research around the questions of whether and how CPS is effective in producing creative results. However, there is no research, which explores what other changes, beyond the production of creative results, might result from CPS.
Ontology, Epistemology, and Research Design

To commit to adopting a PT lens is to subscribe to what some thinkers have termed a relational ontology (Hosking & Bouwen, 2000; Nicolini, 2009b; Slife, 2004), in which “all social realities—all knowledges of self and of other people and things—are viewed as interdependent or co-dependent constructions existing and known only in relation” (Hosking & Bouwen, 2000, p. 129). Slife (2004) explained relational ontology as follows:

Because practices are inextricably intertwined with their concrete contexts and cultures, they cannot be abstracted from them. If, for instance, you ask experts a theoretical question, their answers draw on abstract principles, often without much qualification. If, however, you ask experts a practical question, an onslaught of “it depends” statements cascades from their lips. These statements evidence the importance of the concrete relational, because what is ontologically real and has being in practice cannot be understood apart from its relations to other aspects of the context. Indeed, practices do not exist, in an important ontological sense, except in relation to the concrete and particular situations and cultures that give rise to them, implying what we might call a relational ontology. (p. 158)

This ontological stance articulates precisely how I view the world and why I embarked on this research: In facilitating CPS, my student managers’ experience reality as being primarily about all the “it depends” factors, emerging from social relationships and material conditions. For me, CPS, as a framework, has no meaning outside of its practice. Learning CPS and generating new learning through its application is a practical and socially and materially grounded affair.

Most practice theorists refer to their epistemological stance as an epistemology of practice (Corradi, Gherardi, & Verzelloni, 2010; Gherardi, 2011; Raelin, 1998), which suggests
that we come to know through “active participation in the very apparatus of our everyday life and work” (Raelin, 1998, p. 280) and focuses on “the emergence of relations through ongoing interaction and their normative stabilization” (Gherardi, 2011, p. 52). People know through doing, and are always learning, because practices are always in flux. Considering WPL through a practice epistemology thus requires understanding learning not as a product but as a process (Fenwick, 2006b). In Fenwick’s (2006b) words, “learning is conceptualized as contextually-sensitive participation in ongoing practice itself” (p. 271).

In conducting empirical research, practice theorists tend to use qualitative methods (Reich et al., 2013). Their research tends to be inductive, exploratory and focused on “catching practice” (Reich et al., 2013) through unearthing and better understanding how people, in relationship to each other and the material world, come to live out their everyday lives. PT studies generally require that the researcher “get close to the studied practice” (Goldkuhl, 2011, p. 9, italics in the original). The use of qualitative methods therefore makes sense, given that qualitative research is well-suited for “promoting a deep understanding of a social setting or activity” and implies “an emphasis on exploration, discovery, and description” (Bloomberg & Volpe, 2012, p. 27). PT studies are also associated with thick description, a term popularized by Geertz (1973) and elaborated by Denzin (2001), which points to a form of ethnographic research that calls for detailed and nuanced descriptions, focused not just on capturing a researcher’s observations but also explaining behaviours and their context (Ponterotto, 2006).

Most PT studies employ multiple methods, since practice’s “multifaceted and complex nature” (Nicolini, 2009a, p. 196) make it difficult to capture using a single method. In the case of my research methodology, as explained in Chapter Three, I conducted an interpretive case study
research and employed three different research methods: interviews, observation, and document analysis.

**Outline of Dissertation**

This dissertation contains seven chapters, including this one. Chapter Two reviews the relevant literature and Chapter Three outlines my research methodology, research methods and process of analysis. Chapters Four, Five, and Six present my findings and discuss how they respond to the research questions. Specifically, Chapter Four discusses participants’ existing practices and attitudes, before engaging in CPS; Chapter Five presents what happened when participants engaged in CPS; and Chapter Six present discusses how the findings presented in Chapters Five and Six respond to the research questions and reflect the academic literature. Chapter Seven draws both on the literature reviewed in Chapter Two and on new literature, in order to discuss this dissertation’s contribution to the practice and theory.

**Summary**

This chapter began by describing what CPS is and explaining that I am focusing on it, both because it is of intrinsic interest and because it provides a window into broader theoretical issues. This chapter then explained how studying CPS through the lens of WPL, and specifically PT, enabled me to illuminate issues that previously have not been addressed, such as how the CPS process changes in different contexts. Finally, this chapter outlined how, in adopting a PT lens, I subscribed to a relational ontology and practice-based epistemology, which, as elaborated in Chapter Three, is well suited to a multi-method qualitative, interpretive case study.
CHAPTER TWO: LITERATURE REVIEW

Introduction

As stated in the previous chapter, my research used the lens of Practice Theory (PT), under the larger umbrella of the Workplace Learning (WPL) literature to explore the ways in which learning unfolded when employees engaged in Creative Problem Solving (CPS). This chapter, which reviews the relevant literature, is divided into three major sections. The first contextualizes CPS within the literature on organizational creativity (OC), reviews the existing literature on CPS, and points to the gaps that my research contributes to filling. The second reviews the workplace learning (WPL) literature, with a focus on tracing the roots of PT within WPL. The third synthesizes this chapter’s various parts to put forward my theoretical framework.

In conducting this review, I began by reviewing the broad body of literature on OC, referring to seminal scholarship like that of Theresa Amabile (1982; 1983; 1998), before focusing in on the narrower topic of CPS, which tends to be addressed in journals like Creativity and Innovation Management and Creativity Research Journal. In reviewing the WPL literature, I used as my starting point several historical reviews of the field (Brandi & Elkjaer, 2011; Elkjaer & Wahlgren, 2005; Fenwick, 2006b; Fenwick, Jensen, & Nerland, 2012; Hager, 2011), before honing in on those aspects of WPL—specifically, scholarship on the topic of communities of practice and practice theory—that proved particularly relevant to my research.

Creative Problem Solving (CPS)

In order to contextualize the CPS literature, and recognize the gaps within it, it is necessary to understand two discussions within the broader OC literature, in which CPS scholarship is situated. The first revolves around the relative strengths of OC studies emerging from the functionalist versus the interpretivist paradigms and the way in which functionalists
tend to focus on creative results, which they define as results that are “novel and useful” (Amabile, 1996, p. 1), whereas interpretivists tend to focus on the creative process, “the process of engagement in creative acts, regardless of whether the resultant outcomes are novel, useful, or creative” (Drazin, Glynn, & Kazanjian, 1999, p. 286). The second addresses levels of analysis, which is to say the relationship between individual-level, group-level, and organizational-level creativity.

In terms of paradigmatic approaches, although functionalist research dominates the OC literature, a significant body of interpretivist work exists (Bailey, Ford, Cameron, & Raelin, 2009; Taylor & Callahan, 2005). Functionalist researchers, who are “rooted in the tradition of sociological positivism” and “tend to assume that the social world is composed of relatively concrete empirical artefacts and relationships which can be identified, studied and measured” (Burrell & Morgan, 1979, p. 26), have focused on uncovering “what works”—and what doesn’t work—in fostering OC (Bailey, Ford, & Raelin, 2009; Taylor & Callahan, 2005). Research of this type, for instance the decades of work that have been conducted by Harvard University’s Theresa Amabile (Amabile, 1982; Amabile, 1983; Amabile, 1996; Amabile, 1998; Amabile & Mueller, 2009; Amabile, Schatzel, Moneta, & Kramer, 2004), can be credited for establishing the foundations for OC, as an area of study, through initiating understanding of, “the skills, personality styles, motivations and conditions that are conducive or detrimental to creativity, or the processes through which it emerges” (Amabile & Mueller, 2009, p. 33). Functionalist researchers have defined creative results as that which are “novel and useful” (Amabile, 1996, p. 1), and most functionalist research focuses on figuring out how such results might be achieved.

In contrast, interpretivist researchers, who eschew the possibility of uncovering objective, broadly generalizable truths and tend to “see the social world as an emergent social process
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which is created by the individuals concerned” (Burrell & Morgan, 1979, p. 28), have focused on
the subjective human experience of organizational creativity. These researchers can be divided
into two camps. Those in the first, like those from functionalist camp, are concerned with
increasing creative efficacy, but unlike functionalists, believe that, because the lived experience
of engaging in creative process is nuanced and complex, this can only be done through
understanding the subjective experiences of those involved. The interpretivist scholars in the
second camp are more interested in understanding subjective human experience of the creative
process, than in directly linking their findings to improvements in creative efficacy. These
scholars tend to focus on the creative process, and Drazin, Glynn, and Kazanjian (1999)’s
definition of creativity as “the process of engagement in creative acts, regardless of whether the
resultant outcomes are novel, useful, or creative” (p. 286) would be considered interpretivist.

As a PT project, my proposed research would be classified as neither functionalist nor
interpretivist, but as more closely aligned with interpretivism. Like interpretivists, practice
theorists view the world as constructed and do not hold the functionalist goal of uncovering
objective truths. However, unlike interpretivists, practice theorists perceive social construction,
which results from the meaning making of human beings, as only part of the story. Through
focusing, as well, on the material world, they explicitly work on decentring the primacy of
human intention. Given that only a small handful of PT studies of OC exist (Nayak, 2009;
Stierand, 2014), my research contributes to new understandings of OC through adopting a
practice lens.

In terms of levels of analysis, OC scholars have dedicated significant attention to
puzzling out the way in which they operate (Drazin, et al., 1999; Woodman, Sawyer, & Griffin,
1993), since it cannot be assumed that creativity at higher levels are simply “an aggregation of
creative output at lower levels” (Drazin et al., 1999, p. 287). For example, it would be a mistake to assume that a group of creative people will make up a creative team. This discussion is significant to my review of the CPS literature, because CPS scholars have tended to focus primarily on individual and secondarily on group creativity, while paying scant attention to level-of-analysis debates. It is also significant that an analogous conversation around levels of analysis exists within the WPL literature (Brandi & Elkjaer, 2011). Exploration of levels of analysis within the OC context can thus inform the conversation within WPL, and vice versa.

Review of the CPS literature.

CPS was created and has been developed with an instrumentalist purpose in mind: to increase the efficiency of the creative process. Almost all the CPS research has focused on ascertaining the degree to which it helps practitioners in achieving this goal, as well as adapting the model to better achieve this purpose. The bulk of CPS research thus can be classified as functionalist. However, a small body of interpretive CPS literature exists.

CPS was first studied in the classroom setting, and the Creative Studies Project (CSP), an experimental program conducted between 1969 and 1972, which followed 150 students in courses that provided CPS instruction and compared their results on standard creativity indicators with 150 students who served as a control group, is often cited as particularly significant in establishing the model’s efficacy (Isaksen & Treffinger, 2004; Puccio et al., 2006; Puccio, Murdock, & Mance, 2011). The CSP found that students who were trained in CPS showed superior results on measures of divergent production, convergent production, and cognition (Puccio et al., 2011). In the years that followed the publication of the CSP results, multiple studies emerged confirming the efficacy of the approach (Parnes, 1987; Puccio et al., 2006; Puccio et al., 2005; Isaksen & Treffinger, 2004; Puccio & Cabra, 2010). Moreover, meta-
analytic studies of creativity processes (Rose & Lin, 1984; Scott, Leritz, & Mumford, 2004) found CPS more effective than others in yielding creative results. Significantly, however, most of these studies focused on whether CPS helped individuals—as opposed to groups or organizations—become more creative. Moreover, much of the research was done in classroom settings, using students as research subjects.

Puccio et al.’s (2006) article “A Review of the Effectiveness of CPS Training: A Focus on Workplace Issues” is significant for its exclusive focus on the workplace. All of the 18 empirical studies reviewed by Puccio et al. showed positive results, indicating that CPS training was effective in, for example, increasing “openness to new ideas” and “levels of flexibility in…approach[ing] problems” (p. 23). However, 13 of the 18 studies reviewed focused on individual-level creativity, within the organizational context, and not the group- or organizational-levels.

Perhaps not surprisingly, most of the studies that focus on individual-level creativity are functionalist, whereas most focusing on the group and organizational level are interpretivist. Researchers can design functionalist individual-level studies in relatively straightforward ways, for example, by using standard creativity tests to measure indicators such as post-training divergent abilities. However, assessing what goes on at the group and organizational levels necessarily requires greater subjectivity, since they involve “processes and outcomes that are inherently complex, ambiguous, and dynamic, thus making it somewhat unnamable to positivist inquiry and application” (Bailey, Ford, & Raelin, 2009, p. 28). All interpretive CPS studies would fall under what, above, I have referred to as the first camp of interpretivist research, in that they are concerned with increasing creative efficacy, but understand this can only be done through understanding the subjective experiences of those involved. All interpretive CPS studies
have used the case study method. These include Thompson’s (2001) multiple case study analysis of the CPS process, as it was implemented in three organizations; Firestien’s case studies of a US forge plant and a hospital (Firestien, 1996, as cited in Puccio et al., 2006); Sousa’s (2013) case study of CPS when used by museum employees and volunteers; and Buijs, Smulder, and van der Meer’s (2009) case study of a CPS when used by a dredging company.

The first two of these studies, both which were included in Puccio et al.’s (2006) review, showed CPS to be highly effective in producing creative results, where creative results were defined as those that were both novel and effective within their organizational contexts. For example, Thompson’s (2001) study showed that, at Alcan, the application of CPS yielded a new idea that significantly reduced plant costs and, at Quaker Oats, CPS led to the reduction of tens of thousands of dollars in maintenance costs. In contrast, however, Sousa (2013) and Buijs et al. (2009)’s studies, which were published after Puccio et al.’s (2006) and were not included in it, yielded more ambiguous findings. In both studies, what, according to the version of CPS used in this dissertation (Puccio et al., 2011), would be called clarification and transformation stages were deemed to have been successful, in that challenges were effectively framed and novel and seemingly useful ideas were generated. However, in both cases, the authors deemed the CPS process to have failed at the implementation stage due to political challenges within the organizations. Both Sousa et al. (2013) and Buijs et al. (2009) proposed adaptations to the CPS model or recommendations for how it might be implemented more successfully.

Significantly, the paucity of interpretive academic research exists does not mean that practitioners who wish to understand the experience of engaging in CPS have nowhere to turn. A multitude of non-academic resources exist (e.g. Miller, Vehar, Firestien, Thurber, & Nielsen, 2011a; Miller, Vehar, Firestien, Thurber, & Nielsen, 2011b) around how to practice CPS, as well
as numerous consultancies that provide CPS training and facilitation (e.g. Creative Problem Solving Group, 2013). Moreover, the digital commons database at Buffalo State University (Digital Commons at Buffalo State, n.d.) contains over 150 theses, the majority of which are linked to CPS, which have been completed in fulfillment of their MSc. in Creative Studies. There is thus an abundance of descriptive literature produced by practitioners and Masters-level students around the CPS process.

In short, from a functionalist perspective, significant evidence exists that CPS is effective at improving creative results for individuals. There is a paucity of research linking CPS with group and organizational creativity. Those studies that have focused on organizational creativity have adopted an interpretive perspective and used the case study method. Whereas some have asserted that CPS has successfully produced novel and useful organization-level results (Puccio et al., 2006), others have yielded ambiguous results, finding that the CPS process succeeded in generating creative ideas but that these ideas were not implemented (Buijs et al., 2009; Sousa et al., 2013). Only a few studies have adopted an interpretive perspective and explored what happens and what is experienced when practitioners engage in CPS. However, a multitude of practitioner resources exist.

Gaps in the CPS literature.

As outlined above, CPS has been the subject of significant scholarly attention. However, most CPS research has remained fairly narrow in scope and has focused on establishing the model’s efficacy. In comparison to the general OC literature, the CPS literature features proportionately fewer non-functionalist studies. This is significant, given that OC research has been critiqued for an overabundance of functionalist research (Bailey, Ford, & Raelin, 2009; Taylor & Callahan, 2005).
This narrow focus has led to several gaps in the literature, which my research will contribute to addressing:

1. There is no research that examines the relationship between existing organizational practices and what happens when CPS is implemented. This research seems needed, given that the broader OC research indicates that the organizational context impacts the way in which creativity is practiced (Amabile et al., 2004; Anderson, Potočnik, & Zhou, 2014; Billett, 2012; Isaksen & Akkermans, 2011).

2. The CPS research has not sufficiently acknowledged the multiple possible outcomes of CPS. Sutton and Hargadon (1996) addressed this issue when they urged OC researchers to move beyond a “machine theory” view of organizational life, which conceptualizes organizations as designed solely to produce prescribed outcomes, and which “does not adequately take into account that, regardless of which tasks an organization is constructed to do, it produces other important consequences not imagined or intended at the outset” (p. 688). My research contributes to filling this gap through its use of WPL theory and PT.

3. Almost all CPS research seems to assume that the process is practiced in precisely the same way, regardless of its setting, when in fact, once CPS is removed from a controlled environment and put into play within an organization, it will necessarily be transformed. As Billett (2012) has pointed out, even when people make every effort to execute a procedure, as outlined, they will unavoidably insert some idiosyncratic aspect of who they are into their performance, and, moreover, need to adapt the procedure to their context. Moreover, because research has focused on CPS itself, the broader process, for example, what goes on during breaks or in post-CPS employee gossip sessions, has not been examined.
My research examined the ways in which CPS was transformed within a given context and thus broadens the scope to explore what happens before and after a scheduled CPS session.

4. All research has examined CPS that has been facilitated by specially trained external facilitators. If CPS is to be used regularly within an organization, it cannot only be facilitated by experts. Indeed, recent CPS-based practitioner literature, like the book *Creative Leadership* (Puccio, et al., 2011), is aimed specifically at those who do not possess specialized training but wish to catalyze creativity within their own organizations. My study is the first to explore what happens when CPS is facilitated by an organizational employee, and not an external facilitator.

**Workplace Learning (WPL) and Practice Theory (PT)**

The history of WPL, from the 1970s until today, can be understood as a long conversation revolving around the question of where knowledge is located and where learning occurs. While early theorists, for example Argyris and Schön (Argyris, 1976; Argyris, 1977; Argyris, 1999; Schön, 1983; Schön, 1987), positioned learning as happening within the minds of individuals, later ones, such as Lave and Wenger (Lave and Wenger, 1991; Wenger, 1998) conceptualized it as occurring through participation in communities of practice (CoPs). Those who came later still, for example, scholars like Gherardi and Nicolini (Gherardi, 2006; Gherardi, 2009a; Gherardi, 2011; Gherardi, 2012; Gherardi & Nicolini, 2000; Nicolini, 2012) who might be called practice theorists, questioned the idea of community but retained the notion of practices. For them, learning could be found by looking not at people or at communities, but by examining their practices—the recurrent behavioural patterns of both people and communities, as well as the objects and space that are used and formed through enacting and adapting them.

In my research, I adopted a practice theory (PT) perspective on learning. This means that I viewed learning as a socio-material phenomenon, which arises through interactions with others
and the material world and not, as cognitive theorists would contend, something that happens only in the mind of the individual or, as CoP theorists would contend, something that takes place primarily through community socialization. However, as explained below, CoP theories are not incompatible with PT—and, indeed, can be seen as foundational to it—and in my research, I drew on both. Moreover, as explained below, Jarvis’ (2004) distinction between formal, non-formal, and informal learning also was important to my research.

This section is divided into two subsections. The first uses the umbrella term Social Learning Theory (SLT) to refer to all WPL perspectives that acknowledge that learning does not simply occur in individuals’ minds and reviews CoP theory, PT, and the relationship between them. The second reviews the concepts of formal, non-formal, and informal learning.

Social Learning Theory

SLT is an umbrella term that can be used to refer to different strands of thinking about learning, which use different vocabularies, such as “situated learning,” “practice-based learning,” and “learning as cultural processes” (Brandi & Elkjaer, 2011, p. 24). SLT emerged in response to the limitations of individual learning theory, and specifically, the realization that the relationship between the individual and his or her environment was more complex than previously had been acknowledged. For all SLT scholars, the individual and the environment are, to varying degrees, mutually constitutive. The environment is not conceptualized as a container within which individual learners reside. Rather, the environment—and in particular, the social relationships in which an individual is embedded—change the individual, just as the individual changes the environment. Furthermore, while early learning theorists, for example Argyris and Schön (Argyris, 1976; Argyris, 1977; Argyris, 1999; Schön, 1983; Schön, 1987) conceptualized
learning as a cognitive activity, SLT theorists looked more broadly at issues of identity, which will be explored shortly (Brandi & Elkjaer, 2011).

Lave and Wenger’s work on Communities of Practice (CoPs) (Lave & Wenger, 1991; Wenger, 1998) is generally acknowledged as foundational to SLT scholarship that came after it (Contu & Willmott, 2003; Fenwick, et al., 2012; Fuller, et al., 2005; Huzzard, 2004). For this reason, the first part of this section reviews the CoP concept, pointing both to its strengths and limitations. The second part examines contemporary theories, referred to under the umbrella term Practice Theory (PT), which build on and respond to Lave and Wenger’s concept of CoPs. As noted in this dissertation’s introductory chapter, in framing PT as a response to CoP theorizing, I am focusing on the way it has been framed by certain WPL theorists (Brandi & Elkjaer, 2011; Elkjaer & Wahlgren, 2005; Fenwick, 2006a; Fenwick, 2006b; Fenwick, 2006c; Fenwick, Jensen, & Nerland, 2012; Hager, 2011) and am not providing a broad overview of PT as a social theory.

Communities of Practice (CoPs).

This section, which reviews the CoP concept, is divided into three parts. First it provides a general overview of the concept, then points to its limitations, and finally to its contributions. As elaborated below, there are different interpretations of what, precisely, constitutes a CoP (Cox, 2005), and, even the concept’s seminal texts, Situated Learning (1991) and Communities of Practice (1998) each view the term differently. In the first part of this section, I do not distinguish between the CoP concept as presented in Situated Learning (1991) and Communities of Practice (1998), but rather focus on those aspects that are common to both versions. In exploring the limitations of the concept, however, the differences between the versions become germane and are explored.
Overview of CoP concept.

This section points to four core characteristics of the learning process, as conceptualized by Lave and Wenger (1991): that it occurs through social relations, that it occurs through participation in practices, that it involves material and temporal aspects, and that it occurs through the interaction and overlapping of CoPs.

Learning as occurring through social relations.

According to CoP theories of learning, knowledge is linked to social practices, and moreover, is understood as only existing within a social context. It is through social relations that we recognize some things as “knowledge,” and dismiss or don’t register others. A CoP is thus a precondition for knowledge, and what identifies knowledge within CoPs is “a demonstrated ability to ‘read’ the local context and act in ways that are recognized and valued by other members of the immediate community of practice” (Contu & Wilmott, 2003, p. 285).

Learning as occurring through participation in practices.

In CoP scholarship the notion of participation is important, because it suggests that social units don’t simply exist. Rather, they are brought into being through members’ participation in their practices. The term participation suggests “both action and connection” (Wenger, 1998, p. 55) and is used to link the concepts of activity and relationships: we form, reproduce, and change relationships through our participation. When we participate in a practice, we are also involved in an act of becoming, which suggests that learning, as conceptualized by CoP scholars, involves identity work, and that action cannot be separated from belonging.

Significantly, practice is not simply an activity. Practices are socially legitimized and recurrent behaviours, and an activity only becomes a practice if it is adopted on an ongoing basis by a community. The term practice therefore should not be taken to simply mean doing, as
opposed to thinking or theorizing—as it often does in common usage. Practices exist at the intersection of the individual and the social group, and thus confound the individual/collective dualism. When we engage in a practice, we are acting on our own behalf but we are also enacting and reproducing what has been established by the collective.

_Learning as possessing material and temporal aspects._

Unlike in early WPL scholarship, which positioned learning as happening inside individuals’ minds, CoP scholarship explicitly focuses on how learning always involves “producing or adopting tools, artefacts, [and] representations” (Wenger, 1998, p. 58).

A significant concept in CoP thinking is the relationship between participation and reification, which Wenger explained using the standard Webster dictionary definition—“to treat (an abstraction) as substantially existing, or as a concrete material object” (Wenger, 1998, p. 55). Practice always yields physical traces, for example, memos communicating the outcomes of a meeting or the arrangement of chairs in a room. Conversely, physical artefacts always shape practice: once we have come to arrange the chairs in a certain way, their configuration will impact the way in which we converse. In Wenger’s words, “We project our meanings in the world and then we perceive them as existing in the world, as having a reality of their own” (1998, p. 58). The material world thus both precedes and is produced through practice. Wenger placed significant emphasis on the participation/reification relationship and conceptualized it as central to learning: “[We give] form to our experience by producing objects that congeal this experience into ‘thingness’. In so doing we create points of focus around which the negotiation of meaning becomes organized” (1998, p. 59).

The CoP concept also acknowledges time as central to learning. Communities form over time, as does an individual’s socialization into them, and practices only count as practices if they
recur. Thinking temporally about learning facilitates thinking about change and innovation.

While practices recur, they also change; individuals and groups are formed by practices, but they also form them, adapt them, and reform them.

*CoPs as overlapping and interacting with other CoPs.*

That CoPs exist “in a relation with other tangential and overlapping communities of practice” (Lave and Wenger, 1991, p. 98) suggests that they do not exist in isolation from each other and that the boundaries between them are permeable. CoPs interact; individuals might act as “brokers,” who translate learning from one to another; and “boundary encounters” between members of different CoPs can be considered particularly important in catalyzing change and innovation (Wenger, 1998). From a learning perspective, that CoPs interact is significant, since this interaction represents a way that new knowledge and thus innovative learning can emerge.

*The contribution of the CoP concept.*

Lave and Wenger are generally credited for “the development of a social theory of learning which stands in opposition to the cognitive theory” (Gherardi, 2006, p. 102). They can also be seen as critical in helping learning theorists move beyond assumptions that group and organizational learning are simply the aggregate of learning achieved by individuals (Fenwick, 2008). CoP scholarship offered a plausible theory of how groups of people might be understood to learn. Furthermore, through conceptualizing work practices and learning “not in terms of the groups that are ordained (e.g. ‘task forces’ or ‘trainees’), but in terms of the communities that emerge” (Brown & Duguid, 1991, p. 45), the CoP concept paved the way for new theories of innovation, which posited informal communities as where new, non-canonical ideas could first emerge within larger organizations (Brown & Duguid, 1991).
Limitations of the CoP concept.

In examining the limitations of the CoP concept, the differences between Lave and Wenger’s (1991) original conceptualization and its application become significant, since many critics take issue not with Lave and Wenger’s (1991) theoretical conceptualization of the CoP concept but rather the way it has been interpreted and deployed, both by Lave and Wenger (1991) themselves and by later scholars. Critics like Contu and Wilmott (2003) and Huzzard (2004) have argued that the interpretation of the CoP concept has led to it being stripped of its political implications and thus made ripe for cooptation by a managerialist agenda.

In their original conceptualization of the CoP concept, Lave and Wenger (1991) emphasized two points. One, they made clear that CoPs should not be considered social units, but rather, “sets of relations” (Lave & Wenger, 1991, p. 98) formed through members’ participation in and creation of common practices. Two, they emphasized the role power played in CoP formation and in CoP members coming to consensus around the adoption of certain practices and not others (Contu & Wilmott, 2003; Nicolini, 2012). These linked points are significant because they politicize the CoP concept. Whereas a focus on the community as a social unit leads toward a theory that emphasizes the perpetuation of tradition, a focus on practices enables the emergence of theorizing that emphasizes instability and the always-negotiated and contingent nature of that which is taken for granted. Through emphasizing that practices always precede communities and that the legitimization of practices always results from politically charged negotiation, Lave and Wenger (1991) appeared intent on putting forward a theory that emphasized flux and shifting power relationships, rather than the stability of community norms and culture.
However, the way Lave and Wenger (1991) used the CoP framework in their analysis of their book’s case studies did not “treat these issues [of power] in any systematic fashion, [which] gave the impression that situated learning can be seen as a medium, and even as a technology, of consensus and stability” (Huzzard, 2004, p. 353). In other words, although the CoP concept held critical potential, this potential was not exercised. Furthermore, this depoliticized version of the CoP concept was promoted by Wenger himself, both in *Communities of Practice* (1998) and in his later work (Cox, 2005; Nicolini, 2012). As a result, the CoP concept morphed over time from being an explanatory model to a prescriptive one, which focused on how managers might design CoPs in order to engineer the achievement of learning outcomes (Contu & Wilmott, 2003).

Moreover, despite CoP scholarship’s espoused concern with the relationship between the social and the material worlds, the emphasis remained on social relationships (Fenwick, Nerland, & Jensen, 2012; Nicolini, 2012), with only “marginal attention to the role of mediating artefacts” (Nicolini, 2012, p. 86). Other critiques of the CoP concept, as deployed, include that it tended to underestimate the role of individual-level learning (Fenwick, 2008; Fuller et al., 2005) and that it de-emphasized the role that teaching plays in the learning process (Fuller et al., 2005). As noted in this chapter’s next section, PT addresses many of these critiques.

**Practice Theory.**

A cluster of relatively recent theories of WPL maintain Lave and Wenger’s commitment to the centrality of practice but address the limitations spoken to above and take a markedly more critical stance (Corradi, et al., 2010; Fenwick, 2006a; Fenwick 2006b; Fenwick, 2006c; Fenwick, 2008; Fenwick, et al., 2012; Gherardi, 2006; Gherardi, 2009a; Gherardi, 2012; Nicolini, 2012; Reich & Hager, 2014). This cluster has been referred to using various terms, such as practice-based studies (Corradi, et al., 2010), practice theory (Fenwick, 2006c), and postmodern theories
According to Fenwick (2010), PT “take[s] learning to be the ongoing configurations and reconﬁgurations of practice – unfolding, emergent, situated in activity, acknowledging the important mediating function of artefacts but still focusing on the human interactions of activity” (p. 86). When looking at PT as a response to CoPs, Fenwick’s (2010) description is notable for the omission of the word “community” and the inclusion of the word emergent, since unlike CoP theorizing, which favours stability, PT takes ﬂux as its starting point, and the emphasis on mediating artefacts, which for PT take on a prominent role. The appeal of practices as the focus of scholarly analysis is threefold.

One, PT holds the promise of allowing researchers to transcend dualistic thinking, since practices are both and neither individual and/or social products. On one hand, practices are carried out by individuals, who change them, through acting willfully and creatively, but also through simply putting the practice into play in a way which is always, at least in some way, unique (Nicolini, 2012). On the other hand, the individual is always also the carrier of the social, the perpetuator of that which has been produced and legitimized by the community. The freedom to create thus always only exists within limits and the individual who participates in a practice is always, at least in part, subordinating his or her will to that of the collective. As Nicolini explained, “A practice without standards is not a practice,” and consequently, “to be absorbed in a practice is to accept the authority of those standards and to accept that the inadequacy of a given performance may be judged by them” (Nicolini, 2012, p. 84).

Practices can thus be imagined as a type of zipper, which binds together dualisms, enabling their study to offer “a remedy for a number of problems left unsolved by other
tradictions, especially the tendency of describing the world in terms of irreducible dualisms between actor/system, social/material, body/mind, and theory/action” (Nicolini, 2012, p. 3), due to practice’s capacity “to dissolve (rather than resolve)...enduring dualisms” (Nicolini, 2012, p. 3). In terms of creativity and learning research, a focus on practice allows the researcher to transcend debates around levels of analysis, since PT would conceptualize individual, group, and organizational levels of creativity and learning as inextricably linked.

Two, focusing on practices promises to illuminate the way in which WPL is always mitigated through power and politics. Unlike a focus on community, which in the way it has been taken up by many CoP scholars, “obscures power, conflict, and differences” (Nicolini, 2012, p. 91), a focus on practices makes explicit the way what we take for granted in the world is actually built and rebuilt according to some interests and not others, and relatedly, how coming to know is always an active and political activity. In Nicolini’s words, a practice focus can reveal the ways in which “family, authority, institutions, and organizations are all kept in existence through the recurrent performance of material activities, and to a large extent they only exist as long as those activities are performed” (2012, p. 3). What appear to be coherent social systems are, in actuality, what Schatzki would call “bundles of practices and material arrangements” (2006, p. 1863). This suggests that studying practice “foregrounds the centrality of interest in all human matters and therefore puts emphasis on the importance of power, conflict, and politics as constitutive elements of the social reality we experience” (Nicolini, 2012, p. 6). Significantly, this reality comes across as “normal” and invisible, and consequently, one goal of a PT analysis is to illuminate it. To once again quote Nicolini, “The contribution of a practice approach is to uncover that behind all the apparently durable features of our world there is always the work and
effort of someone” (Nicolini, 2012, p. 3). A PT approach thus encourages the question, “Who, in this situation, is putting in work, in order to maintain the taken-for-granted status quo?”

Finally, PT’s emphasis on flux opens up a space for conceptualizing learning in ways that are particularly conducive to studying innovation. Workplace learning, like learning in general, has typically been conceptualized as occurring through either acquisition, whereby the individual acquires knowledge, or participation, whereby learning happens through participation in a social group (Sfard, 1998)—or through combinations of these two approaches. In contrast, PT conceptualizations are associated with expansive learning theories, which can be understood as something entirely different:

Both acquisition-based and participation-based approaches share much of the same conservative bias. Both have little to say about transformation and creation of culture.…. So the theory of expansive learning must rely on it is own metaphor: expansion. The core idea is qualitatively different from both acquisition and participation. In expansive learning, learners learn something that is not yet there. (Engeström & Sannino, 2010, p. 2)

PT, with its emphasis on flux, can thus be seen as particularly well-suited for theorizing WPL in our contemporary era, which is characterized by change.

PT theorists also focus on the intertwinement of materiality—including human bodies, physical spaces, objects, and technologies—with learning, and the way in which the material and the social are mutually constitutive and inextricably fused (Nicolini, 2012). This offers a more complete picture of how learning occurs. That learning could be conceptualized as something that occurred in our minds or through social relationships, within a container of empty space, has always been a fiction. However, in the technological era in which we live, when so much of our
lives is mitigated by technology, this fiction can no longer be sustained and the role of materiality has come to the fore.

Moreover, a focus on materiality illuminates workings of power and politics that might otherwise remain invisible. To point to just one example, the mere presence of a cell phone might change the power dynamics in a learning situation, since a phone can be used to document and publicize others’ behaviors or to connect its holder to those beyond the bounds of a physical space. Scholars who focus their gaze on the material aspects of learning can thus access new perspectives on the ways in which power and learning are intertwined.

Limitations of PT

A primary limitation of PT lies in its lack of a unified theoretical base, which has led to scholarly confusion, as different scholars have defined and deployed it in different ways (Corradi et al., 2010). For example, while certain strands of PT have their foundations in Marxist thinking (Nicolini, 2012), others are rooted in American pragmatism (Elkjaer, 2007). This makes PT difficult to enter into for those who do not come to it with an existing broad-based knowledge in social theory. Moreover, as will be discussed in Chapter Three, applying PT in empirical contexts can be challenging, given that it is methodologically “still under-conceptualised and underdeveloped” (Reich et al., 2013, p. 10) and that “catching practice” (Reich et al., 2013, p. 10) generally involves the deployment of multiple qualitative methods.

PT’s draw is that it provides a richer and more nuanced perspective of WPL than CoP theories, because it considers more facets of context. However, herein also lies its disadvantage. If practice is made of everything—including scents, speech, texts, spaces, bodies, etc.—how does the scholar know where to focus his or her gaze? This, too, is a question addressed in Chapter Three.
Formal, Non-formal and Informal Learning

Another foundational concept from the WPL literature is Jarvis’ (2004) distinction between formal, non-formal, and informal learning. As Jarvis pointed out, and as illustrated in Figure 2, learning can occur in six different situations.

Formal learning refers to learning that occurs in the context of an educational institution or other bureaucratic organization. Non-formal learning occurs in the work place or community and “sometimes the learner is actually mentored in these situations” (Jarvis, 2004, p. 107).

Informal learning refers both to “learning in everyday life and self-directed learning” (Jarvis, 2004, p. 107). In each case, the learning might be intended or incidental. In a formal learning situation, a learner might learn what the formal instruction was designed to teach, or he or she might learn things that the planners of the learning did not intend. The same principle would apply if an employee were being mentored at work and thus engaged in non-formal learning. In a non-formal situation, which occurs, for example, “when we decide to teach ourselves a computer
program” (Jarvis, 2004, p. 107), again, one might learn what one set out to learn or one might learn something unexpected.

In considering informal learning, I was informed not only by Jarvis’ thinking but by that of Ellström (2011), as well, who framed it as follows:

[Informal learning refers] to learning that occurs regularly in work as well as in everyday life, but is subordinated to other activities (e.g. work practices) in the sense that learning is not their primary goal. Such learning may occur without the awareness or intention to learn (implicit learning), or it might involve a more or less deliberate effort to learn. (p. 106)

Ellström’s (2011) thinking is compatible with that of Jarvis, but his definition is slightly more precise.

These distinctions proved important to my research because CPS can be framed as an intentional non-formal learning activity. My research concerned itself with the relationship between how employees usually learn, when they are engaged in informal learning, and how they learn when engaged in CPS. Moreover, my research concerned itself with the incidental learning that emerged from CPS. Jarvis’ (2004) and Ellström’s (2011) vocabulary therefore proved helpful to me in making analytical distinctions.

**Theoretical Framework**

In this section, I synthesize the above literature into a theoretical framework, which I present using a series of illustrations.

For the purpose of my research, WPL can be depicted by the illustration depicted in Figure 3. The darkest band of dots, running horizontally through the centre of the image, represents learning that takes place in the workplace itself and is directly associated with work.
That this band is located in a larger field of dots portrays that learning happening in the workplace is not disconnected from that happening in life. Within the field of WPL, learning events might be classified as varying in their degrees of formality.

*Figure 3. Formal and Informal Learning Occurring Over Time*

When a CPS session is held, it can be understood as what Jarvis (2004) has termed an intended non-formal learning event, which encompasses learning that, although it is not part of a formal education or training program, is nonetheless intentionally organized and may involve mentoring (p. 108). In Figure 4, a CPS session is represented by a grouping of red dots. Significantly, just as, in the diagram, it is possible to see the black dots within the red square of the CPS session, so too, in the workplace, does the way that employees typically learn influence how learning happens during CPS.

*Figure 4. CPS Session as an Intended, Non-Formal Learning Event*
The CPS session may have impacts over time, which are both formal and informal. For example, it might yield follow-up sessions, further conversations, the adoption of new practices, or the adaptation of existing ones, which in Figure 5, are represented by the red dots, following the session.

Figure 5. Potential Impacts of CPS

My research employed PT as my primary framework. However, I also drew on CoP scholarship (Lave & Wenger, 1991; Wenger, 1998). My theoretical framework can thus be represented by the illustration in Figure 6.

Figure 6. Theoretical Framework
Summary

This chapter reviewed two bodies of literature, that of CPS, which was the object of my research, and that of WPL, which provided the theoretical lens through which I viewed CPS. In reviewing the WPL literature, I focused on explaining CoP theories and PT, and in summarizing Jarvis’ (2004) distinction between formal, non-formal, and informal learning. This chapter ended by summarizing my theoretical framework.
CHAPTER THREE: METHODOLOGY

Introduction

My primary assumptions in embarking on this research were that context matters, that CPS is enacted differently in different contexts, and that it will be helpful to practitioners of CPS and other creativity processes, as well as to scholars of both WPL and OC, to better understand what happens when the CPS process is brought to life within a nuanced and complex social, material, and political environment. In adopting PT as my theoretical lens, I committed to a certain view of what “context” is. Specifically, I adopted an ontological perspective in which the social and material world is made up of “bundles of practices and material arrangements” (Schatzki, 2006, p. 1863), which means that, in conducting my research, I was looking for how participants’ existing practices influenced their enactment of the CPS process, as well as how this enactment influenced existing practices.

All of the above, as I have aimed to demonstrate in the preceding chapters, seems to make theoretical sense. However, as I move into this chapter on methodology, I must acknowledge the complexity I faced in sorting through how, as Reich et al. (2013) put it, to “catch practice” (p. 1), given that what, precisely, a practice is remains a question of theoretical debate (Antonacopoulou, 2008; Gherardi, 2009a; Reich et al., 2013; Reckwitz, 2002). Moreover, because PT, while theoretically compelling, is still relatively young, it is methodologically “still under-conceptualised and underdeveloped” (Reich et al., 2013, p. 10). When I was on the ground, at my research site, I found myself asking questions such as, “How do I determine which existing practices were relevant to the ways in which participants adapted CPS?” and, relatedly, “Given that everything I see, hear, touch, and smell are component parts of practices, how do I know where to focus my gaze?” A significant portion of this chapter addresses these questions.
This chapter begins by revisiting my research questions. Then, after explaining why I chose to use interpretive case study methodology, it describes LJP, the organization in which I conducted my research, and my participants, who were four of the company’s senior leaders. Next, after explaining what methods I used to generate data, this chapter addresses foundational issues around doing PT research and introduces several sub-strands of the PT literature, which helped me focus my data generation and analysis. The chapter then explains how I engaged in data analysis and attended to ethical considerations and issues of trustworthiness. This chapter ends with an overview of my study’s limitations and delimitations.

Research Questions

My research explores the following question: What happens when employees operating within an organizational setting engage in Creative Problem Solving (CPS)? My sub-questions, which are detailed at greater length in Chapter One, are as follows:

1. How do existing workplace practices, and employees’ perceptions of them, impact what happens during the CPS session?

2. How do employees’ perceptions of and emotions about creativity sessions, more broadly, impact what happens during the CPS session?

3. How do employees participating in the CPS session come to define what constitutes a successful creative process and a successful creative outcome?

4. What roles do material aspects of learning play, and how do these aspects perpetuate, adapt, or introduce new practices?

5. How, if at all, are work practices impacted as a result of engaging in a CPS session?
Methodology and Rationale

As explained in this dissertation’s introduction, PT studies, with their emphasis on thick description, are well-suited to qualitative approaches and tend to adopt multiple methods. Case methodology seems particularly well-suited to PT scholarship because it allows the researcher to fence in an area of focus and use multiple methods to explore a phenomenon of interest. This section elaborates on my rationale for choosing case methodology and, given that it is possible to approach case study research in a variety of ways, on my decision for adopting Merriam’s (1998; 2009) approach. It then describes how I chose to delineate the boundaries of the case. This section ends by explaining why I have chosen to conduct a single-case interpretive study.

Rationale for Case Study Methodology

Merriam (2009) asserted that, “the case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon” (p. 50). According to Yin (2003), “a case study is an empirical inquiry that investigates a contemporary phenomenon and context, especially when the boundaries between phenomenon and context are not clearly evident,” and case study analysis would be used because “you deliberately wanted to cover contextual conditions—believing that they might be highly pertinent to your phenomenon of study” (p. 13). Given that, in my research, the complex context in which CPS is occurring is of central importance; case study methodology was appropriate. It seemed further appropriate, because case study researchers have been characterized as interested in “insight, discovery, and interpretation rather than hypothesis testing” (Merriam, 2009, p. 42). In the case of my research, I was interested in further understanding what happens when members of an organization practice CPS; I did not aim to test a hypothesis. Also, I chose the case study methodology, because multiple data sources can be used within the bounds of the
defined case. Through employing a combination of observation, interviews, focus groups, and document analysis, I was able to extract a rich picture of what was occurring.

Significantly, other PT researchers have also opted for case-based research (Gherardi, 2006; Goldkuhl, 2011; Gorli, Kaneklin, & Scaratti, 2012; Nicolini, 2012). Indeed, case study methodology seems particularly well-suited to PT studies. Nicolini (2009a) has recommended that PT researchers use multiple methods in order to capture practices’ “multifaceted and complex nature” (Nicolini, 2009a, p. 196), and within the bounds of a case study, multiple methods can be used. Moreover, in concluding their review of the research that has been done on CPS in the organizational context, Puccio et al. (2006) pointed to the value of the few case studies that have been done and stressed the need for further CPS-focused case-study research.

Case study methodology is, in itself, a broad category and different writers, some which emerge from significantly different philosophical positions, have advocated different approaches to conducting case study research (Baxter & Jack, 3008; Brown, 2008; Buchanan, 2012; Mills, Durepos, & Wiebe, 2009; Eisenhardt & Graebner, 2007; Flyvbjerg, 2011; Gerring, 2004; Hartley, 2004; Hyett, Kenny, & Dickson-Swift, 2014; Merriam, 1998; Merriam, 2009; Pederson, 2011; Stake, 1995; Stake, 2006; Stoecker, 1991; Thomas, 2011; Yin, 2014). In my research, I aligned myself with the approach of Merriam (1998; 2009), who can be understood as advancing an interpretivist perspective. For example, Merriam focused on qualitative approaches, which are associated with interpretivism (Taylor & Callahan, 2005), and framed case study research as well suited to “search[ing] for meaning and understanding” (2009, p. 39), inductive investigation, and producing rich description (Merriam, 2009). Although, as discussed in Chapter Two, there are differences between interpretivism and practice-based perspectives - most notably the latter’s focus on the material world - the goals of case study research, as described by Merriam, are
congruent with mine in researching CPS. Moreover, Merriam’s clear guidelines, which balance theoretical grounding and practical advice, provided me, as a novice researcher, with an appropriate level of guidance. Finally, I appreciated, Merriam’s flexibility. Like Merriam herself, I was able to draw on other case-focused authors, such as Yin (2014) and Stake (1995), as appropriate.

Unit of analysis

A key characteristic of a case is that it must represent a bounded system. According to Merriam (2009), “the single most defining characteristic of case study research lies in delimiting the object of study, the case” (p. 40), and if the phenomenon under study cannot be bound, it is not a case. Merriam (2009) suggested that, in order to determine appropriateness, researchers should question “how finite the data generation would be, that is, whether there is a limit to the number of people involved who could be interviewed or a finite time for observations” (p. 41).

In the case of my research, in which I studied CPS in the organizational context, the phenomenon I studied was bounded, in that there were a limited number of people who were involved in the session and the relevant time span was finite. In terms of unit of analysis, Yin pointed out that “the main unit of analysis is likely to be at the level being addressed by the main study questions” (Yin, 2003, p. 25). My main study questions focused on the CPS process. According to Creswell (2013), a process is an acceptable unit of analysis, and other organizational studies researchers have used analogous processes, for example, change processes and decision-making processes, as their units of analysis (Buchanan, 2012; Napier & Nilsson, 2006). I therefore concluded that the CPS process, itself, would be an appropriate unit of analysis.
That said, I defined the CPS process as occurring not only in the limited time frame in which a CPS session—by which I mean a workshop exclusively focused on CPS—might take place, but more broadly as encompassing activities that occurred before it, which revealed both existing practices and the way employees prepare and perceive the upcoming session, and after it, which revealed post-session changes in practice and perceptions. Moreover, I bound the case geographically. Although one participant in my case studied engaged in the CPS session virtually, from a distance, I focused on what occurred at the physical site where most participants were located, while accounting for the virtual presence of one participant. I did not focus on what was occurring at the physical location of the virtual participant.

Types of Case Studies

A case study researcher might choose to focus on a single case or on multiple cases, thus enabling cross-case comparison. Also, according to Merriam (1998; 2009), a case study might be either descriptive, interpretive, or evaluative. This section puts forward the rationale for my decision to conduct a single-case interpretive study.

Focusing on a Single Case.

When I originally began designing this research project, I assumed I would conduct a multisite case study. As Merriam (2009) pointed out, “the inclusion of multiple cases is…a common strategy for enhancing the external validity or generalizability of your findings” (p. 50). Moreover, I was eager to identify patterns across organizations, which would only be possible if I studied more than one case.

Only after I had solidified my commitment to practice theory (PT) did it become apparent that I sought a more granular understanding of participants’ practices than I originally had anticipated. PT’s emphasis on both social and material factors means researchers must focus not
only on what participants say or the sense that they make of their circumstance, but also on material factors like how their bodies move in space and their interactions with material artifacts. Committing to PT thus means taking heed of multiple types of data and producing rich, thick, granular descriptions. Furthermore, adopting a PT lens meant that, in order to study the CPS session, I needed to study the broader context, since my contribution would lie in illuminating how the context and the CPS session interacted. Consequently, in adopting PT, I became committed to generating more data than I had originally anticipating on existing practices within the workplace, when participants were not engaged in CPS.

Conducting a multisite practiced-based case study therefore exceeded reasonable time allocations for an Ed.D. dissertation. After outlining my research plan to one of my course instructors and my supervisor, I was advised that a single case study would suffice, and I thus made the decision, which is in-line with my commitment to PT and its appropriateness to my exploration of the learning that occurs when employees engage in CPS, to focus on one case.

In making this decision, I accepted trade-offs. As Gerring (2004) pointed out, “Research designs invariably face a choice between knowing more about less and knowing less about more” (2004, p. 348). In choosing to know “more about less,” I sacrificed my goal of identifying patterns across organizations. However, I nonetheless perceived a single case as the best possible route forward, at this time. As Yin (2014) pointed out, a single case study can be effective in “captur[ing] the circumstances and conditions of an everyday situation…because of the lessons it might provide about the social processes related to some theoretical interest” (p. 52), which is what I aimed to achieve. Moreover, as Gerring (2004) noted, a single case can be particularly useful when conducting research that, like mine, is exploratory, as opposed to confirmatory/disconfirmatory, and that addresses a phenomenon that has not yet been widely
researched. Given that, as I elaborated in Chapter Two, CPS has not been studied through either the broad lens of workplace learning theory or the more focused one of PT, I deemed a single case study to be appropriate.

In summary, focusing on a single case allowed me to achieve the richness of description required of a study informed by PT. In so doing, I was able to achieve a more precise understanding than has previously been achieved of what learning occurs when CPS is practiced.

**Conducting an Interpretive Case Study**

Merriam (1998; 2009) distinguished between three types of case studies. Descriptive studies are “atheoretical” and present “a detailed account of the phenomenon under study” (Merriam, 1998, p. 38). Like descriptive studies, interpretive case studies contain “rich, thick descriptions” (Merriam, 1998, p. 38). However, they differ in that they are “used to develop conceptual categories or to illustrate, support, or challenge theoretical assumptions” (Merriam, 1998, p. 38). Merriam (1998) explained, “A case study researcher gathers as much information about the problem as possible with the intent of analyzing, interpreting, or theorizing about the phenomenon” (p. 38). According to Merriam (1998), some writers have referred to interpretive case studies as analytical case studies, and that the “model of analysis is inductive” (p. 39). Evaluative case studies “involve description, explanation, and judgment’ (Merriam, 1998, p. 39).

In my research, I gathered as much information as possible, with the intent of analyzing, interpreting, and theorizing. Conducting an interpretive study was therefore most appropriate.

**Research Setting**

In this section, I describe the criteria I used to select a research site. I then describe the organization where I conducted my research and the research participants.
Criteria for selection of site.

This section outlines the primary and secondary criteria I used to select my research site. It then discusses the ways in which my site, LJP aviation, met these selection criteria.

Primary criteria.

In order to meet the goals of my research, I sought out a site that met these criteria:

1. The research **had to be conducted** in an organization where there was a manager who was familiar with CPS and wanted to conduct a CPS session.

2. The research **had to be conducted** on a site in which employees were engaged in “non-creative” work. Much of the organizational creativity research has centred on work environments that are explicitly focused on producing creative results, such as design firms, marketing agencies, and research and development (R and D) labs and thus has excluded a wide range of companies (Ford & Gioia, 2000; Nayak, 2008). I was interested in how employees who are not explicitly tasked with a creative mission enact creativity. For the purposes of this paper, I define non-creative work as work that does not occur within the context of the 13 industries, such as film and software, that have been deemed as creative industries by UNESCO (UNESCO, 2006) and that does not occur within a research and development setting.

3. Research participants **had to be** employees of the organization being studied, and not contractors or consultants. Given that I am interested in the relationship between existing practices and CPS, the CPS session had to be contextualized within a web of organizational practices, which would not be shared by contractors.
4. The research had to be conducted with an organization that would be willing to grant me a large degree of access, since the research required on-site observation and several interviews with each participant.

Secondary criteria.

In order to meet the goals of my research, I sought out a site that met these criteria:

1. The research preferably would be conducted in a situation whereby all participants were either at the same hierarchical level or above the manager who would be facilitating the CPS session. The facilitating manager would be my primary contact. If he or she were to facilitate a session for his or her peers or superiors, ethical questions around freedom of consent would not be of significant concern, since, presumably, the manager’s peers and superiors would feel comfortable indicating if they do not wish to participate.

2. The research preferably would be conducted with an organization that was relatively geographically close to Victoria, BC, where I live. Proximity would allow for easier and possibly more frequent access to the research site.

3. The research preferably would be conducted within an organization that valued continual learning and with participants who would be interested in more deeply understanding their own workplace practices. Specifically, I hoped that participants would express curiosity about an exploration of the type I had planned and would be situated in an environment that supported that curiosity. I hoped that my research would benefit not only scholars and practitioners, but participants at my research site. My goal to work with research participants in order to make visible practices that were invisible to them, and thus provide them with insight into their own work lives. LJP’s meeting of selection criteria.
LJP Aviation, the site at which this research took place, met all primary criteria. In terms of secondary criteria, it met one out of the three: at LJP, I was able to conduct the research with participants who occupied positions above that of the CPS facilitator within the organizational hierarchy. However, the site was not in Victoria, BC, which meant that I was not able to access it as easily as I had hoped. Moreover, the site did not meet my final secondary criteria, which was that it would be at an organization that valued continual learning and with participants who are interested in more deeply understanding their own workplace practices. Participants were certainly engaged in continual learning. However, most participants had limited interest in more deeply understanding their own workplace practices: they were more interested in doing the learning they needed to do to succeed in their jobs—for example, figuring out how to win bids on contracts—than they were in reflecting on their own practices. That the site did not meet this criterion is discussed later in this chapter.

The site: LJP Aviation.

This section provides an overview of LJP, as a company, and introduces my research participants: Mark, the Chief Executive Office (CEO); Kevin, the Chief Financial Officer (CFO); Terrance, the Vice President (VP) of Offshore Relations, Business Development, and Strategy; Cory, the Executive VP International. All participants were white males. Some identifying details of the organization and the names of participants have been changed. Even though this overview can be considered part of my research findings—since I was not aware of this information about LJP until after I began the research—I am positioning it here, in my methodology chapter. I am doing so because, as becomes apparent later in this chapter, I honed and adapted my methodological approach as I gained knowledge of the site. The remainder of
this chapter therefore reads most clearly and logically, when contextualized by background information about the organization.

**Company description.**

As noted above, some identifying details of the company have been changed.

LJP is a publicly traded company, which provides helicopter transportation and related services, such as helicopter repair and maintenance and flight training. It operates globally, with operations in Canada, Australia, Finland, and Southeast Asia. LJP provides helicopter services to multinational companies and government agencies, in a variety of industries, including oil and gas, mineral exploration, military support, hydro and utilities, forest management, construction, air ambulance, and search and rescue. In 2015, over one third of LJP’s revenue was generated through working with the oil and gas industry, for example, through supplying helicopter services to support on and offshore oil operations. LJP’s employees consist predominantly of pilots, engineers, mechanics, and administrative staff. LJP employs approximately 600 people, with a percentage of these employees working seasonally. Because LJP primarily has grown through acquisitions, members of its top leadership team are geographically dispersed, with the various offices reflecting where key personnel from the various subsidiaries were located. For instance, the Chief Executive Officer (CEO), Chief Financial Officer (CFO), and two Vice Presidents (VP) are based in the Calgary office. The Executive VP International is based in Perth, Australia, and the Chief Operating Officer (COO) is based in Montreal. LJP’s three primary administrative offices—in Calgary, Australia, and Montreal—all serve different functions. The Australia office services the offshore oil and gas industry, which primarily operates out of the Asia-Pacific region. Offshore helicopter operations are significantly different than onshore ones, since they involve bigger, more expensive and mechanically sophisticated
helicopters. They also always involve working with large multinational companies like Shell. The Montreal office is where the company’s financial offices are headquartered. The Calgary office is the corporate head office, which oversees all operations.

That said, the role of each office has shifted over time and continues to shift, and there is not always a clean division of responsibilities between offices. Significantly, in the context of this research, although offshore operations are headquartered in Australia where they are headed up by Cory. Terrance, who, in his capacity as a VP, is responsible for developing offshore business in Eastern Canada, is located in Calgary, but reports to Cory. Moreover, although the finance division is located in Montreal, the CFO to whom everyone in that division reports is in Calgary. During the course of this research, the CFO was in the process of hiring a controller who would be based in Calgary and would oversee the finances of LJP Group, as a whole, leaving the Montreal office to focus on the finances of the Canadian operations.

As stated above, participants in this research project consisted of four members of LJP’s top executive team: the CEO, the CFO, the VP of Offshore Operations, and the Executive VP International. See Table 1 for information about each participant. I became connected to LJP through Terrance, who several years previously had been a student in my innovation class. The class material had resonated with Terrance and we had stayed in touch sporadically via email, in the time since he had graduated. Also, after he had graduated, Terrance had come in to my class to talk to a new group of students about his experiences conducting CPS, as part of his class practicum. When I was seeking potential participants for this study, I reached out to Terrance to see if he would be interested in leading a CPS session in his workplace and, more broadly, have his workplace become my research site, and he indicated he was. Later in this chapter, I discuss the ethical implications of working with a former student.
Table 1. Description of Participants.

<table>
<thead>
<tr>
<th>Location</th>
<th>Year hired at LJP (or predecessor company, CH)</th>
<th>Current position at LJP/location/year hired into position/</th>
<th>Reporting relationship</th>
<th>Educational background</th>
<th>Professional background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark</td>
<td>Calgary office</td>
<td>CEO since 2009</td>
<td>Reports to the board</td>
<td>• BA Economics</td>
<td>• Progressively more senior roles at LJP</td>
</tr>
<tr>
<td></td>
<td>1989</td>
<td></td>
<td></td>
<td>• Certified Public Accountant</td>
<td>• 7 years as an accountant for KPMG and other organizations</td>
</tr>
<tr>
<td>Cory</td>
<td>Perth, Australia</td>
<td>Executive VP International since 2011</td>
<td>Reports to Mark</td>
<td>• Certified Public Accountant</td>
<td>• 10 years in senior leadership with another international helicopter operator</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td></td>
<td></td>
<td>• Certified Accountant</td>
<td>• Several years as an accountant for Ernst and Young and for a private company</td>
</tr>
<tr>
<td>Kevin</td>
<td>Calgary, AB</td>
<td>VP and CFO since 2015</td>
<td>Reports to Mark</td>
<td>• Master of Business Administration (Finance Specialization)</td>
<td>• Financial analyst and manager at LJP</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td></td>
<td></td>
<td>• Masters of Theological Studies</td>
<td>• 3 years in financial analysis positions for various private companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Chartered Financial Analyst</td>
<td>• 4 years as Director of Student Ministries for a church</td>
</tr>
<tr>
<td>Terra nce</td>
<td>Calgary, AB</td>
<td>VP of Offshore Relations, Business Development, and Strategy since 2014</td>
<td>Reports to Cory</td>
<td>• Master of Business Administration</td>
<td>• 18 years as a pilot</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td></td>
<td></td>
<td>• Professional credentials as a pilot</td>
<td>• 18 years in senior leadership roles in other aviation companies</td>
</tr>
</tbody>
</table>
Research Methods

This section discusses my research methods. It begins by providing an overview and timeline of the methods used. It then explains more precisely why and how I used the specific methods of interviews, observation, and document analysis, as well as how I approached gathering feedback from participants on certain aspects of my analysis.

Overview of data generation methods and timeline

Data generation occurred over three phases. The first phase, which occurred in December 2015 and January 2016, enabled me to understand participants’ existing practices and understand the broader organizational structure and context. The second phase, which occurred in February and March of 2016, dealt with what happened before, during, and directly after the CPS session. The third phase, which occurred between April, 2016 and January 2017, addressed longer-term impacts of the session. A high-level summary of the methods used in each phase is outlined in Table 2. Table 2 also documents when what actually occurred, when I was on the ground, differed from what I had planned to do. A detailed account of my data generation process is outlined in Appendix A.
### Table 2. Overview of Data Generation

<table>
<thead>
<tr>
<th>During Phase One (Baseline)</th>
<th>During Phase Two (Before, During and Directly After Session)</th>
<th>During Phase Three (Post-session/Longer Term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Observation</td>
<td>Before the CPS session:</td>
<td>• Planned: Interviews with all participants one month after the session</td>
</tr>
<tr>
<td>• Interviews with all participants</td>
<td>• Interviews with all session participants.</td>
<td>• What happened: Interviews with Cory and Terrance several months after the session; no interviews with Mark and Kevin, due to lack of response</td>
</tr>
<tr>
<td>• Analysis of organizational documents</td>
<td>• Document analysis of planning materials</td>
<td></td>
</tr>
<tr>
<td>• Meeting with participants to collect feedback on preliminary analysis.</td>
<td>Day of the CPS session:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Observation of CPS session</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Document analysis of artifacts produced during the session, including photos of whiteboard notes, “post-it notes” used in idea generation, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Directly following the CPS session:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Interviews with all participants</td>
<td></td>
</tr>
</tbody>
</table>

As noted in Table 2, although I planned to interview all participants about one month after the CPS session, in fact, as discussed later in this chapter, only Cory and Terrance responded to my request for follow-up interviews and these did not happen in the time frame.

**Data Generation Methods**

This section begins by describing how I applied each of my methods of data generation, while remaining cognizant of maintaining a PT perspective.

In a broad sense, in designing research and selecting appropriate methods, I was guided by Nicolini’s (2009b) advice that PT researchers “zoom in and zoom out.” Because practices exist at the intersection of that which is specific to the context and that which is collective,
researchers, on one hand, must zoom in, using methods like observation to pick up what is unique, and on the other, zoom out, in order to connect the localized practices to broader ones and thus to understand their meaning. For me, the concept of zooming in and zooming out was helpful in reminding me of the general sensibility I strove to adopt when in the field.

Also relevant to all information in this section is that, for PT researchers, all approaches to generating data must be considered sociomaterial practices in themselves. As noted in this dissertation’s introduction, committing to a PT lens means subscribing to a relational ontology (Hosking & Bouwen, 2000; Nicolini, 2009b; Slife, 2004), in which “all social realities—all knowledges of self and of other people and things—are viewed as interdependent or co-dependent constructions existing and known only in relation” (Hosking & Bouwen, 2000, p. 129). Applying this ontological stance to data generation suggests that whatever narratives or field notes are produced are themselves the product of the sociomaterial circumstance associated with their production. In other words, data is always generated, and never collected. This perspective informed much of my decision making in how I approached my methods. For example, it meant that, in navigating how to conduct interviews I relied on Holstein and Gubrium’s (1995) *The Active Interview* as my primary reference, because, unlike other resources (e.g. Seidman, 2013), it framed “reality [as] an ongoing, interpretive accomplishment—a matter of practice” (Hostein & Gubrium, 1995, p. 16) and the data that emerges from an interview as a product of the social and material conditions of the interview itself. Moreover, this perspective led me to take particular care in keeping my research journal, which I discuss below.

**Interviews.**

From a zooming in perspective, interviews allow the researcher to understand practice “from the point of view of the practitioners and the activity that is being performed, with its
temporality and processuality” (Gherardi, 2009a, p. 117), as well as reveal the “micro-details of practice” (Fenwick, 2012, p. 6). From a zooming out perspective, interviews—especially when combined with observational methods—provide an opportunity for collaborative sensemaking work, through which participants can explain and contextualize what researchers are noticing (Nicolini, 2009a; Nicolini, 2009b). PT researchers like Nicolini (2009a; 2009b) advocate for using interviews to engage with participants in analytical work.

In the course of my research, I conducted one-hour interviews with each participant in December 2015 and January 2016. The goal, at that point, was to help me understand what the existing practices were among participants, as well as what their attitudes were about creativity, innovation, and creativity sessions. I then conducted multiple interviews with Terrance, as he progressed in planning the CPS session, with the goal being to understand how he came to re-familiarize himself with CPS and adapt it to his context. Directly before and in the week after the CPS session, I interviewed all participants again, in order to discuss their thoughts and feelings going into the session and directly afterwards. Finally, I had intended to interview all participants one month after the CPS session, in order to discuss their impressions of the session after time had passed, but neither Mark nor Kevin responded to my requests. I did interview Cory and Terrance, but due to scheduling conflicts, these interviews did not occur in the one-month time frame. See Appendix A for a detailed overview of who was interviewed when and for how long.

All interviews were semi-structured, which is consistent with Holstein and Gubrium’s (1995) framing of active interviews as “a kind of limited ‘improvisational’ performance…spontaneous, yet structured—focused within loose parameters provided by the interviewer” (p. 17). As suggested by the interview guide in Appendix B, I went into each interview with a clear vision of the overall goals I hoped to achieve and a list of questions and
activities that I foresaw would move the conversation toward achieving them. However, I also improvised as needed, according to what emerged. I generally favoured three types of questions:

1. **Questions that asked participants to walk me through something that had happened.** For instance, in the first round of interviews, I asked participants to share examples of successful innovation at LJP and then, focusing on one example, to walk through in a granular way precisely how one of this innovation came to happen. Here, I was building on and adapting the examples of other PT researchers (Fenwick, 2012; Nicolini, 2009b; Reich et al., 2013) who have asked interviewees to walk them through detailed accounts of their daily practices.

2. **Questions that solicited participants’ opinions.** For example, before the CPS session, I asked participants to rate the degree to which they were looking forward to it on a scale of one to ten, with one indicating that they were not looking forward to the CPS session at all and ten indicating that were very much looking forward to it, and to explain their rating.

3. **Questions that asked participants for feedback on something I was observing.** For example, in my second interview with Mark, I told him that I had noticed that participants, including him, frequently used the word “disciplined” to describe LJP, and I asked for his thoughts around why that was.

Throughout, I took care to keep in mind that my data were always being generated as a result of the sociomaterial context in which it was produced. For example, when participants rated the degree to which they were looking forward to the CPS session, I took that rating to be what they were choosing to share with me, and not some ultimate truth. Concretely, this meant that, as I considered my data, I wrote in my research journal, focusing on the nature of the relationship
between the participants and myself, as well as other conditions, and how that might impact the data being generated. This practice has been recommended by scholars of qualitative method, such as Haynes (2012) and Holstein and Gubrium (1995).

**Observation.**

Observational methods possess a privileged position within PT research, both because they provide the concrete and nuanced micro-detail that is so crucial to sociomaterial analysis and because they allow the researcher to observe practice unfolding over time, and thus capture and make visible the daily way in which what appears to be stable reality is, in fact, reconstructed. As Schatzki (2012) noted, “There is no alternative to hanging out with, joining in with, talking to and watching, and getting together the people concerned” (p. 25).

I employed two forms of observation, shadowing and participant observation (PO), each of which are detailed below. My goals were threefold. One, I had the diffuse goal of simply getting a feel for the site and the relationships between people, objects, and space, as they engaged in their existing practices and in CPS. In so doing, I hoped to better understand and contextualize the data that was generated through other means and be able to ask better questions of participants. Two, I aimed to observe the micro-details of what people did, on the ground. Three, I aimed to engage in sense making with participants. Shadowing, in particular, offers distinct opportunities to engage in collaborative interpretive work, and it therefore provided me, as the researcher, with further opportunities to “zoom out” and understand how participants linked on-the-ground actions to broader patterns of practice.

**Shadowing.**

In terms of PT research, shadowing has been referred to as “the method *par excellence* for studying how actors enact organizations through interactions in everyday situations”
(Vásquez, Brummans, & Groleau, 2012, p. 157). According to McDonald and Simpson (2014), shadowing enables researchers to see what happens in between major events, which allows reality to appear to hang together in a coherent way, and specifically that it lets the researcher “see how micro events are interconnected and interdependent” (p. 9). In their words, shadowing “represents a methodological move away from a view of the organization generated through the sampling of disconnected ‘significant’ events” (2014, p. 12). This suggests that shadowing is particularly appropriate for articulating what is ontologically relational: in following a person, the researcher can observe his or her interaction with others, the spatial surroundings, and material artefacts over time (Gill, Barbour, & Dean, 2014). As Vásquez et al. (2012) pointed out, shadowing “promises to reveal the minute-by-minute recreation of practice” (p. 157) and is conducive to “an ‘always emerging in-the-moment’ approach to reality” (p. 157).

That, in shadowing, the shadower and shadowed engage in a one-on-one relationship also provides unique opportunities for the researcher to “zoom out” and ask participants to explain and interpret their actions, at the moment they are happening (Gill et al., 2014). Moreover, shadowing is particularly appropriate to PT research because the researcher is engaged in an embodied experience that mimics that of the shadowee, and the materiality of the research experience thus comes to the fore (Gill et al., 2014).

In my research, I used a pared down version of shadowing. In pure versions, the researcher spends time with participants over a period of months (Czarniawska-Joerges, 2007). In my case, I spent only a day with two of the participants, Mark and Kevin, and approximately two and a half days with Terrance. I therefore used data generated during shadowing to inform my analysis, but I did not assume that my time spent with participants provided me with a definitive picture of their daily practices. Moreover, after I completed the shadowing portion of
the research, I held a feedback session with participants (discussed below), in which I presented my perception of their practices, listened to their feedback, and adapted my analysis accordingly.

In the case of my research, shadowing happened during its first phase. In January 2016, I spent a day shadowing Mark, a day shadowing Kevin, and a day shadowing Terrance. I also shadowed Terrance on other occasions in ad hoc ways, and beyond the one day in which I formally shadowed him and the time spent in formal interviews, we spent about 20 hours together. My shadowing of Mark and Kevin took place during standard work hours. However, Terrance’s work hours were more variable, and included evening meetings. Consequently, I shadowed him at more erratic times. That my relationship with Terrance differed from that with other participants is something I reflect on and address below, when I discuss my research journal.

In terms of taking field notes while engaging in shadowing, I started by using the three-column template illustrated in Gill et al.’s (2014) article, which suggested dedicating a column to the date and time; a column to observations including “key phrases or qualities of the interaction” (p. 80); and a column to “thoughts and questions” that occur to me while in the field. However, after my first day on-site, I concluded that this system did not work for me, because I tended to have a lot to write in the second column, and consequently, I wanted the full width of the page to note my observations. Also, I found myself switching between taking notes in a binder of looseleaf paper—which I transcribed at the end of each day—and typing them into my Ipad. As I worked to keep up with what was happening on the ground, I found that drawing out the columns, or on my Ipad, inserting a table, to feel overly fussy. I therefore simply wrote my notes by hand in my binder or typed them on my Ipad. I periodically noted the time, and put it in parentheses. When I added my own thoughts and questions, I put them in bold type or in square
parentheses. At the start of each day, I would reread my research questions in order to ground myself in what I should be paying particular attention to. I also used lunch times and breaks to review the notes I had taken so far on a given day and note any questions that I had for the shadowee.

**Participant observation.**

Participant observation (PO), a method of data collection in which the investigator uses participation in an area of ongoing social life to observe it” (Platt, 2004, p. 798), is similar to shadowing, with the “itinerant nature of the shadowing method” (McDonald, 2005, p. 457) lying at the heart of the distinction. I conducted PO when I observed the CPS session itself. PO is consistent with the PT perspective because it acknowledges that the researcher must always be considered, at least to some degree, to be a participant, who influences data generation. The degree of researcher participation can fall on a continuum from complete participant to complete observer (Brannan & Outram, 2012).

In observing the CPS session, I leaned toward observer status. Although I was not a complete observer, I engaged with participants only minimally. The CPS session took place in LJP’s conference room, and participants sat on either side of a long table, which had a computer in the middle and a large-screen TV on the wall at one end. I sat near the back of the table, farthest from the big-screen television. The computer was used to run Bluejeans, the videoconferencing software that was needed to enable one of the participants, Cory, to join the meeting virtually; to run PowerPoint at the start of the meeting, when as the facilitator, Terrance presented his introductory material; and later in the meeting, when participants were engaged in collaborative idea generation, to run Linoit.com, which is an online bulletin board, where virtual stickie notes can be posted. Projected on the big-screen TV was whatever was on the computer
screen, and for much of the meeting, participants tended to face forward, toward the screen at the front.

Whereas participants sat beside each other, I left an empty seat between the participants and myself, thus separating myself from the group. I did not participate in the conversations that took place between participants. However, I did step in, when asked, for example, when a technical problem arose with the videoconferencing software. Even had I not stepped in when asked, I would not have been a complete observer, since clearly, I was in the room and participants demonstrated awareness of my presence, for example, by engaging in small talk with me before the CPS session began. Consequently, in considering my data, I considered the potential impacts of my presence.

**Document analysis.**

PT-informed document analysis requires researchers to look beyond the content of the document and consider what is being done with language, as well as, if possible, the circumstance of the document’s production and use (Lee, 2012; Prior, 2008). Documents thus are viewed “not merely as containers of content, but as active agents in episodes of interaction and schemes of social organization” (Prior, 2008, p. 824).

The documents I collected fell into two broad categories: One, documents that were produced by participants in the planning and execution of the CPS session, and two, organizational documents whose production were not directly linked to the session. The types of documents collected in each category and my rationale for collecting them are outlined in Table 3. A full list of documents collected is included in Appendix A.
Table 3. Types of Documents Collected and Rationale for Their Collection

<table>
<thead>
<tr>
<th>Category of Document</th>
<th>Type of Document</th>
<th>Rationale for Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents produced in planning and execution of the CPS session</td>
<td>Documents produced by Terrance, as he planned the CPS session, including his own notes, iterations of the PowerPoint slides to be used in the session, and emails to me.</td>
<td>To contribute to my understanding Terrance’s process of learning about and adapting CPS</td>
</tr>
<tr>
<td></td>
<td>Documents produced by participants when engaged in CPS. For example, I used screen shots of the Linoit.com board, where participants posted virtual stickie notes with their ideas.</td>
<td>To contribute to my understand of what happened during the CPS session, and specifically what ideas generated; how different ideas were taken up—or not—by participants; how participants transformed ideas through the course of the session; and which ideas emerged as dominant.</td>
</tr>
<tr>
<td>Documents whose production were not explicitly linked to CPS session</td>
<td>Documents produced by participants as they collaborated on various work projects, such as bidding on contracts. These included emails between participants and screen shots of from Terrance’s Salesforce.com page.</td>
<td>To contribute to my understanding of how participants worked together, when not engaged in CPS</td>
</tr>
<tr>
<td></td>
<td>Documents that were produced for external audiences, such as investors, potential business partners, and members of the public, such as presentation slides for investors and pages from the company web site</td>
<td>To contribute to my understanding of how LJP positioned creativity and innovation, when communicating to external audiences</td>
</tr>
<tr>
<td></td>
<td>Creativity- and innovation-related documents that were produced for internal audiences, such as Cory’s innovation-focused article in the company Newsletter</td>
<td>To contribute to my understanding of how LJP positioned creativity and innovation, when communicating to internal audiences</td>
</tr>
<tr>
<td></td>
<td>Articles in aviation trade journals written by and about Terrance, relating to his past innovation-related successes.</td>
<td>To contribute to my understanding of Terrance’s perceptions and feelings around the topics of creativity and innovation.</td>
</tr>
</tbody>
</table>

Getting feedback from participants.

I solicited feedback from participants throughout the data generation process. For example, during interviews and shadowing, I sought participants’ perspectives on whether my
observations and interpretations resonated with them. However, beyond these informal, one-on-one moments of co-analysis, I also scheduled a virtual presentation at the end of Phase 1, in which I shared with participants my impressions so far.

For researchers working within certain paradigms, having participants engage in interpretive work can be viewed as problematic, since the process of interpretation may alter participants’ perspectives and thus introduce bias (Miles, Huberman, & Saldana, 2014). However, because in PT research, pure, unbiased data does not exist—and, indeed, collaborative sensemaking work is considered standard practice (Nicolini, 2009a; Nicolini, 2009b)—the researcher does not adopt the goal of collecting pure and uncontaminated data, but rather that of seeking to understand the conditions under which data has been constructed. This, in turn, leads to a perspective whereby data generation and analysis are intertwined activities.

**Research journal.**

Given that, as stated above, in PT research, the researcher seeks to understand the conditions under which data has been constructed, keeping a research journal proved critical. Instead of keeping a hard-copy journal, I regularly wrote notes in my Ipad. I did this before and after interviews, in spare moments during observational work, and at the end of each day on site. Journaling has been recognized by qualitative research scholars as a good way to engage in self-reflection (Haynes, 2012; Hostein & Gubrium, 1995), and through journaling, I reflected on my own reactions and what I perceived to be the quality of the relationships between participants and me.

One issue of particular relevance addressed in my journal was around the degree to which I would step out of the observer role, particularly when Terrance was planning the CPS session.
designing of the CPS session, I would try not to intervene but rather make efforts to act as an observer of the facilitator’s process. In practice, however, I found myself, at times, asking coaching questions as Terrance figured out how to approach the design of his session. I conducted multiple interviews with him, as he planned the session. My purpose, as a researcher, was to understand his learning process as he re-familiarized himself with CPS and adapted it to his context. However, given that Terrance knew that I possessed expertise in CPS, he understandably ended up asking me questions, as he progressed. Moreover, there was a point in his design process, which I elaborate in Chapter Five, when I felt it would be wrong for me not to express a concern.

It thus became clear to me early in the research process that I needed a protocol, which could serve as a point of reference for Terrance and I and that would enable me to coach Terrance when appropriate, while maintaining the integrity of the research. It was crucial that my intervention not lead to a situation where the session design represented my thinking, and not his. On the other hand, given that I possess expertise in CPS, it seemed wrong not to help if I could. In constructing a protocol, I decided that I would never make suggestions as to what Terrance should or shouldn’t do. However, I would do the following:

1. Point Terrance toward resources, such as articles and websites, that I had included in the MBA course he had taken.

2. Ask coaching questions such as, “What would be the pros and cons of designing your session in this way versus that way?”

3. Guide Terrance in imagining the consequences to his decision, for example, by saying things like, “If you asked that question, how might you imagine the others might respond?”
Clearly, Terrance’s design process was different than it would have been had I not been involved. However, I worked to be balanced in asking questions that would support Terrance, while still ensuring the decisions he made were his own.

In short, I used my research journal to reflect on those conditions, including my own presence, feelings, and interactions, which impacted the research. My creation of a protocol for how to interact with Terrance while he designed the process is one of example of the kind of thinking that emerged from journaling.

**Analysis of Data**

Data analysis occurred both during the process of data generation and afterward. Analyzing data as I collected it enabled me to adapt my research design to unforeseen discoveries, and avoid a situation whereby the data becomes “unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed” (Merriam, 2009, p. 171). Moreover, given the ambiguity inherent to PT research, which requires the researcher to continually re-orient him or herself throughout the process of data generation, ongoing data analysis can work to inform research design (Nicolini, 2009).

In terms of coding, PT researchers generally take an inductive and emergent approach (Gorli et al., 2012; Nicolini, 2011; Yakhlef & Essén, 2012) and do not necessarily go into the data with preset codes in mind. Significant iterative work typically is involved, and multiple PT researchers have described moving back and forth repeatedly between the data and the theoretical literature, as well as between their intuitive sense of the data and external frameworks (Gorli et al., 2012; Nicolini, 2011; Yakhlef & Essén, 2012). For example, Nicolini (2011) characterized his identification of themes as resulting from a combination of “‘hunches’ and insights from the literature” (p. 607). In analyzing their data, Yakhlef & Essén (2012) underwent
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a process of moving back and forth between holistically reading the data and delving into the literature, in order to develop a preliminary coding framework, which then evolved iteratively over time.

My own process of analysis, particularly after most of the data generation had been completed and I was dedicating focused time to data analysis, was similar to those described by Nicolini (2011) and Yakhlef and Essen (2012) in that it was highly iterative and involved moving back and forth between the data and the academic literature. As elaborated in this chapter’s next section, on multiple occasions, I returned to the academic literature to conduct research into sensitizing concepts that could help me in my analysis. In coding data, I used my research questions to guide me in establishing my top-level categories. However, in determining the second-level categories I applied open coding. At this stage, I was guided by Merriam’s (2009) straightforward advice in approaching category construction, with a category being synonymous to “a theme, a pattern, a finding, or an answer to a research question” (Merriam, 2009, p. 178). As Merriam suggested, I started by being “expansive” in “identifying any segment of data that might be useful,” and by engaging in a process of “open coding” (Merriam, 2009, p. 178), which allowed themes to begin to emerge inductively. Once patterns of codes began to emerge, I assigned preliminary names to different categories, into which I grouped units of data. My goal in coding was to achieve saturation, “the point at which you realize no new information, insights, or understandings are forthcoming” (Merriam, 2009, p. 183), at which point I worked to combine linked categories.

From a logistical perspective, all interviews were either audiotaped or, when I spoke to participants via video conference, videoed. The CPS session, which Cory had joined using a virtual meeting software called Bluejeans was videoed using a feature of Bluejeans. All audio
and video material were transcribed, as were any handwritten field notes. I uploaded all data into NVIVO and organized it to be easily searchable.

**Sensitizing Concepts**

My data analysis was not separate from my process of engaging with academic literature and theory, and it therefore is necessary to outline here the sensitizing concepts that guided my analysis. This section is divided into two sub-sections. The first briefly reviews the literature that guided me when I sought to identify participants’ existing practices. The second hones in on those concepts that guided me as I identified specific themes within the data.

**Recognizing Practices**

According to Gherardi (2006) a practice can be defined as “a mode, relatively stable in time and socially recognized, of ordering heterogeneous items into a coherent set” (p. 34). This definition, which is theoretically helpful, raises the question of what is meant by an “item” and what sort of items the researcher should be looking for, in conducting data generation. Here, the work of Reckwitz (2002) is helpful in the way it specifies what the elements of a practice might be. According to Reckwitz (2002), a practice can be defined as follows:

> A routinized type of behaviour which consists of several elements, interconnected to one other: forms of bodily activities, forms of mental activities, “things” and their use, a background knowledge in the forming of understanding, know-how, states of emotion and motivational knowledge. (p. 249)

Reckwitz’s (2002) work suggests that the PT researcher who wishes to empirically study practices should focus on “the routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood” (Reckwitz, 2002, p. 250). It thus provides a further degree of clarity in guiding the empirical PT researcher on the ground.
Significantly, Reckwitz’s thinking is grounded in a thorough analysis of PT’s place within cultural theory. As for Nicolini (2012), for Reckwitz, practices are always socially shared and the individual can be understood as a carrier of practices.

Shove, Pantzar, and Watson (2012) built on the work of Reckwitz (2002)—as well as on the writing of thinkers like Giddens, Bourdieu, and Schatzki—to propose a conceptualization of practices that could be easily used empirically by researchers. Whereas, as apparent from the quote above, Reckwitz (2002) identified a multitude of elements that made up practices, Shove et al. (2012) reduced this number to three, asserting that practices are “defined by interdependent relations between materials, competences, and meanings” (p. 23), with each of these elements loosely defined in the following way:

- **Materials**—including things, technologies, tangible physical entities and the stuff by which objects are made;
- **Competences**—which encompasses skill, know-how and technique; and
- **Meanings**—in which we include symbolic meanings, ideas and aspirations (Shove et al., 2012, p. 14).

Shove et al.’s (2012) view of practices can be understood as overly simplistic when positioned next to that of some of the theorists, such as Gherardi, Nicolini, Schatzki, and Reckwitz. Indeed, Shove et al. themselves acknowledged that “in putting forward such a reductive scheme we may well have fallen ‘prey to the scientific urge to build simplifying, diagrammatic models of social life’ (Schatzki, 2002, xii)” (p. 15). However, it proved helpful to me, as a new researcher, as I began to conduct my data generation, since it provided me with an organizing structure and guided me in figuring out where to focus my gaze.
However, once I progressed in data generation and began engaging in data analysis, I sought out a more granular framework, since Shove et al.’s categories remain broadly defined. I therefore relied heavily on Hopwood’s (2014a; 2014b) contention that times, spaces, bodies, and things are the constituent elements of practices and that a researcher who wishes to identify practices can do so by focusing in on these elements. My understanding of Shove et al.’s (2012) and Hopwood’s (2014a; 2014b) work is that their conceptualizations of practice dovetail into each other: By looking at times, spaces, bodies, and things, the researcher is able to discern the material aspects of practice, which can serve as clues or “bread crumbs” that can, in turn, lead the researcher to discover the associated meanings and competences.

As I progressed in data generation and analysis, I found that remaining sensitive to Hopwood’s (2014a; 2014b) elements allowed me to see the way in which practices were woven together in order to make up the context of my research site. For example, as I elaborate in Chapter Four, taking note of the ways in which participants gathered in hallways during unscheduled and brief periods of time allowed me to understand and describe the ways in which they engaged in informal learning practices. Using the sensitizing concepts of times, spaces, bodies, and things provided me with a frame in order to identify existing practices and contrast them to what occurred during CPS.

**Identifying Themes**

As I progressed in my analysis and began to generate themes, I turned to new bodies of academic literature in order to help me make sense of the patterns I was seeing. For example, as I analyzed the data, I began to recognize that, in their daily work lives when they were not engaged in CPS, participants nonetheless were engaged in creative learning all the time, in different ways. This led me to delve into the literature in order to ensure that I could precisely
define “creative learning,” since I did not want to simply code all learning as creative learning. Similarly, when I began to notice the daily ways in which the CEO exerted power, I went into the literature on power in order to guide me in ascertaining what precisely I might look for in my data in order to identify and articulate power when I saw it. Finally, I turned to the literature on PT and competence in order to understand how competence was defined at LJP.

*Practices of informal creative learning.*

In analyzing my data, I used Ellström’s (2005, 2011) distinctions between adaptive and generative learning and between the logic of production and the logic of development, in order to focus in on what was happening, in practice, when my research participants were being creative. As explained in Chapter One, Ellström (2005, 2011) used the term “developmental” to describe learning associated with creativity and to stand in contrast to “adaptive” learning which he associated with the maintenance of routines. Ellström (2011) also distinguished between two organizational logics, the logic of production and the logic of development, which “shape…the learning environment in an organization” (p. 113). Whereas the logic of production “focus[es] on promoting efficient, effective and reliable task performance” through “reduc[ing] variation in performance within and between individuals in an organization” (Ellström, 2011, pp. 113-114), the logic of development is characterized by “a focus on promoting innovativeness in ways of defining and carrying out an activity...[through] promoting and exploring variation and diversity in thought and action” (Ellström, 2011, p. 114; italics in original). While the logic of production is associated with adaptive learning, the logic of development is associated with developmental learning. Significantly, Ellström (2011) emphasized that the two logics are a heuristic device, which are useful for the purpose of making analytical distinctions but that don’t actually exist in pure form: “In actual practice, the two logics will appear as more or less conspicuous patterns in
the flow of practice within an organization” (p. 113). Concretely and practically, when analyzing my data, I determined that a participant was engaged in informal developmental learning if, in going about his daily work, he was engaged in “creating and handling variation and diversity in thought and action, that is, of promoting heterogeneity” (Ellström, 2005, p. 37; italics in original).

A second concept that proved useful in discussing creative learning was Gilson et al.’s (2012) distinction between radical creativity, which is “predicated upon the generation of new ideas that are revolutionary to a field, are risk taking in nature, and focus on experimentation and paradigm shifts” (p. 171) and incremental creativity, which “is focused on finding new applications for existing methods, processes, or products, and adapting what is currently done” (p. 171). As I delved into the data, it became apparent that different participants engaged in creative learning for different reasons, with some wanting to achieve more radical innovation than others. This distinction therefore proved to be analytically useful.

Practices of power and hierarchy.

One focus of my analysis was on how power was enacted, in practice, and how participants’ practices led to “produc[ing] and reprodu[ing] differences and inequalities” (Nicolini, 2009, p. 6). According to Nicolini (2009), practices “literally put people (and things) in place, and they give (or deny) people the power to do things and think of themselves in certain ways” (p. 6). When I was analyzing my data, I drew on Nicolini’s (2009) PT perspective on power. I also was guided by Watson’s (2014) claims that power “is to act and have effect” and that “power [involves] influencing the actions of others” (p. 13). In concrete terms, when I was analyzing my data, I would ask whether and how a given participant was acting with effect and
influencing the actions of others, in order to analyze the ways that the organizational hierarchy and power relationships were enacted in practice.

*Practices of competence.*

That practices bind together what is individual and what is social is central to my research, since employees engaged in CPS respond both to their unique circumstance and make efforts to adhere to the standards that they believe a good creative problem solving process should meet. Perceived right and wrong ways of engaging in a practice always exist (Gherardi, 2006). When engaging in data generation, I was guided by the central underlying question of what standards my participants were drawing on in determining what would make a “good” CPS session or a “good” outcome. In trying to understand why my participants enacted CPS in the way they did, I sought to understand the unspoken principles that guided their actions.

Here, the concept of competence became key. As I engaged in generating data, I continually questioned what constituted competent performance at my research site and what assumptions about competence guided the ways in which participants engaged in CPS. Theoretically, I drew on a strand of literature that explicitly examined competence through a PT lens (Bjørkeng, Clegg, & Pitsis, 2009; Ellström & Kock, 2008; Johri, 2015; Lindberg & Rantatalo, 2014; Sandberg & Pinnington, 2009). For PT-informed theorists, competence cannot be understood as linked solely to the attributes of individuals, since a person who is deemed competent in one context might be incompetent in another. Nor can competence be understood as linked solely to the attributes of a workplace or job, since different individuals may competently perform a job, even if they do so differently, and standards of what it means to be competent in a given job might perpetually be shifting. Rather, competence always must be considered what Ellström and Kock (2008) termed “competence-in-use”: “a dynamic process of
learning mediating between the capacity of the individual and the requirements of the job” (p. 7). Moreover, echoing Nicolini’s (2012) claim that “to be absorbed in a practice is to accept the authority of…standards and to accept that the inadequacy of a given performance may be judged by them” (p. 84), to be professionally competent always means adhering to certain, socially agreed upon standards:

Any professional practitioner…acts with practical intelligibility as he/she draws on past meaning, rules and future goals when acting. However, a competent professional can be argued to do so in ways that are recognized and favoured (by self, peers, superiors, interest groups, patients, the public or other relevant evaluators) as correct. (Lindberg & Rantatalo, 2009, p. 564)

The PT literature on competence is thus compatible with my broader theoretical framework and proved helpful in enabling me to focus my analysis.

Summary

To conclude, in this section on analysis, I drew from the literature several guiding ideas that helped me in during the process. One, I pointed to the helpfulness of Shove et al.’s (2012) conceptualization of a practice of being made up of elements of materiality, competence, and meaning and Hopwood’s (2014a; 2014b) conceptualization of practices being constituted by times, spaces, bodies, and things. I then pointed out that I was assisted in conducting my analysis by drawing on PT-informed definitions of informal creative learning, power and hierarchy, and competence.

Ethical Considerations

Miles, Huberman, and Saldana (2014) listed ten ethical factors to consider in conducting qualitative research. I address all ten factors in this chapter. However, I have chosen three—
informed consent; privacy, confidentiality, and anonymity; and benefits, costs, and reciprocity—that are of particular relevance for my research and which I highlight in this section. This section outlines how I will attend to these considerations. Miles et al.’s (2014) other seven factors are addressed either as part of this section’s discussion or elsewhere in this chapter.

This research was approved by the University of Calgary’s Conjoint Faculties Research Ethics Board.

**Informed Consent**

Researchers must ensure that participants possess full information upon which to base consent and that they are granting consent freely and voluntarily. Miles et al. (2014) advised researchers to “be an open book with your project” in order to “help develop a sense of trust between you and the setting’s individuals” (p. 60).

In seeking out a research site, I reached out to Terrance, who was an alumnus of my MBA class. Because Terrance had graduated several years earlier, there was no formal existing power relationship between us and, for the most part, he was well positioned to freely grant or withhold consent. However, it is important that I acknowledge that, even without a formal power relationship, it is possible that my position as a faculty member led to me possessing influence over Terrance. For example, former students might benefit from a relationship with a faculty member if they are in need of a reference letter. Moreover, a former student might hold the hope that bringing a faculty member into the workplace might, in some way, help him advance his career. From an ethical standpoint, the decision to work with a former student must therefore be acknowledged as holding some complexity. That said, ultimately, the risk of Terrance feeling obligated to consent to the research appeared to be minimal and acceptable. All other primary
participants in the study were positioned at a higher level than Terrance within the organizational hierarchy, so they too were well positioned to freely grant or withhold consent.

The nature of my on-site research meant that I was also in contact with non-participants, people who met with my participants when I was shadowing them. When possible, I contacted non-participants ahead of time and had a private conversation with them to ensure their consent. When this was not possible, for example, because I did not know the schedule ahead of time, I explicitly asked for the non-participant’s consent before the meeting. There were several meetings for which I left the room, because either the shadowee or the other person involved in the meeting did not want me, as a researcher, to be present. When writing up my analysis, I took care to describe interactions between participants and non-participants in a way that protected the privacy of non-participants.

Privacy, Confidentiality, and Anonymity

In terms of issues of privacy, confidentiality, and anonymity, I considered two issues: One, that my research should not pose a reputational risk to the company, and two, that my research should not pose a reputational risk to individual participants. To address the first issue, I have anonymized the name of the company and have changed certain details of its situation. Although all participants indicated that I could use their names rather than pseudonyms, I decided to use pseudonyms in order to further disguise the company identity. The second issue, of ensuring the confidentiality of individuals, is particularly important, given the small number of participants in the study: even if they are not identifiable to outsiders, they would be identifiable to each other if any of them were to read my research. I addressed this concern by engaging in member checking, which involves taking data back to the participants so that they can judge its accuracy (Creswell, 2012). I sent all transcripts to participants for approval. In
making decisions about which data to use and which to withhold, I was guided by the following principles, which I shared with participants:

- I did not include any information about strategic conversations (e.g. potential acquisitions) that have not been publicly announced
- I did not include any information in which a participant might be understood to be speaking negatively about another person.

**Benefits, Costs, and Reciprocity**

I was ethically bound to consider whether and how participants might benefit from investing their time and energy in this research project (Miles et al., 2014), especially given that its completion will directly benefit me, in terms of helping me to advance my education and career. Inherent in the project design were two possible ways that participants might benefit. For one, the study was designed to provide ample opportunities to discuss my preliminary findings. Because I was focusing both on participants’ existing practices and the ways in which they engaged in CPS, participants potentially might have benefited through gaining insight into their own practices, both when they were and were not engaged in the creative process. Second, as discussed at length later in this dissertation, Terrance’s motivation for introducing CPS was to initiate conversations among LJP’s executive about how to more systemically foster creativity and innovation. Because my project catalyzed Terrance to introduce CPS, it held the potential to help participants advance an innovation agenda within their organization. In other words, in designing the project I foresaw two potential ways participants could benefit from it. However, as this section elaborates, the ways in which reciprocity actually played out, when I was on the ground and engaged in my research, proved to be more complex than I had anticipated. In order
to address the nuance of what happened, this section focuses first on Terrance; then on Cory; and then on Mark and Kevin, who demonstrated similarly reactions to the research.

Terrance appeared to have derived the most benefit from the project. As will become apparent when I present my findings and analysis, in the time I was conducting my research, Terrance faced multiple challenges, both in general and in introducing CPS. I therefore believe that understanding the broader practices, including the ways power was operating among participants, proved helpful to him in making sense of his situation. Moreover, although, as will also become clear through my presentation of the findings and analysis, Terrance did not achieve everything he hoped to, in terms of fostering innovation at LJP, he did achieve some successes. Engaging in the research project also enabled him to hone his skills as a CPS facilitator and use it in various ways in both his personal and professional lives.

For the other participants, the concerns reflected in my research questions—around, for example, the impact of existing practices on the ways in which participants engaged in CPS and the power relationships between them—simply weren’t of significant interest. In retrospect, this is hardly surprising, and I feel naïve for not having better anticipated it. As becomes evident later in this dissertation, my participants were focused on action-oriented concerns like whether to acquire a new subsidiary company or how to ensure that they could offer their services at a lower cost than their competitors. These concerns were all the more pressing because, in the time my research took place, the decline in the price of oil and gas (Hussain, 2016) led to a financial crisis within LJP, which was severe enough to lead participants to question whether the company would survive. Indeed, their main competitor, a company that was in many ways similar to theirs, went bankrupt during the time I was conducting my research. In short, even at the start of the research process, when the full impacts of the financial crisis had not yet become clear,
participants did not appear to be particularly interested in reflecting on their own processes and
dynamics, because they did not seem to perceive this type of reflection as directly linked to the
achievement of business results. Except in the case of Terrance, who was lower in rank than the
other participants and was experiencing professional struggles and thus I believe found it helpful
to understand some of the macro dynamics at work, whatever interest participants might have
had in reflecting on their own processes waned when LJP’s financial situation worsened. Here, it
seems relevant to note that participant disinterest might be a risk associated with PT studies,
more generally. Reich et al. (2013) noted that, when researching the practices of engineers,
participants became “frustrated” with the researchers’ “probing of practices that were so
‘routine’ for them” (p. 490). The stuff of daily life, which is of interest to PT researchers, simply
may seem too mundane to be of interest to participants.

In terms of the second potential benefit of my research, which was to aid participants in
fostering innovation at LJP, Cory’s reactions were more similar to Terrance’s and differed from
those of Mark and Kevin. From the start of the project, Cory, like Terrance, self-identified as
someone who was interested in enhancing how LJP fostered innovation. He therefore seemed to
derive multiple benefits from the conversation. For example, he credited the project for
catalyzing conversations on innovation and motivating him to take concrete steps to promote it.
Mark and Kevin were different, because, at the start of the project, they expressed openness and
curiosity about the topic of innovation, but also self-identified as skeptics. They appeared open to
participating in the research and Terrance’s CPS session, as long as doing so did not demand too
much of them. However, once the company’s financial situation worsened, they appeared to
grow less interested both in the topic of innovation and in the research project. They continued to
participate—which I consider gracious and generous on their part, given the pressing financial
concerns they were facing and their limited interest in the topic of innovation—but, as becomes evident when I present my findings, they did not prioritize it.

In terms of my ethical obligation to try to provide benefits to participants, this waning interest may appear to point to a flaw in my research process. Indeed, when I was engaged in data generation, I often felt discouraged by it and, in an ideal world, perhaps it would have been preferable to have found a way to conduct the research while maintaining greater active interest from Mark and Kevin. However, their waning interest ultimately proved to be inextricably interwoven with this study’s analysis and potential contribution. As discussed at length in this dissertation’s final chapter, that, like Mark and Kevin, many organizational leaders simply may not be that interested in the topics of creativity and innovation, is important for proponents of CPS to consider.

In all, I made efforts to ensure that participants benefited from the project. Although participants did not benefit to the degree I had anticipated when I originally designed the study, some benefits nonetheless were realized. Moreover, certain participants’ waning interest proved to be inextricably linked to the project’s findings and contribution.

**Trustworthiness**

In discussing trustworthiness, I adopted Merriam’s (2009) approach, which links trustworthiness to validity and reliability. Merriam (2009) provided eight strategies for promoting validity and reliability: triangulation; member checks; adequate engagement in data generation; researcher’s position or reflexivity; peer review/examination; audit trail, rich, thick, descriptions; and maximum variation (p. 229). Table 4 elucidates how I employed seven of these eight strategies, and the reasons why I did not apply the remaining one. Because the issue of researcher’s position or reflexivity requires a more thorough discussion, I elaborate on it below.
Table 4. Strategies for Promoting Trustworthiness (taken from Merriam, 2009)

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Application in my research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member checks</td>
<td>I employed member checks, which involved “taking data and tentative interpretations back to the people from whom they were derived” (Merriam, 2009, p. 229)</td>
</tr>
<tr>
<td>Adequate engagement in data</td>
<td>I ensured that I spend “adequate time collecting data such that the data become ‘saturated’” (Merriam, 2009, p. 229).</td>
</tr>
<tr>
<td>Researcher’s position or reflexivity</td>
<td>My use of this strategy is elaborated below.</td>
</tr>
<tr>
<td>Peer review/examination</td>
<td>As a doctoral student, I am privileged to have access to my supervisor who was able to discuss with me “the process of the study, the congruency of emerging findings with the raw data, and tentative interpretations” (Merriam, 2009, p. 229).</td>
</tr>
<tr>
<td>Audit trail</td>
<td>Through the use of a research log, I ensured a “detailed account of methods, procedures, and decision points” (Merriam, 2009, p. 229).</td>
</tr>
<tr>
<td>Rich, thick descriptions</td>
<td>In writing up the case report, I provided rich, thick, description so that readers can gain an understanding that will enable them “to determine the extent to which their own situations match the research context, and, hence, whether findings can be transferred” (Merriam, 2009, p. 229)</td>
</tr>
<tr>
<td>Triangulation</td>
<td>I applied a seventh strategy, triangulation, which involves using “multiple sources of data…to confirm emerging findings” (Merriam, 2009, p. 229), in a cautionary way. There were times when I wanted to confirm my analysis through referring to data achieved from a variety of sources. However, at other times, in line with my research questions that hope to shed light on the differing perspectives of different participants, I explicitly sought out contrasting views. In so doing, I am aligned with Buchanan’s (2012) point that, especially when studying the politically charged environment of the organization, it can be “useful to expose [its] polyphonic, polysemic nature” (p. 364).</td>
</tr>
<tr>
<td>Maximum variation</td>
<td>I did not apply this strategy, which is to “purposefully seek variation or diversity in sample selection to allow for a greater range of application of the findings by consumers of the research” (Merriam, 2009, p. 229), since I was engaged in a single-case study.</td>
</tr>
</tbody>
</table>

Researcher’s Position and Reflexivity

Throughout the research process, I needed to remain aware both of how my positioning impacted participants and how my own assumptions and biases shaped what I saw. Two issues that proved particularly relevant were (1) my own pre-existing perceptions of CPS, given that I
had taught it and facilitated it for about six years and (2) the feelings of discomfort that arose for me while at my research site and interacting with participants.

I entered this research confident in CPS’ potential to yield positive results both for the organization in which it was introduced and for the employee who introduced it. This confidence was the result both of my own positive experiences facilitating CPS, within and outside my own organization, and of the overwhelmingly positive feedback I had received from my manager-students who had conducted CPS sessions in their own contexts. In my instructor evaluations students repeatedly expressed appreciation of CPS’s usefulness. Some students whom I spoke to after the courses’ completion spoke of are still integrating principles of CPS into their work lives. One student attributed her practicum, in which she facilitated CPS in her organization, to leading directly to a promotion. Of course, it is possible that I, as an instructor, overestimated students’ appreciation of my class. Students might tell an instructor what they believe she wants to hear, and instructors might, without meaning to, put greater weight on positive evaluation comments than negative ones, in order to protect their own ego. However, I have reasons to believe the positivity expressed by students about CPS was genuine, since students went above what, in my then-fourteen years of teaching, I had experienced as normal, in terms of expressing their appreciation. For example, as the result of students giving feedback to the program office of the utility of CPS, its instruction was integrated into the students’ final, capstone course. Moreover, twice, the course was given an award by graduating students, for being one of two they valued most in the MBA program. In terms of Terrance, specifically, he indicated that he chose to participate in my research because he had had such a good experience with CPS in the past, when he had conducted his practicum session for the class he had taken with me. All of the
above is to say that, in entering into this research with LJP, I believed that their experience with CPS would be a positive one.

That said, as discussed earlier in this dissertation, I was motivated to conduct this research because I perceived that introducing and engaging in CPS involved a greater degree of complexity than was currently acknowledged in the academic and practitioner literature. Moreover, I suspected that practitioners valued CPS for its potential to yield a host of positive outcomes, and not primarily for its potential to produce creative results. It is not that I doubted CPS proponents’ claims that it could increase the odds of producing creative results. Rather, I saw multiple potential positive outcomes that could emerge from a CPS session, with the production of creative results being only one—and in many cases—not the one that was most important to practitioners. Returning specifically to Terrance and LJP, while I believed participants would perceive benefit in engaging in CPS, I also suspected that achieving these benefits might involve a variety of challenges, and furthermore, that the benefits might not be the creativity-focused ones cited by the literature. In short, there was a gap between what the practitioner and academic literature claimed and what I believed occurred on the ground.

What I did not recognize in entering into the research was the degree to which this gap would create a tension within myself, which persisted throughout much of the process. As will become apparent when I present my research findings and analysis, Terrance did, in fact, experience many complications in introducing and facilitating CPS. Moreover, the session proved to be valuable primarily for reasons other than the production of creative results. This led to a tension between my interests as a researcher and the ethical obligation I had to minimize any professional embarrassment Terrance might face due to participating in my research. As a researcher, I recognized that I could potentially benefit from the ways in which Terrance’s
experience differed from what was described in the CPS literature, since it was from this gap that my contribution might emerge. However, ethically, Terrance’s struggles to introduce and facilitate CPS were problematic. For example, taking at face value of much of what was written in the CPS textbook, *Creative Leadership* (Puccio et al., 2011), he had used in my class, Terrance had introduced CPS to the other participants as a way to achieve creative results. Consequently, when I began to question whether these results would be achieved—or whether the other participants even desired that outcome—I worried that the session would be deemed unsuccessful and that Terrance would lose credibility with his colleagues. Moreover, on a human level, I appreciated all that Terrance had done to bring me into his organization and facilitate my research, and I wanted him to succeed.

In terms of managing this tension, I committed, on a daily basis, to prioritizing what seemed to be in participants’—and in particular, Terrance’s—best interests. As noted earlier in this chapter, in the “Research Journal” section, I created a protocol to guide me in how I might draw on my experience with CPS to coach Terrance, while also maintaining the integrity of the research. When I became concerned about the research’s implications on Terrance’s reputation, I spoke openly with him about these concerns. In all, I actively worked to conduct the research in an ethical way.

A second issue that arose was the discomfort I sometimes felt while at the research site. As discussed earlier in this chapter, participants did not end up being as interested as I had hoped in my research. This led to me, at times, feeling like a nuisance to them. Also, because some participants did not seem to value the type of academic study in which I was engaged, I sometimes felt tempted to demonstrate to them that I could offer something of value, by, for example, sharing key insights from instrumentally oriented innovation-based research from the
academic literature. When I journaled about what I was feeling, I came to recognize that there was part of me that wanted to impress my participants, both due to my own personal desire to feel valued and in order to free myself of the discomfort I felt whole on-site. To navigate this feeling and avoid a situation where it infringed on the integrity of the research, I began by simply acknowledging it to myself, through journaling. I repeatedly reminded myself that it was ok to feel uncomfortable and that, while there was no reason I could not, at times, share innovation-focused research insights with participants, I needed to avoid doing so expressly to ingratiate myself. I also referred back to my research questions, every morning and evening, while I was conducting on-site research. Doing so helped me to stay focused on what the study’s goals.

**Study delimitations and limitations**

**Delimitations**

- This study dealt with CPS sessions conducted in an organizational context and facilitated by a mid-level manager. It did not deal with CPS, when used outside the organizational context, and it does not deal with CPS, when facilitated by external consultants.

- This study dealt with a CPS session that (1) covered two cycles of divergence and convergence, which is to say that participants did not go through the whole CPS cycle, but they must navigate at least one sub-stage of it; (2) involved a facilitator and three non-facilitating employees.

- This study employed a practice lens and looked at the learning that emerges. It therefore is concerned with learning, not creative output, and does not attempt to utilize “objective” measures of creative efficacy.

- This study employed case study analysis as its method.
Limitations

- A true practice study would require more time than I am able to allocate, since teasing out practices within a given workplace is nuanced and complex. That said, some PT studies have been done in shorter time frames, and I hope nonetheless be able to meaningfully contribute to theory and practice.

- The manager who facilitated the CPS session is one of my former students. As pointed to above and elaborated in Chapter Seven, this introduced an element of potential bias, which I needed to address.

- Given that participants knew I was studying CPS, they undoubtedly subscribed to the CPS session a greater level of significance than they would, if it were not the focus of an academic study.

- As described above, I supported Terrance in designing the CPS session. This undoubtedly influenced his process and the outcome, even though, as discussed above, I ensured I limited the type and amount of support provided.

- All participants were white males, employed as top executives in a publicly traded firm. It would have been possible—and perhaps desirable—to offer up an analysis based on gender, race, and class, since these undoubtedly influenced participants’ existing practices and the ways in which they engaged in CPS. However, in order to keep the scope of the research manageable, I bracketed these issues and did not address them.

Summary

In this chapter, I explained that I have chosen to conduct a single, interpretive case study, because it would allow me to understand CPS as inextricable from a broader context. It also explained how I would use interviews, observation, document analysis, and getting feedback
from participants to address my research questions. This chapter also reviewed how I would attend to ethical issues and ensure my research is trustworthy by, for example, ensuring that I exercised reflexivity in considering my positioning and biases.
CHAPTER FOUR: EXISTING PRACTICES AND ATTITUDES

This dissertation concerns itself with how existing workplace practices and employees’ pre-existing perceptions of and emotions around creativity sessions impact CPS. This concern is expressed in two of my research questions: “How do existing workplace practices, and employees’ perceptions of them, impact what happens during the CPS session?” and “How do employees’ perceptions of and emotions about creativity sessions, more broadly, impact what happens during the CPS session?” Consequently, I employ three chapters—Chapter Four, Chapter Five, and Chapter Six—to present my findings and respond to my research questions. Here, in Chapter Four, I focus on identifying participants’ existing practices and perceptions. Chapter Five describes what happened when participants focused on CPS. Chapter Six brings together Chapters Four and Five by discussing the relationship between participants’ existing practices and perception and the enactment of CPS and, more broadly, responds to all research questions.

This chapter contains three sections. The first briefly reviews the sensitizing concepts introduced in Chapter Three, for the purpose of reminding the reader of the literature that proved particularly relevant in the writing of this chapter. The second draws on data generated in December 2015 and January 2016 to describe participants’ existing practices. In so doing, it identifies four existing practices that proved to be of particular relevance to participants’ enactment of CPS:


2. Practices of communities. The four participants can be understood to be identifying with and engaging in the practices of various, different but overlapping, communities
of practice (CoPs). For example, those located in Calgary can be understood as part of a different CoP than the participant in Australia, and those with business backgrounds as differing from the participant with a background as a pilot. For the purpose of my research what is particularly notable are the various ways in which Terrance, who initiated the introduction CPS, was positioned as an outsider.

3. Practices of power and hierarchy. The hierarchical power of Mark, LJP’s CEO, was enacted through a variety of organizational practices.

4. Practices of competence. At LJP, competence was associated with the ability to improvise to achieve business results; the demonstration of discipline; and more broadly, the demonstrated ability to focus on results.

This chapter then goes on to discuss participants’ general perceptions of emotions about creativity and innovation. It discusses how there was a dominant skepticism, expressed primarily by Mark, around the active pursuit of creativity and innovation. That said, participants expressed positive feelings towards creativity activities, like brainstorming—as long as they had a clear purpose.

**Review of Sensitizing Concepts**

The following sensitizing concepts, explained in full in Chapter Three, guided me as I conducted my analysis:

- Hopwood’s (2014) contention that times, spaces, bodies, and things, are the constituent elements of practices and a researcher who wishes to identify practices can do so by focusing in on these elements.

- Ellström’s (2001; 2005) distinction between adaptive and developmental learning. I use the term “creative learning” for what Ellström calls “developmental learning,” and, like
Ellstrom, define it as learning that occurs when the outcome of the learning is not predetermined. Creative learning involves the “creation and handling of variation and diversity in thought and action, that is, of promoting heterogeneity” (Ellström, 2005, p. 37; italics in original). In identifying practices of creative learning, I looked for instances when participants generated a variety of diverse ideas, either in trying to figure out the source of a challenge or in seeking to address a challenge or opportunity.

- Gilson et al.’s (2012) distinction between radical creativity, which is “predicated upon the generation of new ideas that are revolutionary to a field, are risk taking in nature, and focus on experimentation and paradigm shifts” (p. 171) and incremental creativity, which “is focused on finding new applications for existing methods, processes, or products, and adapting what is currently done” (p. 171).

- Watson’s (2014) assertion that power “is to act and have effect” and that “power is influencing the actions of others” (p. 13). In order to identify practices of power and hierarchy, I looked for the degree and nature of influence each participant had on other people.

- Lindberg and Rantatalo’s (2015) contention that “a competent professional can be argued to do so in ways that are recognized and favoured (by self, peers, superiors, interest groups, patients, the public or other relevant evaluators) as correct” (p. 564). In identifying practices of competence, I sought to identify which actions were perceived as favourable within the LJP environment.

Existing Practices at LJP
This section identifies four existing practices that characterized the way participants engaged in their work: practices of informal creative learning, practices of communities, practices of power and hierarchy, and practices of competence.

**Practices of Informal Creative Learning**

As members of the top leadership team in a large, global company, participants were frequently engaged in informal creative learning. Their jobs were far from routine, but rather involved perpetual engagement with complex challenges that had no clear solutions. For example, on a macro level, all participants were at least partially responsible for figuring out how to respond to a financial crisis which, as mentioned in the previous chapter, had led to the bankruptcy of an organization that was, in many ways, similar to LJP. This section begins with narrative accounts of what I observed in the time I spent shadowing Mark, Kevin, and Terrance in the Calgary office, focusing specifically on incidents of informal learning. After presenting these narrative accounts, I analyze them, pointing to the existing creative learning practices among participants.

Notably, I did not shadow Cory, who was in Australia. Doing so would have been beyond the scope of this study, which focused on practices within the Calgary office—with which, during the time I was generating data, Cory interacted virtually. However, Cory’s practices within the Australia office were nonetheless of secondary relevance, and I therefore have included relevant interview information, including a summary of Cory’s description of how he typically spent his day. Moreover, in the section dedicated to Terrance, I included an account of a virtual meeting in which Cory participated.
Mark.

Mark’s office was a large room, with two walls made up entirely of windows overlooking, from several stories up, the runway and gates of the Calgary airport. It was divided into two areas. In one was a large standing desk, with Mark’s computer, a book shelf, and a long table stacked with neatly piled documents. The other was a sitting area, where four red arm chairs were positioned around a coffee table, on which were placed a red model helicopter, with the LJP logo, and a fan of Economist and Avionics magazines. On the wall was a large screen, presumably for video-conferences. The office was predominantly grey, with a few splashes of colour, like the red armchairs. In my field notes, I wrote that the office felt “designed”: the décor was tasteful and sleek, with the walls of windows rendering the airport gates and runway into an animated backdrop to Mark’s work. The offices of Mark, Kevin, and third executive, Bob, who was the VP of Special Projects, were all within an executive wing, which was separated from the rest of the LJP office by doors that, during work hours, remained closed but unlocked.

On the day I shadowed Mark, he had a half hour between arriving at work and his first meeting of the day, which he spent at his computer, engaged in online perusals he described as typical: checking LJP’s stock price, which he did at least twice a day; checking competitors’ stock prices; reading industry news; checking how the Canadian dollar was trending; and, more generally, trying to get a sense of what he called “the competitive landscape.” He explained that his online research sometimes led him to walk across the hall and talk to Kevin, for example, if LJP’s stock price fluctuated, and he wanted Kevin’s help in figuring out why. Mark also explained that, because it was his job to “grow the company,” he spent a portion of each day actively researching companies that LJP might potentially acquire. On the day I shadowed him,
Mark was researching a small aircraft operator out of the Canadian north, Company N, for potential acquisition.

Mark had multiple meetings, both by phone and in person, that day. His phone meetings were with Sylvain, a VP in Montreal; with Bjorn, who owned and ran a subsidiary company that had been bought by LJP; with Hughie, who owned and ran a different subsidiary company; and, with Ed, a retiring executive; just to check in about his health. He met in person with Grant, a junior employee, with whom he provided feedback about presentation slides that Grant was preparing; several times, in an impromptu way, with Kevin; and with representatives from the RBC bank.

In the remainder of this section, I describe three of these meetings— with Sylvain, with Hughie, and with the representatives from the RBC bank— because they are particularly helpful in illuminating informal creative learning practices.

*Phone meeting with Sylvain.*

Mark’s first meeting was a regularly scheduled teleconference with Sylvain, a VP who reported to him from the Montreal office. The meeting was conducted using speaker phone and, throughout, Mark stood at his standing desk, in front of the phone. He kept his notebook in front of him, where he had written an agenda and where he took notes throughout the meeting. He did not fidget or multitask in any way during the meeting. For example, when the screen saver on his computer turned itself on, so that his email was no longer visible, Mark did not press the keyboard to turn the screen saver off, but rather stood with his hands in his pockets, listening to Sylvain.

Focusing on Mark’s portion of the conversation with Sylvain, I noticed the way in which, referring repeatedly to his agenda, Mark led the conversation. Mark was the asker of questions,
and Sylvain the responder. Some of Mark’s questions required Sylvain to follow up after the meeting and Sylvain thus left the meeting with “homework,” but Mark did not. I also noticed that, three times during the meeting, the men broke from the pattern of Mark asking questions and Sylvain reporting back with information and engaged in exploratory conversations, in which, together, they worked to make sense of business situations. For example, in one case, Mark expressed concern about losing a certain contract. He spoke about information he had heard from a colleague in another company about one of LJP’s competitors. According to this colleague, the competitor was “in a mess,” so could make “irrational decisions,” such as offering very low prices, and thus undercutting LJP. Mark and Sylvain went on to discuss the potential implications of this intelligence, before Mark moved the conversation on to his next agenda topic.

When the two men got off the phone, Mark explained that he held these weekly meetings with Sylvain, and not with Cory, who was also a VP working at a distance from the Calgary office, because Cory was more experienced than Sylvain, so with Cory he didn’t need to “get in the weeds.” Also, Mark met with Sylvain because he was intimately familiar with the Canadian business, over which Sylvain had jurisdiction, in a way he was not with that in Australia, so it made sense for him to offer input.

**Phone meeting with Hughie.**

Mark’s conversation with Sylvain, which was characterized by a dominant pattern of Mark asking questions and Sylvain responding, stood in contrast to a conversation Mark had later that day with another senior executive, Hughie, the owner and head of Company H, a subsidiary company LJP had acquired. Unlike the meeting with Sylvain, the conversation with Hughie had no set agenda, and meandered from topic to topic, some which were professional and
others personal. It differed, as well, in the way that Mark spoke more effusively and laughed more frequently and easily than he did with Sylvain, or, indeed, with anyone else with whom I observed him interact. Finally, it differed from the meeting with Sylvain in its degree of collaborative activity, with Mark and Hughie frequently engaged in collaboratively puzzling out an analysis of a situation or generating ideas around how to approach a challenge. For example, Mark and Hughie collaboratively worked to figure out whether Company N would make a good purchase. In so doing, they spent several minutes discussing the character of the current owner, noting that he was a technical person rather than a business person, as well as speculating about his age. This information was used to speculate on the worthiness of purchasing Company N. For example, the owner’s age contributed to Mark and Hughie’s understanding of whether he would be able to change, if he worked for LJP.

**In-Person meeting with bank representatives.**

The meeting with three representatives from the RBC bank had been initiated by RBC, with the goal of soliciting LJP’s business. The meeting took an hour, with about half the time dedicated to Mark describing the business and the other to a more general discussion about the economic environment, with Mark asking the RBC representatives for their views. Afterward, Mark explained to me that he agreed to take meetings like this one because he was always looking for information that might be useful to him in the future.

**Kevin.**

Kevin’s office was smaller than Mark’s and had fewer windows, but it, too, was within the executive wing and was equipped with both a standing and a sitting desk.

On the day I shadowed Kevin he had three scheduled meetings: a weekly scheduled phone call with Pierre and Louise, the two most senior members of the 20-person Montreal team,
which he managed at a distance; a phone meeting with a private equity firm; and a face-to-face meeting with Grant, a junior employee who reported to Kevin, to provide feedback on a PowerPoint presentation he was preparing for the senior leadership to use at an upcoming meeting. He also engaged in several ad-hoc meetings and dedicated time to internet research.

Below, I review the calls with Pierre and Louise and with the private equity firm employee. I also provide accounts of Kevin’s ad hoc calls and meetings and of how he spent his time online.

**Scheduled call with Pierre and Louise.**

The phone meeting between Kevin, in Calgary and Pierre and Louise, employees who reported to him from Montreal, was more casual in tone than the call between Mark and his direct report, Sylvain. The conversation began with all three joking around for several minutes. Unlike Mark’s meeting with Sylvain, this meeting did not follow a preset agenda. Although Kevin raised most of the topics of discussion, Pierre and Louise raised issues of importance for them, as well. At multiple points during the meeting, Kevin, Pierre, and Louise collectively participated in figuring something out. For example, the three spent several minutes discussing whether a certain tax form needed to be filed. They also discussed a billing issue. As they spoke, they sought out additional information, for example through looking in online files, and identified who they needed to follow up with. Unlike in the meeting between Mark and Sylvain, in this meeting, all attendees, including Kevin, as the superior, left the meeting with items to follow up on.

Like Mark, Kevin listened attentively throughout the meeting, referring to his computer only when he referred to the online files mentioned above. He took notes in his notebook.
Sometimes he sat in front of the phone with his eyes closed, as he listened to Pierre and Louise explain something.

After the call ended, Kevin shared how, although he has scheduled meetings with those he manages in Montreal, he also holds many that are unscheduled and informal, stating, “I prefer picking up the phone, calling in and checking in.”

**Scheduled call with private equity firm.**

Leading up to the meeting with Brian, a representative from a US private equity firm, Kevin explained to me that, as CFO, he regularly took meetings with such firms, who were exploring the possibility of buying LJP or parts of it. He said that the representatives from American equity firms generally were unaware of the Canadian law that dictated that no more than 25% of a Canadian company could be foreign owned, and that once they realize that, they usually don’t continue the conversation or continue only out of politeness.

As Kevin predicted, Brian was unaware of the law and, as became apparent when he stopped asking questions, his interest in LJP seemed to wane once Kevin informed him of it. However, Kevin used the opportunity to ask Brian a variety of questions, such as what, from his perspective, were dominant trends in the market. After getting off the phone, Kevin explained to me that he took the call, in the first place, mostly for the potential opportunity to “gather intelligence.”

“Anybody can be a source of information,” he said, “and intelligence is important.”

He then explained that LJP typically would not consider selling parts of its business to private equity firms that aimed to make a short-term investment and flip them for a profit. He spoke of the concept of being a “good seller,” explaining that, if LJP sold to someone who did that, their reputation would be damaged in the long term.
Ad hoc calls and meetings.

Kevin had multiple ad hoc meetings, both on the phone and in person. Kevin held five impromptu meetings with Mark, two which occurred when Mark came to Kevin’s office and three which occurred when Kevin went to Mark’s. All the meetings were catalyzed by a need for information. For example, at one point, Mark dropped by to ask Kevin for a certain financial figure. However, one of the meetings evolved into an informal idea generation session. When Kevin stopped by Mark’s office to ask him an informational question, Mark asked Kevin what he thought about a new financial idea. In an animated conversation, the two men discussed the idea, building on it and generating new ones.

Like Mark, Kevin, several times a day, looked up online LJP’s stock prices and that of its competitors. He also kept track of broad, international, economic trends. For example, on the day I was shadowing him, he said that he was watching “crude oil go down and gold on its way up.”

Terrance.

My experience shadowing Terrance differed from that of shadowing Mark and Kevin in that it unfolded in a less linear way. As outlined in Chapter Three, I shadowed Mark and Kevin for a day each, beginning when they arrived at work and ending when they left. In contrast, when I shadowed Terrance, I spent an afternoon with him, and then, on the next day, a morning. I also spent two evenings with him, when he participated in teleconference calls with colleagues in Australia and Australia. Furthermore, I spent about eight hours on-site with Terrance discussing his CPS session, as he planned it (in addition to the time I spent meeting with him virtually around CPS planning). At times, Terrance interrupted our CPS-focused discussions to attend to other business, which meant I was able to shadow some of his work activities on an ad hoc basis. That my time with Terrance unfolded in a more fluid and open-ended way than my time with his
counterparts was due in large part to the nature of his relationship to me and to the project: Terrance and I had a pre-existing relationship, he was the internal champion of my research at LJP, and he was eager to dedicate significant time to it. I was therefore welcome to spend time with him, whenever I was at LJP, as opposed to only at pre-set, scheduled times.

That said, the non-linear nature of my time with Terrance can also be attributed to the nature of his job. Mark and Kevin’s positions involved overseeing others, and consequently, their days were punctuated by meetings with those they supervised. Both Mark and Kevin spent a portion of their time day overseeing operational activities, which is to say they spent time ensuring that existing operations were running smoothly and addressing operational issues that arose. In contrast, Terrance did not oversee any employees or operational activities and his job consisted almost entirely of seeking out new business opportunities. He had only one regularly scheduled weekly meeting, which was a teleconference call with Cory, his supervisor in Australia. The implication was that Terrance’s schedule was made up almost wholly of meetings dedicated to exploring and advancing new business opportunities. These tended to occur at erratic times, both within and outside of business hours, and with a variety of different people. Because the hours Terrance spent in the office were less regular than those of Mark and Kevin—for example, Terrance sometimes had nothing scheduled for a morning, but was in the office until late at night—it worked out well that I was able to shadow him in a less tightly scheduled way.

In terms of this dissertation, what is most crucial to understand about the way Terrance spent his time is simply that he was perpetually engaged in connecting with others in pursuit of developing new opportunities for LJP. For example, during my January 2016 visit, Terrance was working on advancing an effort to win an oil-company contract away from a competitor, as well
as to advance development of an invention that would enable a certain type of helicopter to fly further and thus increase LJP’s competitive advantage. In advancing these initiatives, Terrance engaged in phone meetings with a contact within the oil company in order to better understand how LJP might approach the bid; with the head of an engineering firm, with whom Terrance hoped to partner in designing the helicopter invention; and with a contact associated with a federal funding agency, in order to inquire about potential funding for the invention. In working on pursuing the oil-company contract, he collaborated with colleagues in Australia and New Zealand, with whom he held evening meetings, in order to account for the time difference between Calgary and the South Pacific. In connecting to others, Terrance would draw on the network of people whom he had met in his decades in the aviation industry. For example, when he sought information about the bid LJP was pursuing with an oil company, he contacted someone who worked at the company who had been a close colleague at one of Terrance’s former places of employment.

The remainder of this section focuses on one phone meeting, between Terrance, Cory, and another colleague, Nicole, a senior leader in the offshore business development team who was below Terrance, in rank, but like him, reported to Cory. This meeting is significant both because it provides an example of how collective creativity was practiced informally at LJP and because it provides an example that involves both Terrance in Calgary and Cory in Australia. 

**Teleconference with Cory and Nicole.**

Unlike the offices of Mark and Kevin, Terrance’s was outside of the executive wing. It also differed in that it was windowless and, with its door opening onto a large bank of cubicles, provided less privacy than those in the executive wing. However, privacy was not an issue on the evening that Terrance met via teleconference with Cory, who called in from Australia and
Nicole, who called from Australia. The meeting, which was held at 6:30 pm Calgary time in order to accommodate time differences, occurred after all other employees except Terrance had gone home for the night. The purpose of the meeting was to “round table” a new opportunity that had arisen when Nicole had heard from a senior leader in an oil company that he was not happy with his current helicopter provider and was open to new bids.

In the meeting’s first fifteen minutes, Nicole described the opportunity; shared her investigation into it and her ideas for how to move forward in pursuing it; and responded to Cory’s questions and comments. In my field notes, I noted that Cory appeared to take a skeptical but open stance and that Nicole seemed to have foreseen all his points of skepticism and prepared responses in advance.

For the first 20 minutes of the meeting, Nicole and Cory engaged in back-and-forth conversation, in which, for the most part, Cory raised potential challenges and then conversed with Nicole in collaboratively coming to solutions. In this time, Terrance made one comment, but otherwise was silent. He sat by the speaker phone nodding. He explained to me later that he had nothing to add so was happy to just listen. When he did interject, it was when Nicole and Cory began discussing what Cory described as his main concern, that they were “being shopped”: that the oil company leader was only soliciting LJP’s bid so that he could use it to go back to his existing helicopter provider and get a better price. After Cory and Nicole discussed this issue for several minutes, Terrance interjecting by saying, “If I was really going to think outside the box, I’d ask what would happen if you were to ask [the oil company leader], ‘Why don’t you tell me the rate you want?’” He continued, “We could say to him, ‘Put your fairness hat on. What do you need, reasonably, to make this work?’”
For the first time in the conversation, there was a moment of silence; no one spoke. Then they engaged in the following exchange:

Cory: Usually guys won’t do that.

Terrance: Just a little spitballing here…No one is laughing at me yet.

Cory: Worth a try, Terrance. If he’ll talk like that, that’s what we need.

Terrance then referred to a point that Nicole had made earlier in the conversation, about what she had learned about the character of the company owner, through spending time with him.

Terrance: The guy is innovative.

[....]

Terrance: I would be somewhat upfront with him. I would say, “Here’s what’s happening.

We’ve been burnt in the past.”….In the meantime, we need to figure out a baseline cost we can live with.

In continuing to advocate for this approach, Terrance explained that specific characteristics of the leader and his company led him to believe it could be viable: “The main thing to focus on is who he is and who the company is. It opens up intriguing options we don’t usually have.”

The group seemed to understand that they would move forward with Terrance’s suggestion when Cory said, “Ok, Let’s continue on there,” and asked questions about its implementation. The conversation moved on to who they would speak to internally and externally in order to move forward with the bid, as well as to explore their ideas for how to deliver helicopter service at a lower cost. At several points, Nicole and Terrance referred to cost-reduction strategies that they had come up with when they had been working on a bid in Finland.
and discussed about how they might be applicable here. Cory raised a labour-law regulation change for which the company was lobbying in Australia, and which would enable more effective cost delivery but which was not yet in effect.

The meeting closed with discussions about next steps, with Nicole agreeing to complete some costing and send around a bid overview document.

Cory.

When interviewed, Cory reported that, typically, his days consisted of telephone and in-person conversations with other LJP executives to discuss projects they were working on, including bids for contracts and potential acquisitions and partnerships. These conversations tended to be with Mark; Terrance; Christine, an external strategic advisor; Terrance; Dennis, who occupied a position similar to Terrance’s but was in Australia; and Hamish, the Australia-based CFO, who reported to Kevin. According to Cory, those discussions were fairly free ranging and, his words, “go all over the place in different areas.”

Cory also spent a portion of each day on operational matters, which involved “checking up on how we're performing across various parts of our business.” These meetings tended to happen with the managers of the units involved and, at times, with personnel from the Human Resources department. During the time I was conducting my research, Cory was involved in working on what he referred to as an innovation around how to train pilots in a different way, which involved discussions with members of the flight operations team.

Cory stated that he spent between 20 and 30% of his time traveling, either to visit bases that were under his jurisdiction, to attend conferences, or to meet potential business partners.
Analysis.

This section draws both on the above accounts of participants’ activities and on interview data in order to describe the informal creative learning practices enacted among participants in the Calgary office. It begins by pointing to the differences between the ways in which participants engaged in creative learning, before describing common practices.

Differences in participants’ practices.

Informal learning was practiced differently by each of the participants described above. Most notably, each participant focused on a different aspect of the business. As CEO, Mark sought to grow the company through pursuing an acquisition strategy, and consequently, was perpetually exploring different potential acquisitions both through doing research on his own, on the internet, and through conversations with people like Hughie. Mark also occupied himself with making sense of the general economic environment by, for example, checking LJP’s stock prices and the stock prices of competitors and by discussing irregularities with Kevin. While Kevin shared Mark’s occupation with the external economic environment, he focused more exclusively on his domain, which as CFO, was that of the finance. In contrast, Terrance focused on generating new ways to structure bids so that LJP might win contracts and on pursuing a technical innovation. Cory focused his creativity on yet other areas of the business. Like Terrance, he was involved in creative learning around deal making. However, because he had overall operational oversight of the Australia office, he also focused on, for example, how to innovate internal operational systems and how to innovate helicopter safety systems. Consequently, while all participants were regularly engaged in creative learning, each directed his creative efforts in different—albeit sometimes overlapping—directions.
Notable, too, is the way in which each participant’s position in the organizational hierarchy influenced the way in which he engaged in creative learning. Although this is a point that I will elaborate below, in the section dedicated to practices of power, here it is worth noting that those lower in the organizational hierarchy appear to be the producers of creative learning for the consumption of those above them. For example, in the interaction between Cory and Nicole and between Mark and Sylvain, the subordinates appeared to have come to the conversation having prepared and thought through ideas to share with those above them. Hierarchical differences thus can be linked to different ways of engaging in creative learning.

Another, related point, which I elaborate later in this chapter, is that Mark, Cory, and Kevin, who were positioned above Terrance in the organizational hierarchy engaged in informal creative learning practices in ways that were similar to each other but differed from those of Terrance. While Terrance made many calls in order to advance various initiatives, he did not have someone readily available with whom he could explore ideas, in the way that Mark did with Hughie and, at moments, with Sylvain; that Kevin did with Mark and with Louise and Pierre; and that Cory described doing with various members of the leadership team. Unlike the other participants, Terrance was less frequently involved in engaging in creative learning through unscheduled conversations with internal colleagues.

**Common practices.**

Despite differences in the practices of individual participants, common practices among LJP executives—and, in particular, Mark, Kevin, and Cory—existed. These can be illuminated using the categories of spaces, bodies, things, and times, which as described in Chapter Three, Hopwood (2014) identified as the constituent elements of practices. Because the category of time holds the greatest explanatory power, I address it first, in its own section, and then group spaces,
bodies, and things together in the following section. In this section, I look mainly at the common practices of Mark, Kevin, and Cory; I further address the differences between Terrance and the others later in this chapter.

_Times._

Focusing on the role of time in participants’ engagement in informal creative learning practices brings several elements of these practices to the fore.

1. Ongoing and unscheduled.

Creativity was only rarely something for which time was scheduled and set aside. Rather, participants engaged in creative learning on an on-going and ad hoc basis, as occurred, for example, when Mark and Kevin spontaneously began generating ideas in Mark’s office. For the most part, participants were engaged in incremental—as opposed to radical—creative learning, in that they were not generating ideas that were “revolutionary to a field” or “risk taking in nature” (Gilson et al., 2012, p. 171). Nonetheless, they were, in Ellstrom’s words, “creating and handling variation and diversity in thought and action, that is, [and] promoting heterogeneity” (2005, p. 37; italics in original).

That creative learning was something that occurred all the time, in unscheduled ways at LJP was confirmed by participants both in their interviews and when I held a feedback session with them. For example, Kevin expressed that creativity often occurred in a way that was “not a big deal,” but rather, emerged as part of regularly scheduled meetings:

Our processes are continually evolving… You sit in on the safety meeting or the ops meeting and they’re always talking … But it’s not a big deal, it’s more like, so how should we do that differently? Okay, well do this, this or this. Okay, roll that out and then tell the other guys they’ve got to do it too.
Kevin continued by explaining that spontaneously generating creative ideas fell into a more general pattern of ad hoc communication at LJP. He made this point by contrasting LJP, where things tended to happen in an unscheduled way, with the previous company he worked at, where there were a lot of meetings:

We don’t do a lot of [meetings]. You won’t find on my calendar meeting with Mark at 3:00 p.m. on Wednesday. It’s not our style….In the office right here [Mark and I ] jump in and out, but when we’re talking to Cory in Australia or I need to call Hamish, my financial counterpart in Australia, I could pick up the phone right now and call him. He might not be there and I’ll send him an email: Are you around in a half hour?

The practice of engaging in creative learning in an unscheduled way thus was linked to broader informal communication practices.

It is important to note that Terrance’s practices varied from those of the other participants. Like other participants, Terrance engaged in informal creative learning in an ongoing and unscheduled way. For example, when he met via phone with the owner of the engineering firm with whom he hoped to partner to advance his idea for an invention that would enable helicopters to fly further, the two men discussed multiple potential ways to structure the partnership between them. However, as discussed above, the difference between Terrance’s interactions and those of others lay in the lower proportion of his time that was spent engaged with internal colleagues. His conversations were thus less free-ranging. For instance, in discussing the multiple potential ways to structure a deal between them, Terrance and the engineering company’s owner engaged in conversation only as long as their mutual interests were being served.
2. Scheduled as needed.

That creative learning often occurred on an ad-hoc basis does not mean that it was never scheduled. Indeed, the meeting described above between Terrance, Cory, and Nicole could be considered a scheduled creative learning meeting since it was explicitly set up so that the group could “round table” the opportunity that had presented itself. Moreover, all participants spoke about occasionally participating in scheduled idea generation sessions, in response to a significant challenge or opportunity that would benefit from multiple perspectives. For example, Mark described a brainstorming session he had called in order to go after a major contract with the US military. Terrance spoke at length about a multi-week meeting he had participated in and, at times, facilitated, in Finland aimed at winning a major upcoming bid. Interestingly, all of participants’ examples of scheduled creativity sessions, revolved around crafting bids in order to win contracts. In these situations, creativity was focused on how to reduce costs and produce efficiencies, so that LJP could out-bid competitors.

3. Arising when challenges and opportunities arise.

For the most part, participants did not spontaneously engage in creative learning. Rather, whether they were engaged in ad hoc or spontaneous creative learning, they did so in response to a challenge or opportunity that presented itself. To name just one example, when Terrance was working on the bid in Finland, he and the team came up with an approach to hiring staff, which was an adapted version of something that was commonly done in the “fixed wing” (airplane) industry but had never been tried in the helicopter industry. Kevin commented on the reactive nature of creative learning at LJP in the following statement: “When you have a problem staring at you, you start to think more innovatively than when you don’t perceive it as a problem, right…. So I think there has to be an impetus.”
However, impetuses to engage in creative learning appeared to arise more frequently in Australia than in Calgary. From the time I began the research, Terrance made clear that he was eager to promote creativity and innovation, and I therefore was not surprised that he continually expressed enthusiasm for increasing LJP’s capacity for creative learning. However, as I interviewed other participants, I began to notice differences between Mark and Kevin, on one hand, and Cory, on the other. For the most part, as elaborated later in this chapter, Mark and Kevin expressed satisfaction with the informal, reactive ways that creative learning happened at LJP. Cory, however, more closely resembled Terrance in expressing enthusiasm for increasing LJP’s innovative capacity. When I asked Cory about this, he explained that the offshore division of LJP, which he oversaw and was headquartered in Australia, dealt with greater complexity than the onshore Canadian division, headquartered in Canada. According to Cory, LJP was more familiar with the Canadian market and had “systems and processes in place” to deal with it. In contrast, there were “whole aspects of [the international market] that we're not comfortable with [and] we don’t understand that well.” As Cory put it, “There's way more variety. There are way more opportunities, just because there are bigger geographical regions and bigger markets.”

Linking back to this section’s dominant point, that creative learning occurred reactively and that its timing was determined by the emergence of challenges and opportunities, it would make sense that it would happen more frequently with the offshore division in Australia, where a broader range of unexplored opportunities existed.

That said, it is important that I don’t overstate this point. While it might be true that Cory’s active interest in innovation was linked to him operating in an environment that required frequent creative learning, it is also true that Mark and Kevin, who were in the Calgary office where the onshore business is headquartered, had broad oversight over LJP’s operations and
were not only focused on the onshore division. Consequently, while there might be a link between Cory’s interest in innovation and the way in which his job, unlike those of Mark and Kevin, was exclusively focused on the offshore industry, other factors undoubtedly were at play, as well.

4. Occurring over the long term.

Ideas developed over long periods of time, and were not something that were born and then executed as the result of a single conversation. When, in interviews, participants spoke about projects they had been involved with, which they considered innovative, they often referred to ideas that had taken months or years to come to fruition. To point to just one example, Mark had been considering the potential acquisition of Company N, which he was actively evaluating during the time I shadowed, for about a decade. He explained that he had tried to buy Company N ten years earlier, and that, although it hadn’t worked out, he had kept in touch with the owner ever since, maintaining contact and nurturing a relationship. Similarly, Terrance’s pursuit of a technology that would enable helicopters to fly further was something that he had been working on for many years, and which he had begun exploring when he was working for a different organization. In fact, several years earlier, when he underwent CPS training as part of his MBA, he had held a CPS session focused on developing this idea.

In the time I spent with participants, I was able to observe the way in which ideas unfolded over time. Participants rarely arrived at a conclusion in the course of a single meeting. Rather, most meetings led to the necessity for follow-up calls with other, relevant stakeholders, either to seek their input or to acquire more information. In my first interview with Cory, he communicated the way in which ideas slowly evolved before coming to fruition by using the analogy of an egg:
Innovation is a little bit like an egg that isn't hatched. So, it's sitting there. And it needs attention. Somebody needs to touch it once in a while. Maybe it needs to bump into something here and there along the way and eventually it hatches. And I think there's a whole bunch of things that you don’t even realize that are happening in the organization that actually leads to the idea. And everyone thinks that you have had the idea in the meeting, on the day, or on the whiteboard, whatever it might be, but actually there was a whole bunch of little nudges along the way that cause the egg to hatch.

Similarly, Terrance frequently referred to the need for “soak time” in pursuing innovation. The perception of participants was that developing an idea occurred through the passage of time.

This perception can be linked to the way in which participants allocated time, in the present, and specifically to the ways in which they valued the building of relationships and gathering of information, and explicitly dedicated time to these activities. This was evident when Kevin took the call from the private equity firm, explaining that he was doing so because “anybody can be a source of information” and when, for similar reasons, Mark met with the bank. Among the LJP leadership team, gathering information and building relationships that would not necessarily lead to short-term business outcomes were acknowledged as intrinsically valuable activities because they could be of use in long-term problem solving.

Participants took an analogous view to the importance of allocating time to external relationship building. While engaging in creative learning, participants continually drew on their relationships in two ways. One, they used their relationships to get needed information and build partnerships, such as when Terrance called his former colleague within an oil company in order to better understand how LJP might approach a bid. Second, participants used nuanced knowledge of others in order to make business decisions, such as when Mark and Hughie
discussed various aspects of the owner of Company N’s character, in order to figure out whether the company would make a good acquisition.

Because relationships and the knowledge of others’ personal characteristics were essential to participants’ practice of creative learning, participants dedicated time in very explicit ways to the building of relationships, just as they did to the gathering of information. The conscious cultivation of external relationships was exemplified by Mark, who went about it in a very deliberate way. For example, he noted that, when he met someone who impressed him, he would sometimes “put him in my day-timer and…try and create a relationship over time.”

*Spaces, bodies, and things.*

Participants were separated by distance from many of their internal and external collaborators and consequently, frequently engaged in collaborative creative learning via teleconference. In terms of Hopwood’s (2014) categories of spaces, bodies, and things, this meant that participants, who were separated geographically in space from those with whom they were collaborating, positioned their bodies in front of speaker phones in order to collaborate. The geographic distance between people impacted creative learning in multiple ways. For one, it seemed easier for those who were in close proximity, such as Mark and Kevin whose offices were near each other in LJP Calgary’s executive wing, to engage in informal, unstructured conversation. While Mark and Kevin met in impromptu ways five times on the day I shadowed Kevin, a pattern which interviews suggested was typical, Kevin indicated that to engage in casual conversations with his colleagues in Australia required more work. Although he could “pick up the phone and call” a Australia colleague, if he wasn’t there, Kevin would then need to send him an email asking about his availability that day. There were thus extra steps in the process. Moreover, a lack of physical proximity limited the time span over which creative conversations
could take place. Whereas in person, conversations could sprawl, phone conversation tended to occur within a finite time frame. This was expressed by Cory as follows: “It’s the conversation at work that spills over into the pub at 5 o’clock because you're excited about something. And it's those kind of things that you miss when you are not face-to-face.”

Participants acknowledged that face-to-face meetings were needed in order to address significant challenges that explicitly called for creativity and in building long-term relationships. For example, Mark’s conversation with Hughie about the purchase of Company N led to a decision for the men to fly to the company together to assess it. All participants spent a significant amount of time on planes—moving their bodies through space so they could interact, face-to-face with other bodies.

Both Cory and Terrance pointed to the importance of whiteboards in facilitating creative learning. For example, in walking me through how he and some colleagues came to what he perceived as a creative way to restructure a contract, Cory explained how, when the group started questioning how they might rearrange the flight schedule, they spontaneously started sketching out ideas on a whiteboard:

You'd get up on the board and you'd say, "Ok, how many flights a week do we need to do? Before you know it, you were on the whiteboard. You had the flight schedule....And all of a sudden, on another whiteboard, there's a roster being designed.

What is apparent in the above description is that ideas were generated through interaction with the whiteboard. Terrance repeatedly remarked on the absence of whiteboards in the Calgary office, and linked this absence with the ways in which LJP systemically devalued the creative process.
Conclusion

In conclusion, differences existed between participants’ informal creative practices. Most notably, each participant focused on a different area of the business. However, participants also engaged in common practices of informal creative learning. Specifically, they tended to engage in creative learning in ongoing, ad hoc ways and participated in more formal creativity sessions reactively, in response to issues and challenges that arose.

Practices of Communities

According to PT, communities arise as the result of shared practices among individuals; the community does not precede its practices, but rather arises as a result of them (Nicolini, 2012). Consequently, although, as outlined in Chapter Two, PT critiques CoP theories for too-frequently positioning communities pre-existing the practices that lead to its formation, it does not reject the notion that CoPs exist. Rather, PT emphasizes the degree to which a CoP’s boundaries are always porous and shifting and that a CoP never simply exists but, rather, is always in the process of being formed, re-formed and altered and, moreover, can dissolve with time (Nicolini, 2009). As elaborated in Chapter Two, practice theorists thus accept certain aspects of CoP theories, while critiquing others. As Nicolini (2009) pointed out, an argument could be made for the wisdom of “withdraw[ing] the notion of ‘community of practice’ as an analytic concept, and us[ing] ‘practice’ instead” (p. 92). However, after debating this point, he concluded that “withdrawing the phrase ‘community of practice’ is both impractical and to, some extent, counterproductive” (p. 93), given its history and utility and asserted that, “the only way forward is thus using the term in a strongly qualified way” (p. 94).

In this section, I use the term CoP in the way it has been taken up by Nicolini (2009) to refer to a community that is “formed by the practice and not vice versa” (p. 94). Specifically, I
identify the various overlapping CoPs that were being enacted among participants in the time frame in which I conducted my research. In so doing, I demonstrate that there are multiple ways in which Terrance is positioned as an outsider vis-à-vis the other research participants.

In order to illuminate the practices of community within LJP, I once again draw on Hopwood’s (2014) categories of spaces, times, bodies, and things.

**Spaces.**

Different practices were associated with different spaces. Most notably, the practices of the Calgary office differed from those of the Australia office, and distinct practices were associated with the executive wing of the Calgary office.

**Calgary, Canada and Perth, Australia.**

Participants noted multiple differences between the Calgary office and the Australia office. For example, Kevin characterized the atmosphere of the Australia office as “less reserved” than that of Calgary. Mark stated that the Australia office was more “laid back,” with Mark stating that the “tempo” was slower. Mark also noted that people tended to dress in a more casual way in Australia, remarking, “When I go down there there’s a lot of comfortable sweaters.” In contrast, in the Calgary office, participants typically wore long-sleeved collared shirts with suit pants or full suits to work, although as discussed below, there were variations in dress. Moreover, those in Calgary occupied different virtual spaces than those in Australia. For instance, Cory stressed the degree to which all aspects of work in the Australia office were influenced by a software system called the Integrated Management System (IMS), which was not used in the Calgary office. All of the above suggests that work was practiced differently in Calgary than it was in Australia.
Given that Terrance was located in Calgary, he, like the other Calgary participants, did not share many of the practices of the Australia office. For example, unlike those in Australia, Terrance typically wore a suit to work. He did not use the IMS. Also, because Terrance was part of the offshore team based in Australia, he did not interact on a daily level and had very little face-to-face contact with those on his work team. That Terrance being in Calgary led to a degree of isolation was expressed by Mark as follows: “Terrance is a bit of an oddball in that he's in the offshore business but located here. Everybody else in the offshore business from a management oversight perspective is in Australia and New Zealand.”

However, as elaborated in the next section, Terrance was also isolated from the Calgary participants.

*Calgary office’s executive wing.*

From a spatial perspective, Terrance’s office was physically separated from those of Mark, Kevin, and Bob (the VP of Special Projects), whose offices were together and who thus developed certain common community practices of which Terrance was not a part. The offices of Mark, Kevin, and Bob were all within a distinct executive area, which remained unlocked during the day, but that was behind lockable doors. Terrance’s office was outside of the locked area, and he therefore was separated from the other executives in the Calgary office. According to Mark, Terrance’s physical separation from the other executives was an unfortunate outcome of timing and design. It was only after the offices were designed that more executives than had been predicted ended up being located in the Calgary office. In Mark’s words, “Of course, what happens after the fact [of the offices being designed] is the numbers of people ebb and flow and, you know, we brought Terrance in. I wish Terrance was in this area, but there's not enough room for Terrance.”
Despite the apparent lack of ill-intent behind the positioning of Terrance’s office, it played a role in the ways in which Terrance’s workplace practices differed from those of Mark and Kevin. As explained by Mark, the lockable inner office was explicitly designed to safeguard the privacy of executive conversations. Terrance’s positioning outside of the inner office thus meant that he was out of earshot of information that was accessible to the other Calgary executives. Moreover, Terrance’s physical separation from the other executives reduced his odds of being involved in their many ad-hoc conversations around business decisions. Given that their roles and responsibilities within LJP require Mark and Kevin to collaborate in ways that were not necessary with Terrance, the frequency of ad-hoc conversations between Mark and Kevin cannot be attributed to the spatial configuration of the offices, alone. However, the spatial configuration can be understood to reinforce existing distinctions between Terrance and other participants.

That Terrance was set apart from the other Calgary participants is particularly significant because, as elaborated below, Mark possessed more power and exerted greater influence than any other participant. Being separated from Mark meant being excluded from the community of those who discussed key business decisions.

**Bodies.**

In considering the ways in which bodies showed up within the Calgary offices, it seems noteworthy that on two occasions, Mark and Kevin were dressed almost identically. On the two days that a junior employee, Grant, was present, he, too, was dressed almost identically to Mark and Kevin. However, Terrance’s clothes were not similar to those of the others. Moreover, Mark and Kevin engaged in practices that were more similar to those of each other than those of Terrance, when it came to diet and exercise. For one, unlike Terrance’s office, those of Mark and Kevin were equipped with standing desks, and Mark and Kevin spent more than half their days
standing. Also, Mark and Kevin frequently shared a lunchtime routine, of which Terrance was not a part. Mark described this routine as follows:

Just about every lunch we go down to Sorrentino’s, myself and whoever's kind of here and available. And we have green salads, and it's a bit of a competition type thing. And then we walk the length of the facility and come back. So, we are mindful of being healthy.

Significantly, although Mark claimed that “whoever's kind of here and available” would join in these lunches, in practice, Terrance was unable join, because Sorrentino’s was located within the secure area of the airport, and Terrance, unlike Mark and Kevin, had been unable to obtain security clearance. In short, Mark and Kevin shared communal practices around dress, exercise, and eating that were not shared by Terrance.

**Times.**

As discussed in the above section on informal creative learning practices, Terrance’s schedule differed both from that of Cory in Australia and from that of Mark and Kevin in Calgary. Terrance was in a different time zone from his supervisor, Cory, as well as from the rest of the offshore team. Moreover, unlike Mark, Kevin, and Cory, Terrance’s schedule lacked regular, operational meetings because, unlike the others, he did not supervise any employees or oversee operational activities.

**Things.**

In considering the role of things, what seems most relevant is that, because Terrance spent many years as a pilot and was recognized as an inventor in the realm of aviation, he possessed intimate knowledge of helicopters themselves, as objects. Terrance worked as a pilot for 18 years, from 1978 until 1996, until he was promoted, within Cougar Helicopters, into the
VP role. Although Terrance had held executive positions since 1996, his formal business education only started in 2009, when he enrolled in a part-time MBA, which he completed in 2013. On multiple occasions through the course of the research, Terrance self-identified as a pilot. Moreover, he explicitly linked his identity as a pilot with the way in which he was accustomed to innovating, making statements like, “As a pilot, I like to innovate technically.” Indeed, in the past, Terrance had realized success through technical innovation. When he worked at Cougar, he invented a way for a certain helicopter—a different type than the one for which he was currently working on an invention—to fly further. According to Terrance, this invention provided Cougar with a competitive advantage that lasted for about six years. It is not that Terrance did not innovate in the sphere of business as well. However, technical innovation in service of improving helicopters was one area in which he excelled and about which he was passionate.

In contrast, the other Calgary participants had never worked as pilots and, for the most part, did not share Terrance’s interest in helicopters. On several occasions, Mark spoke overtly about his lack of connection with helicopters, and in fact, he, at least in part, attributed LJP’s success with this feeling of detachment. In his meeting with the bankers from RBC, Mark explained, “We have always been profitable because I don’t particularly love aircraft: When I see a helicopter I see a hammer.” He pointed to the model helicopter on the table and continued, “That’s useful. I can use that.” Kevin similarly expressed a detachment from helicopters themselves. Having only worked at LJP for two years, having been in the area of finance for that entire duration, and having had no aviation experience before starting with LJP, he had far less experience than any of the other participants in interacting with helicopters.
Mark and Kevin thus differed from Terrance in their lack of attachment to the physical object of the helicopter. In his interviews, Cory, who also had a business background, seemed somewhere in between, in that, like Mark and Kevin, he was a “numbers guy” and could not participate in innovating helicopters, as Terrance did. However, unlike Kevin, he had been in the aviation business a long time and had an intimate familiarity with helicopters. Unlike Mark, he did not express a lack of attachment to helicopters.

In terms of how this difference impacted practice, Terrance’s attachment to helicopters was linked to the ways in which, for him, unlike for the other participants, focusing on cost and numbers was something that required active effort. Terrance expressed this when speaking of his time in Finland putting together the bid for the contract there. The team agreed from the start that “the only thing that mattered was the lowest cost” and that the bid would be won by the aircraft provider who could do the work most cheaply. For Terrance, this meant that he had to remind himself, at the start of each day, that cost was the only thing that mattered. More generally, Terrance consciously expended effort on avoiding delving into technical innovation: “I have to keep myself out of the technical, because I'd love to find superhuman ways to fly aircraft and use approaches and technology, and heads-up displays, and virtual reality, and simulation—and faster, quicker, farther.” Terrance thus was unlike other participants in that, as someone with a longstanding active interest and a passionate curiosity for the object of the helicopter, he, unlike his colleagues, had to actively work on being someone who focused on business matters, as opposed to technical matters.

**Practices of Power and Hierarchy**

As described in Chapter Three, the four participants occupied different positions within the organizational hierarchy. As CEO, Mark was positioned above Cory and Kevin, who
reported to him. Kevin, Cory, and Terrance all occupied VP roles, but Terrance reported to Cory and thus was positioned lower than him—and the others—in the organizational hierarchy. In this section, I explore the ways in which participants enacted this hierarchical structure in practice. Specifically, drawing on Watson’s (2014) assertion that power “is to act and have effect” and that “power is influencing the actions of others” (p. 13), I demonstrate the ways in which Mark exerted greater power than other participants.

Before beginning, it seems important to note that, as senior leaders in a global company, all participants exercised power and influence. However, in this section, I am focusing specifically on Mark because, as elaborated later in this dissertation, his enactment of power proved more relevant than that of others in responding to my research questions. This section is divided into two parts, with the first focusing on the ways Mark exerted influence and the second looking at the meaning of and limits to that influence.

**Mark’s influence.**

This section reviews four ways in which Mark’s hierarchical power played out in practice through his exertion of influence over others. Once again, I draw on Hopwood’s (2014) categories of spaces, bodies, things, and time in order to illuminate the elements of practice. However, because, here, Hopwood’s (2014) categories overlap with each other, I address their application at the end of each sub-section, as opposed to using them to structure the analysis, as I have done previously in this chapter.

**Influence over hiring, promotion, and firing.**

At a fundamental level, Mark’s power is evident in the fact that he was directly responsible for hiring all other participants. He hired Cory to head up Australia operations, when LJP bought a company there; he hired Kevin as a financial analyst and then, after a few years,
promoted him to CFO; and he hired Terrance into the VP role. In each of these cases, as with all executive-levelhirings about which Mark spoke, Mark’s personal assessment of an individual’s character was a key determining factor in whether a candidate would be hired or promoted. When interviewed, he explained that, because he places such importance on hiring the right people, he sometimes would circumvent what might be considered standard HR processes in order to ensure that LJP secured the right people:

[What will make the company successful is] a whole series of things but number one is hiring—without a doubt. That's what I think about all the time: Every guy I meet in the industry: would I hire him?...And I will leapfrog guys over other guys. I've done that.

Where I think: You know what? This guy is better than his boss.

In this quote, Mark’s power to determine others’ fates is apparent. He was constantly making assessments of others and determining whether they merit a place within his organization. Moreover, he had the power to override standard HR processes, determine that a given employee is “better than his boss,” and promote him to a rank above his boss.

Perhaps the ultimate expression of Mark’s power to act and have an effect, as well as to influence the lives of others, is evident in a story he told about how Hughie came to work with LJP. Mark realized that Hughie, whom he perceived as a potential asset to LJP, would not come work for LJP because “he was independent on his own and he didn't need the money,” Mark therefore successfully came to an agreement with Hughie, which involved LJP purchasing his company, thus creating an alternative way for him to become a part of the LJP leadership team. In Mark’s words, “I bought a company to get a guy.” No other participant in this study—and, indeed, no other LJP employee—would possess sufficient power to purchase an organization in order to bring a desired employee on board.
Ensuring that those Mark considered to be the right people occupy the right positions at LJP meant that he frequently evaluated employees in informal and private ways. For example, referring to an internal brainstorming session, Mark noted how he was impressed when a pilot, who was a “technical guy,” put forward an interesting non-technical idea that raised Mark’s esteem for him, causing him to think, “Danny's deeper than I thought he was.” The implication here, which as elaborated in the next chapter, is particularly relevant to my analysis of the enactment of CPS at LJP, is that employees were continually being evaluated, even when formal evaluation was not occurring.

In terms of Hopwood’s (2014) categories of spaces, bodies, times and things, Mark, in exercising his power to hire, promote, and fire, determined which bodies were permitted access to which, if any, of LJP’s spaces and things, including its technologies. Moreover, the practice of evaluating employees occurred, informally without associated artefacts, such as performance evaluation forms, over a dispersed period of time.

**Influence over others’ time and focus.**

Mark’s power was also evident through daily organizational practices. For instance, in the meeting with Sylvain, Mark set the agenda, thus setting the pace of the conversation and determining what Sylvain would discuss. As was also evident in the interaction with Sylvain, Mark also had the power to “assign homework.” When further information was needed, it was Sylvain—and not Mark—who committed to seeking it out. For Sylvain, the timeline of the meeting thus extended beyond the hour in which Mark and he spoke, since he did follow-up work, and Mark’s influence on Sylvain played out even after the meeting ended. The organizational hierarchy was thus enacted through Mark determining how others would allocate their time and focus, both during meetings and after they ended.
In terms of creativity and innovation, as Terrance remarked upon several times, it was Mark who decided whether the ideas of others would move forward toward realization. For example, there was a point when Terrance was in Finland putting together a bid on a contract that he and his team came up with what they perceived as an exciting and novel idea around how to save money on staffing. However, because the idea was risky, Terrance perceived there was a 50/50 chance that Mark would reject the idea and the Finland team needed “to manage the risk internally [the risk that Mark would reject the idea] as much as we had to do it externally.” Consequently, Terrance and his team “communicated to a fault,” spending significant time, on a daily basis, in conversation with Mark. Mark’s position of hierarchy was thus enacted through practices such as the Finland team making frequent phone calls to Mark and the Finland team ensuring that, when they did speak to Mark, they were prepared to respond to his questions. Mark was thus in the room and exerted influence, even when he was physically thousands of miles away.

In terms of Hopwood’s (2014) categories, here, time is most notable. As CEO, Mark was able to exert significant influence over how others allocated their time and focus.

Influence over whether and how ideas were realized.

Mark possessed the power to foster or squelch ideas. In speaking of innovation, he noted, “My job is to try and stimulate [innovation], and not put a damp cloth on it” while, at the same time, he acknowledged that, “I'm probably the guy who puts the brakes on in a lot of cases, because, I look at risk. I always think risk.” Mark also acknowledged that, as the CEO, he spent less time engaged in creative acts and more time supervising them. For example, in explaining how a new, internally developed software system came to fruition, he commented that he could be credited not with “making things happen” but rather with “agreeing to things.” Mark was the
one who gave license to those engineers who came up with the idea for the software system to continue to pursue it.

In terms of Hopwood’s (2014) categories, Mark literally determined which projects would materialize, and which wouldn’t. For example, by encouraging the development of the software system Mark determined that a whole network of “things,” such as computer programs and manuals, would come into existence in the LJP environment. This decision, in turn, influenced people’s bodily actions, such as when and how they interacted with their computers.

**Meaning of and limits to Mark’s influence.**

This section qualifies the above analysis of Mark’s practices of power. Specifically, it offers a point of clarification by emphasizing that possessing power over others cannot be assumed to be a “good” or “bad” thing. It then comments on the ways in which Mark’s influence manifested differently on the practices of those in the Calgary office and on those of Cory in Australia.

In the definition of power taken up by this research, power is something that exists in all situations. That power can be yielded for exploitative reasons does not mean that power is necessarily exploitative (Nicolini, 2009). Indeed, although participants themselves acknowledged Mark’s power, they did not cast it in negative or exploitative terms. For example, Terrance credited Mark’s vetting with improving the quality of ideas. Referring to the way in which he stayed in constant communication with Mark while he was in Finland, Terrance expressed gratitude that, thanks to Mark, he went through a “very very deep process” that was “painful,” but that ultimately “was great” and “just made us better.”

Similarly, Kevin credited Mark’s oversight with enabling him to acquire valuable learning. For example, Kevin cited Mark’s influence when he spoke of how, as “finance guy,” he
came to understand what it meant to be a “good seller” and, in considering a business deal, to consider its long-term impacts and effects on employees. That Mark vetted Kevin’s ideas led Kevin to what he referred to as a “more humane” approach to business. When Kevin spoke explicitly of LJP’s hierarchical structure, he framed Mark’s power in neutral terms, stating that although LJP’s culture was “collaborative,” the organization did not run as “democracy,” and that Mark was the ultimate decision maker. That Mark had ultimate decision making power was presented as value neutral. It was simply the way things were.

Another relevant point is that the power difference between Mark and Cory, who was based in Australia, played out differently than it did between Mark and the other participants, who were based in Calgary. Of all participants, Cory referred the least to Mark in his interviews. For example, in my first, hour-long interview with Cory, he mentioned Mark’s name six times and did so only in explaining how Mark came to hire him at LJP. In contrast, Kevin and Terrance mentioned Mark’s name 39 times and 62 times, respectively. Cory, who was located 12,000 kilometres from Mark, did not appear to be as impacted by Mark’s influence.

In summary, Mark’s position of power and influence played out in practice through his influence over hiring, promotion; his influence over others’ time and focus; and his influence over whether and how ideas were realized. However, it is important to note that that Mark’s ability to influence should not necessarily be seen as something negative and that Mark seemed to influence less daily influence over Cory, who was in Australia, than over the Calgary participants.

**Practices of Competence**

Up until this point in the chapter, I have illuminated existing practices among the LJP leadership team. Now, drawing on Lindberg and Rantatalo’s (2015) contention that “a competent
professional can be argued to do so in ways that are recognized and favoured (by self, peers, superiors, interest groups, patients, the public or other relevant evaluators) as correct” (p. 564), I identify three practices, which appear to have been favoured within the LJP environment and recognized as correct. These are: improvising in order to achieve business results; demonstrating discipline; and, more broadly, demonstrating the ability to achieve results.

In identifying practices of competence, I have given greater weight to Mark’s perceptions of competence than to those of other participants. Given Mark’s power and influence—and specifically his ability to hire, promote, and fire others—Mark’s perceptions of competence mattered more than those of others in shaping practices that were generally favoured.

**Improvising to achieve business results.**

Earlier in this chapter, I described informal creative learning as occurring all the time, in ad hoc ways, among the LJP leadership team. Here, I build on that description by noting that engagement in this type of learning was not something that simply happened at LJP but rather was associated with competence. Competent LJP employees were expected to engage in ad hoc learning, and were rewarded and promoted based on demonstrating exceptionality in this area.

Both Mark and Kevin described continual engagement in creative learning as being something that good LJP employees did. According to Mark, all LJP employees “should always be saying ‘can we do this better?’ even if it’s only marginally better.” Consequently, Mark explicitly hired “competent people with open minds” and “people who really want to solve a problem.” Because of the care Mark took in making hiring decisions, he saw perpetual engagement in creative learning as natural to his employees. As he put it, “the nature of the people that we have here is such that because we did it that way yesterday [it doesn’t mean we need to do it that way today.]” Like Mark, Kevin described perpetual ad hoc engagement in
creative learning as something that happened naturally as a result of the nature of the people who worked at LJP. According to Kevin, one of LJP’s “strengths is that the people that we have here...are constantly thinking about how they can do something better. And I think for the most part it comes naturally to them.” When interviewed, Kevin questioned whether LJP employees’ natural propensity for innovation was in part a result of so many employees being engineers, who, “naturally look at things [and ask] how can we change that?” In his words, “An engineer tinkers with things so I think they naturally gravitate towards how things can be done better.”

Speaking on the topic of innovation, Kevin opined that it was constantly happening at LJP but “we don’t make a huge deal about that; we think that’s part of work.” Bringing this analysis back to the concept of competency, what is notable here is that frequent ad hoc creative learning was simply “part of work” at LJP. It was not something remarkable, but rather what a competent LJP employee naturally did.

Furthermore, when employees showed they were capable of creatively improvising in exceptional ways, they were rewarded. For example, in praising Bob as someone who “can do the most difficult work just because of his nature” and whom he “really value[d],” Mark expressed that he particularly appreciated that he could ask Bob to tackle just about any project, no matter how messy or complex:

I can get him to go down and do an environmental cleanup that is going to be messy, messy, and painful, and is going to take a long time. I could say "Bob, I need a hangar built." He'll do that. [I can say,] "Bob, I need you to go see a customer" or "Bob, there's been an accident and we need someone to talk to somebody." He's just so versatile.

The projects Mark named—dealing with a messy environmental cleanup, getting a hangar built, or dealing with the aftermath of an accident—are all examples of messy, ambiguous challenges
that required creativity to address. Notably, Mark spoke more effusively about Bob than he did about anyone else and created a new VP role for him because he was a “unique guy” with “a unique skill set.” Mark also rewarded Terrance for exceptional improvisation. After Terrance had won and executed on a contract for which, in Terrance’s words, “the logistics of pulling it off were almost impossible,” he received “nods” from Mark, as well as a bonus for the year, which was based on this achievement. Competence in improvising to achieve business results was thus explicitly rewarded.

Importantly, to be considered competent creative learners, employees’ improvisation needed to be linked to financial results. In praising Bob, Mark made clear that “he's a bit of a wingnut sometimes…but he comes up with very good solutions and he's always looking for an economical way to do things, and it's all about business.” For example, when it came to buying and selling aircraft, Bob “wouldn’t give anything away.” Mark also laughingly told an admiring story of Bob in which, because he is “very cheap,” he bought two goats to keep the grass down at a helicopter base he was managing. What emerges from the way Mark described Bob is that at LJP, you can be a “wingnut” and still be considered supremely competent—as long as you also are always “looking for an economical way to do things and it’s all about business.”

Significantly, because successful creativity needed to be linked to business results, it was only possible in hindsight to fully assess whether, in engaging in creative learning, an LJP employee was behaving competently. The innovative strategies Terrance used to put together the bid in Eastern Canada led to “nods” and a bonus, because LJP won the contract. However, although Terrance engaged in many of the same creative behaviors when working on the bid in Finland, they did not seem to hold the same meaning. When I originally met with Terrance in December 2015, he spoke of putting together the Finland bid as an example of innovation at LJP.
However, when I returned in January 2016, when due to not hearing back, participants were beginning to suspect (rightfully, as it would turn out) that they had not won the contract, Terrance hesitated when I referred to his work in Finland as innovative, stating that it would not be considered so if LJP did not win.

Moreover, the requirement that creativity produce results meant that someone who engaged in continual creative exploration, like Terrance, who, as mentioned above differed from other participants in that he did not oversee any daily operations, had to prove and re-prove his competence. Engagement in creative learning did not, in itself, suffice in order to be considered a valued LJP employee. Terrance made this point several times. For example, he noted that, although what happened in Eastern Canada was “nothing short of an absolute and total miracle…you’re only as good as your last landing.” He also noted that, when you win a contract, you are perceived as “the rainmaker” and “you can do anything” but that nobody cares about the innovative things that you do if they don’t lead to results:

It's not like [those who don’t care] are wrong. It's your job. That's how it goes in my type of position. Are you going to keep pulling off miracles? Well, who knows? If the good Lord is with you.

The link between competence and achievement of business results thus led to a situation where the achieving competence was beyond the control of an employee like Terrance, who perceived that he had to “keep pulling off miracles.”

Finally, it is important to note that, in assessing competent creativity, Mark viewed certain groups as intrinsically more competent than others. This was apparent when, in praising Bob he pointed out that he was exceptional for someone who started out as a pilot, since “Most pilots in our business talk a lot. They talk a good story but they can't get things done, or they're
terrible business guys.” In Mark’s view, “Engineers make better business people. They're more thoughtful, they're more analytical.” To be considered competent, one had to be more “like a business person” than “like a pilot.”

In summary, the ability to continually engage in creative learning was linked to competence at LJP, in that competent employees were simply expected to be creative in incremental ways. Exceptional acts of creativity, such as the ones demonstrated by Bob and Terrance, were rewarded as long as those acts led to business results. Finally, competence in achieving business results was associated with the traits of business people, as opposed to those of pilots.

**Demonstrating discipline.**

Another practice associated with competence at LJP was the demonstration of discipline. When interviewed, participants literally used the word discipline multiple times in a variety of contexts. For example, in describing LJP’s general approach to business, from a strategic perspective, Kevin noted that it’s “very disciplined, a very disciplined approach to business. We try to identify risks; we try to be careful with our risk assessment.” He linked this discipline to Mark’s leadership by pointing to his background as an accountant:

Mark is an accountant and…. he always knows that there’s a financial cost to a business decision, and so he is well aware the two are very linked, and there’s discipline there, there’s absolute discipline. So I would say that is definitely part of the culture, that it’s a disciplinary culture.

Cory used the word discipline in describing how LJP’s rigorous internal processes and systems enabled operations to be run safely, stating that “if we follow a discipline, process-based approach across everything we do in the organization, safety just occurs as a by-product.”
Terrance used the word discipline as an overall descriptor of LJP’s approach to business:

“Another way to say the word [discipline] is professional. Adhere to procedures and adhere to your training. Be professional in your appearance.”

However, while all participants spoke of discipline, in interviews, Mark was particular emphatic about its importance—and was perceived as such by the other participants. Speaking about innovation, he noted that, he wanted to be “forward thinking” but at the same time he wanted to be strategic about what he put money towards, stating, “I want more logic, I want more rigor and discipline into the thought process.” Moreover, Mark valued discipline not only at the strategic level, but in personal, daily habits, as well. For example, he spoke of the need for people to demonstrate “email discipline,” by using an appropriate subject line and not CC-ing too many people. He also expressed the importance he placed on being disciplined in his communication. As noted above, he spoke negatively about pilots, whom he perceived “talk a lot.” He commented that he was careful with his words, stating, “I’m not completely transparent” and “I don’t trust everybody.” After I spent a day shadowing him, I wrote in my field notices that I noted “a practice of restraint; which involves not being effusive, not talking without purpose.” For Mark, the demonstration of discipline was relevant not only in executing business decisions, but also in how one conducted oneself, professionally. Because, as CEO, Mark exerted greater influence than other participants—and because other participants spoke of discipline being important at LJP, even if they did not speak of it in as emphatic or holistic terms as Mark did—the demonstration of discipline can be understood as associated with competence at LJP.

What is particularly relevant for the purpose of this dissertation is the difference between Mark’s demeanour—and Mark’s association of this demeanour with the positive practice of
demonstrating discipline at LJP—and Terrance’s demeanour. Whereas, in most interactions, Mark appeared to weigh and calculate his words before speaking, Terrance spoke effusively and described himself as a storyteller. He was known among participants for his aphorisms and anecdotes. As Kevin put it, “He has anecdotes for things. He has sayings, more than maybe the rest of us….He has an approach to business and a colourful way of describing it.” Terrance’s effusive demeanour—for instance, that he self-identified as a storyteller and was recognized by his colleague as “colourful”—was yet another way in which he showed up as different than the other participants.

Finally, it is relevant that the timing of my research corresponded with one of the most financially challenging periods in LJP’s history, which led participants to value discipline to an even greater degree. As outlined in investor information on LJP’s website, over one third of LJP’s revenue was generated through working with the oil and gas industry. All interviewees spoke of how, between late 2015 and early 2016, this stream of revenue was in steady decline, due to declining oil prices. For the LJP executives, this was a time of cutbacks and financial restraints. Kevin, Mark, and Cory all mentioned that there had been lay-offs, due to the current financial situation. On several occasions, Mark mentioned the need for LJP employees to reduce travel expenses. In other words, in an environment where the focus already was on cost cutting and fiscal discipline, my research took place at a time when these were even more highly prioritized than usual.

**Demonstrating ability to achieve results.**

This section speaks to something I have already pointed to above, but which merits emphasis, as a point unto itself, because it is so important to this dissertation’s analysis, and that is that, at LJP, to be competent was to demonstrate an ability to focus on and achieve results. As
noted above, the ability to improvise was valued at LJP—but only when it served the achievement of business results. Moreover, behaving in a disciplined way was valued at LJP—unless one was like Bob and could achieve business results while behaving like a “wingnut.” Although certain ways of acting and speaking were favored at LJP and associated with competence, an employee could disregard these norms as long as, to use Terrance’s word, he or she was a “rainmaker.”

In saying that a competent LJP employee was one who could maintain a focus on results, I am not suggesting that financial goals were the only ones that were important. For example, safety was highly valued at LJP, and, in interviews, its import was repeatedly discussed by all participants. However, as will become increasingly evident as I move into Chapters Five and Six, that competence was associated with an ability to focus on the bottom line had particular impact on the CPS session.

Summary

In this section, I identified that participants’ existing practices included engaging in informal creative learning in ad hoc and unscheduled ways, engaging with different CoPs, enacting the hierarchy in ways that meant that Mark exerted greater influence than other participants. This section also identified that, among participants, competence was associated with the ability to improvise to achieve business results, the demonstration of discipline, and the ability to stay focused on the achievement of results. This section’s analysis is summarized in Table 5.
Informal creative learning

- Different participants focused on learning topics of learning (e.g. Mark’s learning acquisition-related, Kevin’s learning finance-related)
- Creative learning:
  - Happens in ad hoc, informal daily ways
  - Happens through interacting with different people, at different times and in a variety of spaces
  - Happens in more formal and scheduled ways primarily when a challenge arises that needs to be addressed

Practices of communities

- Terrance was positioned as an outsider vis-à-vis multiple CoPs. For example:
  - He reported to Cory in Australia, but was located in the Calgary office
  - His office was outside of the executive wing and he was not privy to informal conversations between Mark and Kevin
  - He was the only participant who came from an aviation—and not a business background.
- Terrance was more vulnerably positioned than other participants because he did not have responsibility for operational oversight; he was the only participant whose job required him to consistently “win work.”

Practices of power and hierarchy

- Mark’s positional power was put into practice through the way in which he influenced:
  - Hiring and firing
  - Others’ time and focus
  - Whether and how ideas were realized

Practices of competence

- Being competent at LJP meant:
  - Improvising to achieve business results
  - Demonstrating discipline
  - Demonstrating the ability to stay focused on the achievement of results

Attitudes toward Creativity and Innovation

In gathering data through interviews, shadowing, and document analysis in December 2015 and January 2016, guided by my first two research questions—“How do existing workplace practices, and employees’ perceptions of them, impact what happens during the CPS session?” and “How do employees’ perceptions and emotions about creativity sessions, more broadly, impact what happens during the CPS session?”—my goal was both to identify existing practices and to identify participants’ baseline attitudes around creativity and innovation. This section focuses on the latter goal.
Incremental Versus Radical and Passive Versus Active

In terms of their attitudes toward innovation and creativity, Mark and Kevin seemed to differ from Cory and Terrance. Mark and Kevin positioned themselves as proponents of incremental innovation, whereas both Cory and Terrance also spoke of a need for radical innovation. For example, when speaking about innovation, Mark used a baseball metaphor and associated incremental innovation with “base hits” and radical innovation with “home runs.” He made clear that he preferred base hits, stating, “We’ve got to do new things, but I'm not blowing the company up for a one-shot pony that is very risky….I like base hits….Home runs are hard to do, and they're very risky.” Mark also spoke of how the economic environment made it even more imperative than ever to focus exclusively on incremental innovation, and moreover, to focus innovation efforts on cost reduction, as opposed to more exploratory initiatives. He expressed this as follows:

To me the time to implement creative solutions…seems more attractive to me when times are good….We can provide a better mousetrap. It will go on deaf ears…..[Our clients] don’t want to hear about safety. They don’t want to hear about how you're going to use a better aircraft. It's who's cheap? Who is cheap?

In other words, at the time my research took place, Mark—whose thoughts were, in many ways, echoed by Kevin—strongly favoured incremental innovation, which focused on saving money. Relatedly, Mark and Kevin expressed little interest in implementing innovation systems or processes, since, in their view, innovation already was happening all the time at LJP, due to the innate nature of LJP employees.

In contrast, Cory explained that he was a proponent of radical innovation because it was appropriate to his context, in Australia, where it was needed in order to deal with all the
complexity of the international offshore aviation market. Terrance expressed his advocacy for radical innovation by stating that, at times, it was appropriate to “markedly change the company…as opposed to simply changing things by “20%.” Both Cory and Terrance expressed support for introducing more systemic approaches to innovation at LJP.

However, although two out of the four research participants, Cory and Terrance, were proponents of actively encouraging radical innovation, it is important to emphasize that, for the purposes of this research on CPS, their views proved less relevant than those of Mark and Kevin. As discussed above, Mark had greater power than the other participants, and all participants had greater power than Terrance. Moreover, as will be discussed in Chapter Five, Cory’s virtual participation in the CPS session led him to exert less influence than other participants. This meant that a bias toward incremental innovation and against its systematization can be understood as having been dominant, as participants engaged in CPS.

Of particular relevance to this study is the contrast between Mark and Terrance. Mark consistently emphasized the importance of pursuing innovation that would increase cost-reduction and efficiency, rather than innovation that would explore new frontiers and for innovation that would not require significant upfront investment. In contrast, Terrance referred multiple times to his experience working for Cougar, where he had experienced the way in which radical technical innovation could yield significant, longer term competitive advantage. Terrance perceived a place within LJP for the pursuit of more radical, albeit riskier, innovations that required upfront investment but that might achieve longer term rewards. From his perspective, LJP would benefit from considering the ways in which “an outstanding idea can produce more dollars or profit than years of a cost reduction programs.”
Another notable difference between Mark and Terrance lay in the type of language they used to describe innovation. When asked about his views on innovation, Mark expressed himself as follows:

I'm not excited about it. I'm not a guy who jumps up and down about most things. But I think it makes sense to look at it because it is a key differentiation in terms of being a key driver in success.

Terrance also valued the rational business reasons for pursuing innovation. For example, he saw innovation as a means to achieve greater profitability, stressing that it was particularly important for a company like LJP, which was a relatively small player in the global market. However, in contrast to Mark—and, indeed, unlike any of the other participants, Terrance also acknowledged that, at a visceral and emotion level, innovating simply was exciting to him, as evidenced by the following quotation:

Innovation is probably one of the better ways to go through business, and even enjoying it, or life…There is…job satisfaction and personal satisfaction with challenging yourself and taking all your norms and sticking them in a box and saying, "So what! Who cares!" You know, "That's yesterday! What about tomorrow? Can we do it better?" [Engaging in innovation] is not something that needs to die with age. It keeps you fresh. It keeps you excited about different things.

What is notable is that Mark used purely rational language, speaking of how innovation might “make sense” because of its potential to offer “differentiation” and be a “key driver of success.” In contrast, Terrance used emotional language, speaking of the feeling of satisfaction one gets from taking one’s norms and “sticking them in a box and saying, ‘So what! Who cares!’”
Another significant point lies in the way in which both Mark and Cory expressed that adopting the language of innovation could serve the useful purpose of reframing negative messaging around cost reduction in a more positive light. Cory, speaking of an article he had written in the company newsletter that promoted innovation, expressed this in the following way:

The industry is pretty tough right now. Our customers are cutting costs, we're having to cut costs, lay people off, do things like that inside of our organization. Talking about innovation and how it can add value to a business is actually a little bit more uplifting of a way to focus people on the fact that we need to be leaner and meaner. People want to get on board with something that's fun...So [writing the article] was also a little bit tactical, a way to get at the economic problems in a way that wasn’t the executive writing the doom and gloom email, which not that many people like to read.

By writing about the necessity of innovating, Cory thus was able to communicate about the need to operate more efficiently in a more uplifting way. Mark made a similar comment when he noted that he generally did not like the word innovation but that he did see the value in innovating around cost, since he struggled with the question of “How do we inspire people if the goal is always the lowest cost?” This point—that the word innovation can be used by senior management to frame cost cutting in palatable, and even inspirational, terms—is one I return to in this dissertation’s final chapter.

Attitudes toward brainstorming

All participants expressed positive views of formal brainstorming sessions, which brought people together to come up with new ideas. For example, Mark overtly stated that his impression of brainstorming was “positive” and Cory noted that getting people from differently functional areas together to generate ideas was helpful. Only Kevin voiced ambivalence, stating
that, when brainstorming, he felt “pressure to talk about things here” and didn’t feel he was able to “go away and think about [the issue] and come back.” That said, it seems notable that, unlike the other participants, Kevin did not mention participating in formal brainstorming sessions at LJP, and rather, was referring to his experience brainstorming as part of his MBA education.

**Summary**

This chapter identified the existing practices that participants were engaged in and discussed their baseline attitudes towards the creative process. In so doing, it identified four existing practices that were enacted at LJP. Specifically, it looked at the ways in which participants continually engaged in informal creative learning; the ways in which participants participated in different albeit overlapping CoPs; the way in which the organizational hierarchy was enacted, in practice; and the way in which competence was associated with the ability to improvise to achieve business results, the ability to demonstrate discipline both through one’s approach to business and in one’s personal demeanour, and the ability to demonstrate consistent focus on the achievement of results. That said, a more effusive personal demeanour was associated with competence if the effusive person nonetheless demonstrated an ability to produce business results. This chapter ended by discussing participants’ attitudes towards creativity and innovation.
CHAPTER FIVE: BEFORE, DURING, AND AFTER THE CPS SESSION

Introduction

This chapter describes what happened when participants were deliberately focused on the CPS session. In so doing, it first outlines what happened before the session, then on what happened during, and finally, on what happened after.

Before the CPS Session

This section describes what participants said and did in the time leading up to the CPS session. It specifically focuses on what Terrance did to prepare and what participants reported thinking and feeling directly before the session.

Terrance’s Preparation

Planning the CPS session involved a significant expenditure of time and energy for Terrance. The day before the session, Terrance estimated that he had put ten working days of time into CPS-session planning, which wouldn’t include the time when he was thinking about it while doing other things, such as “just lying in bed or in the shower.” This section reviews what Terrance did in choosing the question, which would be the session’s focus; how, from a logistical perspective, Terrance went about scheduling the session; how Terrance chose which stage of CPS to focus on; and how Terrance re-familiarized himself with CPS and adapted it to his context.

Before beginning this section, it is important to briefly note something that I delve into in greater detail, as needed, throughout this chapter, and that is the impact of my presence, as a researcher. As elaborated below, it was my research project that catalyzed Terrance to initiate the introduction of CPS into LJP. Moreover, at times Terrance and my roles overlapped. For example, Mark, Kevin, and Cory consented to participate in my research project only after Mark,
as CEO, had approved the focus of Terrance’s CPS session. This meant that the first steps Terrance took to plan the CPS session were entangled with my securing participants’ consent for the project. In writing up my descriptions and analysis, I work to acknowledge the impacts of my involvement while also focusing on what, despite this involvement, might be determined about participants’ engagement in CPS.

**Choosing the question.**

Terrance’s first step in planning the CPS session involved determining what its topic of focus would be. For Terrance, simply having his colleagues experience CPS was a goal unto itself. However, he recognized that the other participants were not intrinsically interested in CPS and that it was therefore necessary to select a compelling focus for the session before they would commit to attending. In his words, he needed to ensure the session would be “worth the time of…four key managers.”

In choosing and crafting the question of focus, Terrance referred repeatedly to the textbook *Creative Leadership* (Puccio et al., 2011) from his MBA Leading Innovation class. He was particularly influenced by what the book referred to as the “4 I’s tool,” which specifies that a challenge for CPS is one that requires imagination, is of interest to those in the room, is one that those in the room are able to influence, and that merits immediate attention. In December 2015, when Terrance first began planning the session, he determined that the question “How might LJP systematize innovation and link it to return-on-investment (ROI)?” responded to the 4 I’s. He was particularly hopeful that the question would be of interest to Mark, since it tied innovation to business outcomes, stating, “I'm sure Mark will appreciate a view as to how innovation and creativity does affect profitability.”
After Terrance selected the question, it was me—and not him—who communicated it to the other participants since I needed to obtain permission from Mark to move forward with the research project as a whole, as well as obtain consent from Mark, Cory, and Kevin for them to be participants. After all participants had agreed to engage in the CPS session and my research, Terrance, using informal conversations and email, garnered agreement that the CPS session would be held on February 9, 2016. I arranged to conduct the first phase of the research, which involved understanding existing practices, in December, 2015 and January, 2016. Then, beginning at the end of January, I engaged in a series of phone calls and video chats with Terrance, in which he discussed with me his progress in planning the session.

Over two meetings in the beginning of February 2016, Terrance communicated that LJP was going through a particularly difficult time. Operating within the already challenging external environment catalyzed by the drop in oil prices, LJP had just learned that they had not won the contract in Finland, for which they had invested significant time and resources preparing. The company was now in what Terrance referred to as an “extreme” and “radical” situation. Several executives would be flying to Finland. Moreover, an emergency strategy meeting of the whole executive team and an external advisor had been called for March 4 in Calgary, in order to address how LJP should respond to the current economic conditions.

Given the unplanned trip to Finland, Terrance needed to reschedule the CPS session for a later date. However, he remained committed to ensuring that it happened. As he put it, “If there ever is a time we need to innovate [it’s now].” At this point, I felt conflicted. As a researcher, I wanted to minimize the degree to which I influenced the process. On the other hand, I was concerned that, given the difficult economic environment, the other participants would not respond positively to the CPS session. My own perception, at that point—which, indeed, was
reinforced when I began to analyze the data more systemically—was that the other participants were less enthusiastic about actively pursuing innovation than Terrance perceived them as being. Given the pressing challenges that LJP was facing, I worried that the other participants would not want to allocate time to the question of how to systematize innovation and that, in moving forward as planned, Terrance could face professional embarrassment.

I therefore decided to voice my concern. Without discussing what I had learned in the preliminary phase of the research, I asked Terrance whether he perceived that the question, “How might LJP systematize innovation and link it to ROI?” still adhered to the 4 I’s. When he said that it did not, I asked whether there might be a way to re-focus the session to address a question of more pressing concern. Terrance remarked that perhaps the CPS session could be tied to the March 4 strategy meeting. In our next phone conversation, Terrance put forward that he wanted to change the CPS-session question to “How might LJP creatively refocus its vision, structure the organization and resource the leadership to survive and thrive in our current industrial environment?” As the conversation progressed, he simplified the question so that it was, “How might LJP survive and thrive in our current economic environment?” Terrance also indicated that he would reschedule the CPS session for February 23. The CPS session would thus allow participants to engage in the question of how LJP might respond to the downturn in the oil and gas industry in preparation for the March 4 strategy meeting on that topic.

Terrance moved forward in rescheduling the CPS session for February 23 and communicating to other participants that its new focus would be the question, “How might LJP survive and thrive in our current economic environment?”
Scheduling the session.

Scheduling the session presented a significant logistical challenge. For one, all participants traveled a lot. For example, as mentioned in Chapter Four, Cory estimated that he spent about 20%-30% of his time traveling and Kevin flew to Montreal about twenty times a year. In the winter of 2016, when Terrance had planned to conduct the CPS session, unexpected trips, such as the meeting to Finland, had been added to participants’ already-busy schedules. Moreover, because there was no executive assistant in Calgary, Mark, Kevin, and Terrance did all of their own scheduling, on top of their regular workloads. Unlike most executives of their stature, they did not have dedicated administrative support. All of this meant that scheduling the session involved many conversations via phone and email between Terrance and me and Terrance and the other participants. Simply scheduling the session was, in itself, an onerous logistical task.

Eventually, all participants agreed via email to hold the CPS session on February 23. This date was not ideal, since Kevin would be traveling, which meant that both he and Cory would need to participate virtually, but it appeared to be the only possible option. However, as the session date approached, it became clear that Cory, Kevin, and Mark were either not as clear about or as committed to the session date and time as Terrance was. A week before the session date, Terrance commented that, despite his belief that his scheduling of the session had been clearly communicated via email, due to time zone differences, Cory had been confused about the time. Now, Cory would be calling into the session directly before leaving to the airport to travel from Australia to the USA.

The day before the session was scheduled to run, I was in Calgary, having flown there to observe the session. While there, however, I realized through an email exchange with Kevin,
who was in Montreal, that he, too, was confused about the session time. Moreover, when Terrance and I were discussing this confusion, we realized that Mark also seemed unaware that the session was scheduled for the next day and, furthermore, that he, too, would be out of town. This meant that none of the participants besides Terrance would be in Calgary on the day of the CPS session.

When Terrance called Mark to discuss the mix-up, Mark said that he had not been aware of the session date and time, because it wasn’t in his electronic calendar. Terrance had sent the information via email but had not sent an electronic calendar invitation. After some back and forth between Terrance and the other participants, they agreed that the CPS session would be held on Friday, February 26\textsuperscript{th}, when Mark was back in town. The added benefit of having it on the Friday was that Kevin would be in Calgary so would be able to attend in person. Cory previously had communicated that he would not be available on the 26\textsuperscript{th}, because he would be on holiday. However, he agreed to call in from his holiday. When I spoke to Cory about rescheduling, he mentioned that if something is not in his electronic calendar, he forgets about it. In my research journal, I wrote, “It seems as if people are subtly saying that the reason it did not work out is because Terrance did not send an evite.”

Another notable point that arose in Terrance’s scheduling of the session was his awareness of the politics and power dynamics within the organization. For example, he knew that he first needed to secure Mark’s assurance that he would attend, in order to ensure other participants’ attendance.

**Choosing the stage of CPS.**

Given that going through all stages of CPS was not possible in a two-hour session, Terrance allocated significant time and energy to figuring out which stages to focus on. When he
When I asked him about this decision, he explained that transformation was “quick and simple in the time we have.” Terrance predicted that the group would likely feel impatient if he spent time in the clarification stage, which would involve interrogating the problem statement itself and working on ensuring the challenge was correctly framed:

It’s the real world. We’re time constrained. The group that I have are going to have a very short attention span. And I know from talking with them in the past that this issue essentially has come up as the problem statement.

What is notable in this quote is that, although Terrance contended that beginning with the clarification stage is not necessary, because “this issue essentially has come up as the problem statement,” he also was influenced by what he perceived to be the limits of the group’s attention span. He thus based his decision around which stage of CPS to employ not only on the principles of CPS but also on his sense of the group’s receptivity. Terrance perceived spending time in the clarification stage as impractical and unnecessary, and so decided to begin with the transformation stage.

Terrance chose to focus on the following activities, which fall within CPS’ transformation stage: (1) Generating ideas in response to the question of focus; (2) thematically clustering ideas and choosing between them, via voting; and (3) diverging and converging on selection criteria, which would enable participants to articulate what made a good solution. The
generation and selection of criteria ended up taking on a particular significance for Terrance since, as he planned the session, he came to the personal insight that generating criteria was actually about “establishing our core values backwards.” Terrance perceived it as particularly important that the group discuss core values, and consequently, forming an association between criteria and core values led to him valuing the generation of criteria more than perhaps he otherwise would have. He explained that going through the exercise of generating criteria would lead the group to uncover what their true core values were—as opposed to those values that they espoused but perhaps did not enact.

**Re-familiarizing himself with and adapting CPS.**

Although Terrance had learned CPS and conducted a CPS session two years previously, during his MBA program, and had used it in ad hoc ways in the time since, he nonetheless needed to go through an intensive process of re-familiarizing himself with it and adapting its use to the LJP context. For the purposes of this dissertation, two aspects of Terrance’s preparation are relevant. One is the way he interacted with textual material, like the Puccio et al. (2011) book *Creative Leadership*. The second is the way in which he prepared for Cory’s virtual participation. As will be discussed in the next chapter, these aspects of Terrance’s preparation shed particular light on the way in which materiality matters in the enactment of CPS and prove useful in helping me respond to the research question, “What roles do material aspects of learning play, and how do these aspects perpetuate, adapt, or introduce new practices?”

**Interaction with textual material.**

Terrance re-familiarized himself with CPS by engaging in an iterative process that involved reading the CPS textbook *Creative Leadership* (Puccio et al., 2011) and searching for CPS-related material on the internet and reading it. While delving into this reading, Terrance
worked on creating a PowerPoint presentation slide deck that outlined key points. For Terrance, creating the slides aided his learning process since, in his words, “I think in presentation style”; he thus created the slides not for the sake of presenting them but for the sake of deepening his understanding of CPS. Moreover, he wanted to create a “master slide deck” for his own future reference about CPS. Only after he had summarized the whole process did Terrance begin making decisions over which stage of CPS he would address in the LJP session.

Significantly, Terrance’s process of re-familiarizing himself with CPS cannot be separated from his process of adapting it. For example, he described the experience of reading the text as different than it had been when he had first done so several years previously because he was always thinking about how its material would be applied, which in his words, led him “to understand intimately how the different processes worked.” Moreover, in reading, he was perpetually considering the political implications of the session, and how it could impact the March 4 strategy meeting, which he expressed as follows:

I wanted the session to…link into our strategy session and effectively, even [get] the agreement and encouragement of the CEO and president that that's exactly what we're going to do. So that's why the book was helpful. Going back to those core principles and understanding them at a different level because of, again, of the politics and the future use of CPS.

As the above quote makes clear, for Terrance, learning CPS—going back into the textbook and rereading it—was inextricable from adapting to the political context by, for example, considering how to secure the “agreement and encouragement of the CEO and president” for what he was trying to accomplish.
Adapting CPS for virtual participation.

In adapting CPS to his context, Terrance needed to consider that at least one participant would be participating virtually. In recalling the last time he had conducted a formal CPS session, when he had been an MBA student, Terrance noted, “it’s quite a physical process” and remembered how those present spontaneously began standing up, until “they were all standing at the board and moving around.” He therefore spent significant time figuring out how he would capture ideas using the software, Linoit, which is an online bulletin board, where virtual stickie notes can be posted. By having all ideas recorded in Linoit, even those participants participating virtually would be able to see them. However, using Linoit meant that Terrance needed to work through logistical, questions such as whether participants who were physically present in the session would type their ideas on laptops and enter them directly into Linoit or, alternatively, whether they would write their ideas on paper and then have them transcribed. Ultimately, Terrance decided that those participants who were physically present would write their ideas on actual stickie notes and that he would bring in an additional person—the junior employee, Grant—to transcribe these ideas into Linoit. Interestingly, the use of the technology therefore led to the presence of another body in the room.

Participants’ anticipatory thoughts and feelings

This section draws on data gathered in interviews done directly prior to the session to discuss Mark, Kevin, and Cory’s anticipatory thoughts and feelings about it. It then discusses Terrance’s anticipatory thoughts and feelings. I have allocated a separate section for Terrance, because the anticipatory thought and feelings of the facilitator merit discrete analysis.
Mark, Kevin, and Cory

This section discusses first what Mark, Kevin, and Cory indicated their degree of interest was in the session and then what they identified as the characteristics of a successful session.

Degree of interest.

Mark, Kevin, and Cory all expressed that they were more interested in the session now that it would focus on the question “How might LJP survive and thrive in our current economic environment?” than they were when the question was, “How might LJP systematize innovation and link it to ROI?” All noted that the current question was of greater immediate interest to them. In Mark’s words, “it’s more pertinent. It’s immediate. The industry's in desperate shape right now. we're getting pressure everywhere. So it's relevant.”

That said, all participants nonetheless indicated that they were only moderately looking forward to the CPS session. When asked to rate their anticipatory feelings on a scale of one to ten, with one indicating that they were not looking forward to the CPS session at all and ten indicating that were very much looking forward to it, Mark rated his degree of interest at 5, Kevin at a 6.5 or 7, and Cory at a 7. All explained that their enthusiasm was dampened because the session was happening at a time when they were very busy.

In summary, while all participants felt more interested in attending a session focused on the question of how LJP might survive and thrive in the current economic conditions than they would have in attending a session focused on the original question, they nonetheless expressed that feeling busy led them to feel less enthusiastic than they otherwise might.
Characterizing success.

Participants differed in terms of what they hoped the CPS session would achieve, with Mark being the most focused on wanting the session to achieve certain types of tangible outcomes, Kevin being least outcome-focused, and Cory falling somewhere in the middle.

For Mark, a successful session would be “practical” and “not too time-consuming.” In explaining what he meant by practical, Mark clarified that he hoped to come to concrete ideas that would allow LJP to build on what they were already doing, as opposed to leading to major change initiatives within the organization. As he put it, “I'm never interested in over-process, never. I'm interested in outcomes.” He reiterated what he had expressed in the first phase of the research about being interested in low-cost, incremental innovation:

I’m an incremental guy….So I think a tweaking to [our] processes would make sense to me, but if there's a suggestion that we need to form committees, meetings. I don’t like meetings. Meetings incur a bunch of costs. Bringing in consultants, I'm not in.

Mark expressed that he could foresee himself feeling frustrated if he were to “perceive that the discussion is too academic.” In his words, “Academe is very different than business…. I like real talk, real process that works.” Mark also reiterated a point he had made in earlier interviews around being primarily interested in innovation around cost reduction. Significantly, Mark did make clear that he was open to new ideas, stating that “it would be good if by virtue of the discussion something comes up that I haven't thought of before.” However, he put more emphasis than other participants on the need for tangible, practical, and inexpensive outcomes.

Cory communicated a similar desire to see tangible outcomes emerge from the session. He stated that, although he did not expect this to be the case, he would feel disappointed if the session turned out to be like unsuccessful ones he’d attended in the past where, at the end, “you're not
really sure what you've accomplished” or “how you're ever going to make a strategy out of any of that.” That said, unlike Mark, he also explicitly communicated a desire to hear creative ideas, as well as creative ideas on all topics—and not just on the topic of cost reduction.

More so than Mark or Cory, Kevin expressed openness to whatever the session would offer and communicated that he did not believe that it needed to yield tangible outcomes, in order for him to deem it successful. In his words, “an opportunity to maybe look at it, sit down and think differently—or maybe not, maybe just solidify some of the things we've already discussed—would be a success from my point of view.” For Kevin, an opportunity to think differently about LJP’s response to the current situation would be a positive outcome, but so too would be simply taking the opportunity for the senior leaders to sit down and “solidify some things.”

**Terrance**

Given that Terrance was the catalyst behind introducing CPS to LJP, it is not surprising that, when I interviewed him before the session, he indicated that he was very excited about it. When asked the same question as was asked to Mark, Kevin, and Cory around rating anticipatory feelings on a scale of one to ten, he responded, “I can give it a ten for sure.”

In terms of what would lead him to view the session as successful, Terrance expressed more nuanced and complex views than the other participants. Although he had short-term goals for the session itself, he also hoped that it would feed into his longer-term goals around promoting innovation at LJP. The remainder of this section is divided into two sub-sections. The first addresses Terrance’s goals for the CPS session itself and the second addresses Terrance’s longer-term view of success.
Characterizing success: Short-term goals.

In the session, Terrance hoped to promote a more creative and free-ranging discussion than participants typically engaged in at LJP. Consequently, in his planning, he spent significant time strategizing about how he would provoke this creativity. For example, having spent years of his life leading church choirs, he imagined that, if he noticed that people weren’t being sufficiently creative, he would use many of the same techniques he used in church when he noticed that people weren’t singing. In his words, it would be “a matter of using a balance of humour and shame.”

Furthermore, Terrance hoped the CPS session would generate a diversity of ideas to inform the upcoming March 4 strategy session. He indicated that Mark had already begun working with Cory to draft a strategy to present at the March 4 strategy session and expressed concern that this could lead to Mark and Cory prematurely deciding on a direction. As he put it:

You guys [Mark and Cory] are on track, but you're just a mile ahead…Let's go back and make sure we've got [the input of] myself—that's what they hired me for, was for strategy—[and other]… good guys who understand strategy.

By holding the CPS session prior to the strategy meeting, Terrance would be able to create a situation where new ideas could be raised that might contribute to LJP’s strategy. The CPS session would present this opportunity not only because people would be actively encouraged to generate divergent ideas, but also because the structured process would give Terrance permission to guide the conversation in ways he couldn’t otherwise. As he put it, “Here's my chance to unpack stuff without conflict. [I can say to them,] ‘I'm just doing this exercise. Don’t shoot me [laughs]. But let's unpack that [idea] a little bit.’” Because Terrance would not actively be raising
contentious points, but rather “just doing this exercise,” he would create the opportunity for participants to raise and discuss ideas they might not normally address.

Finally, at a foundational level, simply scheduling the session represented a win for Terrance, since it meant that people were clearing time in their schedule to participate in a systemic approach to innovating. In Terrance’s view, all members of the executive team shared his commitment to promoting innovation. However, they were not acting on this commitment because they were too busy dealing with day-to-day events. As he put it, people at LJP were too busy “cutting down trees,” which he equated with doing the daily work of running the organization, to dedicate the time needed to “sharpen the axe,” which he equated with developing systemic approaches to innovation:

> The demands of real, tough, anxious industry are brutal. They are overwhelming….and they don’t allow for that time to sharpen the axe….We don’t get the time to sit down and sharpen our axe….How do I get people to come out of their noise for two hours? People who probably just left anxiety here and over there, and now I’m clearly going to say, “You can't have your phones.” I’m going to have some Subway sandwiches and we'll have something to eat… I have to pull them out.

Referring to Mark specifically, Terrance noted that, “he loves the idea of innovation but doesn’t have a lot of time.” For Terrance, simply having people set aside time, apart from the day-to-day anxieties of business life, for “ax sharpening” was, in itself, a goal.

**Characterizing success: Long-term goals.**

For Terrance, this CPS session was a means to a broader goal of promoting innovation at LJP. He frequently spoke about the session being an opportunity to showcase for the other participants the benefits of approaching innovation in a systemic way. In speaking of how he was
using the CPS session to advocate for more widespread promotion of innovation, Terrance used metaphorical language, comparing his initiation of CPS within LJP with a parent reminding a child of the right course of action. On one occasion, he put it as follows: “This is about grabbing your kid’s face and saying, ‘You need to clean your room. You need to sharpen your axe.’” On another, he put it this way: “I think [introducing CPS] will introduce creativity and innovation in a very practical way...It's like sneaking vegetables into your kid's a meal.” Terrance also used religious language, referring on several occasions to his promotion of CPS and innovation, as “preaching the gospel.” Terrance thus viewed himself as a parent or preacher, helping the other participants see and do the right thing.

When Terrance imagined an ideal future for LJP, he imagined all employees, working at all levels and in all departments, being encouraged to innovate. He expressed this as follows:

I would love to have the company promote a culture of innovation. And that means right from the guy who is finding a better way to wash the aircraft and do it safer and quicker to the person that’s at the base and says, “Look, I think I can actually process passengers much better if I use a kiosk.”… And then go a little higher and say “What about search and rescue?”…. And then a little higher is: “What kind of strategy do we need to stay here in this region? How do we do that?” Now you really get into that business development.

He also imagined a company where the systematization of innovation was evident in its material artefacts. In envisioning his ideal future, Terrance spoke about there being policy documents, training programs, and language on the website, all which spoke to LJP’s commitment to innovation. For Terrance, the CPS session would be successful if it helped him take a step toward that ideal future.
The CPS Session

This section describes what happened during the CPS session itself. It begins with a brief overview of what occurred and then provides a more detailed description.

Overview of Session

The CPS session was scheduled to run for two hours, from 11 am to 1 pm on February 23, 2016. However, it ran a half-hour late and ended at 1:30. The session was held in the LJ conference room. Mark, Kevin, and Terrance were present, as well as Grant, the junior employee, whom Terrance had brought in to help with the logistics, such as typing ideas into the computer. Cory joined the session via video conferencing, using a technology called Blue Jeans. Participants sat at a long table, with Kevin and Mark on one side and Terrance and Grant on the other. Grant was positioned in front of a computer. At the end of the table was a large screen, which projected what was on the computer. I sat on the same side of the table as Grant and Terrance, but several seats back, so that I was apart from the group.

At the centre of the table were sandwiches and salads from Subway, a fast food restaurant, as well as bottles of Perrier water. On the table, too, were several laminated colour handouts, depicting information like the CPS model and the guidelines for engaging in divergent and convergent thinking.

In planning the session, Terrance hoped to provide an introduction, facilitate three different activities—idea generation, idea grouping and prioritizing, and establishment of selection criteria—and then facilitate a brief wind-up. Due to idea grouping and prioritizing taking longer than expected, he only facilitated two out of three planned activities. Table 6 compares what Terrance planned and what actually happened, and explains what Terrance hoped to achieve in each time block.
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**Detailed Description**

This section describes how Terrance introduced the CPS session, the way in which participants engaged in idea generation, and the way in which participants engaged in grouping and prioritizing ideas.

**Introducing the session.**

At the start of the session, Terrance and Grant spent about three minutes working with Cory to get the technology working so that he could hear. Once the technology issues had been resolved, participants engaged in a few minutes of general small-talk. Terrance then opened the session by displaying his first PowerPoint slide, thanking everyone for joining, outlining the
day’s agenda, and describing of CPS. At this point, Kevin and Mark, who had been periodically checking their phones, put their phones away and Mark turned his off.

Seven minutes into his introduction, Cory emailed me to indicate that he was experiencing technical difficulties. I interrupted the group to communicate this, and he, Grant, and I began working to resolve the technical issues. In the meantime, Terrance announced that this would be an opportune time for a food break. In introducing the break, Terrance pointed out that there no onions in the food, because Mark didn’t like onions. Terrance said jokingly, “If I got onions on any of these sandwiches, I'm fired,” which resulted in laughter from the other participants.

Once the technology issues were sorted out, Terrance picked up his introduction where he left off. In introducing CPS, he frequently read from his slides and then provided his own explanation of what they said. The following excerpt is typical of how Terrance spoke and interacting with the slides, during the introductory portion of the session. In it, Terrance was explaining to the group how, in CPS, the “assessing the situation” step allows problem solvers the flexibility of deciding where to enter the process.

Terrance [referring to slide depicted in Figure 3 below]: So, assessing the situation, really as you can see in the centre there it is. I like this quote, "An important job of a leader is to continuously scan the environment and try and make sense of it. Change is consistent.”
So how might we know enough about the challenge so we can get to a place where we can offer creative recommendations? By examining the data and deciding at what stage of the process we're going to jump into. And there's, again, a tool that really does help, and it certainly helped me. [Terrance explains how he followed the “assessing the situation” step of CPS]

Terrance [To Grant]: Next.

[Grant changes slides and this slide appeared on screen]:

![Figure 7. Richard’s Assessing the Situation Slide](image)

![Figure 8. Richard’s if-then process slide](image)
Terrance [referring to slide depicted in Figure 4]: So this is literally out of the book. It's the if-then statement and if you see the “if” at the top, all you do is go down through the elements. In this case, I went right to [reading], “You have identified a specific challenge (or challenges) that, if overcome, will move you in the direction of your desired outcome but do not know how to address this challenge.” So I think that's kind of where we are.

What is apparent from this excerpt is the way in which Terrance explained CPS to the other participants by relying heavily on portions of his textbook, which he had either transcribed or literally cut and paste into the PowerPoint slides. Also apparent is the way in which Terrance switched back and forth between reading, paraphrasing, and editorializing. For example, in referring to the first slide shown in this excerpt, Terrance read the quote at the top of the slide, editorializing that he liked that quote. He then paraphrased much of what was written on the rest of the slide, while explaining how this text was relevant to LJP.

Twice during Terrance’s introductory comments, participants interjected comments, and both times, these took the form of jokes. For example, when Terrance explained the concept of imagination, he said, again jokingly, “Mark says that...he certainly hires people for imagination. He never thought he would get one as vivid as mine but...” To this, Mark responded, “Enough for all of us!” and Kevin and Terrance laughed.

**Generating ideas.**

After introducing CPS, in general, Terrance restated the question of focus, “How might LJP survive and thrive, in spite of the current economic challenges?” and began explaining, more specifically, the textbook guidelines for engaging in divergent and convergent thinking. In restating the question of focus, Terrance, for the first time, solicited input from the group, asking “What do you think about that as a generic problem statement for this session or even in
general?” Mark was the only participant to respond, stating, “It's aspirational for sure on the thrive side, but survival for sure. I think survival is, in this market, is extremely challenging. Thriving is more aspirational, I think, and it should always be part of your objective... even in difficult times.” Mark thus agreed with the problem statement but qualified it, emphasizing that LJP needed to focus on survival with thriving being “aspirational.”

When Terrance went on to explain the guidelines for diverging, he emphasized that he expected people to be creative, saying, “If you don’t come up with some novelty then they're going to come back and I might even just say, ‘I'd like to see some more crazy thinking.’” Terrance then seemed to debate whether, in order to reinforce his point that participants should generate crazy ideas, he should share a story from the textbook, called the Pacific Power and Light story. He expressed uncertainty about whether or not he had told this story to the participants, saying, “I think I've given most of you guys that example. That live example, where they used the helicopter to knock ice off the hydro wires there. Did I ever get into that one?” The following exchange ensued:

Mark: I don’t know that you did.

Terrance: Yeah, but I’ve told you enough stories, so it was probably in there somewhere! [Terrance laughs] Actually, you know what I'll do. I can't resist. I just got to...I got to go for it. It's down here in the attachments.

Terrance then had Grant flip to the end of the slide deck, where Terrance had placed two extra slides, one of which is depicted in Figure 5, he had created about the story.
Shortly after this story was told, Terrance indicated that it was time for participants to begin writing their ideas on the sticky notes he had provided for each person. He explained that Cory would enter his ideas directly onto the Linoit board. As people began to write on sticky notes, Mark asked, “So how broad and how narrow? What's your thinking there, Terrance?” and Terrance responded that participants should use their judgment but that “nothing is off the table.”

Terrance asked people to generate about five ideas each. He also informed the group that he too would be generating ideas, acting as both a facilitator and a participant. After Cory and Kevin had started writing, Terrance said to Grant, “You're absolutely welcome to participate. Sorry, I should have thought to[indicate that earlier].”

After five minutes of writing, the participants had stopped, and Terrance indicated that Cory should go first in sharing his ideas. The next to share were Mark, Kevin, Terrance, and then Grant. All participants except for Cory read the ideas from their sticky notes and then passed the notes to Grant, who transcribed them onto the Linoit board. Because Cory was working from a distance, he transcribed his ideas onto Linoit himself. Grant assigned a different colour of sticky figure 9. Richard’s Pacific Power slide
note to each participant, except for Terrance and himself, whose stickies were both pink. The Linoit board, as it looked when all participants’ ideas were posted, is depicted in Figure 6.

![Figure 10. Linoit board with all ideas](image)

The reactions in the room differed when different participants presented their ideas. When Cory presented, no one commented except for Terrance who said, “That’s great, Cory. Excellent,” when he had finished presenting all five ideas. In contrast, Terrance commented after each of Mark’s nine ideas, either praising the idea, building on it, making a joke, or asking a follow-up question. Although they commented less frequently than Terrance, Kevin and Grant occasionally commented on Mark’s ideas, as well. An example of the kind of commentary that followed Mark’s from Mark’s ideas is evident in this excerpt:

Mark [sharing his second idea]: You buy one customer and you operate only for them.

Terrance: You want to work for Shell, don’t you?

[Mark, Kevin, and Terrance laugh.]

[….]

Mark: We say, ok, we’re going to get out of the business. And part of our challenge is that we are in the game with everybody else. We have no advantage.

Terrance: So this is a global supply agreement kind of thing.
Mark: Yeah, well, it's vertical integration to the power of 10.

Kevin, Terrance and Grant: Yeah, yeah.

Mark: Y'know, you're buying something much bigger than this.


What is evident in the above excerpt is, one, that Mark’s ideas generated general discussion among participants and, two, that Terrance acted as an initiator in discussing and praising those ideas.

Kevin’s ideas generated even more discussion than Mark’s, but this discussion was initiated by Mark, as opposed to by Terrance. Mark did not praise Kevin’s ideas, but rather, typically built on what he heard and asked for clarification. As was the case when Cory presented, there were no comments from others in the room when Terrance and Grant presented their ideas.

On several occasions throughout the session, Mark demonstrated attention to the way in which the process was being facilitated, sometimes making suggestions about how it could run more smoothly. For example, at one point, Mark suggested that perhaps participants should avoid looking at the screen at the front of the room, where what Grant was typing was being projected, since doing so proved distracting. Moreover, Mark sometimes expressed objection to Terrance’s facilitative question, as is evident in this exchange:

Mark [reading his idea]: We get out of the helicopter business and we invest only in businesses that reduce cost for the industry. […]

Terrance: Do you have an idea of what one of those would be?

Mark; Ummmmm…not really. I didn't want to constrain myself too much by…

Terrance: Ok, that's cool.
CREATIVE PROBLEM SOLVING IN PRACTICE

Mark: So it's just, after you kind of get through [considering], “Do I like the idea?” then we think that through. And my problem is that if I get too specific then I start killing my own ideas.

In this exchange, it was Mark, who did not occupy the role of facilitator, communicating to Terrance, who did, how to present ideas in a way that would not prematurely squelch creativity.

**Grouping and Prioritizing Ideas.**

After all ideas were posted on the screen, Terrance checked in with Cory around technology, as he did periodically throughout the session. Terrance then moved the group to the next stage by communicating that they would begin to group like ideas together. However, before launching into that process, he opened a general conversation by asking, “Thoughts? Comments? About what you heard? Themes that were coming up?” Mark was the first to respond, with his impression of what theme had emerged, stating, “Anti-aircraft. Anti-aircraft ownership. I kind of got that sense. Anti-aircraft…..Do we really want to own aircraft?” Cory agreed with what Mark had said and built on it. Terrance then moved the group to the next stage—grouping like ideas together, which is referred to within the CPS process as “hits and highlights”—by saying the following:

I think we have really diverged quite a bit. I saw the things that I was hoping for… And it's really kind of that time now, that converging time. Time-wise, it's just natural [to begin] what we call hits and highlights….One theme that I heard about three times that I could suggest is strategic partnerships. Because it's about three times that it came up. So, obviously, we want to get rid of our aircraft. We do not want to own aircraft. That's a big one, right?
Once participants focused their attention on grouping ideas, they faced logistical challenges around how, exactly, to do so. These were resolved through the following exchange:

Mark: So do you want [us to identify] a heading, and then decide where something….

Terrance: Well, I think in some ways we can just even physically start grouping. Push that red one over closer to that blue one or whatever.

[...]

Mark [referring to the colour and the number of two stickie notes]: 22 pink to yellow 1.

Kevin: Oh, here we go!

[Laughter]

Kevin: Checkmate!


The participants thus innovated a way to group ideas virtually by identifying each idea by the number and colour marked on the virtual stickie note on which it was written.

For just over 20 minutes, Mark, Kevin, and Terrance collaborated on grouping and labelling the stickie notes, through instructing Grant, at the computer, around where to physically move each one on the screen. Cory did not participate. However, when asked, he indicated that he thought his colleagues were “on the right track,” that “if I had a different view I would have jumped in there,” and that, “in this part of the meeting, it's probably better for you guys to lead it.” When participants were done grouping, the ideas were categorized into seven categories, as depicted in Figure 11.
Terrance then suggested that participants should decide which ideas they liked best by each using five votes, which they could distribute as they liked. Again, a logistical discussion ensued in which participants figured out exactly how to proceed. This led Terrance to decide that each participant should be allocated ten votes, instead of five. Participants also decided that they wanted voting to be confidential. Consequently, instead of simply entering his votes directly onto the Linoit board, Cory emailed them to Grant.

At this point, it was one hour and forty-five minutes into the meeting, and Kevin indicated that he had an appointment in fifteen minutes.

Kevin: Guys, I do have a meeting in 15 minutes. Is the expectation that we would go a little longer and I will try to push it? Or...?

Mark: How important is it? We won't be quite finished.

Kevin: No, I don’t think so. It’s Montreal….Is half hour enough?

Terrance: I think that's all we can really ask.

Mark: Yeah.

What’s notable here is that it was Mark, and not Terrance, who first responded to Kevin’s concern about timing, and who, in so doing, signalled that Kevin should consider postponing his meeting.
All virtual stickie notes were numbered. Participants voted by writing the numbers of their preferred ideas onto actual, material stickie notes, along with how many votes they allocated to each idea, and passing—or, in the case of Cory, emailing—those notes to Grant. Grant began tabulating the votes. Two minutes into the process, Grant said, “I don’t know if you guys want to start talking about 21 or not, but it’s the clear favorite. I can tell you that much.” Idea 21 was, “develop the best low-cost model in the industry.” Mark, responded to Grant’s comment by saying, “So, there’s a recognition that costs are pretty important.”

Tabulating the results took Grant almost 15 minutes. In that time, people commented on the results as they came in, and engaged in other, unrelated conversation. The voting process led to the category of “Cost Reduction” receiving the most votes, with “Partnerships” coming second. Terrance then explained that it would be easier to move forward and take action, if they left the meeting with four or five categories, instead of the seven, which they had, and suggested they work on further converging, in order to reduce the number of categories.

The group approached this next stage of convergence by discussing all ideas that had not received any votes. They decided that three of those ideas were duplicates or subsets of others. These were eliminated. The group noted that no one had voted for any of the ideas within the category titled “Vertical Integration.” They decided that these ideas nonetheless were worthy of preserving as reference points, and they were placed them on a lower part of the Linoit board, which did not show up on the screen.

Three ideas were removed when the group indicated that they were not of interest. One idea—“Buy one customer, only operate on their behalf”—was transformed, which is to say that, after the group explored and discussed it, it took on a different meaning and was renamed. Because the way in which the group decided that three ideas were not of interest and the way in
which they transformed “Buy one customer, only operate on their behalf” are of particular interest for my research, I describe how these events unfolded below.

Eliminating ideas.

Through the process of converging, the group eliminated three ideas from the board: “#13 Sell entire company to employees,” “#20-Subcontract; bid but don’t operate,” and “#16-pull any contract not making a contribution.” Kevin initiated the conversation about the elimination of the first two by saying, “I don’t know if you need 13 and 20.” However, just as Terrance was asking the question, “What does everyone say about that?” Grant went ahead and pulled the two virtual stickies off the board. This led all participants to laugh and joke:

Mark: I think Grant just—

Kevin: Grant just—

[All participants laughing]

Mark: I think we should talk about them first. [To Grant:] I think the power’s gone to your head buddy!

Kevin: I'm going to say some more stuff! Someone likes my ideas!

[All participants laughing]

This incident resolved when Grant re-typed and re-posted stickie #20, about subcontracting. He did not retype or repost stickie #13, which had been Kevin’s idea, but nobody commented or indicated that they had noticed. Idea #13 thus was eliminated without further conversation.

Participants briefly discussed idea #20 and then decided to eliminate it too.

Greater discussion was involved in the decision to eliminate Idea #16, “pull any contract not making a contribution.” Once this idea was identified as having not received any votes, Terrance, in an ad hoc way, used a tool from Creative Leadership (Puccio et al., 2011) titled,
“Pluses, Potentials, Concerns, and Overcomes” (PPCO), to lead the group in conversation. However, despite several minutes of discussion about this idea, it nonetheless seemed to be eliminated for arbitrary reasons. At a certain point, Kevin, the idea’s originator, said, “You can pull 16 off” and Grant did so.

_Transforming an idea._

When, after the vote had been tabulated, Terrance was facilitating a general discussion about the ideas, he pointed to #7 “Buy one customer, only operate on their behalf,” which had received 5 votes. The following exchange ensued:

Kevin: That was me. I did five votes there. I really liked the idea, because it reduced complexity.

Mark: I [originally] said that [idea] but I thought it was kind of ridiculous!

[Laughter by all participants in the room]

Later in the session, Mark commented on idea #7, stating the following: “I kind of like [idea #7]. I mean, it’s not what you wrote, Kevin, but you did say it. And that is reducing complexity….If it had been worded that way I would have voted for it.” What happened here was that, by putting five votes on the idea, “Buy one customer, only operate on their behalf,” Kevin drew the group’s attention to it. This opened up the opportunity for Kevin to explain that what he liked was not necessarily the idea itself but rather what he perceived as its underlying principle, which was the reduction of organizational complexity. Once Kevin identified this underlying principle, Mark—who had originally proposed the idea but had “thought it was kind of ridiculous”—also began to see the value in it. This chain of events led to a conversation in which Kevin suggested renaming that idea “reduce complexity” and putting it in a different category than it currently was in.

_Directly After the CPS Session_
All participants were interviewed in the week after the session. This section first focuses on the post-CPS areas of satisfaction and dissatisfaction for Mark, Kevin, and Cory. It then discusses the areas of satisfaction and dissatisfaction for Terrance. This section ends by discussing three general perceptions that participants communicated about the session.

**Mark, Kevin, and Cory’s Perceptions**

Mark, Kevin, and Cory all perceived the session as having been valuable. On a 10-point scale, with 1 being “not valuable at all” and 10 being “highly valuable,” all rated it an 8. All also indicated that it exceeded their expectations. However, all participants expressed that they did not think that new, creative ideas emerged from the session. For example, Mark noted, “I don’t know that I heard anything completely different than I hadn’t before” and expressed his belief that, in generating ideas, most participants “kind of took the safe side.” That being said, none of the participants expressed disappointment that the CPS session had not yielded creative outcomes, since other outcomes, which they perceived as valuable, had been achieved.

This section reports on what Mark, Kevin, and Cory reported as areas of satisfaction and what they reported as areas of dissatisfaction.

**Areas of satisfaction.**

**Solidification and documentation of ideas.**

All participants expressed the primary benefit of the CPS session being the way in which it solidified and documented existing ideas. All expressed agreement with the outcome of the session, which they perceived as an acknowledgement that, in order for LJP to survive and thrive despite the current economic conditions, the executive team must, first, focus on cost reduction and investments that required low capital expenditure (as expressed in the theme “Low Cap-Ex/Cost Reduction”) and, second, focus on forming strategic partnerships. All participants
agreed that these were not new ideas. However, they expressed that the CPS session was valuable because it reinforced what was collectively important. Cory perceived that the degree of discussion that had happened during the CPS session had the effect of “solidifying” the importance of pursuing cost reduction as a strategic direction and increasing participants’ commitment to execute on it. Kevin appreciated how the session increased his confidence in “spending time and energy” on the ideas that had emerged on top, because they had won out, even after the group had “thrown everything against the board.”

For Mark the session was particularly valuable for the way it reinforced participants’ commitment to LJP being a low-cost provider:

> What I noticed is that everybody recognizes the importance of us being a low-cost provider…. And I think the exercise was worth it for that reason alone, because… I know [now that] we're all on the same page. So that was really compelling to me, and it was compelling because everybody said it.

For Mark, everyone in the room verbally committing to the importance of LJP being a low-cost provider made the CPS session “worth it for that reason alone.”

Participants spoke, too, of the session having been important because it provided a reference point to which they could refer back. For instance, Mark spoke of how referencing the session could, if needed, legitimate his efforts to keep employees focused on what mattered most:

> If we have these sorts of exercises we can refer to them and say, “We talked about that. Remember, we went through the process. We talked about why we didn't like something and why we did, and is there any new information or has something changed in the, in the
environment that should cause us to rethink that, and if it hasn't then, hey, let's, let's keep
doing what we're doing.”

Similarly, Kevin noted that he valued the way in which the session helped to “articulate and keep
ideas rather than losing them.” Because the outcomes of the session were recorded on the Linoit, Kevin could foresee referring back to them.

The CPS session thus can be understood to have served as an amplifier for certain ideas, increasing participants’ level of commitment to them. Moreover, because people could refer back to the session both through speaking about it and through going back to the Linoit board, it provided participants with a way to transport these ideas into the future.

**Opportunity to “get out of the weeds.”**

All three men remarked that they appreciated that the CPS session allowed them, to use the words employed by both Mark and Cory, “to get out of the weeds.” Participants normally engaged in creativity and brainstorming sessions in order to react to specific circumstances that required their attention and they therefore typically were engaged in more tactical and focused discussions. Participants appreciated that the CPS session provided an opportunity to discuss higher-level strategy issues. Mark articulated this in the following way:

[The CPS process] gets you thinking about bigger issues and more strategic type things, because we spend most of our time dealing with specifics and this says, “Wait, now I guess you have to deal with the specifics, but now you’re approaching 30,000 feet.”

Kevin made a similar point, stating that he appreciated that the session differed from regular meetings because it provided a rare opportunity to “take a step back and have a blank slate look at the company. and throw everything open.”
Insight into others.

For Mark, the CPS session provided an opportunity to gain insight into others. This was not a view that was expressed by other participants. As he put it:

What's interesting to me is how far people will go out. Will they say something that is a bit outlandish, or will they kind of take the safe side? So it also tells me something about the person. So I find that interesting besides the ideas.

Although, Mark generally believed that people played it safe in generating ideas, he singled out Kevin’s ideas as being “a little more risky” and indicated that he appreciated them. As he put it, “I like when guys say things that, OK, we kind of giggle at first but then a discussion follows and sometimes something good happens. It didn't in that case, but I like that.” Although Kevin’s riskier ideas didn’t lead to solutions with which the group would move forward, Mark nonetheless appreciated hearing them.

Some new ideas.

Although participants generally stressed that they had heard or discussed most of the ideas before, they indicated that some of the ideas were new. As noted above, Mark remarked on Kevin having put forward original ideas. Also, Cory remarked that an idea he had not heard raised before among the group was the possibility that the helicopter, as a technology, may be at the end of its life cycle.

Technology.

Both Mark and Cory indicated that they appreciated experiencing Linoit, as a technology to facilitate virtual collaboration. Mark expressed that he liked Linoit because it emulated “the way people talk” and replicated “the way [we’re] used to doing it with paper.” He also appreciated how it kept the conversation organized.
Areas of dissatisfaction

Participants expressed two areas of dissatisfaction. One, all participants found that they felt disengaged during the upfront portion of the session, when Terrance introduced CPS. As Mark put it, that portion of the session, “[got] a little academic for me, and I start[ed] to, to lose a little interest.” Moreover, although, as noted above, Cory and Mark saw the potential in Linoit as a technology, all participants nonetheless expressed dissatisfaction with the way in which it slowed down the process. Specifically, the participants expressed dissatisfaction over the significant amount of time spent waiting after voting had occurred and Grant entered the votes into Linoit and calculated the number of votes per category. They also indicated that, due to being online, Cory was not able to participate as fully in the discussion.

Terrance’s Perceptions

Like Mark, Kevin, and Cory, in his post-session interview, Terrance rated the session an 8/10. After facilitating it, he shared that he was “very excited” about how it went. In terms of areas of satisfaction and dissatisfaction, many of Terrance’s thoughts were similar to those of the other participants. Like the others, Terrance appreciated how the CPS session affirmed and documented existing ideas. In his words, “CPS helped turn information into information you can’t ignore.” Terrance also echoed the others’ dissatisfaction with how, due to the use of technology, it took too long to tabulate the votes. Terrance spoke of no other areas of dissatisfaction. The remainder of this section discusses two areas of satisfaction that were identified by Terrance, but not by the other participants.

Personal learning

For Terrance, a significant positive outcome of the CPS session lay in the way it bolstered his confidence that he could facilitate the creative process. He noted that his confidence
level had gone “to the next stage.” Terrance was particularly pleased that he now felt confident facilitating virtually. He stated that a positive outcome was that now, “I'm not as afraid of working at distance now, and as a matter of fact, I can take it on with a vengeance.”

**Other participants’ acceptance of CPS.**

Terrance indicated that he was pleased with the degree to which participants engaged in the process and seemed to acknowledge its value. At a foundational level, he perceived it as positive that he seemed to have the group’s full attention for the duration of the session. He noted that “they were participating” and that “nobody went to the washroom, for goodness sake,” even though the group was dealing with “all the current pressures and year-end [responsibilities].” Moreover, participants not only stayed in the room, Terrance perceived that they fully embraced the process, as evidenced by their willingness to diverge. As Terrance put it, “I felt each individual diverged enough in their thought process to give us some novel ideas, which were really, really fun…. They were on the edge of their novelty, more than I’ve ever seen.”

For Terrance, participants’ engagement in the CPS session increased the chances that the principles of CPS would be applied by them in future, noting, “I think there is going to be a continued trend to say, ‘Everything is on the table here and we have a process that will allow us to do it without prejudice.’” In all, Terrance perceived a positive outcome to be that participants engaged fully in the CPS process and thus would be more likely to use it in future.

**Quality of ideas.**

Like all participants, Terrance acknowledged that the session had affirmed that cost reduction was of primary importance. However, as evident in this quote, he noted that the session had reframed cost reduction so that it now held a more positive connotation:
The good thing [about cost cutting dominating, as an idea] was that it wasn’t just… “We got to cut cost, cut, cut, cut cost.” It was actually more positive because we could be the best low cost provider in the business. And we all believe that could be the secret sauce right now. So it wasn’t all negative cost. It was a very positive balance I thought.

For Terrance, the goal of reducing costs was now framed as an aspirational and positive vision.

**Impact on strategy.**

Terrance expressed confidence that the CPS would have an impact, both in the March 4 strategy session and on the company’s strategy, more generally:

[The CPS session will] help us get a quick and a higher quality start into a significant strategic planning session for the company and our future. I think the information that we got on Friday [in the CPS session] will absolutely terrance through the company and through the leadership and through our strategic plan. So it will have an impact. I’m sure of it.

Terrance felt satisfied with the impact the CPS session would have on the company.
Three General Perceptions

In this section, I illuminate three general perceptions held by participants: that hierarchical power did not impact the session, that all ideas were given their due, and that the discussion that occurred during the CPS was a strategy discussion.

Perception that hierarchical power did not impact the session.

When asked whether they perceived that the organizational hierarchy—and specifically, the CEO’s presence in the room—influenced which ideas were put forward and chosen, all participants claimed that it did not. Mark indicated that, because he was the CEO, it was difficult for him to know the degree to which the hierarchy came into play but that he generally remained open to what people had to say, and consequently, he believed that “guys are pretty open around here.” Cory and Kevin confirmed this view, indicating that, given the good relationships between participants, the hierarchy did not play a role. Terrance also asserted that the organizational hierarchy did not influence the session and then went one step further and explained that, in fact, the CPS process actively worked to counter whatever influence the hierarchy might have had. In his words, it “had everybody come in under a set of rules for how we were going to form these creative solutions and remove the biases and get everybody’s ideas logged.” Terrance also noted that, by choosing to keep the voting process anonymous, participants further ensured that they were not swayed by positional power.

Although Terrance did not perceive that the hierarchy influenced idea generation or decision making, he did see Mark’s presence as being influential in securing participants’ attention. As he put it: “[Not having] the example of Mark’s leadership and Mark’s interest would have signalled, ‘Well, you know, why am I doing this?’ He has a heavy influence…. So Mark’s involvement and him taking it seriously was really helpful.” Terrance thus perceived that
Mark’s presence was essential in securing the active participation of the other participants, because it signalled that the session was worthwhile.

**Perception that all ideas were given their due.**

All participants communicated that they perceived that all ideas were given sufficient time and attention. When asked the question of whether they could identify ideas that merited greater or further attention, all participants responded that an appropriate amount of time had been spent discussing each idea. Kevin expressed this as follows: “Everyone gave [all ideas] their due course, as much as was warranted. I don’t want to spend twenty minutes on something that is a C, when we could be spending twenty minutes on an A idea.”

**Perception that CPS session was a strategy session.**

All participants associated the CPS session with the act of strategic planning, in that they saw engaging in CPS as a form of strategizing. Moreover, although I was not present at the March 4 strategy meeting, I was informed through interviews with Terrance and documents produced at that meeting, which he shared with me, that it was informed by the CPS session. Participants repeatedly commented passingly about the ways in which, during CPS, they were engaged in strategic planning, as if the link between the two were self-evident. For example, in expressing what he appreciated about the session, Cory stated that “strategy on a piece of paper is nothing more than words on a piece of paper, [and] you really got to carry it deep in your soul if you're going to make it a reality,” and went on to suggest that the CPS session had helped the team move toward making their strategy a reality. Similarly, Kevin noted that the CPS session offered a formal and organized way for participants to engage in the informal strategy conversations that they had all the time. Notably, participants did not go out of their way to discuss the ways in which the CPS session resembled a strategy session. Rather,
they took the fact that, during the CPS session, they were engaged in strategizing as a premise that did not require explanation or elaboration.

Like the other participants, Terrance saw the CPS session as having been a strategy session. However, this link was not something he took for granted. In planning the session, he had worked hard to ensure its outcomes would feed into the March 4 strategy session, but he had been uncertain about whether his attempt to address strategy issues, using CPS, would work out. Once the CPS session was done, he spoke of being pleasantly surprised about the degree to which CPS could be used for facilitating strategy discussions and noted that he now found it difficult to separate CPS from strategic planning. He spoke of how he could now see the ways in which conventional strategy tools like, “the SWOT analysis, Porter’s Five Forces, and competitor analysis” could dovetail with the CPS process, and noted, “They’re all from the same well.”

Understanding how CPS could be linked to strategic planning seemed to help Terrance more deeply understand CPS. For example, in planning the session, he decided that participants would not engage in CPS’ clarification stage because he viewed it of being of secondary importance, given that participants were time constrained. However, once he identified engaging in the clarification stage of CPS as analogous to establishing the vision when engaging in strategic planning, he seemed more persuaded of the stage’s import. Consequently, he began to question whether he might include it in the portion of the March 4 session that he would be facilitating.

*Impact on Strategy Session.*

According to Terrance, the CPS session impacted the March 4 meeting, which was attended by Mark, Kevin, Cory, Terrance, and one other person, Christine, who was a strategic
advisor to LJP. For one, Terrance noted multiple positive comments from participants. Moreover, in the portion of the session that he facilitated, Terrance drew on multiple concepts, tools and processes from CPS. He led the group in a round of divergence and convergence. He also explicitly referred to CPS’ clarification stage and led the group in a clarification exercise that had them identify their core values. Notably, Terrance had wanted to do this during the original CPS session, but had run out of time. This activity can therefore be viewed as an extension of the CPS session.

During the March 4 session, participants viewed the results of the CPS session and worked to further refine them and fold them into the company’s strategy. According to Terrance, those ideas that had come out on top during the CPS session had “survived further... decision making to become our new ‘key strategies.’” The outcomes of the CPS session thus were translated directly into LJP’s strategy documents.

**Longer Term Perspectives**

In order to respond to my research question, “How, if at all, are work practices impacted as a result of engaging in a CPS section?” I had hoped to talk to all participants three to six months after the CPS had occurred. However, when I contacted participants in the months that followed the session, only Terrance and Cory responded to my requests for interviews. I interviewed Cory once, in July 2016, and interviewed Terrance three times, in May and June of 2016 and in January of 2017 (see Appendix A). This section summarizes each participant’s responses.

**Cory**

For Cory, the session had multiple impacts. One, he viewed it as partially responsible for catalyzing his promotion of a broader innovation agenda, for example, by writing an editorial
article, which promoted innovation, in the company newsletter. Cory also indicated that the video conferencing software used in the session catalyzed him to use a similar software to run, for the first time, a livestreamed speech, which included a question and answer period, for over 100 employees associated with the Australia office but working remotely from it. Furthermore, Cory perceived the meeting as having been important in solidifying LJP’s strategic direction and asserted that “some of the principles that got discussed there, we certainly have embedded in the organization…[and] referenced in internal documents.” Finally, he attributed the meeting to having contributed to solidifying the importance of LJP becoming a low-cost provider. Although Cory did not see any systemic way that CPS or principles of innovation had, as of yet, been integrated into the company, he saw it as likely that this would happen, indicating that the executive team was starting to talk about innovation in management meetings that, eventually, he believed they would develop a more formal innovation program. However, he stressed that the topic of innovation was new for them and that doing so would “take a little bit of time to get off of the ground.”

That said, Cory noted the limitations inherent in doing an activity once, without follow-up and noted that no formal and structured follow-up had occurred after the CPS session. As he put it, without follow-up, the session “becomes a sort of fun piece of mental gymnastics, which we can all benefit from, from time to time, but it needs structure and some drive thereafter to take it home.”

Terrance

It is necessary to contextualize Terrance’s responses by noting that 2016 was a difficult year for him, professionally, and that many of his perspectives had shifted between December, 2015, when I started the research and January, 2017, when I conducted my final interview with
him. In that time, he had not won any contracts for LJP. Moreover, in the spring of 2016, he had experienced conflict with other members of the executive team, which although they later seemed to have resolved, had been significant enough to lead him, for a period of time, to feel concern that he could lose his job. In our three later interviews, he remained consistent in expressing, as I elaborate below, the view that facilitating the CPS session had been a positive experience for him and had benefited the organization. However, Terrance no longer expressed hopes of pursuing an innovation agenda with members of the executive team. Due to various events in the year in which the research took place, including the CPS session itself, he had realized that, in his words, “there was a difference between what I thought growth should be and what [the other members of the executive team] thought growth should be.” He overtly credited the CPS session with revealing to him the limits he could go in pursuing innovation. Referring to conflict he had experienced, he shared that he had recognized that in “being vocal about stuff,” sometimes he was his own “worst enemy.” In all, Terrance appeared to have decided to refrain from overtly championing innovation—or indeed, change, more generally—with the executive team.

The events of the past year had led Terrance to reflect on something he had raised in previous interviews, which was the role luck played in determining the degree to which an organization would be receptive to innovation efforts. He spoke of how, when he had worked at Cougar, he “got lucky,” because he took a highly innovative approach and was immediately successful. This led him to “dig into” pursuing a path of creativity and innovation. As he explained it, that first win kicked off a process that “begat wins and performance, which begat creativity which begat empowerment.” In contrasting his experience to that at Cougar with that at LJP, Terrance noted that LJP had its own “secret sauce or method or formula that’s been
working here for a long time” and which did not involve radical innovation and which made it “very hard to come out of [a focus] on cost.” From Terrance’s perspective, the reasons that LJP had won or lost certain bids were complex, with many external factors playing in that were beyond the organization’s control. He perceived that LJP had lost certain bids, such as the one in Finland, where he had used several innovative strategies, not necessarily because the innovative strategies were flawed, but due to other, macro-scale factors. Had he been lucky, and a major bid been won, a cycle might have started whereby innovation was celebrated and supported at LJP. For Terrance, these observations about the differences between Cougar and LJP, as well as the role of luck, were puzzling. In speaking of them, he noted, “When things don’t line up as planned, you go back and do a bit of forensic work and ask, ‘How did this become as it is?’” but concluded that, “I don’t know how to fully deconstruct all that. These are just interesting discussion notes.”

None of the above is to say that Terrance had completely given up on fostering innovation or that he did not feel proud and pleased about the CPS session. Terrance credited the learning he had achieved through planning and facilitating the session with leading to a situation whereby he now more frequently drew CPS and CPS principles. He noted that he now often consciously led LJP employees in diverging and converging, both in formal brainstorming sessions and in facilitating meetings, and described how he now perceived that “running a meeting is all about mini diverging and converging.” In his personal life, Terrance had taught CPS to his 22-year old daughter in order to help her in her job of running children’s church music programs. Furthermore, like Cory, Terrance credited the CPS session with having generated ideas that had subsequently been embedded in the organization and its strategy. In short, in the months after the CPS session, Terrance continued to believe in the value of CPS and
innovation, but, as I take up in this dissertation’s discussion, he seemed more careful and strategic in how he promoted them.

Relatedly, in his later interviews, Terrance expressed a different view of what constituted success than he had either before the CPS session or directly after it. Reflecting back on the session after several months had passed, Terrance noted that what he would most want to communicate to others who, like him, hoped to introduce CPS was the following: “Don’t ever think, in going into a CPS session, that results will be immediate. It is messy. Life is messy. Corporate life is messy.” He stressed that, in introducing an initiative like CPS, one should aim for incremental progress. He noted that his CPS session did not impact large-scale change at LJP—as he put it, “the wagon wheel goes back into the normal rut”—but that it nonetheless contributed to progress, such as demonstrating to the executive team the value of approaching problem solving “systemically,” so that ideas weren’t selected without rigorous consideration and of going through a process that led to documentation of what was discussed. Whereas, in earlier interviews, Terrance stressed the importance of achieving creative results, now he seemed to take a longer term view, noting that acceptance of the process was a first step toward fostering innovation.

That Terrance came to define success, in terms of the achievement of what he called “little wins,” was particularly evident in our final interview, when I shared with him my perception—which I discuss in Chapter Six—of how, during the CPS session, a multitude of subtle interactions led to Mark’s preferred idea around cost cutting prevailing. I felt nervous about sharing this analysis with Terrance, because of the potential for him to perceive it as a criticism. According to resources like Creative Leadership (Puccio et al., 2011), a successful CPS session is one that yields creative ideas, defined as those which are novel and appropriate to
their context (Amabile, 1996; Puccio et al., 2011). According to this standard, Terrance’s session, which affirmed the CEO’s pre-existing belief that LJP employees should focus on cost reduction, did not yield novel results and would not be considered a success. Terrance, however, did not appear at all offended by my observation and, furthermore, expressed surprise that I seemed as interested in this analysis as I was. He responded as follows: “I saw that the session affirmed [the CEO’s bias] but I wasn’t as surprised or as intrigued by it as you are, because I just knew it was there. You can’t help it.” He then went on to explain that, “influencing culture is not a flash in the pan. If you’re dealing with an iceberg, you don’t necessarily move an iceberg....[You ask,] ‘Are there little wins we can have, instead of big ones?’”

A final relevant point that emerges from Terrance’s final interviews is the way he emphasized the need for what he called a “CPS-lite”: a version of CPS that easily could be inserted into regular work practices. As he pointed out, a disadvantage of CPS was that using it drew too much attention to the process itself:

Soon as you put a label on it—we're going to have a CPS session—[people think,] Oh my gosh, not another thing, right?....But [if I could say,] we have a defined process here to look at this. And let me tell you how we're going to do this in two minutes. And then you jump right into it? But it really is CPS—or as I like to maybe call it, maybe CPS-lite. He imagined a situation where he could explain CPS to someone “in two minutes” in a way that would allow them to “jump right in.” Practicing CPS-lite would not require people to undergo the onerous task of scheduling a group of people to convene in a set location for a relatively long block of time.

Terrance could not envision in a precise way what CPS-lite might look like, but he imagined it would involve having posters on the wall, which would remind people that “This is a
way we could approach this here.” He also imagined teaching managers a simplified version of the process, which would ask them, upon noticing a problem to, “grab a group of people consisting of if you can at all five or six people,” to gather in a room that “must have a white board,” and then to “refer to the very basic poster or the one page that we have on solving the problems.” Terrance also imagined a kit that employees might use to solve problems: “I mean you could literally have almost like a life jacket or something that you have wrapped up in a plastic but if you tear it open, out of it falls a bunch of Post-it notes and pens and a poster.”

Summary

This chapter reviewed what transpired when participants were focused on CPS. In so doing, it discussed how Terrance prepared for the session, what participants reported thinking and feeling in anticipation of the session, and what transpired during the session. It then discussed participants’ perceptions of the session directly after it had occurred. This chapter ended by discussing the perceptions of the session that were shared by Terrance and Cory, when I interviewed them several months after the CPS session had run.
CHAPTER SIX: RESPONSE TO RESEARCH QUESTIONS

This study was guided by the broad question, “What happens when employees operating within an organizational setting engage in Creative Problem Solving (CPS)?” and the following sub-questions:

- How do existing workplace practices, and employees’ perceptions of them, impact what happens during the CPS session?
- How do employees’ perceptions of and emotions about creativity sessions, more broadly, impact what happens during the CPS session?
- How do employees participating in the CPS session come to define what constitutes a successful creative process and a successful creative outcome?
- What roles do material aspects of learning play, and how do these aspects perpetuate, adapt, or introduce new practices?
- How, if at all, are work practices impacted as a result of engaging in a CPS session?

I crafted these questions at the outset of this study and, for the most part, they have served me well. However, in light of where the research has taken me, I believe it is appropriate to slightly adapt the fourth one so that it addresses not just materiality but temporality as well and I would now ask, “What roles do material and temporal aspects of learning play, and how do these aspects perpetuate, adapt, or introduce new practices?” In adopting Hopwood’s (2014) categories of spaces, bodies, and things, and time, I ended up focusing on temporality to a greater degree than I had originally anticipated and perceive that addressing it together with materiality will enable me to more comprehensively represent my findings.
This chapter begins by addressing each of the above sub-questions, including the adapted fourth question. It then responds to the dissertation’s broad research question. In so doing, this chapter offers an analysis of what was described in Chapters Four and Five. In most of this chapter, I focus on analysis of the data, while making only scant reference to the academic literature. However, in its final section, I address the ways in which the theoretical literature was reflected in the data. This chapter does not discuss my contribution or areas for future research, both of which are addressed in Chapter Seven.

Before beginning, it is important to note that, as discussed in Chapter Three, in conducting a qualitative, interpretive case study, I am “search[ing] for meaning and understanding” (Merriam, 2009, p. 39) and gathering information “with the intent of analyzing, interpreting, or theorizing about the phenomenon” (Merriam, 1998, p. 38). However, this research is not intended to establish causality. Consequently, in responding to the above research questions, I speak of likely—but not definitive—relationships between cause and effect. To offer one example, in responding to the first question, I will discuss how it seems likely that Terrance experienced scheduling difficulties at least in part because, in introducing CPS, he was circumventing existing practices. However, in so doing, I am only pointing to a likelihood.

**Relationship between Existing Practices and Enactment of CPS**

This section offers three responses to the question, “How do existing workplace practices, and employees’ perceptions of them, impact what happens during the CPS session?”

1. It is likely that participants were only moderately interested in the session and that Terrance experienced scheduling difficulties, because, in introducing CPS, Terrance was circumventing existing LJP practices.
2. It is likely that the ways in which power was practiced by participants contributed to a situation where the CPS session worked to affirm the CEO’s preconceived belief around the importance of prioritizing cost reduction.

3. That, at LJP, competence was associated with the demonstration of discipline and the achievement of business results seemed to influence all aspects of the session.

**Introduction of CPS as Running Counter to Existing Practices**

Simply by scheduling the CPS session, Terrance was going against several of participants’ existing practices, as summarized in Table 7. This circumvention of established practices likely contributed to participants being only moderately interested in the session and to Terrance’s logistical and scheduling difficulties.

As demonstrated in Chapter Four, at LJP, creative learning happened all the time and in ad hoc ways. More formal brainstorming sessions were only scheduled reactively, in response to a problem or challenge. More generally, participants tended not to schedule a lot of meetings, which, in Kevin’s words, were “not our style.” In scheduling the CPS session, Terrance had participants come together at a pre-set time and place, for the proactive purpose of engaging in CPS. Although, in planning the session, Terrance did his best to choose a focus that would be of interest to participants, participants were aware that Terrance’s priority was to introduce them to CPS.

The findings in Chapter Four also demonstrated that Terrance was positioned as an outsider vis-à-vis other participants and was not included in many top-level strategic discussions. Indeed, Terrance himself noted in a pre-session interview that Mark and Cory had already begun preparing the strategy that they would present at the March 4 meeting and that the CPS session would slow them down and “and make sure we've got [the input of] myself...[and other] good
guys who understand strategy.” In linking the CPS session to the March 4 strategy session, Terrance was inserting himself into the early stages of a conversation about strategy formation, which he otherwise would have been excluded from. He was thus circumventing the way that participants’ CoPs typically operated.

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<th>Table 7. How CPS session countered existing practices.</th>
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<td><strong>Existing Practices at LJP</strong></td>
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operational oversight; he was the only participant whose job required him to consistently "win work."

**Practices of power and hierarchy**
- Mark’s positional power was put into practice through the way in which he influenced:
  - Hiring and firing
  - Others’ time and focus
  - Whether and how ideas were realized

**Practices of competence**
- Being competent at LJP meant:
  - Improvising to achieve business results
  - Demonstrating discipline
  - Demonstrating the ability to focus on results

- By asking Mark to devote time and focus to a session that was initiated and facilitated by Terrance, and in which Mark was only moderately interested.

Furthermore, in scheduling the CPS session, Terrance was also going against the way in which the hierarchy typically was enacted at LJP. It typically was Mark who determined how others, who were positioned below him in the organizational hierarchy, allocated their time and focus, and he typically attended only those meetings that he viewed as particularly valuable. In interviews, Mark expressed moderate to low levels of interest in CPS and the topic of innovation, more generally. In early interviews, he indicated that he had agreed to participate because Terrance had advocated for it and Mark was “willing to listen to what he’s got to say.” However, being “willing to listen” is different than being actively interested. Moreover, when Mark had agreed to participate, it had been before the company began to experience the full extent of the financial challenges associated with declining oil and gas prices. By the time the CPS session ran at the end of February, 2016, Mark appeared to be attending primarily out of a sense of obligation to meet a pre-existing commitment, and in the pre-CPS session interview, he rated his interest level in the session at a 5 on a scale of 1 to 10. In so doing, he was allocating his time to
something that Terrance perceived as important, which represents a reversal of how power and influence typically was exercised at LJP.

Finally, by scheduling the CPS session, Terrance was implicitly suggesting that learning about creative process would be useful. This suggestion ran counter to the perception, which was held in particular by Mark, that LJP employees were, by their very nature, creative and thus not in need of training in creative process.

In summary, simply by scheduling the CPS session, Terrance was going against the grain of existing practices at LJP.

**Implications.**

Terrance likely ran into two specific barriers that were, at least in part, due to his circumvention of existing practices. One, participants were only moderately interested in attending the session. For example, in rating his degree of interest, Mark allocated only a 5, on a scale of 1 to 10. Two, Terrance experienced logistical challenges in scheduling the session, which likely resulted, at least in part, from participants not being that interested as well as the session not being perceived as a priority within the LJP context. It is easy to imagine that the logistical difficulties would not have occurred had Mark, rather than Terrance, scheduled the meeting or if the session had been scheduled in response to a problem that required immediate resolution.

Notably, however, the scheduling difficulties might also be attributed in part to the fact that participants generally did not schedule many meetings at LJP. There seemed to be a lack of clarity around what, precisely, Terrance needed to do to ensure his colleagues attended the CPS session. Although Terrance believed that, as a result of his email, all participants had booked off time for the session, as Cory pointed out, of something was not in his electronic calendar, he
tended to forget about it. If, as emphasized in Chapter Four, the constituent elements of practices are things, times, spaces, bodies (Hopwood, 2014), LJP did not appear to have a practice in place that would enable Terrance to schedule a meeting: It was unclear what “things” he should use—email messages, evites, or telephone calls—in order to get all needed bodies together, for a two-hour time block.

Finally, it is important to note that, although the CPS session went against the existing practice of engaging in formal creativity sessions only in response to a pressing need, it was precisely this circumvention that, after the session, participants communicated they most appreciated about it. Mark, Kevin, and Cory all expressed that a dominant positive outcome of the session was that it provided them the opportunity to get out of the weeds and converse about issues in a less reactive way.

**CPS’ Affirmation of Existing Practices of Power**

The CPS session can be viewed as an attempt by Terrance to circumvent existing practices of power and to increase his own influence at LJP. As noted in the findings in Chapter Five, in speaking of his motivations for introducing CPS, Terrance compared himself to a parent sneaking vegetables into his kid's a meal and to a preacher, “preaching the gospel.” Terrance’s motives were explicitly political, in that he believed LJP would benefit from more overtly promoting innovation and was hoping the CPS session would advance this agenda. In scheduling and facilitating the session, Terrance thus claimed a degree of power, because he determined what would be discussed when. However, this power was conditional, in that it hinged on Mark sanctioning the session. Moreover, as Terrance repeatedly noted in his post-session interviews, Mark’s approval was extremely important to him and, for Terrance, was an indicator of success.
This section discusses the ways in which the conditional nature of Terrance’s power was evident in its enactment. It then discusses how, although Terrance was, to a degree, successful in influencing the group, existing practices of power—in which Mark, as the CEO, exerted greater influence than anyone else—ultimately prevailed. This section begins by discussing how the various participants contributed to a situation that ultimately affirmed the existing practices of power. It then discusses what the implications were on the CPS session.

**Participants’ enactment of power.**

This section discusses the ways in which the different participants enacted practices of power and hierarchy while participating in the CPS session. It first discusses the role played by Terrance, before moving on to discuss that played by Mark. It ends by discussing the roles of Kevin and Cory.

**Terrance’s enactment of conditional power.**

Terrance repeatedly justified his power by referring to external sources of authority, such as the CPS textbook and the process itself, and positioning himself as a translator or messenger who was simply communicating their guidelines. For example, at the session’s start, Terrance held up the textbook and noted how “ragged up it was,” due to frequent use. His slides contained long quotations from the book, which he read verbatim. Terrance thus presented himself as a representative of an established approach and implicitly linked his own credibility to that of the CPS process. Moreover, Terrance justified his decisions by downplaying his decision-making power and emphasizing the degree to which he was simply adhering to the dictates of CPS. To point to just one example, in explaining to the group that it was time to move on to the next stage of the process, Terrance used the following language: “It's really kind of that time now, that converging time. Time-wise, it's just natural [to begin] what we call hits and highlights.”
Terrance’s use of the pronoun “we” (“what we call hits and highlights”) implicitly positioned him as a member of a group who possessed expertise in CPS. His use of passive voice in stating that “it’s really kind of that time now, that converging time” allowed him to suggest that he was not asking the group to move on but, rather, was simply suggesting that they do what was “natural.” Here, and throughout the session, he justified his decisions by downplaying the degree to which they were his own.

That said, in his enactment of the facilitator role, Terrance in actuality did not strictly adhere to CPS guidelines, but rather improvised according to what appeared to seem right to him, in the moment. In so doing, Terrance can be seen to have affirmed existing practices of power, whereby Mark exerted greater influence than other participants. For example, he tended to praise and affirm Mark’s ideas, but made very few comments about the ideas of others. Sometimes, Terrance’s comments appeared particularly biased in Mark’s favour. For example, when, after the group had finished generating ideas, Terrance asked whether anyone noticed any prevalent themes, Mark responded that he noticed an anti-aircraft craft theme and, asked, “Do we really want to own aircraft?” In moving the group forward, Terrance treated this perception, as if it were true and self-evident, stating, “Obviously, we want to get rid of our aircraft. We do not want to own aircraft. That’s a big one, right?” As the facilitator, Terrance thus deferred to Mark’s position, rather than asking questions or engaging the group in discussion. This deference is particularly notable given that my own analysis of the ideas does not suggest that an anti-aircraft theme indeed prevailed. Terrance also showed deference to Mark’s hierarchical position in multiple small ways, such as when he made clear that, due to Mark’s dislike of onions, the Subway sandwiches were onion-free, and jokingly commented, “If I got onions on any of these sandwiches, I’m fired.” What is significant here is that although, in introducing CPS to LJP,
Terrance was going against the grain of existing practices by exerting greater influence than he normally would, in actually running the CPS session, he contributed to reinforcing existing power structures, by amplifying ideas that, because they were held by Mark, already were likely to be well received by participants.

In short, Terrance’s introduction of CPS to the other participants can be viewed as a way for Terrance to exert power, where power is understood as the ability “to act and have effect” and involves “influencing the actions of others” (Watson, 2013, p. 13), since Terrance’s goal was to further foster innovation at LJP. However, given that Terrance was operating in a context in which existing practices tended to exclude him from power, he appeared to justify his influence in the CPS session by emphasizing his role as a representative of the CPS process. Moreover, in enacting the role of facilitator, Terrance tended to affirm Mark’s ideas.

*Mark’s enactment of power.*

Mark’s power was evident not only through Terrance’s deferential treatment of him, but also through his own behaviour. For one, Mark talked more than other participants, besides Terrance, who was facilitating, and when Terrance asked a question, it was almost always Mark who responded first. Also, Mark repeatedly took on a facilitative role. He frequently demonstrated awareness of the process itself and advised others, including Terrance, who was the facilitator, how to engage with it. Examples of this occurred when Mark advised others not to look at the screen when Grant was typing and when Mark resisted Terrance’s suggestion that he clarify an idea, by explaining that, in order to maintain his creativity, he needed to leave it open-ended.
Cory and Kevin’s passive support for existing practices.

Up until now, I have discussed the way in which power was enacted by Terrance and Mark. Indeed, it was Terrance and Mark who were most active in asserting influence, which is to say that they spoke far more than either Kevin or Cory and more actively advocated for their perspectives. However, it important to note that Kevin and Cory exerted influence in their passivity, since they enabled the way in which the power dynamic played out to proceed unquestioned.

Cory’s more passive presence may largely have been due to him participating virtually and therefore being unable to engage to the same degree as those who were in the room. However, Kevin was different. Kevin raised ideas which, in post-session interviews, the other participants acknowledged as being risky and thought-provoking. These ideas generated discussions about new possible directions. That said, Kevin also was quick to back away and insist that the group need not pursue the ideas that he raised. On several occasions, he initiated discussion around the potential elimination of ideas that he had generated or voted on. When, in the post-CPS interview, I shared with Kevin my perception that he did not seem to advocate for his own ideas, he responded that he liked to throw out provocative ideas in order to generate discussion and “see what sticks,” but that he was not tied to any given outcome. This response was consistent with what he expressed in his pre-session interview, when he indicated that he would deem the session successful if “we have a good discussion about it and not necessarily come out with a number of specific outcomes.”

What is relevant to this analysis is that, for different reasons, both Kevin and Cory behaved more passively than Terrance and Mark and thus enabled Terrance and Mark to determine how power was enacted in the session.
Implications.

In discussing the implications of the enactment of power within the CPS session, it is helpful to begin by considering that, ultimately, the session affirmed that the best way to respond to the challenge of how LJP might survive and thrive, despite the current economic crisis, would be to reduce capital expenditures and costs. After participants generated ideas, categorized them into themes, and voted on them, the category titled “Low Cap-Ex/Cost Reduction” received more votes than any other. Notably, it was primarily Mark who championed this idea. Five out of the six ideas in the “Low Cap-Ex/Cost Reduction” category had been generated by Mark. Moreover, from the start of this research project, Mark had made clear that, when it came to innovation, he was most interested in ideas that were linked to cost reduction. Ultimately, the session thus confirmed and gave further weight to the CEO’s pre-existing viewpoint. In summary, I argue that Mark’s viewpoint likely dominated due, at least in part, to the way in which power was enacted in the session—even though participants themselves did not perceive that hierarchical power differences impacted the session.

According to participants, they felt comfortable—both during the CPS session and more generally—speaking freely and voicing dissenting views and the organizational hierarchy thus did not impact the CPS session. Moreover, as expressed by Terrance, the structured CPS process and participants’ choosing to engage in anonymous voting mitigated and neutralized whatever hierarchical influence may have been at play. Indeed, my own observations would confirm that, during the CPS session, participants appeared comfortable speaking their minds and did not appear to feel in any way coerced to support Mark’s views. In fact, I observed Mark demonstrate interest in others’ ideas—and most notably those of Kevin—and actively initiate discussions to explore them.
That said, as described above, I also saw practices of power and influence exerting themselves in subtle but real ways and I nonetheless believe that Mark’s ideas dominated at least in part because of the practices of power that were at play. Here, it is helpful to point briefly to Nicolini’s (2012) assertion that one goal of a PT study is to illuminate the labour required to maintain the seemingly normal status quo. As discussed in Chapter Two, according to Nicolini, “The contribution of a practice approach is to uncover that behind all the apparently durable features of our world there is always the work and effort of someone” (Nicolini, 2012, p. 3). It is therefore in line with a PT perspective to assert that, participants simply viewing the environment as “normal” does not mean power dynamics were not in play.

Above, I discussed the ways in which all participants participated in enacting existing practices of power and affirming Mark’s viewpoint. Now, I add some points that are linked explicitly to the fact that cost reduction ended up being the session’s winning idea. Specifically, my goal is to demonstrate how a series of small-scale and nuanced occurrences likely led to the idea cost reduction dominating.

For one, it seems notable that, when Terrance asked for input on the session’s question of focus, “How might LJP survive and thrive, in spite of the current economic challenges?” Mark, who was the first and only person to respond, stated that although thriving “should always be part of your objective,” it was also “aspirational.” As he put it, the problem statement was “aspirational for sure on the thrive side, but survival for sure.” From the start of the session, Mark thus set the tone by signalling that the situation was such that LJP needed to focus on surviving, as opposed to thriving. This could be seen as supporting the need to focus on sober strategies like cost-reduction, as opposed to more ambitious ones.
It also seems noteworthy that, although, in post-session interviews, all participants expressed that all ideas had been given their fair share of attention, the ideas that pointed toward significant expenditure of resources, in fact, were not discussed. Both Kevin and Cory raised the idea of investing in drone technology, with Kevin specifying that LJP should “Invest 10 million in drone technology.” These ideas, both which pointed toward radical innovation—since drones would be a disruptive technology within the helicopter industry—were not discussed, even though they received a total of four votes. Significantly, in the first phase of the research, Mark had made clear that he was not interested in pursuing drone technology at this point in time, claiming that “it’s too early.” Furthermore, the idea that LJP pursue ways to technologically innovate helicopters was not discussed, even though it was raised twice—once by Cory and once by Terrance. Notably, innovating technically not only would require an expenditure of resources; it also went against the premise that LJP should be divesting itself of aircraft, since to innovate technically meant making an investment in helicopters. Ideas that overtly countered Mark’s pre-existing views thus were not discussed.

It also seems relevant that Terrance indicated that, while he was facilitating, he was aware of Mark’s preferences. In his post-CPS interview, he remarked on how “the president’s eyes lit up when everybody started referring to cost.” Given the degree to which Terrance valued Mark’s approval, it seems likely there is a link between him, as the facilitator, noticing what Mark approved of and a reluctance—even if manifested subtly—to steer the group toward ideas that might not meet with his approval. To refer back to Nicolini’s (2012) point that “behind all the apparently durable features of our world there is always the work and effort of someone” (p. 3), the open and unrestricted way in which participants perceived that they engaged in dialogue seems likely to have been premised on a multitude of invisible and unconscious efforts to
support Mark’s viewpoint. Again, this is not to say that Mark behaved in a coercive way. Nor is this to say that participants would not have spoken up had they actively disagreed with this viewpoint. My point is that, without any apparent conflict or coercion, some ideas simply were not addressed, whereas others were perceived as obvious candidates for discussion.

Terrance’s goal of promoting acceptance of CPS and, more broadly, of the value of innovation likely also played a role in bolstering the dominance of cost reduction as the winning idea. Analysis of Terrance’s pre-session interviews suggests that he held two conflicting goals for the session. On one hand, Terrance wanted to promote divergent thinking and push participants to be more creative than they typically were. On the other hand, Terrance sought the approval of Mark, who was skeptical of more radical forms of creativity. Despite his desire to promote creativity, Terrance had a vested interest in allowing the idea of cost reduction to dominate, because doing so bolstered CPS’ credibility in Mark’s eyes. This was affirmed in Terrance’s post-session interview when he stated how pleased he was that the session demonstrated to Mark how innovation could be about “really raising the level of cost and cost control.” In Terrance’s words “We were not out making soft cushy children's toys or anything. We got some real meat, right? So that was good.” For Terrance, the session’s cost-based outcome supported his goal of persuading Mark that CPS and the pursuit of innovation held legitimacy. Here, it is notable that Terrance achieved a measure of success in promoting innovation at LJP. For example, Cory pointed to the CPS session as having influenced him in promoting innovation and, in the March 4 strategy session, innovation was identified as a core value—sometime which, given that it had not been prioritized in the past, likely would not have happened had Terrance not introduced CPS. As I will discuss later, it is possible to view
Terrance as having accepted a trade-off: in order to further a general innovation agenda at LJP, he accepted that it would need be defined according to Mark’s terms.

In summary, although participants did not perceive that hierarchical power was at play during the session, it is notable that ideas that Mark would not have favoured simply were not discussed. Moreover, because Terrance wanted Mark to perceive CPS as credible, Terrance had an interest in demonstrating how the process would lead to an outcome that Mark supported.

**Necessity of Demonstrating Discipline and Focusing on Results**

It is impossible to overstate the degree to which Terrance’s planning of the session was impacted by the ways in which, at LJP, competence was associated with demonstrating discipline and focusing on results. Terrance’s planning revolved around the question of how to ensure the session would “be worth the time of…four key managers.” He can thus be understood to have been subscribing to a logic that dictated that time must be used in a disciplined, efficient, and results-oriented way. Throughout his planning, Terrance demonstrated awareness that, as he put it, “the CEO and president is an economics major and an accountant” and that, consequently, “it’s inevitable that the tone of the company is set that way.” Terrance actively sought out stories and statistics that he could share that would argue for the financial value of creativity. Indeed, early interviews with Terrance suggested that he chose CPS precisely because he viewed it as a means to promote creativity in a disciplined way, claiming that he was drawn to it because of its ability to guide creativity in a way that was “efficient” and “concise and condensed.”

Moreover, in choosing the stage of CPS, he decided to forego the clarification stage, which is about setting a vision and properly framing the challenge, and move straight to transformation, which is about generating ideas, because, in his words, participants were operating in the “real world” and were “time constrained.” He made this choice even while
acknowledging that focusing on clarification would be beneficial, and in fact, my own analysis of how Terrance might have applied the CPS guidelines, as explained in Creative Leadership (Puccio et al., 2011), suggests that doing so would have been aligned with what was outlined in the textbook. Again, this choice points to Terrance’s desire to adapt to a context where results-orientation dominated, since clarifying could potentially be viewed as spending time on discussion that did not lead to business results.

Terrance treated the need to prove that CPS would efficiently yield business results as an unquestionable truth, which, indeed, in the context of LJP, in many ways it was. However, it is notable that, in the pre-session interviews, Kevin, unlike Mark and Cory, did not emphasize the hope that the session yield tangible results, but rather expressed that simply having a good conversation would be a desirable outcome. It is interesting to consider Kevin’s perspective, as a counterpoint, since doing so illuminates the degree to which the compulsion to plan a disciplined and results-oriented session dominated Terrance’s planning process. Had the dominant attitude been Kevin’s—had it been socially acceptable for Terrance simply to create a space for participants to have a good discussion—his planning process would have been entirely different (and likely far less stressful).

In terms of discipline, the session also served to highlight the personal differences between Terrance and the rest of the group. Much of Terrance’s behaviour, which involved joke-telling, story-telling, and expressions of emotion, did not serve a clear, results-oriented goal. That Terrance’s actions were driven not only by logic but also by emotion was evident when he debated whether to tell the Pacific Power and Light story but finally acknowledged that he “couldn’t resist.” Moreover, he created a PowerPoint slide that illustrated the story by showing a picture of bear on a pole, and thus went above and beyond what was needed to communicate the
story. In terms of personal demeanour, the session thus highlighted the differences between Terrance and his colleagues.

**Implications.**

That throughout the planning and facilitation of the CPS session, Terrance was working to meet LJP’s standards of competence suggests that the context in which a CPS session occurs cannot be extricated from the session itself. As I will address in Chapter Seven, this finding suggests that there is no such thing as a “creative process” or “creative product” that exists outside of politics.

**Summary**

In this section, I addressed my first research question, “How do existing workplace practices, and employees’ perceptions of them, impact what happens during the CPS session?” I began by discussing how simply by introducing CPS to LJP, Terrance was going against the grain of various existing practices, and suggested that this likely contributed to the difficulties Terrance had in scheduling the session and to other participants expressing only moderate interest in attending. I then went on to discuss the ways in which existing practices of power impacted the session, and specifically, it argued that, although in scheduling the session, Terrance was asserting influence, the ways in which Mark typically exerted power and influence nonetheless were reinforced through the session. Finally, I discussed how, in planning and facilitating the session, Terrance worked to ensure it would be viewed as a disciplined and results-oriented activity and how, the session further highlighted the ways in which Terrance differed from other participants in behaving in a way that was more effusive and emotionally driven.

**Relationships between Preconceptions and Enactment of CPS**
In response to the second research question, “How do employees’ perceptions of and emotions about creativity sessions, more broadly, impact what happens during the CPS session?” this section discusses how participants’ favourable views of creativity sessions likely contributed to Mark, Kevin, and Cory engaging fully and respectfully in the session, despite having indicated in their pre-session interviews that they were only moderately interested in attending.

Even though participants were somewhat reluctant to attend the session, once in the room, they treated the activity as valuable. For example, Mark indicated that Kevin should delay his appointment, so that the CPS session could run overtime. In his post-session interview, Terrance noted that “nobody went to the washroom, for goodness sake,” even though the group was dealing with “all the current pressures and year-end [responsibilities].” Participants’ engagement likely was at least in part due to the intrinsic respect that, in interviews, they expressed they possessed for processes like these. For example, Mark overtly stated that his impression of brainstorming was “positive” and Cory noted that getting people from differently functional areas together to generate ideas was helpful.

**How Success is Defined**

I address the third question, “How do employees participating in the CPS session come to define what constitutes a successful creative process and a successful creative outcome?” by discussing how, at LJP, the success of the CPS session did not hinge on the achievement of creative outcomes. Rather, participants defined success according to the degree to which the session achieved organizational outcomes and advanced their personal goals, and were relatively unconcerned about whether creative outcomes had been achieved. Moreover, in considering the success of the session, participants did not simply consider what happened on the day of the CPS session. Rather, they considered a longer timeline.
There were a multitude of reasons that participants deemed the CPS session to have been a successful process. For Terrance, success meant having his colleagues accept the process and its results, thus increasing the likelihood of them supporting him in systematizing innovation within the organization. For Mark, success was linked to the degree to which the session affirmed and helped further solidify his view that LJP employees should focus on cost reduction and low-cost investments. Other reasons cited by participants for viewing the CPS session as having been a successful included that it allowed them to get out of the weeds and discuss strategic issues and that it introduced them to new, useful technologies, which they could foresee using for other purposes. What is notable here is that participants generally did not link the success of the session with the generation of new, creative ideas. In fact, it is probable that to certain participants—most notably, Mark—the CPS process would have been deemed less successful had it yielded creative results. This is particularly significant, given that, as discussed in this dissertation’s next chapter, CPS was created expressly for the purpose of guiding problem solvers in achieving creative results. According to my findings, a successful creative process is one that meets a multitude of organizational goals, but that might not yield creative results.

Notably, participants also assessed the success of the CPS session not by considering simply what happened on the day it ran but by considering longer term outcomes. For example, Terrance pointed to the way the session was simply a stepping stone which could enable the group to “become a little more radical…next time.” In a post-session interview, Cory suggested that the success a CPS session hinged on the degree to which it was followed up on, noting that “if we're going to use a process like that…it needs to be followed up with some further structured meetings.” Kevin, too, referenced a longer timeline when speaking about the session, stating that the outcomes that were achieved were simply the priorities for now and that “maybe next time
we do it and we find out something different.” Although Terrance, Cory, and Kevin were making
different points, what is important for the purposes of answering this research question is that
they were all suggesting that assessing the value of a CPS session did not happen directly after
the session. Rather, the session must be viewed as an organizational event entangled with and
linked to what occurred after it, along a longer timeline. This supports the notion that successful
creativity is subjectively defined, with the meaning of success changing over time.

**Role of Material and Temporal Aspects of Learning**

In this section I address the research question, “What roles do material and temporal
aspects of learning play, and how do these aspects perpetuate, adapt, or introduce new
practices?” To begin, it is important to note that the material and temporal aspects of learning
permeated all aspects of the CPS planning and enactment process. To name one example of the
impacts of materiality, Terrance’s use of technologies like Blue Jeans, a video conferencing
software, and Linoit, an online bulletin board, meant that a greater number of people attended the
session, since the use of technology led Terrance to invite Grant to assist; that participants
spontaneously innovated new ways to communicate about the ideas, identifying them by stickie
note colour and number; and that, unlike in a conventional CPS session where the artefacts are
often flipchart papers and stickie notes, the results of the session were recorded virtually and thus
were easily accessible for later reference. These adaptations undoubtedly, in turn, impacted the
way people interacted and perhaps even what they said. For example, Cory likely was quieter
due to his virtual participation. Furthermore, it is likely that, due to Grant’s presence, participants
exhibited greater respect for the process, since as Terrance pointed out before the session, the
need to act as positive role models for a junior employee would likely make them a “little more
attentive.” Another example of the way in which materiality influenced the session lay in how, as
described above, Terrance used the textbook—literally holding it up—in order to claim authority. This is all to say that it would have been possible to focus an entire dissertation on the roles of materiality and temporality, and consequently, I am identifying only three points as key for this study’s purposes.

The following aspects of materiality and temporality are particularly important to this study. One is the issue, which I have already discussed at length, of the CPS session itself, which asked participants to gather in a single place for a scheduled and relatively long period of time, being incongruent with the material ways in which creative learning typically was practiced at LJP. The second, which is addressed in this section, is that, in describing how CPS and the creative process might be adopted in future, participants imagined a version that would be adapted to LJP’s material and temporal context. Third, which is also discussed below, is that what constituted a successful outcome changed with time and that short-term success must be distinguished from long-term success.

**Material and Temporal Visions of Future Adoptions**

In discussing CPS-lite, Terrance spoke primarily of the element of time, noting that, although he was an advocate of CPS, he was concerned about how, within an organizational context in which people were busy, it was time-consuming to implement. He therefore spoke of wishing for a version of CPS that he could explain to someone “in two minutes” in a way that would allow them to “jump right in.” Terrance envisioned CPS-lite in material terms, as well, imagining, for example, that it might involve “something that you have wrapped up in a plastic but if you tear it open, out of it falls a bunch of Post-it notes and pens and a poster.”

Terrance was not the only participant to envision in temporal and material terms how the creative process might be integrated into the rhythm of work at LJP. In speaking about how he
hoped to bolster innovation, Cory envisioned doing so by identifying it as a process that would be tracked by the Integrated Management System (IMS) software, which tracked all aspects of work in the Australia office. In his words, “If we are going to…embed innovation into our company and into our culture…the way we need to do that is through our IMS…[Right now, innovation] isn't one of our key 33 processes that we manage.” As with Terrance, what was important to Cory was figuring out a way for innovation to “fit” into the existing rhythms and material elements of the context.

Notably, in imagining how innovation might be integrated into existing practices, Cory and Terrance drew links between existing safety practices and potential innovation practices. During the course of their careers, both Cory and Terrance had experienced a shift in what they referred to as the culture of their workplaces, in order to accommodate tightening safety standards across the aviation industry, and both described this shift in material terms. For instance, the IMS, which had been introduced in response to these tightening standards, had changed the way in which employees operated by requiring them to regularly interact with the software and thus integrate consideration of safety practices into their daily work. Similarly, in describing CPS-lite, Terrance referenced the shift that occurred around safety awareness, describing how it had changed material practices and expressing the hope that, in the future, innovation practices could be similarly normalized. Terrance exemplified this perspective when he described a time when, entering a hangar at night, he decided to adhere to the then-relatively new policy to wear protective eyewear, even though there was no activity in the hangar and thus no risk of him damaging his eyes:

Now, I know there's zero risk of damage, but I went back and put the safety glasses on, because of my own soul… I knew I wasn't going to be hurt, but I had to stay in that
culture… So that’s what I'd like from an innovation point of view. That it's just part of our company.

What is significant here—and which I will discuss further in Chapter Seven—is that both Cory and Terrance referenced a previous shift in organizational practices, the shift toward adopting new safety standards, in order to envision how they might catalyze an analogous shift focused on the fostering of innovation. Significant, too, is that they described both the shift in the way safety standards were in enacted and the potential shift toward further embrasure of innovation in material terms.

In all, in answer to the research question, my study suggests that temporality and materiality was inseparable from the learning processes in which participants engaged, and that, furthermore, they were inseparable from the ways in which participants imagined altering practices in the future.

**Short-term and Long-term Successes**

What constituted a successful outcome of the CPS session was unclear, in large part because what seemed successful or unsuccessful in the short term could prove not be so in the long term. Of relevance here is Terrance’s statement that, although the CPS session had affirmed the CEO’s bias, it could nonetheless be considered a “little win” because “influencing culture is not a flash in the pan” and “if you’re dealing with an iceberg, you don’t necessarily move an iceberg.” Viewed from one angle, Terrance’s perspective could be seen as accurate. Had the CPS session yielded creative results, CPS might not have come to be seen as credible by Mark. Consequently, a host of other outcomes, which were aligned with what Terrance hoped to achieve, may not have been realized. Some notable positive outcomes were as follows:
Participants reported feeling positively about the process and Terrance was able to use CPS tools in the March 4 strategic planning meeting. That Terrance garnered acceptance for the CPS process may have set the groundwork so that, even if the first CPS session did not yield creative results, there was now openness to a process that might do so in future.

He facilitated a session that yielded useful outcomes to those who attended. Participants credited the session with helping them focus on their strategic direction, feel greater confidence in its rightness, and move it toward actualization. The ideas were picked up on in the March 4 strategy session and integrated into the organization’s strategy.

In introducing CPS, he seemed to have advanced the goal of fostering the systematization of innovation at LJP. In the March 4 strategy session, participants identified innovation as a core value, and Cory credited the introduction of CPS for catalyzing him to allocate greater focus to innovation.

However, viewed from another angle, that the CPS session did not yield creative results in the short term, can be understood as a failure. It is reasonable to ask the question of whether an opportunity was missed for participants to open up to new directions.

The key point here is that it is difficult to assess what constitutes a successful outcome, and that standards of success may differ when considering the difference between short- and long-term outcomes.

**Impacts of CPS**

This section addresses the question, “How, if at all, are work practices impacted as a result of engaging in a CPS session?”
Both Terrance and Cory indicated that the CPS session helped solidify commitment to the pursuit of cost-reduction. On the ground, this meant that cost reduction was now highlighted in strategic documents and emphasis on it presumably impacted the ways in which employees worked. Given that an appetite for cost reduction existed before the CPS session took place, both indicated that they were unable to determine the degree to which cost reduction strategies would have been pursued had the CPS session not occurred, but both perceived that the session nonetheless did play a part in moving this initiative beyond the point of, as Cory put it, just being “words on a piece of paper.”

The session directly impacted the way in which Cory communicated to employees, since as a result of participating in it, he recognized the utility of video conferencing software and began holding virtual town hall meetings with upward of a hundred employees at a time. Terrance’s personal work practices seem to have shifted, as a result of him having facilitated the session. He indicated that he more frequently drew on the principles of CPS in everyday ways. Moreover, he likely impacted his daughter’s work practices by introducing her to CPS. Finally, the CPS session seemed to have had an influence on changing the frequency and way in which innovation was discussed at LJP. For example, Cory credited the session with catalyzing him to write a newsletter editorial promoting innovation and with catalyzing an increased number of conversations about innovation among the executive team. What is significant here is that these impacts, which participants viewed as positives, represent instances of incidental—and not intended—learning.

All of the above suggests that the CPS session did impact work practices, but not in ways that have been discussed in the CPS literature (Puccio et al., 2006), which has emphasized CPS’s
capacity to efficiently yield creative results. None of the impacts discussed above point to the CPS session having changed work practices through generating creative ideas.
Response to Primary Research Question

In light of everything presented in this chapter, a response to the primary research question “What happens when employees operating within an organizational setting engage in CPS?” can be summarized as follows:

1. Terrance faced multiple struggles in introducing CPS, due to the incongruence between CPS and existing organizational practices.
2. Participants adapted and innovated the process. For example, in his planning, Terrance adapted the process to accommodate Cory’s virtual participation and, in an impromptu way while participating in CPS, all participants innovated a way to cluster virtual stickie notes.
3. Participants used CPS to achieve their own ends. For example, Terrance introduced CPS to advance a larger innovation agenda, and Mark used the CPS session to advance his goal of emphasizing the need for cost reduction.
4. Employees assessed the success of the CPS session based on criteria other than whether it achieved creative outcomes. Particularly notable is that fact that short-term outcomes, like achieving creative results from a session, could potentially be at odds with long-term outcomes, like achieving acceptance for creativity processes.
5. Political and contextual factors influenced what was discussed and what emerged as a successful solution. For example, ideas around technological innovation or anything else that required upfront investment were not discussed.
6. Incidental learning emerged, which participants valued more than the achievement of creative results. For example, participants valued the way in which CPS enabled the solidification of existing ideas. Also, that the session introduced participants to new
video conferencing technologies proved to be significant, since it led to Cory using this technology to communicate in new ways with geographically dispersed employees.

Linking Academic Theory and Findings

In this section, I discuss the points made in my literature review, which proved to be particularly accurate in predicting what I would find, once I began empirical research. My goal is to demonstrate the notable overlaps between theory and practice. In this section, I do not make claims to build on or contribute to the academic literature. My contribution is addressed in Chapter Seven.

In conducting my research, I was particularly struck by how the tenets of both CoP theories and PT—as well as the tensions between them—played out on the ground. For instance, in describing the characteristics of the learning process, as defined by CoP theory, I pointed to the suggestion that what identifies knowledge within CoPs is “a demonstrated ability to ‘read’ the local context and act in ways that are recognized and valued by other members of the immediate community of practice” (Contu & Wilmott, 2003, p. 285). I watched this relationship between CoPs and knowledge play out, when I observed how, in planning the CPS session, Terrance understood the necessity for the session to efficiently produce business results as an unquestionable truth. Within the CoP of LJP leaders, knowledge that fell outside of that would not count as knowledge. My Chapter Three review of CoP theory also pointed to the way in which reification—the transformation of what is abstract into concrete and material form—impacts learning, and specifically how practice always yields physical traces, which in turn, shape future practices. In Wenger’s (1998) words, “[We give] form to our experience by producing objects that congeal this experience into ‘thingness’. In so doing we create points of
focus around which the negotiation of meaning becomes organized” (p. 59). The process of reification played out on the ground at LJP, for instance, when the Linoit board notes from the CPS session were pulled up to guide the following week, to inform conversation during the March 4 strategy conversation. Indeed, in the eyes of participants, a primary benefit of the CPS session appeared to be that it led to the reification of ideas around cost reduction. As Mark put it, the session “solidified” the idea of cost reduction and “was worth it for that reason alone.” In short, multiple ideas from CoP theory manifested in practice.

That said, I also could see the limitations of CoP theory. In Chapter Two, I reviewed the work of thinkers who have argued that CoP theory’s emphasis on community is not appropriate for our contemporary era, which is characterized by flux and unstable work conditions, rather than stability, and in which dispersed work teams hinder community building (Contu & Wilmott, 2003; Huzzard, 2004; Nicolini, 2012). These critiques resonated as I engaged in my study. Even in the relatively short amount of time that I was engaged in primary data generation, LJP acquired new companies, dispensed of others, brought new people on board and laid others off. By the end of my study, one of the executives Mark had spoken to on the phone when I was shadowing him was no longer in his position, nor was Nicole, the employee who had participated in the phone meeting with Cory and Terrance. Terrance had perceived himself as at risk of losing his job. Moreover, Kevin had only been in his position as CFO for three months before I started the research. This is all to say that flux indeed seemed to be the norm and while, in some ways, participants behaved as if they were part of a community and adopted existing practices this behaviour co-existed with the reality that individuals could not assume they would enjoy ongoing community membership.
The economic crisis catalyzed further flux. For instance, the openness that Mark demonstrated at the start of the study to exploring the topics of creativity and innovation in an open-ended and non-results oriented way—as evidenced by his willingness to participate in my research—had shifted by the project’s end. Due to change financial circumstances, Mark’s interest in innovation narrowed to a focus on incremental innovation around cost reduction. Consequently, the existing attitudes and practices at the time of the CPS session differed from those at the outset of the study, and stable community practices could not be assumed.

Finally, participants’ geographic separation from the teams of which they were a part meant that “communities” were further fragmented. Practices in the Calgary office differed from those in the Australia and Montreal offices, and participants, all of whom worked regularly with counterparts in at least two out of the three offices, adapted. This was particularly evident when Kevin met with his Montreal team and assumed a casual and jocular style that was not consistent with how people generally interacted in Calgary. Furthermore, all participants traveled a significant percentage of their time. Consequently, for me, as a researcher, there was a constant tension. On one hand, the CoP lens had utility. I was able to identify, for instance, the way those within the walls of the executive wing typically engaged in creative learning—at least during the time I was on site. On the other hand, I was also aware of the way each of these participants participated in the practices of multiple, geographically distant sites, as well. In all, both the CoP literature and the critiques of it proved relevant to what I experienced on the ground.

Also of particular relevance were the theories reviewed in Chapter Two on the material aspects of learning. In Chapter Two, I discussed how PT theorists focus on the way in which the material and the social are mutually constitutive and inextricably fused and how, by focusing on materiality, researchers can illuminate workings of power and politics that might otherwise
remain invisible (Nicolini, 2012). Although I thought I understood these ideas when I wrote my literature review, it was only through conducting the empirical research that I truly assimilated them. For example, through examining the way in which, in the CPS session, Terrance repeatedly referenced the textbook, his lack of power—and consequent need to associate himself with the textbook—I could point, in concrete terms, to what otherwise seemed difficult to articulate. Similarly, focusing on the placement and décor of participants’ offices illuminated the power relationships between them.

**Summary**

This chapter responded to the study’s sub-questions and identified six points in response to the primary research question “What happens when employees operating within an organizational setting engage in CPS?” It concluded by pointing to the ways in which the literature reviewed in Chapter Two proved particularly prescient.
In this chapter, I discuss this study’s contribution to professional practice and academic research and point to directions for future research. In so doing, I have tried to address the needs of two different audiences: practitioners and academics. In writing about my contribution to professional practice, I have gone beyond my exploratory research question, “What happens when employees operating within an organizational setting engage in CPS?” and asked, “So what? How can what I’ve learnt from my participants’ experiences at LJP benefit other practitioners who, like Terrance, want to use CPS to foster organizational creativity and innovation?” In grappling with what would count as a meaningful contribution, I have found it helpful to ground myself by thinking about the working-manager students in my innovation class, and by continually asking myself, “What might they benefit from knowing?”

Through drawing on Shove et al.'s (2012) theory of practices, which was introduced in Chapter Three—as well as relevant literature from the disciplines of Organizational Creativity (OC) and Organization and Management Studies (OMS)—I come to the following suggestions, which I direct both at practitioners themselves and at those CPS instructors, textbook authors, and researchers who provide these practitioners with guidance:

- CPS practitioner resources should do more to guide practitioners in navigating the political contexts of their organizations.
- In introducing CPS, practitioners should frame it so that it is not simply associated with the development of creative ideas but rather is linked to outcomes and practices that are more meaningful to those within the organization.
- CPS researchers should consider ways to adapt CPS so that it is more congruent with the material and temporal qualities of existing organizational practices.
After I have finished explaining my contribution to professional practice, I discuss my contribution to academic knowledge, focusing both on the ways my study builds on existing CPS literature and on the ways, through applying a practice theory (PT) based workplace learning (WPL) lens to study CPS, it represents a break from what has come before and offers a new way of conceptualizing CPS. I then go on to discuss how this study advances the empirical application of PT and provides empirical substantiation for theoretical scholarly discussions around the strengths and limitations of community of practice (CoP) theories.

I end this chapter by discussing directions for future research and reflecting on the learning I have achieved through this dissertation process.

**Contribution to Professional Practice**

I state above that I wrote this chapter in response to asking myself questions like, “How can what I’ve learnt from my participants’ experiences at LJP benefit other practitioners?” In some ways, asking questions of these types has put me in a funny position. My research simply explored what happened, without assuming there was a “right way” to practice CPS or imposing a metric to determine the degree to which Terrance’s introduction of it had been successful. Indeed, as discussed later in this chapter when I address my contribution to CPS research, that I did not assume there is a right way to practice CPS or adopt predetermined measures of success are ways that my study differs from others. However, if my research is to benefit practitioners, it is helpful to consider where Terrance can be understood to have succeeded and where he might be understood to have struggled, so that others can learn from his experiences. I therefore begin this section by pulling together threads from Chapter Six, in order to discuss Terrance’s successes and struggles. I then turn toward the OC and Organization and Management Studies (OMS) literature to suggest that much of what Terrance experienced would also be experienced
by others. Next, I draw on Shove et al.’s (2012) theory of practice to recommend how proponents of CPS might mitigate resistance to its introduction, and how those who support these proponents, such as textbooks authors, instructors, and CPS researchers, might help them do so.

Before beginning, it is important to discuss how, in writing this section, I found myself turning to new areas of literature from Organizational and Management Studies (OMS), in order to contextualize my findings. For example, Meyerson’s (2003) research on how employees impact change within their organizations helped me understand and contextualize Terrance’s political maneuvering in working to gain acceptance for CPS and to hone my suggestions for what others who find themselves in a similar situation might do. Similarly, the work of strategy researchers, such as Healey et al. (2015) was useful in unpacking what had occurred when Terrance unexpectedly ended up linking the CPS session to the March 4 strategy meeting, as well as in guiding me in thinking through what linking CPS to strategy might mean to other proponents of CPS. Other new literature that falls outside of the area of OC includes the work of Mintzberg (1971; 2011), Tengblad (2017), and Yukl (1989), who were helpful in enabling me to understand that many of the ad hoc ways participants from LJP approached problem solving and creative learning are typical of those in executive positions.

The decision to introduce new literature so late in this dissertation was not one I made lightly. In making it, I recognized that Chapter Two had already grounded this dissertation in the workplace learning (WPL) and practice theory (PT) literature, and that, in turning to new bodies of research, I risked raising questions in the minds of readers about the cohesiveness and rigour of my project. Ultimately, however, I felt I needed to do so in order to fulfill this dissertation’s commitment to contribute to practice. The (WPL) and practice theory (PT) literature I reviewed
in Chapter Two grounded me theoretically and proved invaluable in providing a theoretical lens that enabled me to see CPS in new ways. When, later in this chapter, I address this study’s contribution to CPS research, I speak at length to the ways in which WPL and PT shaped this project and the implications resulting from their use. However, once I had gathered and had begun to analyze my data, it was the OMS literature that was able to help me in fully understanding and contextualising them. Consequently, I have drawn fairly extensively on that literature here.

**Terrance’s Successes and Struggles**

In Chapter Six I pointed to multiple successes that Terrance achieved. For instance, Terrance gained acceptance for CPS, as a process, as evidenced by the facts that participants reported feeling positively about the process and that Terrance was able to use CPS tools in the March 4 strategic planning meeting. He facilitated a session that yielded useful outcomes to those who attended: participants credited the session with helping them focus on their strategic direction, feel greater confidence in its rightness, and move it toward actualization. Session participants also reported that the session provided them with the opportunity “get out the weeds” and discuss high-level strategic ideas in a more proactive way than they typically did; that the session provided some new ideas; and that (at least according to participants’ perception) the session created a situation whereby all ideas were given their due. Moreover, the ideas from the CPS session were picked up on in the March 4 strategy session and integrated into the organization’s strategy. In introducing CPS, Terrance seemed to have advanced his goal of fostering the systematization of innovation at LJP, since participants identified innovation as a core value in the March 4 strategy session and Cory credited the introduction of CPS for catalyzing him to allocate greater focus to innovation. Terrance also seemed to have advanced
personal goals, in that, as a result of planning and facilitating the session, he drew on the principles of CPS in everyday ways and taught it to his daughter, for use in her workplace. Finally, Cory credited the session with introducing him to the potential of new video-conferencing technology, which led him to begin holding virtual town hall meetings with upward of a hundred employees at a time.

Of particular relevance here is the way in which many of Terrance’s organizationally focused successes can be attributed to his ability to navigate his political environment. For example, he recognized that he needed to secure Mark’s approval in order for the session to be taken seriously by the other participants; in choosing the stage of CPS, he avoided focusing on problem clarification in recognition of it being, in his words, “the real world” and the likelihood that “time constrained” participants would grow impatient; and he recognized the need to achieve “little wins,” when attempting to move “the iceberg” of organizational culture. This is all to say that Terrance continually demonstrated a recognition of his political context and adapted accordingly. Many of the successes he achieved required political maneuvering.

Terrance also experienced multiple struggles. As has been discussed, other participants—and most notably, Mark—thought differently than he did about creativity and were less interested in forms of creativity that were not about improving existing processes or reducing cost can be linked to the difficulties Terrance experienced in scheduling the session and in fostering the generation of creative ideas. Another struggle Terrance faced is one that he did not identify as such, but that I would, and that is that he did not facilitate the session in a way that showed awareness of or mitigated the power dynamics of the room and unintentionally showed bias toward Mark’s ideas. As noted in Chapter Six, it is not possible to determine whether, in the long run, the fact that Mark’s idea dominated was a good thing or a bad thing. However, I would
put forward here that Terrance would have benefited from greater awareness of what appeared to
be blind spots in his facilitation, since he could then have made more conscious decisions around
whether and how to mitigate power relationships.

**Resistance to Creativity and Creative Processes as Typical**

As noted above, a significant barrier for Terrance was that others—and most notably, Mark—appeared resistant to creative ideas. This section points to three lines of research, which contextualize the resistance Terrance faced and, in so doing, suggests that other proponents of CPS likely would experience similar resistance.

The first line of research emerges from work done by organizational creativity researchers, who have found that people hold a bias against creativity. Key here has been the work of Mueller, Melwani, and Goncalo (2012), who showed that those working within organizations value practical ideas over creative ones, and that, even when they espouse an interest in creative ideas, they may nonetheless “hold deeply-rooted negative views of creativity” (Mueller et al., 2012, p. 13). The bias against creativity operates like the bias against race, in that it can be at work even when people perceive themselves as open to creativity. Moreover, in times of greater uncertainty, people generally become more risk adverse, and anti-creativity bias can deepen (Mueller et al., 2012). Similar points have been made by the pioneering OC scholar, Theresa Amabile, who asserted that, although most organizational leaders “believe in the value of new useful ideas,” “creativity is undermined unintentionally ever day in work environments that were established—for entirely good reasons—to maximize business imperatives such as coordination, productivity, and control” (1998, p. 77). Consequently, according to Amabile, “There can be no doubt: creativity gets killed more than it gets supported” (1998, p. 77). Furthermore, Mueller, Goncalo, and Kamdar (2011) have shown that those who offer up creative
solutions are viewed as less credible and as possessing lower levels of leadership potential than those who don’t (Mueller, Goncalo, & Kamdar, 2011). In all, a bias against creativity and creative people appears to exist within organization, and this bias deepens in times of uncertainty.

This line of research is helpful in contextualizing many of Terrance’s struggles at LJP. For example, in light of this research, it seems unsurprising that, although Mark permitted Terrance to move ahead with the CPS session, he, in fact, showed preference toward more practical ideas—especially given that, from a financial perspective, LJP was going through a particularly difficult and uncertain period.

A second relevant line of research builds on the work of March (1991), who suggested that, when it comes to learning, organizations must inevitably manage the tension between exploration, which “includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation” and exploitation, which “includes such things as refinement, choice, production, efficiency, selection, implementation, execution” (March, 1991, p. 71). While both exploration and exploitation are necessary for organizational success, striking the right balance between them—or achieving what later thinkers termed “organizational ambidexterity” (Tushman & O’Reilly, 1996)—is difficult to achieve (March, 1991). One challenge lies in the way that initial success achieved through reliance on either exploration or exploitation tends to snowball, which leads to a situation where it is even more difficult for an organization that favours exploratory learning to move toward exploitative learning, and vice versa (Levinthal & March, 1993). Because an organization becomes competent in one mode of learning, its “distinctive competencies invite utilization, which furthers their additional development” (Levinthal & March, 1993, p. 102). According to
Levinthal and March (1993), “The self-reinforcing nature of learning makes it attractive for an individual or organization to sustain current focus. The result is that distinctive competence is accentuated, and organizations become specialized to niches in which their competencies yield immediate advantage” (p. 102). Of particular relevance to my research is a situation that Levinthal and March (1993) termed the “success trap,” whereby “exploitation drives out exploration” (p. 106). Because, “the returns to exploitation are ordinarily more certain, closer in time, and closer in space than are the returns to exploration” and because “past exploitation in a given domain makes future exploitation in the same domain even more efficient,” organizations can tend to favour refinement of existing ideas over experimentation with new ones (Levinthal and March, 1993, p. 106).

Here, again, the research is useful in making sense of Terrance’s experience. For example, it helps explain something about which Terrance expressed confusion, which was why he was so easily able to foster radical innovation at Cougar, but struggled so hard to do so at LJP. At Cougar, Terrance perceived that he “got lucky” from the start, in that he won work through innovating and thus kicked off a process whereby that initial success “begat wins and performance, which begat creativity which begat empowerment.” In contrast, as Terrance came to realize later in the research process, LJP had its own “secret sauce or method or formula that’s been working here for a long time” and which did not involve radical innovation and which made it “very hard to come out of [a focus] on cost.” Terrance expressed feeling confused about whether success in innovation simply depended on luck, and whether, if he happened to achieve a win at LJP, he would be given greater leeway to innovate. As discussed in Chapter Five, Terrance was not sure how to make sense of these thoughts, noting that “when things don’t line up as planned, you go back and do a bit of forensic work and ask, ‘How did this become as it
is?” but concluded that “I don’t know how to fully deconstruct all that. These are just interesting discussion notes.”

By referring to research on the challenges of managing the tensions between exploration and exploitation, Terrance’s thoughts become explicable. Specifically, LJP can be viewed as caught in a “success trap,” whereby their “secret sauce” that had been “working…for a long time” had led to a situation where it is more difficult to introduce more radical creativity and innovation. Terrance’s intuitive sense that whether or not organizational support will exist for radical innovation is largely a matter of luck is supported by the research, which suggests that, if, as happened to Terrance at Cougar, one happens to achieve early innovation success, one becomes more likely to be encouraged to continue innovating—regardless of the merits of any individual idea. The research suggests that much of the difficulty that Terrance experienced in promoting innovation would be experienced by others who are in organizations that favor exploitative learning.

A third line of relevant research is a body of work focused on coming to nuanced understandings of what executives do and experience, in practice on a day-to-day basis (Kaplan & Beinhocker, 2003; Kurke & Aldrich, 1983; Mintzberg, 1971; Mintzberg, 2011; Tengblad, 2017; Yukl, 1989) and which suggests that many organizations, like LJP, would be environments in which scheduling a two-hour CPS session would prove challenging. To begin, this literature typically frames time as an executive’s scarcest resource, and something about which he or she must remain protective (Matthaei, 2010; Mintzberg, 2011; Oshagbemi, 1995; Tenglabd, 2017). As Mintzberg (2011) put it, managers “develop a sensitive appreciation for the opportunity cost of their own time—the benefits forgone by doing one thing instead of another” (p.23). The situation Terrance faced, in which everyone was too busy, as he put it “cutting down trees” to
schedule time to “sharpen the axe” is, according to research into managerial work, a dominant characteristic of that work. As Yukl (1989) phrased it in his summary of this body of research, “managerial work is inherently hectic, varied, fragmented, reactive, and disorderly” (p. 257).

This line of research also points out that, like those at LJP, most organizational executives tend to solve problems in ad hoc ways and address them reactively, rather than proactively (Mintzberg 1973; Mintzberg, 2011; Andersson & Tengblad, 2016; Tengblad, 2017). As Andersson and Tengblad (2016) pointed out, “the actual work practices of managers [is] dominated by unformalized and reactive activities rather than intentional/planned activities” (p. 31). Writing of the creativity required to come up with new strategic directions, Kaplan and Beinhocker (2003) noted that executives rarely realized innovations through participating in long meetings in “paneled conference rooms” (p. 71), asserting that, rather—similarly to participants at LJP—they did so “informally — in hallway conversations, in working groups, and in quiet moments of reflection on long plane flights” (p. 71). For managers in most companies, like those at LJP, sitting down to come to creative solutions through scheduling a CPS practice likely would circumvent existing practices.

Contextualized by research from the fields of OC and Management, the resistance that Terrance experienced can be understood to have been predictable. For this reason, I, in this chapter’s next section, explore how practitioners of CPS might mitigate this resistance—and how CPS researchers and textbook authors might support them in so doing. In so doing, I can be seen as responding to a call that has been put out by researchers such as Mueller et al. (2011) who noted that “the field of creativity may need to shift its current focus from identifying how to generate more creative ideas to identifying how to help innovative institutions recognize and accept creativity” (p. 17).
Mitigating Resistance

In this section I use Shove et al.’s (2012) theory of how practices change and how new practices come to be adopted to suggest ways in which practitioners who, like Terrance, wish to use CPS to promote creativity and innovation, might do so while avoiding some of the struggles Terrance experienced. In so doing, it looks towards Terrance’s successes to provide clues for ways forward.

This section starts by summarizing Shove et al.’s (2012) theory. It then uses that theory to suggest three directions in which practitioners might move to better succeed at introducing and facilitating CPS: by developing different competences than are currently emphasized in the CPS literature, by associating CPS with meanings other than creativity, and by shifting the temporal and material ways in which CPS is practiced so that it might be integrated more smoothly into existing organizational practices.

In outlining these suggestions, I, in places, point to ways in which the literature that has been written to guide practitioners in facilitating CPS might be further developed. In so doing, I use Puccio et al.’s (2011) book Creative Leadership as representative of this body of literature, as a whole. I have chosen to focus on this book both because it is the book Terrance used in planning his session and because it can be understood as one of CPS’s most credible sources. Its first author, Gerard Puccio, is the department chair and a full professor at the International Centre for Studies in Creativity (ICSC), which is where CPS has been studied continuously for over 50 years. The second and third authors are or were professors at the ICSC. The book grounds practitioner advice in theoretical research. Moreover, this book is one of the few that is not simply about facilitating CPS session, but rather, by bringing together the creativity research with research from the management discipline of leadership, it directly addresses the situation of
someone like Terrance, who is an internal organizational employee. In short, I use *Creative Leadership* (2011) as a proxy for the practitioner literature, as a whole, because I perceive it as the most relevant and credible available resource. Focusing on a single book enables me to dig into my analysis and potential contributions in concrete and specific ways.

**Shove et al.’s theory of practices.**

In Chapter Three, I explained how I used Shove et al.’s (2012) conceptualization of practices to understand practices and study them empirically. According to Shove et al., practices can be “defined by interdependent relations between materials, competences, and meanings” (p. 23), with each of these elements loosely defined in the following way:

- **Materials**—including things, technologies, tangible physical entities and the stuff by which objects are made;

- **Competences**—which encompasses skill, know-how and technique; and

- **Meanings**—in which we include symbolic meanings, ideas and aspirations (Shove et al., 2012, p. 14)

Now, I build on this explanation to summarize how, according to Shove et al. (2012), practices “emerge, persist, shift and disappear” when connections between the elements of materials, competences, and meanings are “made, sustained, or broken” (p. 14). Shove et al. (2012) contended that new practices do not simply emerge in the world. Rather, they graft onto existing practices, through linking themselves to one or more of the elements of material, competences, and meanings. Consequently, in the words of Friedland and Nicolini (2015), who empirically employed Shove et al.’s (2012) theory, “new practices are likely to be a mix of old and new” and “a totally new practice is both inconceivable and probably indefensible” (p. 29).
Shove et al. (2012) used the example of Nordic walking sticks to make their point, discussing how, when first introducing them, promoters of this form of exercise actively worked to shift the meaning of “walking with sticks”:

For Nordic Walking to take hold on any scale, walking with “sticks” had to be disassociated from meanings of frailty and somehow connected to concepts of vitality and wellbeing. This required a process of de- and re-classification: old connotations had to be shaken off and new connections made. In an effort to make this happen, manufacturers and others with an interest in establishing the practice sought to position it with reference to two established narratives, one of personal health, the other of fresh air, nature and outdoor life…. This semiotic positioning of Nordic Walking was only possible because concepts of wellbeing and nature already existed in the popular imagination, each having recognizable qualities born of prior practice-based associations. (p 53)

What is notable here is that, to gain acceptance, Nordic Walking needed to be associated with practices, such as spending time outdoors, that already held positive meanings. Moreover, a shift in one element—in this case, meaning—gave rise to shifts in others. Once Nordic Walking came to be associated with health, exercise, and outdoor pursuits, people learned new competencies by, for example, taking Nordic Walking workshops at their local YMCA. Notably, Shove et al., stressed that how practices change is never wholly within the control of practitioners. While Nordic stick manufacturers may have used advertising campaigns to associate Nordic Walking with the healthy outdoor life, they could they could not have predicted connections that subsequently arose with categories of age and gender, “as a consequence of the fact that middle-aged women were the first to take up the practice” (Shove et al., 2012, p. 54). The practice of
Nordic Walking thus shifted due both to consciously manipulation by its proponents and to organic unfolding.

Those who, like Terrance and Cory, are proponents of innovation, can be understood as analogous to proponents of Nordic Walking, in that both wish to introduce a new practice and alter existing ones. Both Terrance and Cory illustrated the way in which Shove et al.’s (2012) theory about new practices grafting onto existing ones plays out in practice when, in discussing the introduction of innovation, they repeatedly referred back to safety practices. As noted in Chapter Six, Cory envisioned using the Integrated Management System (IMS) software, which had been introduced in order to integrate safety practices, to foster innovation practices. In envisioning how innovation might be embedded into the daily organizational practices, Terrance recalled how this had occurred with safety, remembering, for example, how he had begun to wear safety glasses, as a matter of course. Just as proponents of Nordic Walking introduced it through linking it to existing outdoor exercise practices, so too did Terrance and Cory imagine introducing innovation practices through linking them to existing safety-oriented ones.

In this dissertation, I am using Shove et al.’s (2012) theory not only for description but also to guide me in making recommendations. I have just used it descriptively to explain how this theory helps contextualize Cory and Terrance’s linking of potential innovation practices to existing safety practices. In the following sections, I consider how proponents of innovation might achieve success through shifting competencies, meanings, and materiality of CPS. The suggested shifts emerge from my analysis of Terrance’s successes and struggles.

**Strategies for mitigating resistance.**

Drawing on Shove et al.’s (2012) theory, this section suggests ways that organizational proponents of CPS might be supported in mitigating potential resistance.
**Shifting competences.**

In this section, I begin by going to the OC literature in order to contextualize Terrance’s experience and, specifically, deepen understanding of the ways he succeeded organizationally—despite the CPS session not having achieved creative outcomes. In so doing, I turn first to Sutton and Hargadon’s (2003) study of brainstorming and then to Nayak’s (2008) practice theory (PT) work on creativity, the latter which asserts that achieving what might be recognized organizationally as creative success requires different competencies than those required simply to achieve creative results. Next, I discuss how my contribution to CPS picks up where resources like *Creative Leadership* (Puccio et al., 2011) end. Whereas *Creative Leadership* (Puccio et al., 2011) focuses on guiding practitioners in using CPS to achieve creative results, my study suggests that practitioners also require guidance around developing the political competencies needed to succeed within an organizational context.

**Successful creativity in an organizational context.**

Chapter Six discussed how this study’s participants assessed the success of the CPS session based on criteria other than whether it achieved creative outcomes. This finding echoes conclusions drawn by Sutton and Hargadon (1996) in their study of brainstorming. In their review of the brainstorming literature, they noted that it “rarely addresses the question of whether or not generating ideas is, or should be, the primary effectiveness criterion” (p. 687) and pointed to research into group effectiveness in organizations, which has concluded that “if effectiveness can be defined and measured at all, it is a multidimensional construct, because social systems produce many consequences and have multiple participants with inconsistent preferences” (p. 688). Sutton and Hargadon (1996) went on to explain, “Researchers must ask ‘effectiveness at what?’ and ‘effectiveness for whom?’ to assess effectiveness in social systems”
Writing over 20 years ago, Sutton and Hargadon (1996) thus identified the precise issue that has emerged through my research: that whether a creativity session produces novel and useful ideas is not necessarily of significance to those within organizations—even if, like Terrance, they hold longer term hopes around promoting creativity. However, my own review of the CPS literature suggests that, despite Sutton and Hargadon’s (1996) research having been widely cited, both the academic and the practitioner CPS literature continues to equate efficacy with the generation of creative ideas (Amabile & Mueller, 2009; Birdi, 2005; Birdi, 2007; Puccio et al., 2006; Puccio et al., 2011).

Nayak’s (2008) PT work on OC complements that of Sutton and Hargadon (1996) by differentiating between creativity as the generation of ideas and creativity as an accomplishment within a given context. According to Nayak (2008), “creativity for individuals in organisations is something that gets a job done, rather than being merely novel and appropriate” (p. 421). He (2008) elaborated as follows:

Managers do not “make up” something that is novel and appropriate; they accomplish something in a novel and appropriate way. As an accomplishment, creativity is the ability to “make do,” to search for simplicity, to be metistic, to demonstrate economy of effort in achieving maximum results by being sensitive to the “opportune moment.” (p. 421)

Nayak (2008) went on to note the importance of “operating logic,” which he defined as the “feel for the game” (p. 422). In his words, “The everyday creativity of managers is brought into view by way of their underpinning operational logic” (p. 422). For Nayak, what is important for managers is the ability to navigate the organizational context in a way that will yield creative results, rather than that of producing novel and appropriate results.
Taken together, the work of Sutton and Hargadon (1996) and Nayak (2008) suggest that employees interested in fostering organizational creativity would be wise to, one, aim for broad outcomes and not simply the attainment of creative results and, two, employ their “feel for the game”—their ability to get things done, on the ground—in order to do so. Notably, these are both things Terrance did in promoting creativity at LJP. Terrance—and the other participants—expressed satisfaction with the session’s diverse outcomes and did not perceive the lack of creative results as problematic. Terrance demonstrated his ability to, as Nayak (2008) put it, “make do” by doing things like “being sensitive to the ‘opportune moment’” (p. 421) when he took various actions described above, such as recognizing the need to achieve “little wins.”

Fostering the competencies required for success.

This section discusses the gap between the competences taught by the book Creative Leadership (Puccio et al., 2011) and those Terrance needed, on the ground, to achieve the successes he did.

Puccio et al.’s (2011) Creative Leadership, which is directed at those who, like Terrance, want to bring about creative change in their organizations, outlined the CPS-related competencies needed to do so. More specifically, it identified seven cognitive skills and seven affective skills, each which maps onto a different stage of CPS and dedicates a chapter to each stage. Puccio et al. (2011) addressed the importance of what Nayak (2008) referred to as using one’s “feel for the game” (p. 421) in explaining the cognitive skill “contextual thinking”—defined as “understanding the interrelated conditions and circumstances that will support or hinder success” (Puccio et al., 2011, p. 71)—and the associated affective skill “sensitivity to environment”—defined as “the degree to which people are aware of their physical and psychological surroundings” (Puccio et al., 2011, p. 72). What Terrance did, when he
recognized the importance of achieving a small win, can be perceived as a show of contextual thinking and sensitivity to his environment. Here, I will use the phrase “political competence” to refer to what Puccio et al. (2011) called “contextual thinking” and “sensitivity to environment” and what Nayak (2008) referred to as “feel for the game.”

Notably, although Puccio et al. (2011) acknowledged the importance of political competence, they positioned it differently than Nayak (2008), whose framing better describes what Terrance experienced, on the ground. For Puccio et al. (2011), contextual thinking becomes important during the implementation phase of CPS: After good, creative ideas have been generated and transformed into viable solutions, creative leaders must use it to “increase the likelihood that…ideas and proposed creative changes will eventually be adopted” (Puccio et al., 2011, p. 205). For Nayak (2008), there is no aspect of the creative process that is untouched by politics, and indeed, there is no pure version of “creativity” that exists outside of it. The impossibility of disentangling Terrance’s experience of introducing, planning, and facilitating CPS from his political context is evident throughout the case study. To point to just a few examples: Getting participants to come to the session required political manoeuvring on Terrance’s part, and Terrance explained that he first had to secure Mark’s attendance in order to ensure that Kevin and Cory would attend. Moreover, Terrance’s very reading and interpretation of the textbook was informed by his political context since, his words he understood its principles “at a different level because of…the politics and the future use of CPS.” In planning the session, he spoke of a continual awareness of it needing to “be worth the time of…four key managers,” thus suggesting that he was aware of the need to act in a disciplined and results-oriented way. What is evident is that Terrance used contextual thinking from start to finish and that politics must be acknowledged as a force that ran throughout the process.
All of the above is to say that many of the key competences required to introduce and facilitate CPS within the organizational context are not addressed in *Creative Leadership* (Puccio et al., 2011), which as noted above, can stand for a proxy for the CPS practitioner literature, more generally. It is here, in this gap between what is outlined in the practitioner literature and what is needed in practice, that my study can make a contribution. There are multiple reasons that resources are needed that focus on political competences.

For one, as noted above, Terrance naturally adopted multiple tactics to navigate the political environment, such as, for example, ensuring that Mark accepted the session invitation, before securing the attendance of other participants. However, Terrance was in his fifties, had a long career behind him, and had developed his “feel for the game” over decades of work. Those without Terrance’s organizational experience would undoubtedly benefit from explicit guidelines around what Terrance naturally did. Indeed, as an instructor of CPS, I have witnessed other, less experienced, managers make what seemed to be political missteps when they introduced CPS to their organization.

Two, Terrance came to awareness of much the political manoeuvring in which he needed to engage in reactive—and not proactive—ways. For example, at the start of the project, Terrance overestimated Mark’s receptivity towards creativity, expressing that Mark “loves the idea of innovation,” but simply wasn’t engaged in pursuing it because he “doesn’t have a lot of time.” Had Terrance been reminded upfront that others might be thinking differently about creativity than he was and been given some tactics for dealing with them, he might have adapted his approach to introducing CPS, from the start. Moreover, Terrance changed the focus of the CPS session from “How might LJP systematize innovation and link it to ROI and link it to return-on-investment (ROI)?” to “How might LJP survive and thrive in our current economic
“environment” only after he had been prompted by me to consider whether participants would be interested in the former question. Had he been guided by a CPS resource in doing so, he may have been quicker to question his own pro-creativity biases and recognize that he was dealing with an audience who thought differently about creativity than he did.

Third, although Terrance did realize successes, for reasons already discussed, the session could not be called an unmitigated success. If Terrance had a CPS resource that further emphasized ways to navigate power dynamics, Terrance might have been forewarned and prepared to navigate the session’s political dynamics in a more conscious and deliberate way. Finally, I believe the practitioner literature, which tends to highlight the advantages of pursuing organizational creativity without addressing potential pitfalls does readers a disservice, by eluding the real political risks to individuals who introduce creative thinking and position themselves as creative. As my research at LJP progressed, I became increasingly concerned about the reputational risks to which Terrance was exposing himself in introducing CPS. Terrance was already positioned as an outsider vis-à-vis the other participants. He was a former pilot, operating within an environment where the CEO expressed skepticism of pilots’ abilities to succeed in. In a context where competence was associated with restraint and discipline, Terrance was known for being effusive and creative. As noted in Chapter Five, Terrance’s facilitation of the CPS session—in which he told stories and used colourful language—seemed only to accentuate the differences between him and the others. As someone passionate about creativity and innovation, Terrance did not seem fully aware of how, in effusively expressing this passion, he might compromise his credibility. Here, I am not necessarily suggesting that Terrance should have acted differently or less authentically—only that he might have benefited from the opportunity to reflect on the potential political implications of promoting creativity and making
more conscious decisions around how to do so. As I elaborate below, I believe that those who introduce CPS into their organization would benefit from further information upfront about the potential political risks of promoting creativity and guidance in how to navigate them.

This chapter’s next section describes types of information that might be included in new, CPS-based resources.

Addressing political competences in the practitioner literature.

This section offers three suggestions: that, in textbooks like Puccio et al.’s *Creative Leadership*, guidance pertaining to political skills be woven throughout; that the CPS practitioner literature draw on organizational behavior research into how internal change agents navigate politically within their organizations; and that the CPS practitioner literature offer guided reflective exercises so that practitioners might take stock of their political contexts and their positions within them.

As noted above, *Creative Leadership* (Puccio et al., 2011) specified the cognitive and affective skills needed to lead and engage in each stage of CPS. Political competences—termed “contextual thinking” and “sensitivity to environment”—were positioned as needed during CPS’s implementation stage. This study leads me to recommend that political skills be positioned as on par with cognitive and affective skills in order to guide the reader in how, politically, to address each stage of CPS. At each stage of the CPS process, a practitioner like Terrance could thus read about the possible political competences he or she may need to use.

More broadly, new CPS-focused resources should draw on OB research focused on how internal change agents navigate their political contexts, a representative example of which is Debra Meyerson (2003)’s work on tempered radicals. According to Meyerson (2003), tempered radicals are organizational employees who are, in some way, at odds with the dominant
organizational culture and who “at once uphold their aspiration to be accepted insiders and their commitment to change the very system that often casts them as outsiders” (p. 5). Meyerson’s research led her to recommend multiple tactics tempered radicals might take to impact change in their organizations, many of which, notably, are ones that Terrance intuitively used in introducing and facilitating CPS. For example, Meyerson (2003) advised tempered radicals to aim for “small wins,” both because they could be leveraged into bigger ones and because, within change agents, they can “precipitate a sense of hope, self-efficacy, and confidence” (p. 105). She also suggested tactics such as using the language of the dominant organizational culture to frame and communicate one’s goals and advancing one’s goals through “backstage” acts—ones that take place quietly, in the background—rather than “front stage” ones (Meyerson, 2003, p. 41). Terrance can be understood to have employed both of these tactics. An example of when he used the former is when he worked to frame creativity—something which he found intrinsically energizing—in terms of its potential to generate ROI. An example of the latter would be how he continued to use CPS in ad hoc ways, in meetings and to facilitate informal sessions in Halifax. Seemingly naturally, Terrance drew on many of the recommendations that Meyerson (2003) identified through her research. Marrying the CPS research to the OB research on change agents would allow practitioners who are less experienced than Terrance to adopt those tactics he intuitively adopted and allow experienced practitioners to supplement what they might naturally do, as well as more systemically and proactively consider how to navigate their political environment.

Finally, organizational employees who aim to introduce CPS would benefit from being guided through reflective exercises, in which they consider, one, the potential receptivity toward creativity within their organization, and two, their own positioning within the organization.
Proponents of CPS might adapt the way in which they introduced it and facilitated it—as well as the challenges they chose to take on as their session’s focus—depending on factors like the degree to which, to date, their organization has relied on exploitative versus explorative learning and the degree to which they, as individuals, are positioned to exert influence. Systemic guidance in thinking through how to adapt CPS to their context and situation undoubtedly would benefit practitioners.

**Summary**

Those who, like Terrance, hope to introduce CPS to their organizations would benefit from further guidance in navigating their political contexts. This dissertation contributes to the practice of CPS by recommending the following:

1. Practitioner resources like Puccio et al.’s (2011) *Creative Leadership* should emphasize the necessity of employing political skills throughout the CPS process, as opposed to positioning them as an issue of focus during the implementation stage of CPS.

2. Resources should be developed that draw on the existing OB literature on how change agents navigate their political contexts, such as Meyerson’s (2003) work on tempered radicals.

3. Resources should be developed, which include reflective exercises. These would guide practitioners in analyzing their political environment and their positioning within it and using this analysis to adapt the way they introduce and facilitate CPS.

All three of these recommendations suggest that proponents of CPS would develop political competences that are not currently highlighted in the practitioner literature.
Shifting meanings.

Forgeard and Kaufman’s (2016) review of the creativity literature—as well as my own review (e.g. Anderson, Potočnik, & Zhou, 2014; Gilson et al., 2012; Puccio & Cabra, 2009; Puccio & Cabra, 2010; Toivonen, 2015)—suggest that many OC researchers frame their work by linking creativity to the achievement of business results. To point to just one typical example, Gilson et al. (2012) framed their discussion of incremental and radical creativity by noting that, as a consequence of “operating in fast-paced, dynamic environments,” creativity has become “a necessary prerequisite for organizational innovation, growth, and survival” (p. 168). In a practitioner context, in the textbook *Creative Leadership*, Puccio et al. (2011) dedicated several pages to citing research attesting to creativity now becoming recognized as a desired trait in today’s organizations, due to the role it plays in achieving organizational outcomes. Indeed, in the context of the LJP case study, Terrance himself used a similar approach when, in planning the session, he sought out data and anecdotes that he could use to show that creativity would help yield return-on-investment.

Framed by the work of Shove et al (2011), those who link creativity to business outcomes can be understood to be working to change its *meaning*, within the organizational context so that creativity is not considered, in the words of Puccio et al., (2011) as something “strange, weird, and uncontrollable” (p. 20), but rather something that could predictably lead to greater economic success. The logic of those communicating to a practitioner audience seems to be that, once people accept that creativity is valuable and important, they will actively promote it in their organizations.

This strategy undoubtedly has its place. However, the LJP case study suggests that it might be complemented by others. That LJP participants claimed to have valued the CPS session
not because it helped foster creativity but because it allowed them to achieve other outcomes leads me to question whether those other outcomes should be further highlighted by its proponents. Rather than so tightly associating CPS with creativity—which, as discussed in this chapter’s first section, is something against which many people are biased—why not also highlight its other benefits? In this section, I point to two potential strategies that proponents of CPS might take to foster its organizational acceptance:

1. **Link CPS with the development of strategy.** As explained below, strategy is a high-status organizational activity for which leaders typically schedule lengthy meetings and engage in participatory activities. Many of the goals of strategy meetings are compatible with those of CPS and indeed may be more effectively reached through using CPS tools.

2. **Link CPS with outcomes that are not creativity focused, such as the fostering of commitment and alignment around a given direction and the fostering of employee engagement.**

Each of these strategies would involve changing the meaning of CPS so that it was associated not only with creativity, but also with something already valued within the organization.

*Associating CPS with strategy.*

An unexpected finding from my research lies in the potential link between CPS and strategy. Terrance decided to link the CPS session to the March 4 strategy session only when, due to the economic crisis LJP was experiencing, it seemed ill-advised for him to move forward with the originally planned innovation-focused session. Terrance thus used the CPS session to facilitate what other participants viewed as having been a successful discussion about strategy. Furthermore, Terrance used CPS principles and tools in the March 4 strategy meeting—even
though that meeting was not formally referred to as a CPS session. The seemingly easy fit between CPS and strategy raises the question of whether, by shifting the meaning of CPS so that it is associated with strategy, its proponents might more easily foster organizational receptivity.

From a temporality and materiality standpoint, strategy meetings resemble CPS sessions. Like CPS sessions, strategy meetings take place in a single place for a prolonged period of scheduled time, during which participants are facilitated through a variety of participative exercises. Moreover, participants use many of the same technologies and objects. As was the case with Terrance’s CPS session, in strategy sessions, it is common to be guided through the session with the aid of PowerPoint slides and engage in exercises involving writing on and then posting and grouping Post-it notes (Jarzabkowski, Spee, & Smets, 2013; Kaplan, 2011).

However, strategy and CPS sessions differ significantly in terms of their meaning within the organizational context. Whereas, as discussed above, scheduling a lengthy meeting for the purpose of generating creative ideas would go against the grain of existing practices within many organizations, as I demonstrate momentarily, scheduling a lengthy meeting for the purpose of developing strategy is a commonplace—and even a high-status—practice (Healey, Hodgkinson, Whittington, & Johnson, 2015; Hodgkinson, Whittington, Johnson, & Schwarz, 2006; Schwarz, 2009). My interviews with participants revealed that LJP held annual strategy meetings, for which all executive flew to a single location, and, as evidenced by the scheduling of the March 4 meeting, they scheduled strategy meetings, as needed. Moreover, whereas the word “creativity” held negative connotations for some LJP participants, and most notoriously Mark, the word “strategy” seemed to universally be perceived as positive.

In its valuing of strategy and strategy sessions, LJP could be considered typical. As discussed by various scholars (Healey, Hodgkinson, Whittington, & Johnson, 2015; Hodgkinson,
Whittington, Johnson, & Schwarz, 2006; Schwarz, 2009) scheduling time for strategizing is a norm within many organizations. One study of 1300 organizations revealed that 77% scheduled strategy workshops, which often took the form of day-long offsite retreats (Hodgkinson et al., 2006). Moreover, strategy research suggests that, within organizations, strategic planning workshops are perceived as particularly high-status events. In studying strategy workshop through the lens of ritual theory, Johnson, Prashantham, Floyd, and Bourque (2010) positioned them as “ritualized episodes of organizational life,” arguing that, as such, they were “social processes [that were] differentiated and privileged over others.” (p. 3). Furthermore, a pre-existing link exists between strategy and creativity, in that strategy sessions are generally acknowledged as times when it is desirable to actively promote creative thinking (Heracleous & Jacobs, 2008; Hodgkinson, et al., 2006; Kaplan & Beinhocker, 2003; Kotler, Berger, & Bickhoff, 2016) and, indeed, some strategy research has considered the impact of explicitly including creative processes as part of strategy workshops (Heracleous & Jacobs, 2008).

Given that organizational employees value strategy, accept that scheduling time for strategy workshops is a valuable activity, and appear to accept the desirability of promoting creativity within the context of strategy planning, it would seem to make sense for proponents of CPS to frame it as a means to aid strategy development. The LJP case study offers two potential interpretations of what this might mean. It could mean that a CPS session could be scheduled, as Terrance scheduled his, to discuss strategic issues, or it could mean that CPS principles could be used, as Terrance used them in the March 4 strategy session, in the context of a strategy meeting. Questions for further research would be: How might CPS sessions be used for purposes of strategic planning? How might CPS tools be integrated into strategic planning sessions? And, how useful do practitioners perceive CPS to be, when used for strategic planning purposes?
Here it is relevant that, although other researchers have not yet explored the precise idea of marrying CPS and strategy, it is not entirely new in that linking innovation processes to strategy development has been discussed by design thinking researchers (Johansson-Sköldberg, Woodilla, & Çetinkaya, 2013). As mentioned in Chapter One, design thinking can be understood as similar to CPS in that both are processes for fostering creativity and innovation. However, design thinking differs from CPS in that it has enjoyed more widespread popularity within the business world and has received more attention in the business press (Efeoglu, Møller, Sérié, & Boer, 2013; Johansson-Sköldberg, Woodilla, and Çetinkaya, 2013; Martin, 2009). In fact, references to design thinking have become so prevalent within the business practitioner press that, despite continuing debate within the academic literature about its precise meaning (Efeoglu, Møller, Sérié, & Boer, 2013; Hassi & Laakso, 2011; Johansson-Sköldberg, Woodilla, and Çetinkaya, 2013; Kimbell, 2011), it is now used without explanation in business publications like Harvard Business Review and Fast Company and some authors have started asking whether it has become a cliché (Brown, 2015; Nussbaum, 2011). Proponents of design thinking thus can be seen as having been successful in catalyzing its adoption and, consequently, proponents of CPS might benefit from understanding their tactics—one of which seems to be linking design thinking to strategy development.

In summary, given CPS’ compatibility with strategy development, its proponents might foster its adoption through linking it to strategy. This could be done either through using CPS sessions to tackle strategic issues or through integrating CPS tools into existing strategy workshops. Further research would be needed to determine the degree to which this idea holds potential.
Associating CPS with non-creative outcomes.

As noted above, this study’s findings echo those of Sutton and Hargadon (1996), who concluded that multiple valued organizational outcomes beyond the generation of creative ideas emerge from creativity processes. For proponents of CPS it might be useful to further emphasize its other possible outcomes, such as, for example, its potential to improve the rigour of decision making. Questions for future research would include the following: What other outcomes are yielded from CPS sessions? To what degree are various outcomes valued by organizational members?

Here, the LJP case study points to one outcome of particular interest, and that is the potential for creativity initiatives, like the introduction of CPS, to prove inspirational to employees. As noted in Chapter Four, both Mark and Cory expressed the idea that adopting the language of innovation could serve the useful purpose of reframing negative messaging around cost reduction in a more positive light. As Cory put it when he explained why he wrote an innovation-focused article in the company’s newsletter, his promotion of innovation “was also a little bit tactical, a way to get at the economic problems in a way that wasn’t the executive writing the doom and gloom email.” Moreover, after the CPS session Terrance noted that he appreciated the way that it reframed the pursuit of cost reduction in more positive terms.

That participants responded positively to the potential of creativity initiatives to reframe otherwise negative business messages is interesting, because it highlights that the promotion of creativity is not morally neutral. Pointing to CPS’s potential to make cost cutting palatable may, indeed, prove effective in its promotion. However, proponents may need to decide for themselves whether this is a strategy they choose to adopt.
**Shifting temporalities and materialities.**

Terrance and Cory both indicated that they were interested in ways that creativity and innovation processes could be integrated into existing practices. Cory expressed this when he noted that, “the way we need to [foster innovation] is through our IMS.” Terrance repeatedly expressed the desire for a CPS-lite, which would be supported by physical artefacts like posters on the wall and whiteboards, and would enable employees to quickly convene for a CPS session, when they needed it.

Another way to improve acceptance of CPS would be for CPS-focused scholars to build on the insights gleaned through this study and develop a system for it to be integrated into the daily rhythms of organizational life. Here, I can be understood as framing CPS as an organizational learning program and, in so doing, echoing the advice of Andersson and Tenblad (2016), who, commenting specifically on leadership development programs, noted that they “should be more based on the experiences of what leaders actually do by acknowledging their many informal and/or reactive activities” (p. 32). According to Andersson and Tenblad (2016), leadership development “must…be designed to support already ongoing processes, which puts emphasis on more continuous support rather than solitary interventions” (p. 31). CPS, like leadership development programs, could be reconfigured so that it could be more easily integrated into the work itself. Here, it is instructive to consider that Terrance naturally began to see running a meeting as being “all about mini diverging and converging,” and began using CPS tools in the course of regular meetings.

**Summary**

In this section, which focused on this study’s contribution to professional practice, I drew on academic literature from the areas of OC and management to suggest that many of the
struggles Terrance experienced in introducing CPS would likely also be experienced by others. Then, drawing on Shove et al.’s theory (2012), I put forward the following recommendations for how organizational proponents of CPS might be supported in mitigating these struggles:

- Proponents of CPS should be guided in developing political competences that are not currently highlighted in the practitioner literature. Specifically:
  - Practitioner resources should emphasize the necessity of employing political skills throughout the CPS process
  - Resources should be developed that draw on the existing OB literature on how change agents navigate their political contexts, such as Meyerson’s (2003) work on tempered radicals.
  - Resources should be developed, which include reflective exercises. These would guide practitioners in analyzing their political environment and their positioning within it and using this analysis to adapt the way they introduce and facilitate CPS.

- In introducing CPS to their organizations, proponents should highlight the multiple potential benefits of CPS, besides the generation of novel and useful ideas, and when possible, draw links between CPS and strategy.

- CPS-focused scholars should develop a version of CPS that might be more easily integrated into existing organizational practices.

As noted above, several of these suggestions still require further research and development.

**Contribution to CPS Research**

Now that, in the section above, I have shown how proponents of CPS might be supported in more easefully introducing CPS into their organizational contexts, I want to loop back to the
academic literature reviewed in Chapter Two in order to discuss how this study contributes to it. Chapter Two reviewed two broad bodies of literature, that relating to CPS, which was contextualized within the broader organizational creativity (OC) literature, and that relating to practice theory (PT), as applied within the workplace learning (WPL) literature. As discussed in Chapter Two’s introduction, this study’s primary goal is to contribute to an understanding of CPS. Consequently, in writing this section, I have grounded myself in the questions, “How have I built on and how am I contributing to CPS research?”

In writing this section, I realized that I had two different, though not incompatible, perspectives on this study’s contribution. The first frames this study as continuous with CPS research that came before and positions it as building on and adding to this past research. The second perspective frames this study as having made a substantial break with previous research and having different concerns. According to the second perspective, in adopting a PT-focused WPL lens, which is premised on a relational ontology (Hosking & Bouwen, 2000; Nicolini, 2009b; Slife, 2004), I have not simply filled gaps in the existing literature or studied aspects of CPS that have not been addressed by past researchers. Rather, I have conceptualized in a different way what CPS is and means and, in so doing, have studied an altogether different phenomenon. Consequently, I can be understood to be making a different type of contribution than has been made in the past and pointing to a new direction for future CPS research.

This section is divided into three sub-sections. In the first, I briefly summarize the review of the CPS literature put forward in Chapter Two, with the goal of re-grounding the reader within it. In the second, I discuss how this study can be seen to be building on and contributing to this literature. In the third, I discuss how this study can be seen to be making a break with it and
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contributing in a new way not only to the study of CPS but to that of creative processes, more broadly.

**Review of CPS Literature**

In Chapter Two, I noted that the bulk of workplace-focused CPS research could be classified as functionalist, which suggests that it focuses on whether CPS has yielded creative results, which are defined as results that are “novel and useful” (Amabile, 1996, p. 1). This literature is made up of studies that used psychological tests to measure the degree to which those trained in CPS demonstrated outcomes associated with creative capacity (Puccio et al., 2006). A small portion of the CPS literature could be classified as interpretivist, which suggests that it has focused on the creative process, “the process of engagement in creative acts, regardless of whether the resultant outcomes are novel, useful, or creative” (Drazin, et al., 1999, p. 286). In Chapter Two, I further classified the interpretivist literature into two categories. The first refers to those studies that remain concerned with the efficient achievement of creative results but that, in recognition of the ways in which engaging in the creative process is nuanced and complex, use interpretive methods, and the second refers to studies that focus on the creative process for its own sake. All existing studies of CPS are concerned with the achievement creative results and those that have used interpretive methods thus fall into the first category.

Several interpretive case studies have focused on CPS’s application within the organizational context and have found it to have been effective in achieving novel and useful outcomes (Thompson, 2001; Puccio et al., 2006). However, two case studies, done by Souza et al. (2013) and Buijs et al. (2013), yielded more ambiguous results. In both studies, CPS sessions implemented in the workplace were deemed to have been successful in guiding participants in generating creative ideas but ultimately, due to internal organizational politics, to have failed to
have led to these ideas’ implementation. Souza et al. (2013) and Buijs et al. (2013) responded to what they perceived to be shortcomings in the CPS model by proposing adaptations and further guidelines for its use. I concluded my Chapter Two review of the CPS literature by identifying four gaps, which my study worked to fill:

1. There are no studies that examine the relationship between existing organizational practices and what happens when CPS is implemented.
2. The existing literature has not sufficiently addressed the multiple possible outcomes that might result from a CPS session.
3. All studies of CPS assume that it is always enacted in precisely the same manner; the literature has not accounted for the ways in which contextual factors or different facilitators might change it.
4. All organizational CPS studies have focused on CPS, when it has been facilitated by an external consultant with specialized training. Although resources like Creative Leadership (Puccio, et al., 2011) are aimed specifically at employees who wish to use CPS to catalyze creative change within their own organizations, there are no studies of CPS that address what happens when they do so.

Building on Past Research

Among the small number of interpretive CPS studies, several (Buijs’ et al., 2009; Puccio et al., 2006; Souza et al., 2013) can be understood to be advancing the goal of helping CPS facilitators more successfully navigate the political contexts of their organizations. Of particular note are the studies of Souza et al. (2013) and Buijs’ et al. (2009), which, as stated above, both found that, due to internal organizational politics, ideas generated in CPS sessions were not implemented. In response to this finding, Sousa et al. (2013) ended their paper by putting
forward recommendations for what CPS facilitators might do to gain sufficient political traction to ensure implementation. Buijs et al. (2009) proposed an adapted version of the CPS model, which highlighted the importance of weaving throughout “activities outside the traditional CPS process” (Buijs et al., 2009, p. 287), including those that involve political navigation.

Contextualized by this past research, my study can be understood to contribute to the agenda of helping proponents of CPS politically navigate their environments. In many ways, my research reinforces the findings and recommendations of those who came before. To point to just one example, both Sousa et al. (2009) and Buijs et al.’s (2009) recommended that CPS facilitators include all stakeholders, and particularly high-level decision makers, from the start. This recommendation overlaps with my suggestion that CPS support materials be altered to acknowledge the importance of exercising political competence throughout the process, and not, as is currently suggested in the CPS practitioner literature (Puccio et al., 2011), primarily in the implementation stage.

However, my study also contributes in new ways. For one, I generated data in the weeks preceding the CPS session itself, and thus included in my study the facilitator’s process of choosing an appropriate focus for the session, planning the session, inviting others, and persuading them to attend. In contrast, all other case studies of CPS in the workplace have focused only on the CPS session itself and, in some cases, what happened afterward (Buijs et al., 2009; Sousa et al., 2013; Thompson, 2001; Puccio et al., 2006). Consequently, whereas Sousa et al. (2013) and Buijs et al. (2009) illuminated the challenges of moving ideas from the idea generation to the implementation stage, I made visible those involved simply in introducing CPS in the first place. These have not previously been explored or discussed. Furthermore, my commitment to generating thick description has meant that, in discussing how proponents of CPS
might more easefully navigate their political contexts, I have been able to contribute more comprehensive and detailed suggestions than have previously been offered. Because I spent so much time with participants, and in particular with Terrance, I was able to observe in a nuanced and granular way the political maneuvering that occurred through the introduction and implementation of CPS and fold these observations into my contribution.

In short, my research can be seen to affirm and build on the findings and recommendations of interpretivist CPS researchers who, in using case method to explore CPS’s enactment in workplace settings, have provided guidance to practitioners in navigating their political contexts.

**Breaking from Past Research**

In the previous section, I discussed how this study can be seen to be building on and contributing to the existing CPS literature. In this section, I put forward an alternative view, which is that this study represents a break from the CPS research that came before it and invites future researchers to conceptualize CPS in new ways. Specifically, I suggest that there are two ways in which this study is different from previous CPS research. One, it is premised on the assumption that CPS changes when put into practice. Unlike previous studies, it does not assume that CPS is—or should be—practiced in precisely the same manner, regardless of context. Two, it does not primarily link success to the achievement of novel and useful results. These differences result from my adoption of a PT-informed WPL lens to explore CPS, and this section addresses each, in turn. Moreover, these differences emerge from my study being premised on fundamentally different understandings of what is to know and to learn than those taken up by previous CPS researchers.
Viewed in this way, my study contributes to CPS research by offering up a new approach to researching it, which promises to yield a more nuanced picture of its enactment.

**The assumption of variation.**

In contrasting my conceptualization of CPS from that of previous researchers, it is useful to begin with the concept of learning transfer, which as explained by Hager and Hodkinson (2009), can be viewed through different conceptual lenses, each corresponding to a different theory of learning. Acquisition-based theories of learning give rise to theories of transfer that suggest that knowledge and skills learned in one place can be faithfully transferred into another. According to this view, “what is learnt is a thing of substance that is independent of the learner” and “learning involves movement of this thing from place to place” (Hager & Hodkinson, 2009, p. 624). When it comes to the learning of skills, this conceptual lens assumes that “once acquired... skills can be transferred unproblematically by learners to diverse situations” (Hager & Hodkinson, p. 625) and that “different learners can all acquire the same skill” (Hager & Hodkinson, p. 624). Hager and Hodkinson (2009) contrasted acquisition-based conceptual lenses of transfer with those based on CoP and PT theories of learning. Although differences exist between CoP- and PT-based views of transfer, what is relevant for this dissertation is that, in both conceptualisations, learning emerges from a particular context. The idea that one can faithfully reproduce learning from one environment in another becomes nonsensical, since “the constant appearance of novel situations, new kinds of equipment, local traditions or preferences etc. mean that learning needed for successful practice is continuous and not specifiable in advance” (Hager & Hodkinson, 2009, p. 628) and because “learning involves emergence of novelty as new understands and/or new contexts are formed” (Hager & Hodkinson, 2009, p. 629).
Taking a PT perspective, as I have done in this dissertation, means subscribing to the view that, because learning is context-dependent and emergent, “transferring” knowledge, a skill, or a process, involves its transformation. As discussed in Chapter One, to commit to a practice lens is to subscribe to relational ontology (Hosking & Bouwen, 2000; Nicolini, 2000; Nicolini, 2009b; Slife, 2004) in which “all social realities—all knowledges of self and of other people and things—are viewed as interdependent or co-dependent constructions existing and known only in relation” (Hosking & Bouwen, 2000, p. 129). This ontological perspective shifts the focus of learning- and transfer-based discussions from “knowledge (knowledge as an object) to knowing (knowledge as a process and a collective activity)” (Gherardi, 2012, p. 219), with knowing in the workplace conceptualized as “a collective social activity contextual to work practices” (Gherardi, 2012, p. 219). According to Gherardi (2011), knowing and doing are “always inextricably entangled” (p. 43), and PT “den[i]es any ontological priority to knowledge that exists prior to its performance” (Gherardi & Perrotta, 2014, p. 135). A PT perspective thus suggests that, in the words of Gherardi and Nicolini (2000), “to transfer is to transform” (p. 329).

As noted above, a gap in the CPS literature lies in its assumption that CPS is always practiced in precisely the same manner, regardless of context. This assumption is apparent, for example, in Puccio et al.’s (2005) review of the research on CPS in the workplace, where, in reviewing 18 studies conducted between the years 1982 and 2002, some of which were case studies conducted in different workplaces, the term CPS is taken to have a static and immutable meaning. The assumption, which can be understood as emerging from a broader objectivist ontology (Crotty, 1998), is that there is something out there in the world called CPS, which someone can learn and transfer into various contexts. In contrast, because I subscribe to a
relational ontology, I took as a starting point the assumption that, in practice, CPS is transformed.

To assume that CPS is transformed when transferred is to shift the object of study away from CPS, in itself, and, as befitting a study based on a relational ontological perspective, toward the *relationship* between CPS and the on-the-ground practices at LJP. This means that I was concerned with neither CPS nor with LJP, but rather with what happened at the boundary between them. Indeed, framing the study in this way helps clarify (even for myself) why it became necessary for me to move away from my original plan to present all my findings in a single chapter and instead dedicate two chapters, one to existing practices at LJP and a second to the CPS session itself, to their elaboration.

Because the topic of boundaries has been so fulsomely explored within both the WPL and the OMS literature (Akkerman & Bakker, 2011; Yrjö Engeström & Sannino, 2010; Hager & Hodkinson, 2009; Roberts, 2010; Spee & Jarzabowski, 2009; Star & Griesemer, 1989; Wenger, 1998) to suggest that the study of CPS might be a study of relationships at a boundary is, to open up the possibility of a rich vein of future research. For instance, the artifacts that Terrance used to familiarize himself with CPS and explain it to others, including the textbook *Creative Leadership* (Puccio et al., 2011) and the CPS process diagram reproduced in Chapter One (Figure 1) might be analyzed as “boundary objects,” which are “artifacts doing the crossing [between different sites] by fulfilling a bridging function” (Akkerman & Bakker, 2011, p. 133). Similarly, Terrance’s actions in introducing and facilitating CPS might be conceptualized as those of a broker or boundary crosser, which, according to Akkerman and Bakker (2011) positions him as someone who, while playing a “rich and valuable” role (p. 140) also “face[s] a difficult position because they are easily seen as being at the periphery” (p. 140). Drawing on the
literature on learning and boundaries, which as noted above, is explored in both the WPL and OMS literature, thus holds the potential to illuminate new insights, which go beyond what as of yet has been addressed within the CPS literature.

To conceptualize CPS as always changing through enactment and that, ontologically, can only be understood exist when it is put into practice in a specific circumstance is to understand it differently even than those CPS researchers like Souza et al. (2013) and Buijs et al. (2009), with whom, as noted above, I shared commonality. Although, like me, these researchers put forward suggestions for how practitioners might politically navigate their organizations, they nonetheless assumed that they would, and should, faithfully replicate the CPS model, or, in Buijs et al.’s case, the adapted version of it they proposed. My study is the first I have found to suggest that reflective exercises, which would guide practitioners in thinking about their own organization and their political positioning within it, be included in CPS practitioner resources. This suggestion is significant because it implies that those who introduce CPS are bridging a boundary and that, in so doing, must notice what is important on either side and work to create a fit. Moreover, a significant finding from my research was that, after the session had ended, Terrance used CPS in adapted ways in running meetings and other aspects of his life. A PT-based research agenda for CPS would enable the interesting ways it is put in use and transformed to be made visible within CPS scholarship.

In all, assuming that CPS transforms in use and studying what happens at the boundary, when it interacts with organizational practices would represent a new direction for CPS scholarship.
Beyond creative outcomes.

In linking the successful enactment of CPS primarily with the achievement of novel and useful results, previous CPS studies are tacitly premised on a conceptualization of learning that suggests that the outcomes of a learning activity are knowable in advance. In contrast, according to PT-based theories of learning, learning is “emergent” (Fenwick, 2010, p. 86) and “formative” (Gherardi & Perrotta, 2014, p. 135) and what will be learned cannot wholly be predicted. Here, Engeström’s theory of expansive learning, which I touched on in Chapters One and Two, seems particularly key for its emphasis on the idea that “people and organizations are all the time learning something that is not stable, not even defined or understood ahead of time.” (Engeström, 2009, p. 58). Expansive learning theory also suggests that what learners hope to achieve through their engagement in learning activities is perpetually shifting and the object of learning is “always, explicitly or implicitly, characterized by ambiguity, surprise, interpretation, sense-making, and potential for change” (Engeström, 2009, p. 55). CPS research that suggests that, through adherence to the CPS process, creative results can be achieved thus can be understood as running counter to PT understandings of learning.

Pursuing a PT-based understanding of CPS holds rich possibilities because it would make visible a host of outcomes that are not currently captured within the CPS literature. Of all the outcomes of the CPS session that were discussed at the start of this chapter, only one—that Cory adopted video conferencing software to hold a new kind of meeting with employees—would appear to meet the criteria of being novel and useful. Moreover, according to Jarvis’ (2004) typology discussed in Chapter Three, this outcome would be classified as incidental learning, since it did not relate to the intended goal of the CPS session, which was to generate ideas around the question of how LJP would survive and thrive in the current economic crisis. This is
significant because it suggests that, despite the CPS session having contributed to a novel and useful outcome—as well as having yielded multiple outcomes that would not be deemed novel and useful but that participants nonetheless valued—it would be deemed a failure according to the measures that have typically adopted by CPS scholars. Notably, even interpretive CPS scholars like Souza et al. (2013) and Buijs et al. (2009) still considered only the achievement of intended creative results when discussing their findings. By adopting a PT-based perspective, CPS research would better capture the diversity of outcomes that are valued on the ground.

Here, it seems necessary to qualify my point in order to make clear that in acknowledging that, as suggested by PT, the outcomes of learning cannot be wholly predicted in advance does not mean that one can’t increase the odds of achieving a desired result. Relatedly, just because the existing CPS literature is limited does not mean it is meaningless. My critique of the CPS literature lies in the narrowness of its scope and its limited acknowledgement of how, due to the complexity of what happens when CPS meets an organization’s social, material, and political practices, the process itself can only ever be one condition among a tangle of those that might catalyze creative outcomes. However, decades of CPS research suggest that engaging in CPS increases the chances of achieving creative results (Isaksen & Treffinger, 2004; Puccio et al., 2006; Puccio et al., 2011), and indeed, my own experience facilitating and teaching CPS supports this finding. Adopting CPS, which has been researched more rigorously than any other creativity process (Puccio et al., 2006) would appear to be a good way for practitioners to put into action personal or organizational goals to achieve creative results, as long as they did so while acknowledging the complexity involved in its enactment and the potential for unexpected outcomes, be they ones considered positive or negative, to emerge.
In other words, my point is not that creative results are irrelevant and can never achieved, nor that CPS can’t in fact be helpful in achieving them. Rather, it is that adopting a PT perspective means that determining their achievement is a subjective judgment call and not something that a researcher can determine in an unqualified way. As noted in this chapter’s first section, this has been pointed out by Sutton and Hargadon (1996) who stated that, “if effectiveness can be defined and measured at all, it is a multidimensional construct, because social systems produce many consequences and have multiple participants with inconsistent preferences” (p. 688). Moreover, as was suggested by my study, any determination of success will depend not only on who is making it but also on at what point in time it is being made. On one hand, the ideas that emerged from the CPS session would not be deemed particularly creative, in that they reinforced the CEO’s desire to cut costs. On the other, the session seemed to catalyze a larger receptivity to the pursuit of creativity and innovation within the organization and yielded other results valued by participants. In all, for a CPS researcher, adopting a PT perspective would mean sacrificing the hope of easily answering questions around whether a given CPS might be judged to have “worked” or achieved “success.” However, the reward would be a fuller picture of what outcomes actually emerged.

Furthermore, adopting a PT perspective would mean that the researcher could not assume that the achievement of creative results is or should be the only goal of a CPS session, nor that it is the goal of all participants. This point has been explored by strategy-as-practice (SAP) scholars, some of whom, as noted in Chapter One, have studied standard strategic planning tools like the SWOT analysis in similar ways as I have done with CPS (Jarzabkowski & Kaplan, 2015; Spee & Jarzabkowski, 2009; Whittington, 2007). As SAP scholars Jarzabkowski and Kaplan (2015) noted, “While the designers of tools may intend them to be selected for particular tasks, to
be applied in certain ways, and to achieve certain outcomes these intentions may or may not be realized as actors engage with the tools” (p. 539). That a gap might exist between the textbook purpose of a tool and the reasons it might be taken up and engaged with by practitioners was apparent in my study, where, in pre-CPS session interviews, participants expressed a variety of goals for the session. Importantly, acknowledging that participants will have different and often conflicting reasons for engaging in CPS opens up the door for more nuanced analyses of power and politics than have been done in previous CPS studies. That participants used the CPS session as a political tool to achieve their own ends was an important finding from my research. To point to just one example, my study revealed that, for Terrance, organizing the session was a way not only to promote his goal of fostering innovation at LJP but also of inserting himself into strategy conversations in which he otherwise would not have been included.

In short, for CPS researchers, adopting a PT perspective, in which the outcomes of learning activities can not be wholly determined in advance, would mean wading into murkier waters than those navigated by scholars who conceptualize CPS as a technology for the achievement of creative outcomes. However, doing so promises to reveal a richer picture both of the multiple outcomes that might emerge and of the politics and power dynamics inherent in introducing and enacting the process.

**Summary**

In this section, I have proposed that this study offers a new way PT-based way of conceptualizing CPS, in which the primary focus is not on the CPS process model itself, but rather on what happens when the model meets the practices of the organization. This conceptualization is founded on a different ontological stance and different perspectives on what it means to learn and to know than previous CPS studies. It eschews the objectivist (Crotty,
stance that knowledge is out in the world and objectively knowable (Hager & Hodkinson, 2009, p. 628), and instead embraces a relational ontology which suggests that what can be known is dependent on precise socio-material circumstance of its emergence. In so doing, it views CPS as perpetually transforming, as it is put into practice. Moreover, because PT suggests that learning is “not stable. . . defined or understood ahead of time.” (Engeström, 2009, p. 58), this new conceptualization of CPS assumes that the yielding of creative results, which cannot be objectively determined, is only one possible outcome of a CPS session. Decoupling CPS from the necessary achievement of creative results would allow researchers to paint a more nuanced and realistic picture of what happens when CPS is put into practice and specifically to illuminate the multiple possible outcomes and the workings of power and politics.

**Contribution to WPL and PT Research**

As noted in Chapter Three, PT has been recognized as methodologically “still under-conceptualised and underdeveloped” (Reich et al., 2013, p. 10). My study contributes to the methodological development of PT, by bringing together and empirically using theories and frameworks that have not yet been widely employed. Shove et al.’s (2012) work, which is premised on the claim that the elements of practices are competences, meanings, and materialities, has been useful to me, both in the data generation stage, when it provided me a means to begin to recognize practices within what at first seemed like an overwhelming amount of undifferentiated data, and, as evidenced above, in this final stage of analysis and discussion. Hopwood’s (2014a; 2014b) contention that times, spaces, bodies, and things are the constituent elements of practices has been immeasurably helpful in enabling me to further focus on identifying practices, and articulate what I was seeing and hearing in ways that would be comprehensible to a reader. When I first adopted these two frameworks, I was concerned that
they could lead to oversimplification. Indeed, Shove et al. (2012) themselves acknowledged that “in putting forward such a reductive scheme we may well have fallen ‘prey to the scientific urge to build simplifying, diagrammatic models of social life’ (Schatzki, 2002, xii)” (p. 15).

Moreover, I had not seen these frameworks used empirically by the authors whose work I had reviewed for Chapter Two. Shove et al.’s (2012) work has been widely cited but when I started this project, I had not seen it employed empirically by those authors, for example, Nicolini, Gherardi, and Fenwick, whom I have relied on as guides. Hopwood has used his framework in his own research—which I have found highly valuable—but it has not been widely adopted by others. In short, I adopted the work of Shove et al. (2012) and Hopwood (2014a; 2014b), because I needed tools to help me navigate my data generation and analysis and these seemed like good ones to me. However, I adopted these tools with an awareness that I was taking a path that had not yet been well trodden.

Now, having finished this study, I would attest to the value of using Shove et al. (2012) and Hopwood’s (2014a; 2014b) frameworks empirically, and I believe my use of them can serve as a contribution to furthering PT’s methodological development. I do not perceive that these frameworks led me to oversimplify. Rather, they provided me the straightforward framing and language I needed to understand and describe the complexity I was noticing. Moreover, after I had launched this study, I was gratified to learn that Nicolini himself, whose work (2012) has been so foundational to mine, employed Shove et al.’s framework in his and Friedland’s analysis of how a new practice came into being (Friedland & Nicolini, 2015).

Finally, the analysis I presented at the end of Chapter Six, which described in empirical terms how the tension between CoP theories and PT played out, on the ground, represents a contribution to WPL theorizing. As described in Chapter Two, CoP theories have been widely
critiqued for as limited in their ability to analyze current WPL environments, which can be
categorized by flux and change. Yet, as has been acknowledged by WPL researchers, such as
Nicolini (2012), they nonetheless possess utility. Although the limitations and utility of CoP
theorizing has been the subject of significant theoretical debate, this debate has not been
explored empirically. My research contributes to WPL theorizing by elucidating in concrete
terms both the advantages and limitations of CoP theories.

In all, this study makes the following academic contributions: It contributes to CPS, by
pioneering a new methodological approach, grounded in WPL and practice theories, which have
not yet been applied to its study. It contributes to OC research by building on the work of Nayak
(2008) and further exploring the benefits of a PT approach. It contributes to the methodological
enactment of PT in a WPL context by demonstrating the utility of using Shove et al.’s (2012) and
Hopwood’s (2014a; 2014b) frameworks. Finally, it contributes to WPL theorizing by exploring
empirically the strengths and limitations of CoP theories, which have been the focus of
theoretical discussion.

Directions for Future Research

As is undoubtedly typical when engaged in dissertation work, my data analysis process
led me down multiple theoretical rabbit holes to see if what I found there might hold explanatory
power. When I came to the later stages of the project, so that the dissertation would not become
too unwieldy, I had to decide which research areas were most essential and file others away to be
explored at a later date. In this section, I identify those areas I filed but that seem particularly
promising. Here I don’t repeat those research directions I’ve already identified above, when
discussing my contribution to professional practice.
The following three directions, each which is explained below, would be of particular interest: To adopt a conversation analysis (CA) perspectives, to further elucidate the elements of materiality and temporality, and to apply the literature pertaining to the diffusion of management ideas.

**Adoption of a Conversation Analysis (CA) Perspective**

In his introductory book to PT, Nicolini (2012) pointed to CA, “a research tradition aimed at deepening the understanding of the social organization of linguistic conduct (‘talk-in-interaction’) by investigating the sequential structure of naturally occurring conversation” (p. 191) as being of particularly relevant to PT research. At the start of my study, I decided not to use CA, because doing so—which would have included adopting a specialized notation system to transcribe not only what is said, but the pauses and trailing off of words, as well (Nicolini, 2009b)—seemed to add a level of complexity that, as a new scholar, I did not feel prepared to take on. However, when it came time to analyze the CPS session itself, I found myself casting about for tools to understand and articulate the power dynamics that I sensed were being enacted by participants. Although I ultimately was able to analyze the practices of power without referring explicitly to CA, I would foresee the work of CA scholars to be helpful in enabling me to deepen this analysis. Indeed, given the way in which the PT lens allowed for the illumination of how power actually is performed in minute-by-minute, on-the-ground ways, further exploration of this topic could enable me to contribute to academic understanding of how power operates in organizations.

The issues that CA helps address include how to understand power dynamics through analyzing whether, in a conversation, someone is providing a “preferred response,” which is a response that keeps the flow of dialogue going and “avoid[s] trouble” (Schegloff, 2007, p. 58), or
a “dispreferred response,” which signals “rejection or disagreement” (Schegloff, 2007, p. 58).

CA scholars also have explored the way in which politeness and humour are linked to power relationships (Holmes, 2000; Holmes, 2003; Holmes & Stubbe, 2003; NorTerrance & Spitz, 2008). Furthermore, through using CA, Benoit-Barné and Cooren (2009) advanced the notion that someone might work to establish authority through using what they call “presentification”—the invocation of external sources of authority, such as textbooks or the words of absent experts. All of these directions would be helpful in deepening my analysis of the CPS session and of other conversations that took place at LJP and would thus further my analysis of the way power is practiced when people engage in CPS.

**Further Elucidation of Temporal and Material Aspects of Learning**

When I started this study, I allocated one out of my five research sub-questions to the topic of materiality, asking what role the material aspects of learning play, and how they perpetuate, adapt, or introduce new practices. I later altered this question to include a focus on temporality. Posing this question enabled me to study materiality and temporality in broad terms and to emulate some of the studies I have found to be insightful (e.g. Hopwood, 2014a; Hopwood, 2014b; Friedland & Nicolini, 2015; Nicolini, 2006), which offered material and temporal analyses without delving into theoretical debates surrounding the terms themselves, but rather interpreted these terms as they are commonly used in daily life. For me, a next step would be to explore more nuanced ways of understanding materiality and temporality, which would involve delving into the different ways they can be interpreted (Carlile et al., 2013; Cecez-Kecmanovic, et al., 2012; Fenwick, 2012; Johnsson, 2013).

Particularly useful to this study would be to apply the materiality-focused scholarship that is specifically concerned with technology (Cecez-Kecmanovic, 2014; Orlikowski & Scott, 2008;
Suchman, 2007), since facilitating CPS, as Terrance did, using virtual technologies, such as video conferencing and online bulletin boards, seems to represent a significant shift in how CPS is enacted and the types of interactions it might enables. A second rich vein for future research would be to delve more deeply into the role of temporality. My study reveals an incongruence between the way in which time is experienced and used in organizational life and the way time must be allocated in order to practice CPS, as it is currently described in books like Creative Leadership (Puccio et al., 2011). It would be worthwhile to deepen this analysis through diving into the literature that theorizes time in a nuanced way (Antonacopoulou, 2014; Johnsson, 2012; Lefebvre, 2004).

**Application of Literature on Diffusion of Management Ideas**

One of this dissertation’s primary contributions lies in its recommendations around how proponents of CPS might more successfully foster its organizational adoption. This contribution can be further developed through exploration of the literature dedicated to the diffusion of management ideas. Working within the discipline of management, various scholars (Birkinshaw, Hamel, & Mol, 2008; Sturdy, 2004) have questioned why some management ideas have come to be widely adopted within organizations, while others have not. This literature could help me respond to a question I have had ever since I have started working with CPS, and that is why, given the abundance of research that has gone into ascertaining its efficacy, it has not received widespread attention in organizations, whereas other creativity processes, most notably design thinking, for which there is far less evidence of efficacy, have (Efeoglu, Möller, Sérié, & Boer, 2013; Johansson-Sköldberg, Woodilla, and Çetinkaya, 2013; Martin, 2009). I touched on this issue above, when I noted that proponents of design thinking have been more successful than proponents of CPS in catalyzing its adoption and that linking it to strategy is one approach they
have used. The literature on the diffusion of management ideas would provide me with the tools to further understand what proponents of design thinking seem to have done so well and build on this dissertation’s contribution, in order to provide further recommendations to proponents of CPS.

**Reflection and Conclusion**

In this dissertation’s introduction, I introduced myself as a faculty member who, in teaching an MBA class on organizational creativity (OC) and innovation, has noticed that the CPS textbook—and the OC literature more broadly—did not wholly describe what my students reported experiencing, on the ground in their workplaces, when they facilitated CPS. At a very concrete and practical level, completing this study has enabled me to better understand what is going on for them, when they bring CPS to their workplaces and to come to multiple strategies that will help me in guiding them. When I teach the class again, in the fall of 2017, I will share many of the insights from this dissertation, such as the need for them to use political competences in introducing CPS and ideas around how they might integrate CPS principles into daily work routines. Moreover, I hope to produce and publish both practitioner resources and academic articles, which will enable me to share this dissertation’s insights more widely.

However, for me writing this dissertation has been as much about the process of engaging in the research process as it has been about finding answers to my research questions. I have found the experience to be deeply satisfying. I liked the front-end portion of the project, when I read broadly, in order to gradually hone in on that body of literature that held the greatest explanatory potential. I liked the challenge of making sense of WPL theory and PT, once I had identified these areas as key. I felt privileged to be on the ground at LJP, and to experience the world of top-level executives, which if not engaging in this project, I would not have access to,
and I appreciated the way on-site research enabled me to move beyond past assumptions about “right” and “wrong.” For instance, as I came to know Terrance, I came to like and respect him, and found myself rooting for him as he worked to promote creativity and feeling badly for him when he experienced struggles. And, yet, I also could understand why Mark—who, in the midst of a financial crisis, which had sent other companies, similar to LJP, into bankruptcy, was responsible for ensuring the ongoing employment of hundreds of people—would respond guardedly, and at times impatiently, to the notion of spending time generating new, creative ideas. I liked the way on-site qualitative research enabled me to interact with the participants as humans, and not subjects. Finally, I found the final stages of the project deeply satisfying, when I worked to make sense of it all and figure out what I had seen and heard had meant and how it might contribute to others. I particularly liked the experience of getting a niggly feeling about what might be an explanation for something I observed on the ground, and then following that niggle into the literature, only to discover that there was a whole body of scholarship dedicated to its exploration. I found that satisfying.

In terms of the overall experience, I liked the way in which the canvas of the dissertation was large enough for a deeper and more complex intellectual exploration than I’ve done previously. There were moments where I could physically feel my capacity for synthesis and sense making expanding. I liked how that felt, and found it a bit addictive.

This is not to say that there were not difficulties. For as much as I was grateful for the opportunity to get a window into my participants’ day-to-day life, being at LJP was not always easy. As discussed in Chapter Two, except for Terrance, my participants seemed primarily focused on action-oriented concerns around keeping the business afloat, and as the project progressed, I began to perceive that my more exploratory questions simply did not seem that
relevant or interesting to them. As, through doing this project, I found my own love of academia deepening, I was in an environment where there was little place for the type of academic exploration I was coming to love. On several occasions, Mark used the word “academic” in a derogatory way, to refer to conversations or ideas that were not useful. I can see why he would adopt this view (and I am grateful that he continued to participate, despite questioning the project’s usefulness to him), but it nonetheless led me to feel uncomfortable at times. I am glad I did this project and came to know a bit more about what it is like to lead a relatively large publicly traded company. However, if possible, I would like the next research project I take on to be with participants with whom I feel more at ease or who are working toward a cause that I can feel more personally invested in advancing.

Summary

In this chapter, I put forward that this dissertation contributes to the practice of CPS by recommending the following:

- Practitioner resources should further emphasize the political skills needed to introduce and facilitate CPS in the organizational context.
- In introducing CPS, proponents should highlight its multiple potential benefits—as opposed to simply focusing on the achievement of creative results. When possible, proponents should demonstrate the compatibility of CPS and strategy development, since engaging in strategic planning activities is generally recognized as a valuable and even high-status organizational activity.
- CPS-focused scholars should develop a version of CPS that might be more easily integrated into existing organizational practices.
I also suggested that this dissertation contributes to academic knowledge by pioneering a new methodological approach to studying CPS, advancing the empirical application of PT, and providing empirical substantiation for theoretical scholarly discussions around the strengths and limitations of community of practice (CoP) theories.

This chapter ended with identifying three directions for future research. This study’s insights would be deepened if the data were further analyzed, one, using a CA perspective; two, taking a more in-depth approach to the analysis of temporality and materiality; and three, applying the literature on the diffusion of management ideas.
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CREATIVE PROBLEM SOLVING IN PRACTICE


### APPENDIX A: DETAILED DESCRIPTION OF DATA GENERATION

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Date (Not to Scale)</th>
<th>December 9-11 (3 days)</th>
<th>December 15 1-hour interview with Mark</th>
<th>20-minute meeting with Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>December 18-22 (5 Days)</td>
<td>1 day shadowing Mark; 1 day shadowing Kevin; 1 day shadowing Terrance</td>
<td>1 day shadowing Mark; 1 day shadowing Kevin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1-hour interview with Mark</td>
<td>1-hour interview with Mark</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30 minute interview with Mark</td>
<td>30 minute interview with Mark</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>20-minute pre-CPS interview with Mark</td>
<td>20-minute pre-CPS interview with Mark</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4-hours of pre- and post- CPS session</td>
<td>4-hours of pre- and post- CPS session</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Date</th>
<th>Time Spent on Site</th>
<th>Virtual Meetings, held via Skype, Blue Jeans or teleconference</th>
<th>Virtual Feedback/Member Checking, when I received feedback from participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 23-26 (4 days)</td>
<td>Feb 1: 1-hour virtual feedback session with Cory and Kevin</td>
<td>Feb 4, 17, 18, 19, 20: Conversations with Terrance Burt ranging from 20 to 40</td>
<td></td>
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<td></td>
<td>Feb 29: 1-hour interview with Terrance</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 3</th>
<th>Date</th>
<th>Time Spent on Site</th>
<th>Virtual Meetings, held via Skype, Blue Jeans or teleconference</th>
<th>Virtual Feedback/Member Checking, when I received feedback from participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 7, 8 &amp; March 21: 30-minute post-CPS interviews with Cory, Mark, &amp; Kevin</td>
<td>March 2016</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Ma y 5: 30-minute conversation with</td>
<td>June 1: 30-minute conversation with</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>July 27: 30-minute conversation with</td>
<td></td>
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<tr>
<td></td>
<td>Janu ary 12: 60-minute conversation with</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Documents directly linked to CPS session</td>
<td>Preparatory Documents for CPS Session</td>
<td>Feedback questionnaires from Kevin and Mark (Cory did not submit)</td>
<td>“Report on LJP CPS session” : 7-page document prepared by Terrance, with his reflections, in response to questions I provided</td>
<td>Terrance’s notes from strategy session, which took place on March 4, one week after CPS session</td>
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<td>----------------------------------------</td>
<td>--------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Terrance, Cory and Nicole</td>
<td>1-hour interview with Kevin</td>
<td>1-hour interview with Kevin</td>
<td>1-hour interview with Kevin</td>
<td>1-hour interview with Kevin</td>
</tr>
<tr>
<td></td>
<td>90-minute interview with Amy</td>
<td>90-minute interview with Amy</td>
<td>90-minute interview with Amy</td>
<td>90-minute interview with Amy</td>
</tr>
<tr>
<td></td>
<td>1-hour observation of teleconference</td>
<td>1-hour observation of teleconference betweenTerrance, Cory, and other members of the Australia team</td>
<td>1-hour observation of teleconference betweenTerrance, Cory, and other members of the Australia team</td>
<td>1-hour observation of teleconference betweenTerrance, Cory, and other members of the Australia team</td>
</tr>
<tr>
<td></td>
<td>facilitated by Amy</td>
<td>75 minutes</td>
<td>75 minutes</td>
<td>75 minutes</td>
</tr>
<tr>
<td></td>
<td>interviews/conversations with Terrance</td>
<td>2.5 hours of observation of CPS session</td>
<td>2.5 hours of observation of CPS session</td>
<td>2.5 hours of observation of CPS session</td>
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<td></td>
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</tr>
</tbody>
</table>

Documents produced in CPS Session:
| Existing LJP documents, which were shared with me | • “LJP Integrated Management System Manual”  
• Screenshots and copied text from Terrance’s Salesforce.com page  
• Emails between Terrance and Cory about Northern Exposure Bid  
• Presentation: Northern Oil and Gas Bid Overview  
• Presentation: Investor Presentation for Q1 June 2015  
• HMZ Bid Consent form for Chevron Australia  
• Global Strategy Presentation, created by Terrance  
• Bid Overview for Encana | • Personal document created by Terrance outlining projects he is currently working on | • Articles from aviation trade magazines written about Terrance, dating back to 1986  
• Article for an aviation trade written by Terrance  
• Torque newsletter, featuring Cory’s article promoting innovation at LJP  
• “UAV (Drone) Strategy for LJP”: Report prepared for LJP by University of Alberta undergraduate students |
| Other documents | • Documents for LJP website, such as investor relation reports and press releases  
• Ongoing email exchanges with Terrance | | |
APPENDIX B: INTERVIEW GUIDE

The following topics and sample questions serve as entry points for the semi-structured interviews. The goal is not to “cover” the following topics in order but to allow you to enter into the interview where you choose and to move through the topics in any order you choose.

**Before the CPS session:**

*Your stories around how you normally engage in solving problems and being creative, within your organization. Please draw on examples based both on your general past experience within your organization and on events that occurred in the time we have spent together, when I have observed you at work.*

- Your examples and stories.

*Your thoughts and feeling about the challenge that will be addressed in the CPS session*

- Your thoughts and feelings.

**After the CPS session:**

**Directly after:** *Your perspective on what was successful and unsuccessful about the CPS session, and changes to your thoughts and feelings about the challenge*

- Your perspective and changes to your thoughts and feelings
  - Your examples and stories

**Approximately one month after the CPS session:** *Your perspective on enduring impacts of the CPS session*

- Your perspective and changes to your thoughts and feelings
  - Your examples and stories
APPENDIX C: GUIDE FOR ONSITE OBSERVATION

I will be observing you as you go about your daily work so that I can understand how your existing workplace practices impact what happens during the CPS session. I am specifically interested in understanding how you typically address daily challenges that require collective problem solving.

What, precisely, will occur when we spend time together is not entirely predictable, and what I observe on the ground might lead me to revise my precise focus. However, these are my general areas of interest, as we head into the research:

1. Where does problem solving take place? For example, do you typically address challenges alone, in your office? Do you talk to others? Do you email them or meet with them in person? Where do you typically meet?

2. Who is engaged in problem solving? If you discuss challenges with others, who are they?

3. How does problem solving occur? Here I am interested in the ways you typically solve problems resemble and differ from what occurs during CPS. For example, to what degree do you discuss the framing of the challenge, before discussion solutions or their implementation? How much time do you spend exploring various options, in relation to the amount of time you spend coming to the “right” decision? To what degree do you try to figure out the right way to approach a challenge ahead of time versus simply trying something and seeing if it works?
APPENDIX D: CONSENT FORM

Name of Researcher, Faculty, Department, Telephone & Email:
Amy Zidulka, Ed.D Candidate

Supervisor:
Dr. Janet Groen, Werklund School of Education

Title of Project:
Creative Problem Solving (CPS) in Practice

Sponsor:
N/A

This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study.

Purpose of the Study

Creative Problem Solving (CPS) is a process to help guide people through the steps they might take in order to achieve creative results. Research suggests that it can be particularly useful in helping organizations meet their innovation goals. However, CPS has primarily been studied in controlled condition. This study therefore is interested in what CPS looks like, in practice, when it is being used in the messy context of organizational life.

In order to understand what CPS looks like, in practice, the researcher, Amy Zidulka, is interested in exploring three broad questions:

- What are your existing problem-solving practices, when you are not engaged in CPS? This would be important, because the way colleagues normally interact with each other and with challenges will impact how you engage in CPS.
- What happens when you engage in CPS? For example, the researcher would be interested in how you come to agree on what a good, creative idea is.
- What, if anything, changes for you and your organization as a result of having participated in a CPS session?

What Will I Be Asked To Do?

To be involved, you would participate in a CPS session, which would be at least 1.5 hours long and would be facilitated by your colleague, [Colleague’s name here]. The precise date for the session will be selected in way that accommodates the schedules of all participants. However, it is expected to occur in January or February of 2016. You would also be amenable to (2) me spending time observing your existing work practices, approximately 1-2 months before the session, (2) being interviewed by me...
about a month after the session, and (3) participating in a feedback session with other participants, in order to discuss my preliminary observations from the CPS session.

The research would take place in three phases. In the first, the researcher would gather baseline information about your existing practices. The second would revolve around the CPS session. The third would involve follow-up, about a month after the CPS session. The expected time commitment for you, as a participant, would be as follows:

<table>
<thead>
<tr>
<th>Phase One: Understanding existing practices</th>
<th>Participant Commitment</th>
</tr>
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<tbody>
<tr>
<td>The researcher would observe existing practices in your office for approximately one week. This would include: (1) a one-hour introductory meeting with all participants, to launch the research project, (2) one to two days of shadowing you, as you engaged in your work, and (3) a one-hour interview with you. The researcher would also review documents, for example, the organizational chart or strategic planning documents that the CEO deemed appropriate to share.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Phase Two: Understanding the CPS Session</th>
<th>Participant Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The researcher would (1) Conduct a one-hour interview with you before the CPS session, (2) observe the session, and (3) conduct a one-hour interview with you after the session. The researcher would also collect documents produced in the planning and execution of the CPS session, such as brainstormed ideas written on flipchart paper.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase Three: Gathering post-session thoughts</th>
<th>Participant Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The researcher would (1) conduct a one-hour interview with you approximately one month after the session and (2) conduct a 1.5 hour feedback session with all participants, in which she would share her observations and invite your commentary and analysis.</td>
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To better understand the details of what would occur at each stage, please refer to interview guides appended to this document.

**Note:**
- Interviews will be audiotaped, in order to ensure accuracy
- Participation is completely voluntary. You may refuse to participate altogether; withdraw from the study at any point; refuse to answer specific questions asked during the course of the study; and decline to participate in certain aspects of it.
- You will have the opportunity to review interview transcripts. You will also be informed of any direct quotes or specific actions that are attributable to you and that will be referenced in the group feedback session or published accounts of the research. Upon your request, such quotes and actions will be kept private. You will have a two week window to review material and provide feedback, with the understanding that no response on your part indicates approval.

**What Type of Personal Information Will Be Collected?**

Should you agree to participate, you will share identifying information, such as your name, job title, and email
address, with the researcher. The researcher will safeguard your identity through assigning you a pseudonym in all published accounts of the research.

You may choose to participate in this study and not be audiotaped.

Please put a check mark on the corresponding line(s), which grant permission to:
I grant permission to be audio taped: Yes: ___ No: ___
I grant permission to be referred to by a pseudonym: Yes: ___ No: ___

The pseudonym I choose for myself is: _______________________________________

Are there Risks or Benefits if I Participate?

This research presents minimal risks. However, risks do exist. The risks, along with their mitigation strategies, are outlined in the table below.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The dissemination of this research will pose a reputational risk</td>
<td>In collaboration with the CEO, the researcher will arrive at a way to refer to your organization to ensure its anonymity is maintained.</td>
</tr>
<tr>
<td>to your organization.</td>
<td></td>
</tr>
<tr>
<td>2. You will say or do something while you are being interviewed or</td>
<td>The researcher will check with you before sharing with the group any quote or action that I have gleaned through interviews or observation.</td>
</tr>
<tr>
<td>observed, which would prove damaging to their reputation or social</td>
<td></td>
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<tr>
<td>standing if it were known to others, either in the collective</td>
<td></td>
</tr>
<tr>
<td>feedback session or upon publication of the research.</td>
<td></td>
</tr>
<tr>
<td>3. During observational activities, non-participants will feel</td>
<td>When I am observing you, you will likely interact with others. You likely will have scheduled meetings and participate in unplanned hallway conversations. All those with whom you have scheduled meetings will be contacted in advance—either by me or you—in order to determine whether it will be best for me not to be present when you meet. We will assume that I will not be present in meetings, unless the third party has explicitly granted permission.</td>
</tr>
<tr>
<td>obligated to participate in the research project.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>In working with people you happen to encounter, while I am observing you, we will communicate that, although I am observing you and not them, I would be happy to leave the room.</td>
</tr>
<tr>
<td></td>
<td>It will be important that both you and I communicate clearly to third parties that they should feel no obligation to have me be present.</td>
</tr>
</tbody>
</table>
In terms of benefits, you and your organization will gain awareness of your own tendencies, as well as how they enable or constrain your ability to innovate. By coming in, as an impartial observer, the researcher will be positioned to feed back to you observations and analysis of your processes and organizational environment, and their relationship to the fostering of creativity and innovation. Also, in the final feedback session, we will collectively discuss what I have been observing, so that, as a group, you might come to your own insights and conclusions.

The research will thus provide you with a “mirror” that will enable you to reflect on how you currently engage in informal and formal creative problem solving. This information could inform the ways in which you move forward to foster innovation within your organization.

By participating in this research, you would also be doing a service to other practitioners and to the researcher. Through her teaching and through publication of my research, the researcher will disseminate findings so that other practitioners will be able to engage in processes like CPS in a more informed way.

What Happens to the Information I Provide?

Only the researcher and her supervisor will have access to your interview tapes, the transcripts, or the researcher’s field notes. All material will be kept in a locked locale and/or a password protected computer only accessible by the researcher and will be stored indefinitely by the researcher to be utilized for ongoing data analysis and publication.

The study’s findings will be the basis of the researcher’s Ed.D dissertation. Also, the researcher anticipates that they will be the basis for a number of conference presentations, journal articles and other sources for wider publication.

Signatures

Your signature on this form indicates that 1) you understand to your satisfaction the information provided to you about your participation in this research project, and 2) you agree to participate in the research project.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant’s Name: (please print) _____________________________________________
Participant’s Signature: __________________________________________ Date:

Researcher’s Name: (please print) ______________________________________________
Researcher’s Signature: ________________________________________ Date:

Questions/Concerns
If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Ms. Amy Zidulka  
Werklund School of Education  
250-370-1135; amy.zidulka@royalrads.ca

and  
Dr. Janet Groen  
Werklund School of Education  
403-220-6440  
jgroen@ucalgary.ca
If you have any concerns about the way you’ve been treated as a participant, please contact the Research Ethics Analyst, Research Services Office, University of Calgary at (403) 210-9863; email cfreb@ucalgary.ca.

A copy of this consent form has been given to you to keep for your records and reference. The investigator has kept a copy of the consent form.