

The Dialectic of Distributed Leadership

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It is 1994, and the Heartland oil refinery is in trouble (Houshower, 1999).¹ Plagued by poor reliability and ailing performance, the plant is identified by its parent company, Global Oil, as a target for serious change, decommissioning, or fire sale. A re-engineering effort has reorganized the official hierarchy, shuffling job titles and creating chaos at the front lines. Problems lurk in the aging equipment, brewing fears of safety hazards and environmental damage from leaks or explosions of the plant's volatile contents. The beleaguered plant manager, whose own job responsibilities have been confusingly redefined, casts about for a solution to the refinery's problems. From a maintenance supervisor he learns of a new approach to increasing plant reliability, and he authorizes its implementation. Over the course of the next few years, three things happen. First, every employee and manager in the refinery joins together to play a board game designed to teach holistic, systemic thinking about refinery operations. Reflective debrief conversations encourage them to think about applying the learning of the game in their corner of the plant. Second, the front line workers form 106 different action teams to eliminate defects in equipment, plant design, and operational procedure – this creates a buzz of distributed activity in the plant. Third, the refinery begins holding monthly continuous improvement forums to review action team progress and handle the more centralized, systemic issues that arise in their efforts. Within a year, annual cost savings in the tens of millions of dollars hit the bottom line. Safety and environmental incidents drop to negligible levels. Months before Global Oil is about to close Heartland refinery permanently, a buyer realizes the immense value created at the plant and offers a price far

¹ Heartland and Global Oil are pseudonyms, following the disguise used in the Houshower (1999) learning history. This story has been subsequently “outed” and its identity clarified through talks, presentations, and web sites, but for the sake of conservatism I retain the disguise here.

higher than Global Oil had anticipated. Now, after ten years and four changes of management, these practices have continued and performance has continued to improve steadily, making Heartland Refinery a handsomely profitable asset.

I have presented this story as a heroic narrative of leadership – there is transcendence amid adversity, and celebration of insight, vision, and action. There is not, however, a captain at the helm whose glory shines through the story. We might celebrate the plant manager who opened the door, the consulting team who designed the change process, or the leader of any one action team whose efforts helped save the plant. No one person’s efforts, however, is sufficient. At the risk of dulling the narrative, we are better off describing Heartland’s story as the emergence of a *system of distributed leadership*.

Distributed leadership is, however, a relatively new concept, in its early stages of formulation. The aim of this paper is to motivate and articulate the concept of distributed leadership, using the Heartland case study as a provocative example. I do this in four sections. First, I describe some theoretical reasons *why* distributed leadership is normatively and intellectually interesting. Second, I explore *how* the activities, structures, and cultural features of a distributed leadership system might function. Third, I describe *when* (under what conditions) the organizational literature would predict the emergence of distributed leadership or at least the utility of the concept. Finally, I revisit the Heartland story to highlight some of its counterintuitive features, and lay out some questions and rationale for further study of similar stories.

(Not) Defining Distributed Leadership

The idea of distributed leadership is not new. “Distributed leadership” per se has gained traction in the educational administration literature (School of Education & Social Policy, 2005; Spillane, 2006; Spillane, Halverson, & Diamond, 2001). And closely related concepts, such as “shared leadership” (Pearce, 2004; Pearce & Conger, 2002) are emerging. It has parents and cousins in earlier concepts, for example decentralization (Malone, 2004), empowerment (Conger & Kanungo, 1988; Kirkman & Rosen, 1999; Spreitzer, 1995, , 1996; Spreitzer, De Janasz, & Quinn, 1999; Spreitzer & Quinn, 2001), distributed innovation (Von Hippel, 2005), and aspects of learning organizations (Senge, 1990).

There is, however, one critical and distinctive feature of the concept. Like a few other concepts in organization studies (e.g. “loose coupling”) “distributed leadership” is fundamentally dialectical. “Leadership” invokes the idea of a single person, or at least an activity carried out by a single person. Merriam-Webster’s (2006) first definition of leadership is simply “the office or position of leader.” “Leader” in turn is “a person who leads as a guide, conductor; a person who directs a military force or unit; a person who has commanding authority or influence”, etc. On the other hand, “distributed” implies that the “leaders” or people exercising leadership are multiple, that they are not the unitary guide or conductor. As much as we might try to reframe or redefine leadership as something collective, shared, or distributed, its common-sense baggage remains. There is, therefore, a contradiction inherent in the common usage and associations of the two terms.

The temptation with such a dialectical concept, as Orton and Weick (Orton & Weick, 1990) point out, is to convert it into a unidimensional one. The simplest conversion is to a binary variable: is a particular system loose or is it coupled? Is there a leader or is leadership distributed? Less simply, we can posit a continuum, in which leadership can be more or less distributed. Such formulations could get even more sophisticated – for example, we could try to develop a contingency theory about when leadership *should* be more or less distributed given properties of the technology and environment of the organization. Doing so, however, risks redundancy with work already being done on centralization in organizational design. It also eliminates the basic dynamic tensions latent in the concept – those between the individual and the collective, between order and chaos, etc.

I would like instead to hold onto that tension, maintaining distributed leadership as an ambivalent and dynamic term. This is not to be pedantic or intellectually elusive. In fact it is to be incredibly practical – just as we as researchers must wrestle with these tensions, so must founders, managers, employees, and other people living inside organizations. We all must ask ourselves, *when is it my moment to lead?* Like loose coupling, the concept of distributed leadership can be a sensitizing device (Weick, 1976), prompting us to ask exactly that question.

What makes a story like Heartland’s compelling, therefore, is not that a “new model” of distributed leadership won over non-distributed leadership, leaving us the task of asserting “distributed” over “leadership.” Rather, a creative set of activities allowed the organization to do its own wrestling, and to attain a kind of dynamic balance as a whole system. This, I would assert, is what allowed a process of correspondingly holistic

improvement, overcoming apparent tradeoffs between financial, human safety, and environmental performance.

Why Distributed Leadership?

The question remains, why do we want to be sensitized to these tensions? What does managing the tension of distributed leadership accomplish? This, I believe, is one of the key empirical questions to be addressed by research that employs a distributed leadership perspective. At the same time, we have some clues from existing literature on organizations that may guide our inquiry.

One celebrated dimension of distributed leadership is **empowerment**. This affective and humanistic dimension gives distributed leadership approaches their intrinsic appeal. Although there are structural antecedents (Conger et al., 1988; Spreitzer, 1996), and it may exist at the team level (Kirkman et al., 1999), empowerment is fundamentally psychological – as a sense of meaning, competence, self-determination, and impact (Spreitzer, 1995). The connection between this experience and qualities of leadership has been established directly through Spreitzer’s research. Setting the right structural context (sociopolitical support, access to information, role clarity) leads to feelings of empowerment among managers (Spreitzer, 1996). Managers who feel empowered are in turn reported by their subordinates to be leaders – innovative, upwardly influential, inspirational (Spreitzer et al., 1999). Thus, one promise of balancing or attaining a system of distributed leadership is that more people might enjoy these psychological benefits. This would be both an end in itself and might lead to greater mobilization of people’s energies that in turn lead to higher organizational performance (Kirkman et al.,

1999). But this could stand to be explored further – having taken a psychological turn and validated some measurement instruments, research on empowerment could come back to the network or organizational level of analysis. After all, the root word of empowerment is power, which is both relational and inescapably asymmetric. When the dialectic of distributed leadership is managed elegantly, how is the experience of empowerment distributed throughout an organization? Is it possible for everyone to feel empowered all the time? Or is it a zero-sum game, with empowerment ebbing and flowing among individuals? Empowerment may be a valid goal, but without recognizing the inherent tensions in the concept and the underlying dialectic, we risk its confinement to hollow rhetoric (Argyris, 1998).

A second dimension or trope of distributed leadership is **adaptability**. In this sense, the idea of distributed leadership is closely linked to that of continuous, situated change (Orlikowski, 1996). To connect with her ideas, we might liken leadership to a kind of improvisation that occurs in many places simultaneously. We can then take a positive stance about this improvisation, and offer the obligatory prayer to Proteus, god of change, citing some combination of globalization, new technology, or competitiveness as an impetus for adaptation. But there is no guarantee that a change will be responsive to the environment of the organization and yield higher performance – in fact Orlikowski (1996) documents several unintended consequences of improvisation with detrimental impact (e.g. technological dependence). Again, distributed leadership is dialectic – traditional “leading” involves guiding or conducting something unitary and coherent. Distributed leadership could mean fragmentation, with myriad unsynchronized leaders guiding in opposite directions. When the dialectic is handled elegantly, as it was at

Heartland refinery, the process of change has a salutary effect. But we have to look deeper into the case to understand how this occurred. Action teams undertook local improvisation but did so under strong constraints – that no team could go beyond its usual authority, but could recruit more senior members to attain authority. Team activity was distributed but members had to account for themselves in a centralized forum. They acted locally in their corner of the refinery but with the board game’s lesson in mind that all the pieces are connected into a whole system. We see a kind of improvement or adaptation in this story, but again it is not unidimensional (distributing leadership -> adaptation -> improvement). To better understand the connection, we need to understand the conditions under which improvisation is possible, and the conditions under which it leads to genuine adaptation. Again, this prompts empirical work on distributed leadership – when do we see distributed improvisation, innovation, and change? What conflicts arise in such processes? How does coordination occur?

The third theme is about **situated knowing** and responsiveness. Here the idea of distributed leadership overlaps insights from distributed innovation (Von Hippel, 2005). The argument goes something like this: knowledge arises through participation in a community of practice (Lave & Wenger, 1991). Although some of this knowledge can be partially articulated and externalized, much of it is tacit and embodied (Polanyi, 1958, 1966). In an organization, these two propositions mean that knowledge, and hence organizational capability (Teece, Pisano, & Shuen, 1997), is situated in local contexts and interactions: sales and service people with customers; operators with equipment; teachers in classrooms; users with products. It is, in other words, distributed. Leadership, however, is traditionally construed as occurring in the top of the organizational hierarchy.

The promise of distributing leadership is to somehow grant the holders of situated knowledge with the capacity to improvise, innovate, guide strategy, or catalyze change. Because they have the rich, situated knowledge to do so, their leadership will be more efficient and effective. In Heartland we see this occur – process improvement and elimination of defects is not carried out by senior managers or external consulting teams, but by the operators who live with the equipment every day, and who are attuned to hear subtle changes in vibration as signals of malfunction.

While this situated knowledge framing would seem to argue for total decentralization of decision making (a unidimensional view of distributed leadership), doing so would ignore another critical aspect of the story. While action teams did carry out improvements at distributed points in the refinery, they also encountered systemic issues that prevented them from moving forward – for example the need to shut down parts of the plant beyond their own in order to replace a part on their equipment. Issues like this were brought to a continuous improvement forum that included senior managers, which in turn advised the planning and decision making teams of the refinery. When systemic, non-local issues were resolved, it was through this more traditional exercise of leadership. In essence, the situated knowledge perspective calls us to look for the situatedness of central leaders in addition to front line workers – their interactions and practice (which involves a steady diet of meetings, emails, and other communication), positions them to be uniquely aware of coordination and integration challenges. A system of distributed leadership somehow allows for a blend of centralized and decentralized knowing and leading.

How might distributed leadership work?

Each of these framings – empowerment, adaptability, and situated knowing – raises a set of questions about systems that accomplish the dance of distributing and redistributing the activity of leading. What should we look for? What might we see? Again, these are some of the rich questions for empirical research, but there are clues in the organizational literature. Each of these, in a sense, provides a mechanism for choreographing distributed leadership. I deliberately use artistic, perhaps whimsical terms to emphasize the lightness with which a dialectical tension must be held.

The first approach is the **dance**. In part, this notion draws on the idea of entrainment (Ancona & Waller, In press), in which centralized and decentralized activities occur in a kind of rhythm. In Heartland, perhaps the continuous improvement forum (which occurred every month) provided a kind of pulse for the work of the action teams. It reminded them that they were part of a larger plant context, let them know that there would be a forum to address their needs and challenges, and allowed centralized planning to continue without constantly interrupting the work of distributed activities. This is a relatively new area of teams research, but we could imagine it being enriched by studying organizations and processes that undertake a dance of distributed leadership. Balancing in time may also simply mean a sequencing of leadership activities, alternating between a more centralized setting of direction, a decentralized process of testing and feedback, a centralized process of sensemaking and revision, and so on. Again, the important caution to researchers is to maintain a dialectic concept – a strong, central, charismatic move by a CEO after an attempt at distributing leadership does not

necessarily mean failure or backsliding; rather it could be a necessary moment in an alternating or rhythmic sequence of activity.

The second approach is the **toy chest**. In order for distributed leadership to work, there must be communication and play among distributed actors. With any group of children, the simplest objects can provide a referent and focus for that interaction, whether it be a piece of butcher paper, a basketball, or a dollhouse. In the organizational context we can look to the idea of a boundary object (Carlile, 2002, , 2004; Star & Griesemer, 1989). When successful, boundary objects can accomplish the transfer, translation and transformation of knowledge – this is exactly the challenge posed by situated knowing and the need to integrate diverse knowing. How organizations employ these objects, which include information technology systems, drawings, reports, etc. is a critical focus of study for distributed leadership research.

In Heartland, a systems thinking tool called The Manufacturing Game (Carroll, Sterman, & Marcus, 1998) served as just such an object. The board game provides an opportunity to role-play the conflicts that arise in managing continuous manufacturing facilities. When all 850 employees in the refinery played the game, trading roles, it provided a shared experience that illustrated the importance of thinking more holistically and systemically about the plant. Most importantly, playing the game not only provided an episodic boundary-spanning experience. Later on in the history of Heartland, when people slipped into habitual patterns of behavior (e.g. deferring preventive maintenance to maximize short-term output), operators could hold up a poker chip from the game as a reminder of the systemic insights shared by the team. Like a pointy hat worn by a young

princess, this re-invoked a shared world, in a sense returning them from the world of the local role to the world of the whole.

Of course, manufacturers accomplish coordination through a more traditional toy chest as well – incident reports, computerized maintenance management systems, management of change forms, etc. Carlile (2002) discusses the use of prototypes and engineering drawings in the collaboration of design engineers and manufacturing engineers. Outside of manufacturing, Adler (2006) describes medical pathway documents and their role in allowing shared leadership among doctors, nurses, technicians, and administrators in hospital process improvement. Put simply, to understand the more abstract routines, processes, and assumptions of distributed leadership, we must understand the tangible stuff with which it plays.

The third approach might be called the **puzzle**, and refers to the way that distributed pieces in an organization fit into a coherent whole. It also means to invoke the image of the puzzle piece, with its gaps and protrusions that demand connectivity. A nice example of the puzzle approach emerges from Ancona and colleagues' work on externally focused behavior in teams (Ancona, Bresman, & Kaeufer, 2002; Ancona, 1990; Ancona & Caldwell, 1992). Their work demonstrates the performance benefits that teams enjoy when they actively probe and shape their external environments. We could imagine that having a habit of such teams might allow distributed leadership activity that is both locally innovated and globally connected. While this research is predominately behavioral, one could imagine that this type of interconnectivity could be encouraged through structural features of the organization, including incentives, standardized practices, and cross-functional reporting relationships. In further

exploration of the Heartland case and similar efforts at distributed leadership, we might look for creative structures and behaviors that encourage local autonomy and innovation while maintaining connectedness to centralized resources, knowledge, and currents of activity.

Just as Schein identifies three layers of organizational culture – artifacts, espoused values, and the guiding assumptions that lie beneath (Schein, 2004) – we can ask whether these approaches to distributed leadership might be supported by something deeper. This deeper level I will partially bracket and label the **playing field**. I use the term “field” to invoke a few ideas from the edges of organizational theory. The first is Lewin’s field theory of social behavior (Lewin, 1951), from which we get the notion of action as occurring in a field of social forces that must be uncovered. The second is from William Isaacs’ (1999) notion of a “container” and the idea that social interactions produce and are influenced by an affective and intangible tone or climate that is best understood as a field phenomenon.

Schein might claim that this playing field is largely produced by leaders enacting tacit cultural assumptions that guide decisions, social interaction, and sensemaking. In that case we might inquire into the different types of cultural assumptions that underlie different styles of distributed leadership. Of course, some assumptions have emerged already in this essay: that empowering people leads to performance vs. chaos; that adaptation comes from cumulative improvisation vs. visionary direction; that knowledge is primarily tacit and locally situated vs. book-learned and centralizable. Any culture or micro-culture will come out with different answers to these “whys” of distributed leadership. Following further research on such cultures, we might take a stance that one

or another assumption is more accurate or more generative, and advocate for cultural positions that generate a certain pattern of distributed leadership. Doing so, however, would miss the point – that every organization, as a community of practice and discourse, must wrestle with the dialectic themselves. My hypothesis is that if we as researchers join them in that reflective and self-generative process through clinical and/or ethnographic methods, we will learn a great deal about the deeper territory of distributed leadership.

I do not, however, want to limit the idea of a playing field to just “assumptions” that we can articulate linguistically. There are also qualities and affective dimensions of leadership that produce the field in which we play. I can best illustrate this by juxtaposing theory and data that seem to contradict one another. The theory is that of threat-rigidity effects: under conditions of threat and strain, organizations will narrow their range of information inputs and centralize authority and decision making (Staw, Sandelands, & Dutton, 1981). While this observation has been validated by some research, we also see counterexamples, one of which is the Heartland story. Under threat of closure, the refinery scanned for new solutions that uncovered the Manufacturing Game. It then undertook a decentralized process of local improvements, thereby pushing license for action to the front lines. What about this situation allowed for a reversal of the threat-rigidity effect? In particular, what about the senior leadership team and plant manager allowed them to trust and invest in a distributed process, when power would naturally fall in their hands? There are, no doubt, other rich examples of leaders who set a tone contrary to that of other social forces – slow reflectivity amid pressure and urgency, or camaraderie amid conflict. In the spirit of our dialectic, these are qualities of

action among central leaders that create part of the context for the distributed action of the system as a whole. As such, this tonal, affective climate dimension of the playing field merits further inquiry.

Conflicts and limits to distributed leadership²

Unfortunately, the playful imagery employed in this essay glosses over some of the stickier conflicts lurking in the concept of distributed leadership. Returning to our three dimensions of empowerment, situated knowing, and adaptability, we can take a more critical perspective on each. Empowerment, as articulated above, is largely a psychological concept. If we think of empowerment more structurally, however, we run headlong into a critique of organizational power – that no matter how hard we try to engender a feeling of empowerment, the reality of resource and information control, dependence, and status differentials still exists in hierarchical organizations. Building on the tradition of critical theory from Marx to Foucault to Bourdieu, we have difficult questions to pose about this contradiction. Is any distribution of leadership possible as long as legal and financial control resides in the hands of a central executive board? Is empowerment possible without a radical restructuring of corporate ownership and distribution of financial returns? Is all conversation about psychological empowerment in fact a tool for manufacturing consent? Empirically and methodologically these questions have strong implications – should we be willing to call the Heartland renewal

² Special thanks to my colleague Joelle Evans for her contributions to this section. I have just begun to really listen to her sociologically and historically rich and critical perspective on these issues; I hope that this section allows me to explore a balance to my own idealism. Herein lies my own challenge in grappling with the distributed leadership dialectic.

process a case of distributed leadership? Or do we need to hold higher standards – searching, perhaps, for a refinery operated as a workers’ cooperative?

Situated knowledge and adaptability evoke parallel critiques. Implicit in these ideas is that front line personnel should be given more responsibility – we should look to them for organizational learning, innovation, and renewal. The question is, what are the terms of that exchange? Is the organization compensating them for their extra efforts? Are they granted a greater share of the material return? Are they granted a genuine voice in decision making or just an advisory role? These answers were not explored in the first study of Heartland’s transformation (Houshower, 1999). Exploring these issues will require revisiting that story and others like it. I can say that in my initial encounters with a refinery undertaking a similar change process, I have seen interesting signs. Their process of deploying the Manufacturing Game has been stalled because workers are logging an average of 40-45% overtime. Their exhaustion may be contributing to challenges at the plant. When I asked about the sources of overtime, it seems that a great deal of it comes from workers’ involvement in participatory change initiatives. Again, the burden of distributed leadership places intensive demands on workers and their families, with only overtime pay as additional compensation. It may be that dances, toy chests, puzzles, and playing fields can reduce the load and increase the benefit, or it may be that these conflicts are irreducible.

Approaches to distributed leadership research

As I have presented the concepts here, distributed leadership is not a domain where deductive, hypothesis testing research would be appropriate. The literature gives

us clues as to the tensions and dialectics that organizations might wrestle with in adopting a distributed leadership approach. How they do so, however, is a question for a more inductive, theory-generating style of research. The MIT Leadership Center's intention is to develop a portfolio of case studies, each of which contributes insights to a model or theory of distributed leadership. Within that portfolio, we could imagine including Heartland and the handful of other oil refineries and chemical plants who have attempted the same change process with the Manufacturing Game, action teams, and continuous improvement forum. To that end, I am developing two field research sites. The first is a refinery where the same plant manager from Heartland carried out a very similar change process with similar performance results between 1998 and 2005 – this will be a retrospective case study dependent on interviews with plant personnel from that time period. The second site is a refinery that has just begun to engage with the Manufacturing Game but has run into the aforementioned challenges of personnel overtime. This will allow a mix of ethnographic observation and interviews to document the process as it unfolds. The hope is to observe the dialectic in action and see what concepts emerge. Ideally these case studies will be combined with other case studies from the MIT Leadership Center's research community.

The discussion above about conflicts and limits, however, warns us to take a critical and balanced approach to this research. While the tendency might be to focus on the positive and document the success of distributed leadership efforts, we must remain attuned to some of the essential conflicts lurking beneath. We might hold higher standards for what we consider positive (e.g. worker-owned cooperative structures) and look for the ways that any of these contexts mask relationships of domination and

conflict. Our narratives may be heroic dramas like the one I spin about Heartland, or they may be tragedies – the dialectic of distributed leadership implies that the two may be inseparable.

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