



# The Challenge of the Paradoxical Vision: Innovating Where No Solution Seems Possible

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Perhaps the clearest illustration of the challenges for communicating a vision for the Department of Defense can be found in the annual Secretary of Defense Testimony to Congress. In his March 2015 testimonies, Secretary Ash Carter outlined the threats that the U.S. military must be able to counter. To confront these threats, he outlined the Defense Innovation Initiative (DII) as the change effort to “ensure the military continues to ride the leading edge of innovation.”<sup>1</sup> While the DII is aspirational, there are several competing interests within the bureaucracy of defense that naturally push against innovation and the change it requires. This paper explores the nature of the relationship between paradoxical visions and innovation using current and historical examples, and provides recommendations for current and future leaders seeking to foster cultures of innovation.

Many writers and scholars in change management emphasize the importance of vision in fostering innovation. Common themes in vision development include simplicity, clarity, identifiable or measurable outcomes, emotional connection with the membership, and stakeholder commitment.<sup>2</sup> These themes help leaders navigate the complexity of strategic decisions by providing a coherent mental image of the desired future that is a change to the existing trajectory.

The discourse on visioning often operates under the critical assumption that such images are possible to attain. While strategic issues are complex and naturally present competing perspectives, it is assumed synthesis is possible and will emerge in the course of implementing the change effort.<sup>3</sup> In practice, such a synthesis is only temporary because the competing perspectives are paradoxical, presenting “dilemmas in which no choice can resolve the tension because opposing solutions are needed and interwoven.”<sup>4</sup> Military transformational efforts face a stream of predictable paradoxes borne out of inherent organizational tensions, such as the need to generate innovative changes to solve local problems (especially in combat situations) and the need to generalize that change across the force.<sup>5</sup>

Diversity management provides an example of an institution’s underlying vision that leverages the unique skills and capabilities of all its members and respects their differences.<sup>6</sup> Tensions arise from the challenges of meeting the functional imperative of providing trained and ready forces and the social imperative of ensuring the military is representative of society.<sup>7</sup> The tensions become paradoxical when the two imperatives clash—for instance, when the senior officer ranks are perceived as not being diverse.<sup>8</sup> The military services’ selection and promotion processes may have chosen the best-qualified candidates, but the lack of representation becomes problematic.

Scholars and commentators in organizational change have long contended that leaders must accept, confront, and transcend dilemmas and ambiguity rather than avoid them, thereby fostering adaptability, creativity, and innovation in their organization.<sup>9</sup> In the military, innovation, defined by the Army as “the conversion of new ideas into valued outcomes” through critical and creative thinking, is an institutional tenet.<sup>10</sup> Innovation is more than mere evolutionary change, it is a process that “cross[es] organizational lines and threaten[s] to disrupt existing arrangements” on the way to addressing “highly problematic situations.”<sup>11</sup> Recognizing that organizational culture is an important factor in fostering innovation,<sup>12</sup> much attention addressing the how and why of innovation has focused on “processes, inhibitors, and enablers of the production of novel solutions” that innovative efforts should provide.<sup>13</sup> Given that organizations are faced with solving paradoxes and typically visions for change do not and cannot provide a clear way forward (note that 70-80 percent of change efforts fail),<sup>14</sup> what impact does that have on building the culture of innovation the military desires?

## Vision and Paradox

The roles of vision are two-fold: a mental image of the future and compelling need to move the organization toward it,<sup>15</sup> or a “guiding philosophy.”<sup>16</sup> The purpose of vision is to create “energy, commitment, and belonging” and the expression of that vision, called the vision statement, “provides a sense of ultimate purpose, direction, and motivation for members and activities within an enterprise.”<sup>17</sup> The statement is “the articulation” of a vision and output of the visioning process,<sup>18</sup> but is too often inappropriately treated as the equivalent of a vision.

Simplicity and clarity are among the characteristics often attributed to quality vision statements conveying a common understanding of the desired future and goals to achieve it.<sup>19</sup> These are difficult to achieve when the vision is rooted in complex, ill-structured problems with competing perspectives. A vision statement that aligns with one perspective over the other or satisfies neither risks failing to garner commitment. The organization thus diverts energy toward overcoming resistance and away from implementing change. If the competition is a resolvable disagreement, then one would expect the vision to promote the synthesis as the outcome.

Paradox can inhibit that synthesis. A paradox “denotes contradictory yet interrelated elements - elements that seem logical in isolation but absurd and irrational when appearing simultaneously.”<sup>20</sup> Because the competing perspectives seem unresolvable, a change effort rooted in a paradox becomes embroiled in controversy. At the individual level, the quest to resolve personal paradoxes, such as seemingly opposite and incompatible behaviors (for example, simultaneously centralizing and decentralizing certain functions under mission command<sup>21</sup>) can drive and foster creativity.<sup>22</sup>

At an organizational level, the competing perspectives can represent different camps within the organization or among external stakeholders, and the risk is for leaders to shortchange the visioning process and produce a vision statement that reads as either/or.<sup>23</sup> Even when there are only two primary camps, the choices become complex. State the vision in terms of ‘A’ or ‘B’ and risk alienating the other side. Express the vision as ‘A’ and ‘B’ (regardless of how leaders describe the synthesis) and risk the vision being an uncomfortable compromise or seeking the “least common denominator.”<sup>24</sup> Or, the leader can avoid ‘A’ and ‘B’ altogether, but risks developing a vision that is too vague, causing the leader to equivocate when pressed for the details. Of the three, avoidance can appear the most attractive when the tensions are greatest and risk killing the change effort before it begins. Moreover, leaders might take comfort in an altruistic approach, expressing the vision in terms of common organizational values, to avoid personal tensions and anxieties in communicating the vision.<sup>25</sup>

Part of the challenge is that there is more than one general class of paradox that organizational change efforts face. Change scholar Marianne Lewis presents three, and often these paradoxes intersect:

*Paradoxes of Learning.* This describes a general class of tensions between continuity and change, whereby one constituency prefers to retain knowledge and past practices while the other seeks change.<sup>26</sup> These tensions naturally arise in change efforts, but oftentimes a balance can be struck whereby the organization continues to function adequately while undergoing the change. The paradox arises when the organization cannot function while undergoing change, when it appears necessary to break the organization while striving to fix it.<sup>27</sup>

Military innovation scholar Nina Kollars provides an excellent case study in this challenge from recent operations in the Middle East. Her 2014 case study reviewed the emergence of the rapid acquisition process out of the requirement for field-expedient solutions to allow military convoys in Iraq to survive growing numbers of ambushes and threats posed by improvised explosive devices. The paradox emerged as the institutional U.S. Army sought to develop a blanket solution, as some pushed for immediate changes through the acquisition system while others “engaged in the preservation of budgetary continuity and long-term acquisition programs” that privileged continuity.<sup>28</sup> The result was that urgent systemic needs “languished in offices.”<sup>29</sup>

The challenge of this class of paradox is that there is not a clear relationship that forces for continuity and forces for change have on organizational performance. In other words, there is no prescription for how much of



the organization needs to break in order for the whole organization to be fixed. Nor is it certain how change and continuity influence each other in the pursuit of change.<sup>30</sup> Business literature tends to focus on only one scenario, whereby the forces for change must prevail in some way lest the organization become stagnant. Therefore, in business literature, forces for continuity are merely sources of resistance to be overcome through aggressive engagement by change agents.<sup>31</sup> While this scenario applies to the military, so too does the converse. For example, Kollars' work shows a lack of capacity to seek, discern, and share lessons can cause the urgency to change to become unclear,<sup>32</sup> and thus a very real problem is overcoming organizational ambivalence.<sup>33</sup>

*Paradoxes of Organizing.* Some scholars suggest that the very act of organizing generates tension between control and flexibility.<sup>34</sup> For military organizations, the tensions can be described in several ways such as centralization and decentralization,<sup>35</sup> tight versus loose coupling,<sup>36</sup> and professional autonomy versus bureaucracy.<sup>37</sup> Change scholar John Kotter noted that organizations often evolve from greater flexibility in its early stages to ever-increasing control and stabilized structure over time, and the challenge for leaders is to seek the proper balance.<sup>38</sup> While bureaucracy is often demonized in the literature as a barrier to innovation, so-called 'adhocracy' can be equally damaging.<sup>39</sup> The resulting tensions can sometimes pit extreme and emotionally-charged views against each other – of the potential for falling victim to dehumanizing and centralized administrative behavior<sup>40</sup> against anarchy on the other.<sup>41</sup>

Such paradoxes have a very complex middle ground regarding how much and where the variance within organizational behaviors reside. An organization may segment itself into multiple sub-organizations whereby one is tightly controlled and the other loosely, and the placement of the boundary presents an additional paradox. For example, the military services have divided themselves into conventional and special forces with separate cultural views toward innovation and change;<sup>42</sup> into operational and experimental units whereby innovations are encouraged but bounded;<sup>43</sup> and into core and peripheral mission areas that pre-determine priorities and interests.<sup>44</sup>

In a case study of the Army Air Corps' P-51 Mustang, Alan Haggerty and Roy Wood show the dangers of relying too heavily on a centralized acquisition system to spur innovative solutions. Rather, this stalwart aircraft of the Second World War was designed through "a combination of urgent warfighting need, intense industry competition, and freedom to draw on the intellectual forces of government, industry, and academia," yet did not stem from a "highly structured requirements generation process."<sup>45</sup> The difficulties of such processes can include risk aversion, rigidity, excessive oversight, and sacrificing "good enough" for perfection,<sup>46</sup> all potentially inimical to innovative thought.

Forty years later, the centrality of the program of record as the instrument for managing Army change spurs its own tensions. Programs of record are approved and funded line items in the defense budget and have embedded authorities for the expenditure of those funds.<sup>47</sup> Our experiences with global teleconferences (e.g., councils of colonels) suggest that new ideas are too easily dismissed if the idea either competes with an existing program of record or does not yet have its own funding. While not all innovations must become programs of record, new ideas surfacing outside of the established innovative or experimental boundary of the organization have a longer and more difficult path toward becoming viable change efforts.

*Paradoxes of Belonging.* This involves matters of individual perspective versus the collective. Members show commitment to groups (including organizations) in three ways – emotional connection, a sense of obligation, or through cost-benefit analyses.<sup>48</sup> Groups leverage all three to recruit and sustain memberships. Meanwhile, individuals identify with and are connected to many groups (and to subgroups within groups): they often have to find balance among their commitments. The resulting paradoxes are many-fold, regarding differences between what organizations view as its preferred memberships (and its acceptable forms and degrees of commitment among its members) and what it actually does to sustain that membership. For example, the military espouses service as an avocation or 'calling' and asks its members (military and civilian) to show commitment intrinsically through a sense of obligation. However, it recognizes that extrinsic rewards are necessary to sustain a membership of the



requisite size and capabilities to satisfy the overall mission.

The presence of paradox in complex, ill-structured problems means that not only must these tensions be confronted early, they may have to be confronted often. Before the ink dries on a change effort plan, adversaries have already adapted and the organization evolved. The shifting problem space can fuel internal criticism against the change effort and ultimately derail it. Thus, leaders must develop visions that synthesize and transcend the tensions so they avoid being too easily disrupted. Exercising vision to overcome complex, ill-structured problems requires “deep thinking.” Embracing (i.e., “fully accept[ing] and ‘liv[ing]”) both sides of the paradox allows adaptability as the very definition of the problem evolves.<sup>49</sup>

### **Challenges of Innovation**

The desired outcome of fostering innovation is complex and is affected by different types of paradox. Defining innovation is the first challenge, as it is an overused and vague term.<sup>50</sup> Adam Grissom defines military innovation as a three-part phenomenon, as something that: (1) changes how military formations function in the field, (2) is significant in scope and impact, and (3) produces greater military effectiveness.<sup>51</sup> The 2015 Army Operating Concept’s (TRADOC Pamphlet 525-3-1) description emphasizes the leader’s role “of critical and creative thinking and the conversion of new ideas into valued outcomes. Innovation drives the development of new tools or methods that permit Army forces to anticipate future demands, stay ahead of determined enemies, and accomplish the mission.”<sup>52</sup>

But the processes and behaviors that enact such ‘conversions’ differ according to what is being changed by the new ideas and where the changes are occurring. A useful taxonomy comes from military thought leader John Garstka who found that innovation occurs through interrelationships of five different types: (1) concept innovation, the development of new theories and operating philosophies that alter how military organizations employ capabilities to achieve a particular aim;<sup>53</sup> (2) people innovation, changing behaviors of organizational members;<sup>54</sup> (3) organization innovation, also known as structural change,<sup>55</sup> “[i]nvolves the creation of new organizations, business practices, ways of running organizations, or organizational behavior;”<sup>56</sup> (4) process innovation, the “development of new tactics, techniques, and procedures;”<sup>57</sup> and (5) technology innovation, involving technological capabilities that organizations use.<sup>58</sup> In Garstka’s model, the latter four interlink as capabilities move from new idea to initial fielding. Thus, “innovations in one line of development often require innovations or changes in other lines of development.”<sup>59</sup>

This clearly favors a top-down comprehensive approach to military innovation that pre-determines component efforts, possibly using DOTMLPF<sup>60</sup> as a basis or through a transformation campaign with distinct experimental lines of effort.<sup>61</sup> The challenge for leaders is to craft vision statements that provide both the desired overall outcomes as well as how disparate efforts can cooperate and interoperate. As tensions arise between lines of effort, leaders must decisively engage and re-state the vision as needed before the overall transformation grinds to a halt.

Where the new idea becomes an innovation is also important.<sup>62</sup> Although successful field innovations are often celebrated as the desired model, they occur often out of necessity due to a threat environment,<sup>63</sup> and not all field innovations are good for the organization overall.<sup>64</sup> Screening processes (e.g., the aforementioned ‘councils of colonels’) should aid in elevating the right new ideas for generalization across the enterprise level. However, the same paradoxes affecting the expression of the enterprise vision also provide ready ability to bureaucratically deny opportunities to explore new ideas. Why generalize it? Is it redundant with existing activities? If not, where will the resources come from? Which other parts of the enterprise would have to change in kind?

### **Implications for Visionary Leadership**

The nexus of vision and innovation should cause the enterprise to answer these four questions through deliberation of the idea’s merits and not via a quick relegation to the rejection pile. Vision statements, built for simplicity and clarity, are insufficient because they only communicate the essential components of the guiding philosophy,



one that has been reduced in form. Solving this problem means getting beyond the vision statement and focusing on the more complex and comprehensive mental image underlying it.

The guiding philosophy and mental image must be expressed must incorporate a guiding philosophy that provides intent and direction for the enterprise to engage with new ideas, rather than leave it to the bureaucratic processes to figure out. The philosophy answers the question of continuity versus change, of where is change to be fostered and what continuity is critical. It answers the question of handling redundancies, which may or may not be undesirable! If a new idea competes with an existing program, the vision must help guide when that is considered OK and when not. It also helps with understanding the degree to which solutions must be pre-determined and comprehensive across all lines of innovation, and when and how new (especially disruptive) ideas should be pulled forward.

If fostering innovation is the goal, a single overarching guiding philosophy that applies to all possible change efforts will not work. Each strategic issue driving military innovation is different in how it enacts the paradoxes of vision, and how it poses questions for senior leaders to answer with innovative solutions. The guiding philosophy has to be specific to the change effort, with sufficient guidance for leaders within the enterprise to enable the right and best new ideas to help guide the organization toward the vision. This way, the enterprise anticipates, embraces, and critically evaluates new ideas as they come forth.

This is not easy. Organizations are attuned toward vision statements with the right sound bite. Full visions require significant energy and reflection, whereby the paradoxes are confronted, synthesized, and turned into useful strategic direction that helps organizations make sense of the many good ideas surfacing from individuals, and encourage rather than discourage innovation. It requires that we pay much more attention to what goes into the vision statement, rather than rely on the vision statement alone. Leaders should anticipate potential tensions and issue guidance on how to navigate them as part of rolling out a transformation campaign.

The U.S. Army, like the other armed services, is pursuing its own vision that should align with the DII such that “our vision of the future must drive change to ensure that Army forces are prepared to prevent conflict, shape the security environment, and win wars.”<sup>65</sup> But as former Secretary of the Army John McHugh offered in reflection during his last keynote speech, “In life—especially in the Pentagon—vision and ideas give way to priorities and realities.”<sup>66</sup> This presents the ultimate paradox facing any leader, how to pursue long-term goals while being pushed toward addressing only the here and now. Overcoming this paradox is simple but not easy. It requires that leaders at all levels exhibit the skills to craft a vision, the leadership to encourage members to pursue that vision, and the perseverance to see it through.

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## NOTES

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