

# Dealing with Chaoplexity

In this commentary, the authors propose a new frame for the professionalization of military logisticians.

■ By Dr. Christopher R. Paparone and George L. Topic Jr.

In the turbulent environment in which we expect to continue operating, the top-down habits of hierarchical organizations will suffice less and less because they cannot respond to changing circumstances in a timely manner. This environment, characterized as “chaoplexic” in our July–September 2013 *Army Sustainment* article, demands the simultaneous, holistic, and continuous adaptation of entire organizations rather than individual responses to directives that trickle too slowly from higher authorities.

The military has adopted the philosophy of mission command to address the decentralization of initiative needed to operate effectively as a networked organization. Logistics organizations are driven by small teams tied together as one of the most networked organizations in the military.

We contend that the Army logistics community has not studied in detail how emerging demands and philosophical changes call for us to transform how we think about military logistics as a profession and the corresponding adaptive role of the professional logistician.

The industrial age Army of mass production is slowly losing its applicability. Today we still have remnants of the Army’s early 20th century scientifically managed design that includes an assembly-line method of creating units and preparing Soldiers, a competency-map approach to creating military occupational specialties, and commissioned officer classification systems that pair outputs with matching coded authorized positions. In this age of global interconnectedness and fast-changing operational environments, we cannot expect this mechanistic system to

keep pace with the complexity faced by our logisticians.

Instead, we need to reframe the very idea of what professionals do when confronted with novel situations in which our old knowledge structures do not work. We must shift from a view of a mechanized competency production line to an organic, complex view of people and organizational methods.

We feel there is a need to reshape the definition of our profession and place a higher value on the ability of logisticians to figure things out “on the fly.”

Professor Donald A. Schön called this “reflective practice” in his 1987 book, *The Reflective Practitioner: How Professionals Think in Action*. Schön wrote, “The nonroutine situations of practice are at least partly indeterminate and must somehow be made coherent. Skillful practitioners learn to conduct frame experiments in which they impose a kind of coherence on messy situations and thereby discover consequences and implications of their chosen frames. From time to time, their efforts to give order to a situation provoke unexpected outcomes—‘back talk’ that gives the situation a new meaning. They listen and reframe the problem. It is this ... that constitutes a reflective conversation with the materials of a situation—the design like artistry of professional practice.”

Schön proposes that professional education and practice should be recast as a matter of crafting divergent knowledge. In other words, education that targets creating knowledge through action, coupled with critical retrospection of that knowledge. Expertise comes from adapting actions based on what one knows to be the situation at hand rather than relying on preordained solutions.

In his 1995 book, *Educating the Reflective Practitioner*, Schön proposes that “if you are dealing with a unique situation, then by definition you cannot apply to it standard categories of analysis and action. Because if it’s unique, just that about it which is unique does not fit those categories. And therefore, you have to do something on the spot in such a situation, something that involves invention, which involves reconfiguring the problem, which may involve redesigning categories so that they fit it.”

We argue that Schön’s framework of reflective practice is sound. To implement the philosophy of mission command our concept of the profession of military logistics needs to change. We need leaders at all levels who continuously develop acumen for quickly and effectively adapting to complex environments.

We are not suggesting that the logistics community ignore the science that has been developed during the past century of modern military operations. We suggest that it acknowledge that this science promotes the mass production of Soldier skills. If we want highly adaptive logisticians, they need a highly adaptive sense of the continuum of knowledge as the current and future operational environments demand.

---

Dr. Christopher R. Paparone is the dean of the College of Professional and Continuing Education at the Army Logistics University at Fort Lee, Va.

George L. Topic Jr. is a retired Army colonel and the vice director for the Center for Joint and Strategic Logistics at the National Defense University at Fort McNair, Washington, D.C.