

# Tactical Application of Army Design Methodology: GEN Eisenhower's Response to German Ardennes Offensive

by MAJ Amos C. Fox

The U.S. Army exists to solve problems, whether that be to fight and win the nation's wars, provide humanitarian assistance, or any other number of problem sets. However, the Army does not act without first planning. Because of this, the Army conducts conceptual and detailed planning to enable it to accomplish a given mission. While the military decision-making process (MDMP) and troop-leading procedures are used for detailed planning at tactical levels, the Army Design Methodology (ADM) provides Army leaders an excellent tool for conceptual planning at all levels of war. ADM enables its practitioners in understanding and visualizing problems of all types, and to craft an operational approach to move beyond the current problem toward a desired future state.

This article explains the utility of ADM while highlighting the doctrine and theory upon which it is written, and then briefly surveys GEN Dwight D. Eisenhower's actions immediately following the German Ardennes offensive of 1944 to illustrate ADM in a real-world scenario.

Author Nassim Taleb provides an excellent starting position for understanding ADM's utility. "Unless we concentrate very hard, we are likely to unwittingly simplify the problem because our minds routinely do so without our knowing it," writes Taleb.<sup>1</sup> With that in mind, ADM's primary utility resides in its ability to assist the practitioner in avoiding oversimplification in relation to a given problem set, regardless of the problem's character. Similarly, Army doctrine supports this concept, stating that ADM is "[a] methodology for applying critical and creative thinking to understand, visualize and describe unfamiliar problems and approaches to solving them."<sup>2</sup>

## ADM as framework

ADM contributes to sense-making and problem-solving by providing a framework to comprehensively think about the situation. The framework, while not a formal step-action drill, consists of interdependent activities which include framing an operational environment, framing the problem and developing an operational approach. Reframing – or revisiting previous thoughts, deductions or templated actions – is a vital component of ADM and is the predominate driver of ADM's symbiotic character.

The first activity of ADM instructs the practitioner to frame the operational environment. In doing so, the practitioner "[s]eeks to understand what is going on and why and what the future operational environment should look like."<sup>3</sup> Environmental framing assists the practitioner in seeing beyond their own self- and socially-constructed reality. Environmental framing assists leaders in understanding how one's "here" can be someone else's "there" and that reality is subjective, thus "one-size fits all" thinking should be avoided when examining the characteristics of the environment.<sup>4</sup>

Taking this idea a step further, ADM helps overcome the traps of randomness, or the absence of knowledge, through the meticulous process of environmental framing.<sup>5</sup> Defense consultant Douglas Macgregor argues that leaders must begin framing the environment by asking first-order questions – who are we fighting, where are we fighting and how are we fighting – to understand the environment in which one is operating.<sup>6</sup> Army doctrine provides a number of other heuristics to assist the practitioner, including brainstorming, mind-mapping, meta-questioning, questioning of assumptions and the use of the "four ways of seeing."<sup>7</sup> The result of environmental framing is a definition of the current state and the endstate, both of which are represented graphically and through a written narrative.<sup>8</sup>

Following environmental framing, the designer must frame the problems that stand between the current state and the desired endstate. These problems, which require resolution, provide the nucleus in which the operational approach develops. The problem frame, like the environmental frame, is articulated through a graphic and a narrative.<sup>9</sup> The Army acknowledges three types of problems – well-structured, medium-structured

and ill-structured – their defining characteristics being how each varies in relation to the problems’ perception, solution, execution and necessity for adaption.<sup>10</sup> Problem framing employs the same tools and techniques as environmental framing to develop a problem statement. The problem state is a succinct statement that captures the essence of the problem at hand. Using the outputs from environmental and problem framing, the design practitioner transitions to developing an operational approach.

The operational approach, or the broad general actions that must be completed and associated objectives that must be met to arrive at the desired future state, provides the basis for planning guidance used during MDMP. The operational approach — which is not a course of action (CoA) — is most often expressed through the use of the elements of operational art. Furthermore, it provides “[f]ocus and boundaries for the development of CoAs during the MDMP.”<sup>11</sup> Following the completion of ADM’s three primary activities, it is good practice to reframe to ensure all outputs of ADM are in harmony with one another.

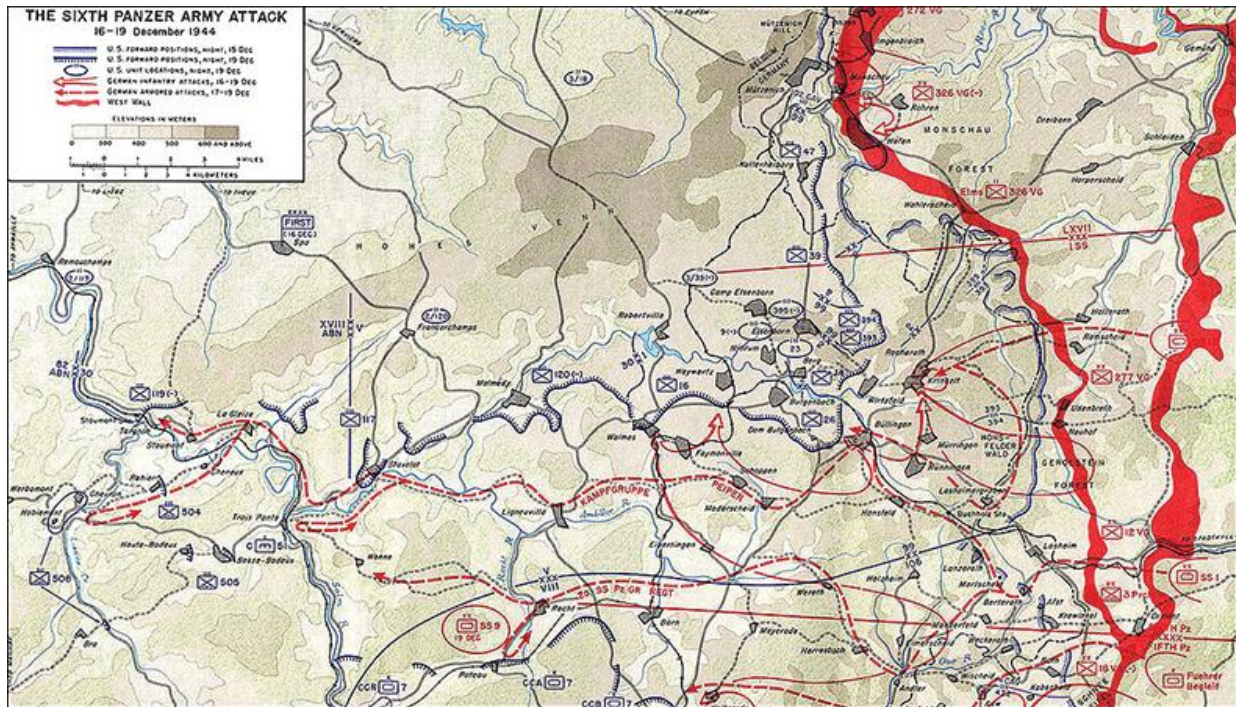
The concept of reframing is a vital component in ADM. Reframing is the process used to check progress, verify the direction of the plan, revisit previous facts and assumptions that drove the planning effort, and account for entropy – the gradual tendency for things to lose efficiency over time and devolve toward chaos.<sup>12</sup> Reframing is continuous and monitors “[t]he operational environment and progress toward obtaining endstate conditions and achieving objectives.”<sup>13</sup> Army doctrine suggests reframing when assessments show a lack of progress, vital assumptions are proven invalid, major events (positive or negative) occur, a change in mission or the endstate occurs, or whenever the commander or planning team deems it necessary.<sup>14</sup>

## **Eisenhower and Battle of Bulge**

One of history’s better-known examples of reframing and ADM is found in Eisenhower’s response to the German winter counteroffensive of 1944, or what became known as the Battle of the Bulge. Eisenhower’s actions serve as both an example of ADM but also a mental model for thinking about how to apply ADM within an organization.

In what historian Carlo D’Este labeled a “last-ditch gamble,” Hitler sprang the Ardennes offensive “[t]o destroy all Allied forces north of a line running from Bastogne to Antwerp” and to “compel the Allies to sue for peace.”<sup>15</sup> The offensive, launched Dec. 16, 1944, caught the Allies by surprise by slashing through the Ardennes Forest with four army groups toward Antwerp.<sup>16</sup> In doing so, the torrent of the German attack pinned Allied forces in the vital road network at Bastogne. The lightning German attack stunned GEN Omar Bradley, commander of 12<sup>th</sup> Army Group, whose force absorbed the preponderance of the attack. The attack all but annihilated the Bradley’s 106<sup>th</sup> Infantry Division and 28<sup>th</sup> Infantry Division, while other units, such as 2<sup>nd</sup> Infantry Division and 14<sup>th</sup> Cavalry Group, fought to hold on.<sup>17</sup>

To make matters worse, the attack occurred when 12<sup>th</sup> Army Group possessed no operational reserve. This forced Eisenhower to mobilize the strategic reserve (101<sup>st</sup> Airborne Division and 82<sup>nd</sup> Airborne Division) as a temporary stop-gap to provide time in which to hastily develop a thorough response.<sup>18</sup> During the process, the German salient continued to grow, encircling Bastogne and all but trapping 101<sup>st</sup> Airborne within the city.<sup>19</sup>



**Figure 1. Troop movements during the Battle of the Bulge.** (Courtesy Department of History, U.S. Military Academy West Point)

On Dec. 19, Eisenhower summoned a trusted team of subordinate commanders, staff officers and advisers to Verdun to conduct what is known today as the ADM. Eisenhower and his planning team discussed the situation, developing both an environmental frame and a problem frame while defining the Allied current and desired future state. The team agreed that the Germans attacked with several army groups through restricted terrain, in inhospitable weather, creating a large salient in the Allied lines around Bastogne. If action was not taken soon, the Germans possessed the ability to complete their penetration while annihilating Allied forces along the way. Therefore, the Allies had to stop the German attack while regaining their balance to push the Germans back to their previous starting position.

During ruminations on an operational approach, LTG George Patton said he could pivot his Third Army 90 degrees to the north, move the 100 miles from Lorraine to Bastogne and attack the underbelly of the German salient – all while weathering the hardships of a bitter western European winter.<sup>20</sup> After deliberation, more conceptual planning and reframing, Patton’s recommendation was approved.<sup>21</sup>

As a result of the approved operational approach and its derivative detailed planning, 4<sup>th</sup> Armored Division of Patton’s Third Army broke through the German salient Dec. 26.<sup>22</sup>

## ADM key to success

The 4<sup>th</sup> Armored Division’s rendezvous with 101<sup>st</sup> Airborne Division at Bastogne was the first indicator of success, but more importantly, it demonstrates the tangible results of Eisenhower’s ADM exercise at Verdun. The 4<sup>th</sup> Armored Division’s success – a harbinger of operational victory at the Battle of the Bulge – was a direct byproduct of effectively framing the environment, framing the problem and devising a comprehensive operational approach that drove detailed tactical planning for subordinate formations.<sup>23</sup> The process was highlighted by creative and critical thinking in which the senior commander and his trusted lieutenants successfully understood, visualized and described the situation at hand and subsequently developed a broad set of actions to move from the current state to their desired endstate.

Lastly, when dealing with ADM, it is instructive to harken back to the old cavalryman, Patton, who writes, “The best is the enemy of the good. By this I mean that a good plan violently executed now is better than a perfect plan executed next week”<sup>24</sup> – Patton’s idea being that one must not allow the pursuit of perfect information

derail the planning process. The practitioner of ADM must know when and where to apply brackets around the problem. If done correctly, ADM greatly enhances the practitioner's ability to understand, visualize and describe a problem set while developing a comprehensive operational approach to drive detailed planning. ADM is a versatile and effective tool all planning teams must be comfortable employing.

History provides many examples of ADM, including Eisenhower's planning conference at Verdun Dec. 19, 1944. To take it a step further, Eisenhower's conference provides a mental model that demonstrates how to implement and execute the practice of ADM.

*MAJ Amos Fox is a plans officer for 1<sup>st</sup> Armored Division, Fort Bliss, TX. Previous assignments include plans officer, Combined Joint Forces Land Component Command-Operation Inherent Resolve, Baghdad, Iraq; commander, Troop L, 2<sup>nd</sup> Squadron, 16<sup>th</sup> Cavalry Regiment, 199<sup>th</sup> Infantry Brigade, Fort Benning, GA; commander, Company D, 1<sup>st</sup> Squadron, 11<sup>th</sup> Armored Cavalry Regiment (ACR), Fort Irwin, CA; assistant operations officer, 1<sup>st</sup> Squadron, 11<sup>th</sup> ACR, Fort Irwin; and commander, Headquarters and Headquarters Troop, 1<sup>st</sup> Squadron, 10<sup>th</sup> Cavalry Regiment, 2<sup>nd</sup> Brigade, 4<sup>th</sup> Infantry Division, Fort Carson, CO. MAJ Fox's military education includes School of Advanced Military Studies, Command and General Staff College, Airborne School, Maneuver Captain's Career Course, Cavalry Leader's Course, Bradley Fire Support Vehicle Course and Field Artillery Officer Basic Course. He holds a bachelor's of science degree in secondary education from Indiana University-Purdue University at Indianapolis and a master's of arts degree in secondary education from Ball State University. MAJ Fox's awards include the Tom Felts Leadership Award; the Draper Armor Leadership Award, Fiscal Year 2013; member of 11<sup>th</sup> ACR's honorary rolls; and the Order of St. George (Bronze). He is also a recipient of Silver Spurs.*

## Notes

<sup>1</sup> Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable*, New York: Random House, 2010.

<sup>2</sup> Army Training Publication (ATP) 5-0.1, *Army Design Methodology*, Washington, DC: Government Printing Office, 2015.

<sup>3</sup> ATP 5-0.1.

<sup>4</sup> Peter L. Berger and Thomas Luckman, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, New York: Anchor Books, 1966.

<sup>5</sup> Ibid.

<sup>6</sup> Douglas Macgregor, *Margin of Victory: Five Battles that Changed the Face of Modern War*, Annapolis: Naval Institute Press, 2016.

<sup>7</sup> ATP 5-0.1.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> Everett Carl Dolman, *Pure Strategy: Power and Principle in the Space and Information Age*, New York: Frank Cass Publishing, 2005.

<sup>13</sup> ATP 5-0.1.

<sup>14</sup> Ibid.

<sup>15</sup> Carlo D'Este, *Patton: A Genius for War*, New York: Harper Perennial, 1995.

<sup>16</sup> GEN of the Army Omar N. Bradley, *A Soldier's Story*, New York: The Modern Library, 1989.

<sup>17</sup> Antony Beevor, *Ardennes 1944: The Battle of the Bulge*, New York: Viking Publishers, 2016.

<sup>18</sup> Ibid.

<sup>19</sup> B.H. Liddell Hart, *The German Generals Talk*, New York: Quill Publishing, 1979.

<sup>20</sup> Carlo D'Este, *Decisions in Normandy*, New York: Konecky and Konecky Books, 1983.

<sup>21</sup> The author acknowledges the lack of detail regarding the operational approach – this is intentional and a byproduct of keeping the article focused on the utility of ADM, and not necessarily on the product it produced. More of the major actions included temporarily reassigning upward of half of Bradley's 12<sup>th</sup> Army Group to Field Marshal Bernard Montgomery's 21<sup>st</sup> Army Group to allow Bradley to singularly focus on cleaning up his front before receiving those forces back from Montgomery. A number of counteroffensives from 12<sup>th</sup> Army Group and 21<sup>st</sup> Army Group were conducted also, seeking to augment the effects wrought from Third Army's attack in the south.

<sup>22</sup> D'Este.

<sup>23</sup> The author acknowledges this is a simplification of how the operational-level fight unfolded. Detailed information was intentionally omitted to keep the article focused on the utility of ADM for tactical purposes.

<sup>24</sup> LTG George S. Patton Jr., *War as I Knew It*, New York: Houghton Mifflin, 1995.

## **Acronym Quick-Scan**

**ACR** – armored cavalry regiment

**ADM** – Army Design Methodology

**ATP** – Army training publication

**CoA** – course of action

**MDMP** – military decision-making process