



A Vietnamese man is shown cooking Bánh xèo sizzling cake, a traditional street food, in Chau Doc, Vietnam, 13 October 2018. In a more abstract sense he is using skill, creativity, and judgment to integrate ends, ways, means, and risk. (Photo by Quang Nguyen Vinh, via Pexels)

# Everyone Is a Chef

## Cooking as an Analogy to Explain Operational Art

Maj. Chris Adams, British Army

**W**ith the introduction of AirLand Battle doctrine and the founding of the School of Advanced Military Studies (SAMS), operational art was introduced to U.S. Army doctrine. It has been a centerpiece of U.S. Army thought ever since. Like

a popular movie or television franchise, it has spin offs such as operational approaches and the operational level of war. Today, “operational,” “operations,” and “operation” collectively appear 2,583 times in the 2022 version of Field Manual (FM) 3-0, *Operations*.<sup>1</sup> That averages over

nine uses per page. Other words one might expect to feature prominently are supporting actors at best. “Enemy” appears a paltry 1,141 times, and “combat” just 587. The idea of an operation and its associated art, level, and approaches are thus deeply engrained in the U.S. Army’s capstone doctrine.

This article uses cooking as a tangible and easily understood analogy to help newly promoted field grade officers understand operational art. In doing so, it provides a model that explains tactics, strategy, operational approaches, ends, ways, means, and risk. It does so without needing to refer to an operational level of war. Some readers might believe this invalidates the analogy. Instead, this article proposes that if one can understand the interaction of all the components described above without mention of an operational level of war, perhaps it is a superfluous concept. The arguments herein stem from months of lively debate at SAMS, in particular with Lt. Col. Filip Scheynius, Swedish Armed Forces, and Maj. Jesse Howard, U.S. Army.

## Levels and Art

Debate on the relationship between all things “operational” is bigger than one article. Brig. Gen. (Ret.) Huba Wass de Czege, a key figure in the creation of SAMS and AirLand Battle doctrine in the early 1980s, argued that there is no operational level of war. He explains how he “miss-translated an idea borrowed from Soviet doctrine.”<sup>2</sup> Some contemporary experts make the same point, arguing that creating an operational level of war is a fundamental mischaracterization of Soviet maneuver.<sup>3</sup> Brett A. Friedman dedicated an entire book to arguing against the operational level of war. One of his most intriguing points is that a distinct operational level of war was coined to insulate Mikhail Tukhachevsky and Alexander Svechin’s conceptual exploration of military strategy from any accusations of criticizing Marxist-Leninist strategy. In short, they created a buffer to stay alive, which disconnects tactics from strategy.<sup>4</sup>

This debate is alive and well among students in SAMS today. One corollary of an operational level of war not existing is exploring where operational art occurs. The 2008 version of FM 3-0 states that operational art only happens at the operational level.<sup>5</sup> So are the art and level inseparable? If not, and such thinking happens all the way from strategic down

to tactical, then is operational art actually just military art? Interestingly, military art exists in the 2008 version of FM 3-0 but is gone by 2011, where operational art happens at all levels.<sup>6</sup> Today, Army Doctrine Publication (ADP) 3-0, *Operations*, describes operational art as something that happens at all levels.<sup>7</sup> This shows how operational art and an operational level of war are distinct concepts that have evolved over the past forty years.

Such movement in concepts only emphasizes Col. William Hanne’s point that military professionals must not view doctrine as dogma but as a continuously evolving body of knowledge.<sup>8</sup> Despite understanding and studying this background, operational art can still feel like a nebulous phrase to junior field grades. Describing it as integrating ends, ways, means, and risk makes it sound like a synonym for planning.<sup>9</sup> Explaining it as the pursuit of strategic objectives through the arrangement of tactical actions also sounds like planning.<sup>10</sup>

## Pursuit of Strategic Objectives through the Arrangement of Tactical Actions

Consider why you prepare food. Is it simply to quickly sate hunger? Perhaps you are trying to create something to impress friends, or simply learn something new? These are all strategic objectives. If one’s strategic objective is a quick filling meal at lunch, making toast is the solution. Making toast is not, however, the solution to different strategic objectives such as hosting a successful dinner party. These two examples have different strategic contexts,

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Paratroopers assigned to 1st Battalion, 503rd Infantry Regiment, 173rd Airborne Brigade, discuss today's special in their kitchen. The commander in the center is a chef, and those surrounding him are some of his ingredients. (Photo by Paolo Bovo, U.S. Army)

which lead to different strategic objectives. Simon Sinek's infinite game describes competition where there is no discrete end state.<sup>11</sup> That is, you cannot "complete" or "win" strategy; you are just in a more advantageous position than before. Within this analogy then, strategy is living a healthy life physically and emotionally. Strategic objectives, including sating hunger or socializing with friends, are part of this infinite game and contribute to an intangible but important strategy of "staying healthy." Perhaps policy is therefore the desire to stay alive, but this idea pushes the limits of the cooking metaphor. Back, then, to strategic objectives.

If a quick lunch or a successful dinner party are strategic objectives, they are achieved by arranging tactical actions. Within this analogy, therefore, tactical actions are culinary skills such as frying, baking, poaching, or smoking. Some tactical actions, like operating a toaster, are simple. Others, such as filleting a fugu fish, are extremely difficult. These tactical actions must be arranged in time and space effectively to achieve a strategic objective, as anyone cooking thanksgiving dinner on a small oven with two hobs would attest.

## Integration of Ends, Ways, Means, and Risk

Achievable tactical actions in time and space require resources, no matter how they are arranged. Similarly, ingredients are required to cook. Therefore, ingredients are the means used to achieve ends. A chef is ultimately limited by the ingredients available and must adapt a meal around those that are missing. The same is true with military operations, where echelons have to adapt their approaches to employ the combat power they have available or lobby for extra resources.

Ends are similar to the strategic objectives mentioned already, albeit more tangible. Our strategic objective might well be to host a successful thanksgiving dinner for friends and family. A more tangible end might be to deliver a steaming hot plate of turkey, sweet potatoes, and other vegetables to delight those present. In a nutshell, ends are the pictures in recipe books that we strive to create with the means available. Ends should be tangible and align with a broader strategic objective.

Ways describe how means are employed to achieve ends. Within cooking, therefore, ways are how ingredients end up looking like the picture in the recipe book. There is a great deal of overlap in doctrine between



Senior leaders from across eight nations of the NATO alliance are in a kitchen at echelon to conduct a mission brief while managing a tactical operations center during Exercise Allied Spirit V at 7th Army Training Command's Hohenfels Training Area, Germany, 11 October 2016. Participants exercised tactical interoperability and tested secure communications among alliance members and partner nations. They discuss the ingredients, culinary techniques, and risks associated with cooking their end state. (Photo by Spc. Nathaniel Nichols, U.S. Army)

ways, operational approaches, and operational art. The act of cooking is operational art, because it is the cognitive approach supported by skill, knowledge, experience, creativity, and judgment to develop meals by integrating ends, ways, means, and risk. An operational approach is a methodical recipe that describes the cooking process.

Risk management is inherent in the sequencing and execution of tactical actions. This is just as true for cooking as it is for military operations. Flipping a pancake is risky. Catering for a celiac even more so. There is risk to life in allergies or food poisoning. There is risk to mission when everyone is seated at the table and someone drops the Le Creuset dish on the floor while carrying it across the kitchen to serve.

Therefore, integrating ends, ways, means, and risk looks like visualizing what the finished meal looks like, assessing the ingredients available, and devising a recipe to bridge the two, all the while accounting for allergens and other risks.

## Applying Operational Art

A frequent question posed by faculty at SAMS when studying history is whether a specific commander in the past applied operational art. It often feels like a silly question because the Duke of Wellington certainly spent very little time reading ADP 3-0 or Svechin. Within this analogy then, anyone who converts ingredients into a meal to sate hunger or to impress guests practices operational art. The crucial point here is that a practitioner of operational art does not have to be good at it. In fact, they can be terrible! You can probably think of a family member or friend who uses a smoke detector as a cooking timer or who forgot to take the plastic wrapping off a pizza before placing it in the oven. These people are practicing operational art, just not very successfully.

## Everyone Is a Chef

Likewise, one might question who practices operational art, regardless of how talented they are in the





Cooking in a wok at the London Mela 1 September 2005. The chef integrates ingredients, technique, and a visualization of what the finished meal will look like, exactly as an operational artist does with ends, ways, means, and risk. (Photo by Jan van der Crabben, courtesy of Wikimedia Commons)

kitchen. Is it only above a certain level, say divisional planning? Or can it only be performed by military personnel? At this point, the article might become borderline heretical to some readers because it redefines military strategy in an unconventional way.

A platoon leader integrates ends, ways, means, and risk. They also pursue their higher commander's intent by arranging tactical actions with the squads under them. In a movement to contact, they very quickly establish fire support with one squad, move up a flank with the second, and keep the third in reserve. The platoon's mission is its end state, a finite game defined in advance.

But what is strategy to that platoon leader? Is he or she cognitively linking the actions of his or her platoon directly to the successful outcome of the war? It is far more likely that the strategic objectives the platoon strives toward are closer cognitively and spatially. Instead of winning the war, they are more likely to understand their mission in terms of one-up (company) and two-up (battalion) intent.

The squads understand the company objective of reaching the river, which feels like their strategic objective. The platoon leader can see the importance of establishing a battalion crossing site over the river and is vaguely aware of how operations might unfold after that. The platoon does not comprehend the five-up (corps) strategic objective of getting over the river to threaten a vital enemy supply route to achieve an effect within another division's area of operation some forty miles away. So, what is strategy to the platoon leader? For every level, it is everything that sits above the two-up intent and mission.

Apply the same logic to the divisional commander of that platoon. His or her mission, and therefore defined end state, is to sever the supply line. They understand the corps' strategic objectives of forcing enemy units to withdraw in their neighboring division's area of operations. But the divisional commander does not fully comprehend that the corps' entire role within the whole force is a diversion to draw forces away from the

Army's main effort, led by another corps entirely. The platoon certainly has no comprehension of its role in a diversion. It sits so far above them that on their level the diversion is just "strategy."

This is true at the individual level, where an infantry private looks up at the vast terrifying size of his own battalion and sees brigades and divisions as "strategy." That private arranges their own tactical actions of running forward, adopting a stable firing position, firing to enable others to move, etc. They integrate ends, ways, means, and risk second by second. They have their own end state: stay in one piece. Their strategic objectives are at the fire team or squad level—help assault that position and do not lose the respect of peers along the way.

Returning to cooking then, everyone is a chef because they are cooking to achieve end states in support of strategic objectives they can comprehend: satiating hunger, impressing friends, and so on. Strategy three-up and above is something they have an incomplete understanding of. If three-up strategy within the cooking analogy is "staying healthy," then many of us do not fully comprehend what that means. Is drinking a glass of red wine supporting that strategy or not?<sup>12</sup> Is a keto-diet beneficial for one's long-term health or is cooking in that way just an astrategic operational approach?<sup>13</sup>

## Coming Full Circle: Strategic Foresight

So far, this article has described a somewhat linear process where a chef begins by taking means out of the pantry and practices operational art to produce a desired end state that achieves a strategic objective. But alas, the story does not necessarily begin with the ingredients in the pantry, because the story is circular.

How do the ingredients end up in the pantry to start with? Simply put, the chef anticipates the strategic objectives and visualizes likely end states that might be required. Some of the ingredients are



Operational art is like cooking in that it accurately describes the cognitive approach by chefs using their skill, knowledge, experience, creativity, and judgment to integrate ends, ways, means, and risk in a recipe to achieve a successful end product. (Photo by Alberta Studio, courtesy of Pexels)

prescribed by higher strategic guidance, operating concepts, and the Joint Capabilities and Integration Development System (JCIDS). Enduring processes such as JCIDS ensure there is always the capability to cook something, akin to having plenty of pasta and tins in the cupboard. More frequently updated strategies such as the *National Security Strategy*, the *National Defense Strategy*, and the *National Military Strategy* are like the weekly shopping list. As they update, they make it clear that the force needs to be much more prepared for making a curry (large-scale combat operations), and that baking cakes (counterinsurgency) is off the agenda for a while. Likewise, it might direct the chef to learn something new through experimentation. Perhaps the Army Operating Concept – Experimental 2040 (AOC-E 2040) currently under development by Futures Command calls for chefs who can make soufflé.

Of course, not all strategic foresight goes according to plan. Sometimes nothing is defrosted in time, you find yourself out of milk, or you gave away all your garlic to a neighbor and cannot get more in time for dinner. Task Force Smith of the 24th Infantry Division found itself in this position at the beginning of the Korean War, trying

to desperately cook with only thirteen 105 mm high-explosive antitank rounds and no other antitank ingredients that could defeat North Korean T34 tanks.<sup>14</sup>

When things go wrong, one can always lean on Papa John's for a bailout, but this requires time and money, and a diet based on continually ordering pizza is not exactly conducive to one's strategy of "staying healthy."

## Conclusion

This article explained operational art to junior field grade officers by using cooking as an analogy. It demonstrated that operational art is distinct from an operational level of war while offering wider literature that the latter is a mistranslation of Soviet ideas. Having dislocated operational art from a distinct level of war, it began building its analogy.

Ingredients and equipment form means. Skills such as filleting, frying, or smoking are the ways those means are employed. Ends are the tangible output of cooking: the plated meal. The meal as an end serves a strategic objective, sating hunger or impressing friends, for example. These strategic objectives are steps toward a much broader strategy, a strategy that is an infinite game with no ending.

Within this analogy, operational art is cooking because it accurately describes the cognitive approach by

chefs using their skill, knowledge, experience, creativity, and judgment to integrate ends, ways, means, and risk. An operational approach is a recipe that describes a specific cooking process.

The article then explored the natural corollaries such as who is allowed to be defined as a chef. It explained that one does not need to be successful in cooking to be a chef. In exploring how far down the organization such thought happens, it argued that even an individual rifleman practices operational art. In doing so it proposed a likely contentious definition of strategy: everything above someone's two-up intent and mission. What feels like frying or baking to a corps commander is thus "strategy" at the platoon level.

Finally, the article brought strategic foresight back round to means. It explained that ingredients in the cupboard must be planned with strategic guidance to form the grocery list for the Army's next trip to the Commissary.

Hopefully, it provided a useful sense of how these various concepts fit together and provides a starting point for military professionals to continue developing their own understanding of what operational art means to them. ■

## Notes

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