

Lessons in Reconstitution from the Russia-Ukraine War



Gaining Asymmetric Advantage through Transformative Reconstitution

Maj. Thomas Haydock, PhD, Washington Army National Guard
Maj. Jack Meeker, U.S. Army National Guard

The Russia-Ukraine War is replete with tactical, operational, and strategic lessons for our Army while serving as a vivid reminder of the national challenges involved in protracted conflict. News headlines and videos constantly offer commentary on combining arms or show unmanned systems preying on tanks, but they miss the wider lessons. Russia began this conflict by falling for a common trap, believing it would achieve a quick victory, and Ukraine has showed it otherwise. Russia's folly is a reminder that major, protracted conflict is a contest of the national ability to remain in the fight, to deliver and absorb blows better than an opponent. In short, victory in protracted conflict requires reconstituting armed forces and doing it well. The truth is that Russia has proven quite capable of reconstituting lost

personnel and materiel, but its reconstitution model has created a force of amateurs. Unfortunately, the U.S. Army is not only decades out of practice in reconstitution, but our model is unsettlingly like Russia's, focused on balancing supply and demand. We can absorb the lessons from this war and create a superior model for force expansion and reconstitution to deter now and win the next fight by dominating the potential transition to protraction.

While the Russia-Ukraine War has novel features (as all wars do), it has numerous similarities to relatively recent conflicts, including World War II and the Korean War. We can synthesize observations to build an asymmetric advantage through a superior reconstitution process that does more than simply regenerate personnel and materiel. Specifically, this article



A Ukrainian serviceman walks next to a fighting vehicle outside Kyiv, Ukraine, 2 April 2022. On the same day, French President Emmanuel Macron committed to delivering artillery pieces to Ukraine to reconstitute combat units fighting Russian forces. (Photo by Vadim Ghird, Associated Press)

proposes a new reconstitution model, *transformative reconstitution* (TR), that structures our Army for the transition to protraction so we maintain and improve our qualitative advantage over time rather than devolving like Russia. TR is intended to transform our Army's initial transition from conflict opening to protraction and model a reconstitution process that allows our Army to transform into a superior force during protraction. To do so, this article will extract reconstitution observations from the Russia-Ukraine War (due to space limitations, our observations will focus on Russia, our potential adversary), examine current U.S. Army reconstitution doctrine and our own historical examples, use those to identify the process we need (TR), and offer an operational approach for how to implement TR. Ultimately, reconstitution is a requirement to win protracted conflict, and we need to use our opportunity now, in peace, to build a war-winning model.

Reconstitution in the Russia-Ukraine War: What Not to Do

As of July 2024, Russia's daily casualties have averaged about 645 troops; in U.S. Army terms, that is a battalion per day, or a large division per month.¹ Its equipment losses have also been staggering, with average losses of about eighteen artillery platforms (a battalion) per day.² Further, the rate of losses has accelerated in 2024; for instance, Russia averaged over 1,200 daily casualties in May, and its artillery losses have increased to roughly three battalions per day.³ Ukraine has similarly suffered tremendous losses. Figure 1 shows visually confirmed Russian equipment casualties as of 19 July 2024 (*left*), as well as the losses that Ukraine claims to have inflicted on Russia (*right*). Note that Russia has certainly lost more equipment than has been visually verified by independent analysts, and that both Russia and Ukraine may have inflated their claims of battlefield success.



(Figure by authors; data from Oryx and the Armed Forces of Ukraine)

Figure 1. Visually Confirmed versus Reported Russian Equipment Losses

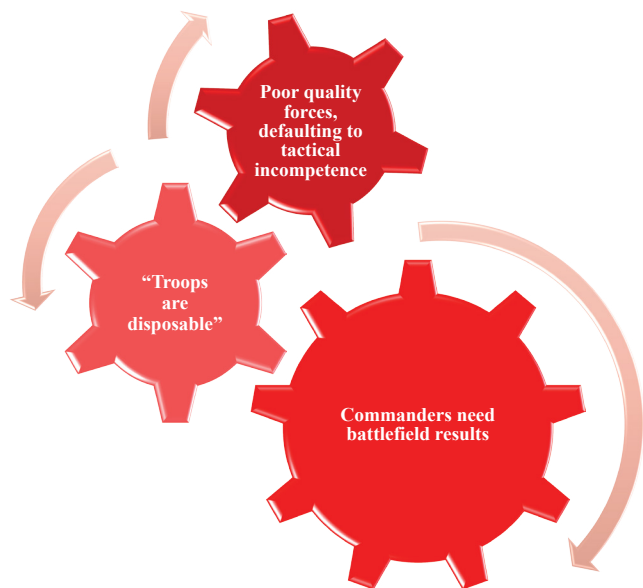
The losses are astonishing, greatly exceeding replacement rates, and yet both have found viable reconstitution processes because the conflict is still raging with full intensity. Russia's approach has generally involved pulling from its deep equipment war stocks and filling its ranks with whoever it can find, including prisoners and old men; in general, its reconstitution is a story of devolving quality. Ukraine has similarly drawn down war stocks and struggled to fill ranks but with the added complication of integrating equipment from well over a dozen nations. Due to space limitation, we will focus on Russia since it is our potential adversary and more comparable to the United States in size. We have a choice: learn lessons and build a better system now while out of war or learn lessons as Russia and Ukraine have, the hard way, while dealing with a thousand other challenges during war.

Russian Reconstitution

Russia's approach to reconstitution has generally been effective at refilling its army with personnel and materiel, but its approach has led to the steadily declining quality and efficacy of its force. Despite hundreds of thousands of casualties, the Russian Army is now

recruiting thirty thousand soldiers a month and actually growing, increasing its troop strength in Ukraine "from 360,000 to 470,000" between 2023 and 2024.⁴ Its materiel regeneration is similarly impressive. "Russia is on track to produce or refurbish over 1,200 new main battle tanks a year, and to manufacture at least three million artillery shells or rockets per year—over triple the amount the United States estimated at the beginning of the war—and more ammunition than all thirty-two NATO allies combined."⁵ While the numbers are genuinely impressive, the reconstitution process is not one to emulate.

In general, Russia's army is caught in an *efficacy dilemma* in which the tensions of viewing its troops as disposable while also having poor-quality forces have created a mutually reinforcing cycle. In this dilemma, commanders need to produce results, but their forces lack the training for even moderately sophisticated operations, and so the pressure to produce results, combined with disregard for the lives of troops, has created a reinforcing loop. One of the most well-known examples of this is the infamous nearly yearlong battle for the village of Bakhmut, where Russia incurred over ten thousand killed, frequently through mass frontal



(Figure by authors)

Figure 2. Russia's Efficacy Dilemma in Reconstitution Operations

attacks into prepared defenses.⁶ Russia's net gain was minuscule territory, but those human wave attacks were the only tactic that seemed to produce even the slightest results on land, so they have become standard practice rather than an inspiration for change.

Further, Bakhmut was no isolated incident. March 2024 in Umanke, Russia, demonstrated it is still caught in the efficacy dilemma:

On 29 March [2024], 6th Tank Regiment (90th Tank Division) mounted a battalion-sized attack supported by the militia 428th Motor Rifle Regiment. As many as 36 tanks and 12 APCs [armored personnel carriers] were committed, the largest grouping seen since October 2023. The assaulting force launched from Tonenke. The aim seems to have been to force the Durna [River] at Umanke where the river narrows to a shallow or dry stream. The attack was conducted in daylight (due to lack of night vision capability) across open ground. The assaulting force followed a road. The Russians remain unable to coordinate an all-arms assault (with engineers, artillery, aviation or air) due to the lack of a working VHF [very-high

frequency] tactical net. The likelihood was the vehicles were communicating on walkie-talkies. 'Follow the leader' is the default tactic. Destruction of the lead tank quickly leads to the attack breaking up. This is what happened. 25th Separate Airborne Brigade was the main defending formation, supported by 68th Jaeger (Mountain) Brigade. One or more Ukrainian T-80s engaged the head of the column. Then a combination of artillery fire, FPV [first-person view] drones, ATGMs [anti-tank guided missiles] and mines broke up the attack. The Russians lost 12-15 tanks, including two T-90Ms, and eight APCs.⁷

Unsurprisingly, Russian performance in places like Umanke led the United Kingdom's Ministry of Defense in May 2024, a year after Bakhmut ended, to notice the same efficacy dilemma. It characterized Russia's army in general as defaulting to human wave attacks because its troops have little training and are consequently unable to perform more complex operations.⁸ Figure 2 models the Russian efficacy dilemma embodied by its performance in Bakhmut and Umanke.

Russia's materiel regeneration has shown similar qualitative decline, but its combination of deep war stocks of old equipment and new production will enable it to continue to reconstitute for at least the next one to two years. The table shows Russia's war stockage of tanks, with the clear implication that Russia has mostly exhausted stockpiles of its newer tanks (T-80s), and its armor is facing

Maj. Jack Meeker, U.S. Army National Guard,

is an Army strategist, logistician, and social worker. He is a planner at the National Guard Bureau and an adjunct professor at the Army War College. As a National Guardsman, he has led COVID-19 response planning teams, facilitated exercises on poly crisis plans development with state emergency management, and coordinated logistics support for civilian, military, and special operations customers.

Maj. Thomas (Tom)

Haydock is an infantry officer serving as the G-5 strategic plans and policy officer for the Washington Army National Guard. He is a 2024 graduate of the School of Advanced Military Studies.

Table. Russia's War Stock of Tanks over the Course of the Russia-Ukraine War

	By Type				Remaining
	Pre-War	Mid-2023	Mid-2024	Difference	
T-55	313	257	216	-97	69.01%
5-62	1846	1292	1167	-679	63.22%
T-64	562	499	499	-63	88.79%
T-72A/Ural	1142	1063	1042	-100	91.24%
T-72B	861	595	418	-443	48.55%
T-80B/BV	1207	431	260	-947	21.54%
T-80U/UD	193	157	55	-138	28.50
T-90	112	89	0	-112	0.00%
Total	6236	4383	3657	-2579	58.64%

(Table by authors)

a qualitative decline. While the table looks at tanks, Russia has had similar consumption of its other major end items like artillery and armored fighting vehicles. Given its equipment losses and production, it's estimated that Russia will have depleted most of its once massive war stock of tanks by 2026.⁹

The takeaway is that Russia looks at reconstitution as a tool to support attrition, and it is quite good at its form of reconstitution. It has not only replaced personnel losses but grown its land forces in Ukraine. Simultaneously, while the pace of its equipment losses exceeds its replacement rate, it institutionally prepared for this with deep war stocks. But this is no model to emulate because Russia is caught in an efficacy dilemma, and it is unable or unwilling to break this dilemma based on events like Bakhmut in 2022–2023 and Umanske in 2024. Russia's model, underpinned by viewing its troops as a disposable commodity, is fundamentally at odds with the character of our Army and Nation. The lesson we should glean is that our reconstitution process should solve the issue of refilling and growing our Army in conflict without creating our own version of the efficacy dilemma.

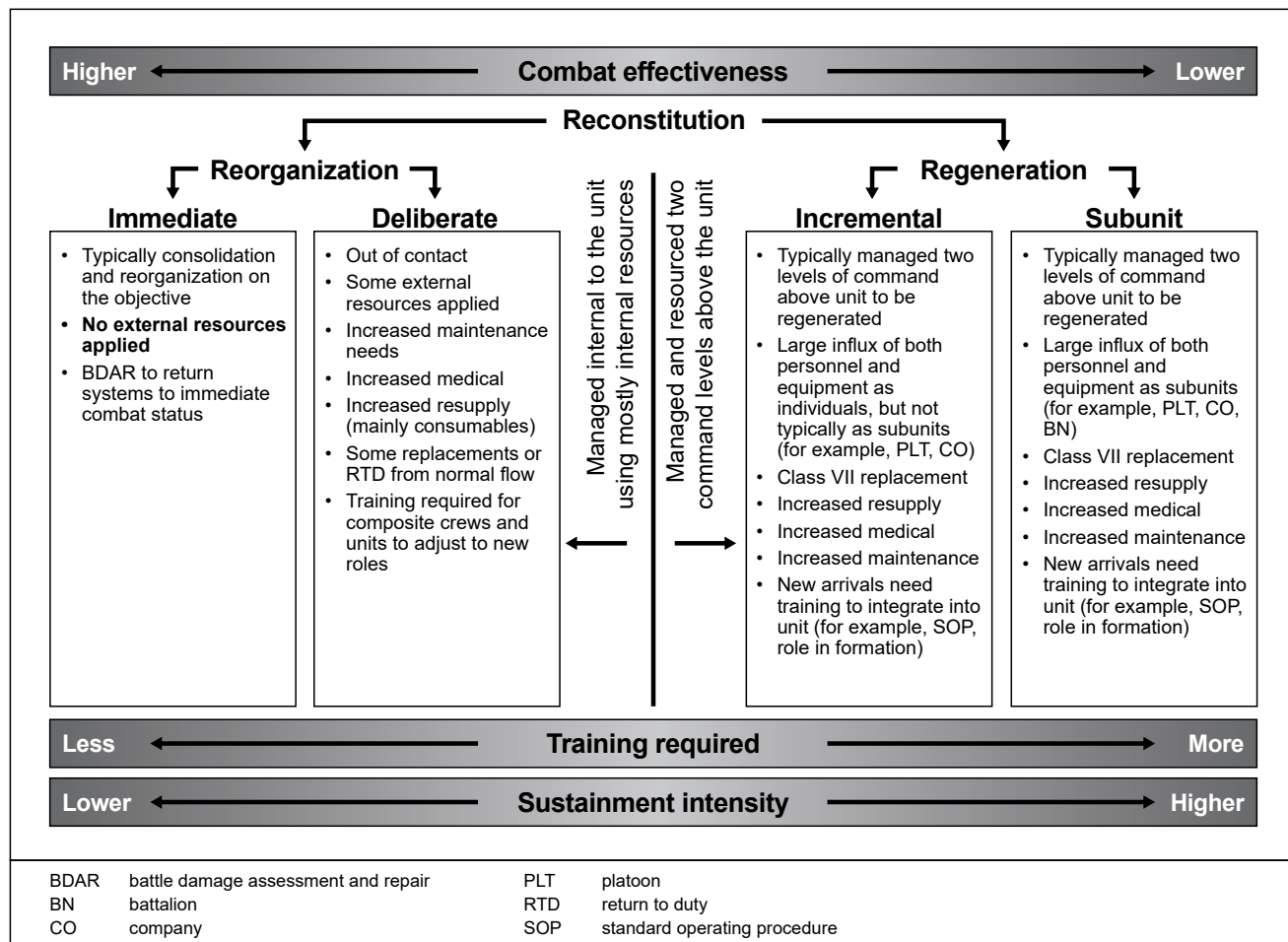
U.S. Army Reconstitution Doctrine and Experiences

Our reconstitution doctrine, found in Army Techniques Publication (ATP) 3-94.4, *Reconstitution Operations*, looks at reconstitution as a supply and demand problem, with the acknowledgment that the

supplied quantity and quality of new personnel and equipment may differ from the demand.¹⁰ The ATP defines reconstitution as “an operation that commanders plan and implement to restore units to a desired level of combat effectiveness commensurate with mission requirements and available resources.”¹¹ Reconstitution consists of *assessment, reorganization, and regeneration*. Assessment is “a commander’s estimate of the unit’s ability to accomplish its mission” and “must include the commander’s judgment of all factors.”¹² Following the assessment, a unit can be reorganized or regenerated as described in figure 3. In essence, reorganization reshuffles a unit with what remains and what a higher headquarters has available to provide.¹³ In contrast, regeneration is the deliberate “rebuilding of a unit through large-scale replacement of personnel, equipment, and supplies ... and training” and “usually occurs at the corps level and above, out of contact with enemy forces.”¹⁴

ATP 3-94.4 acknowledges our Army has needed to reconstitute major formations on numerous occasions, and includes the below 7th Armored Division vignette following the December 1944 Battle of the Bulge:

After retiring across the Salm River, the 7th took stock of the price paid over the previous two weeks. In all, the 7th’s delaying action cost the division over 40 percent of its tanks and 10 percent of its personnel, predominantly in the cavalry and armored infantry units. With Hodges already planning the First



(Figure from Army Techniques Publication 3-94.4, *Reconstitution Operations*)

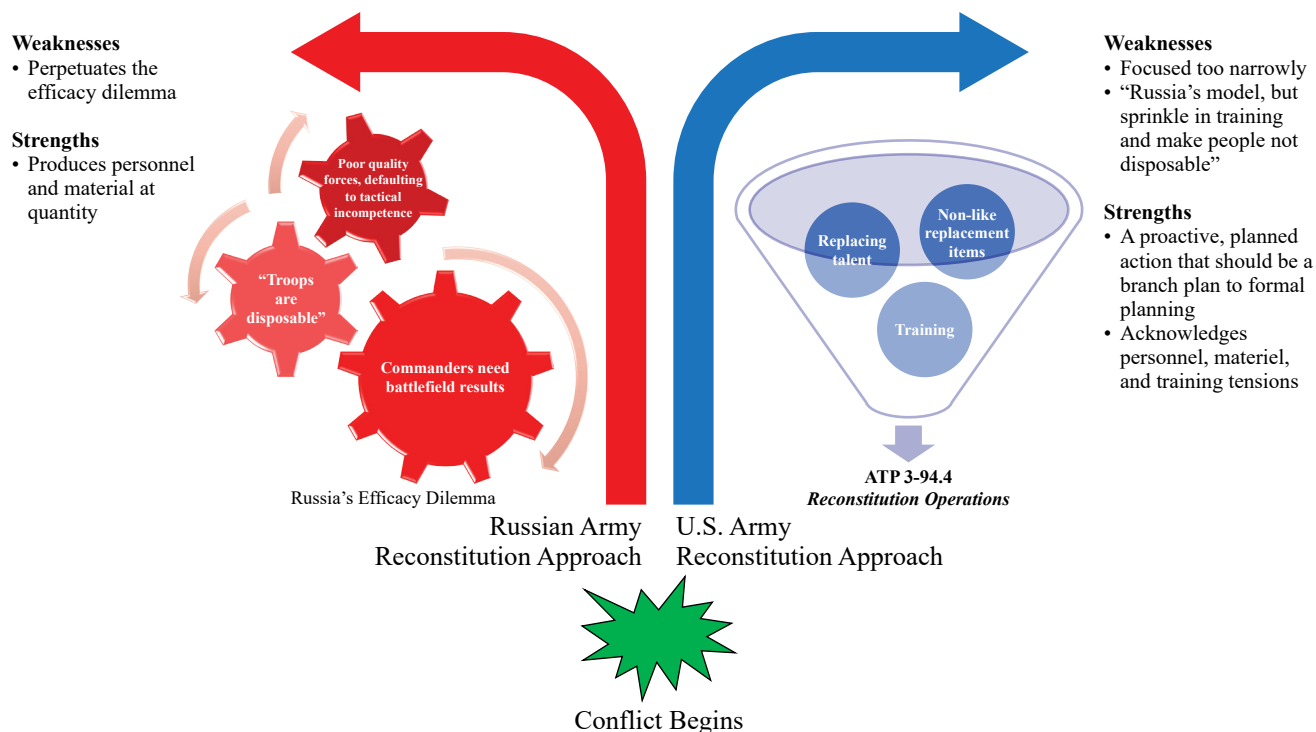
Figure 3. Reconstitution Elements versus Training and Sustainment Required

Army counterattack, there would be little time for Hasbrouck to prepare his division for its next mission ... The task of reconstituting the division was daunting. Many units had suffered greater than 50 percent casualties. One such unit, B/87th Reconnaissance Squadron, had made it across the Salm with only 35 Soldiers of its original 135, and 1st Sergeant Ladd, as the sole surviving leader. Many of the replacement Soldiers were either recent inductees with no combat experience, or cooks or anti-aircraft artillerymen, all now becoming infantry. Units would need to be completely rebuilt and then conduct individual, platoon, and up to battalion level training. Focusing on the mission at hand, Brigadier General Hasbrouck determined

the use of small combined-arms task forces, consisting of tanks, infantry and engineers, operating decentralized, would be best suited to regaining the ground lost ... Unit drills focused on platoon gunnery and infiltration, allowing the 7th Armor Division's M4 Shermans to close to within 200 yards of German positions.¹⁵

This deliberate approach, which included three weeks of training before returning to the fight, all designed to maximize potential at the lower echelons that the division could train up to in the time available, worked. In just three days of combat, the 7th Armored Division recaptured the terrain it had slowly ceded over two weeks.¹⁶

The strength of our doctrine is that it acknowledges the essential nature of reconstitution and the



(Figure by authors)

Figure 4. Comparison Between U.S. Army and Russian Army Approaches to Reconstitution: More Similar than They Should Be

tensions within the process, supported by our history. Specifically, our doctrine notes that regeneration (the heart of reconstitution) is “a proactive, planned action,” for which “planners should develop a base reconstitution plan as a branch plan during the formal planning process.”¹⁷ One of the tensions in our process, which mirrors attrition trends in the Russia-Ukraine War, is replacing talent. Returning to our history, “a typical World War II division from June 1944 to May 1945 experienced 200-300 percent personnel turnover as it received replacements on its eastward advance. In the early stages of conflict, a unit may receive personnel with the rank and experience requested, but as a conflict continues, that likelihood decreases.”¹⁸ Likewise, our doctrine acknowledges the materiel tensions that Russia and Ukraine are both encountering as they replace losses with what our doctrine terms *non-like replacement items* (replacing equipment with older or newer generations, or even foreign analogs).¹⁹ Lastly, our doctrine identifies the tension of weighing the immediate need for combat power versus their greater efficacy after training. The weakness of our doctrine

is that it looks at reconstitution too narrowly, balancing demand for personnel and materiel with available supply over time.

While ours makes clear that training is a critical ingredient for reconstituted units (something Russia lacks), as in the 7th Armored Division example, our doctrine is just a variation of the Russian attrition focused model (see figure 4). We need a more comprehensive approach, an approach developed, practiced, and refined before conflict, which anticipates the transition to protraction and expansion of the force while balancing supply and demand over time, ultimately producing a better force.

A More Comprehensive Approach: Transformative Reconstitution

The speed and timing of reconstituting and expanding forces matters tremendously, and getting the timing right to seize limited windows of opportunity can win or stalemate wars. For the Russia-Ukraine War, the timing of the shift to protraction and major reconstitution events has determined operational level initiative.



(Figure by authors)

Figure 5. Initiative Over Time: Russia-Ukraine War

The side that can better anticipate and execute these transitions has a decisive advantage. While Russia initially and briefly seized large portions of Ukraine in early 2022, the initiative decidedly switched in fall 2022 as Ukraine's counteroffensive achieved significant results in the south and east (see figures 5 and 6). Since then, while the initiative has tilted as both sides traded offensives, the war generally appears to be in

a stalemate, with neither likely to achieve its political objectives, and this stalemate is the result of failed reconstitution.

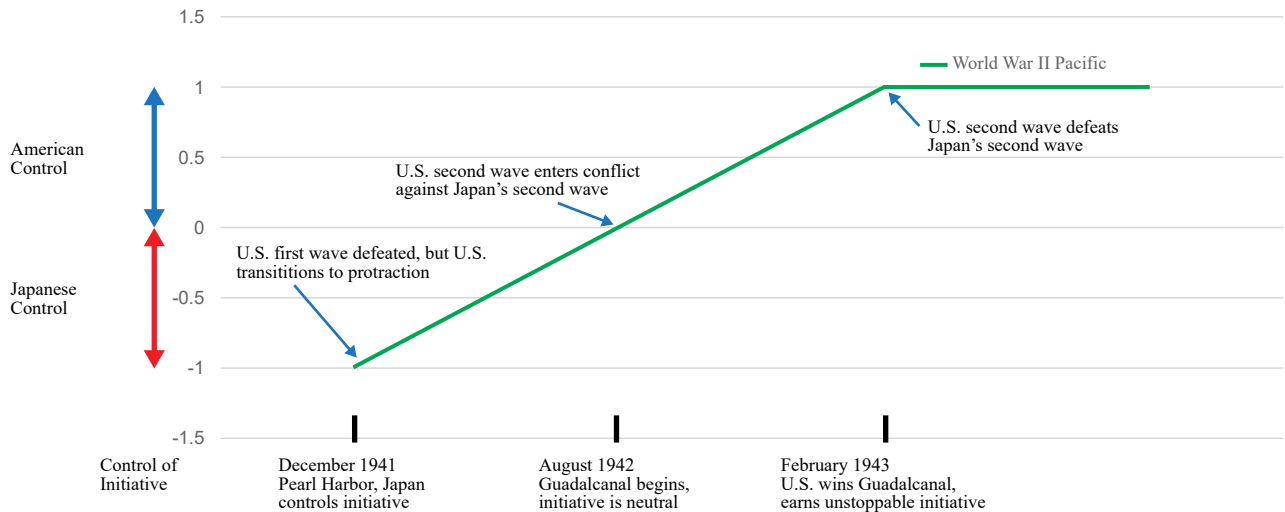
While we (the authors) decidedly want Ukraine to win this war (one of the authors served in Ukraine in 2021), its size in comparison to Russia makes it exceedingly unlikely it will reconstitute and grow enough mass to recapture all its lost territory. In



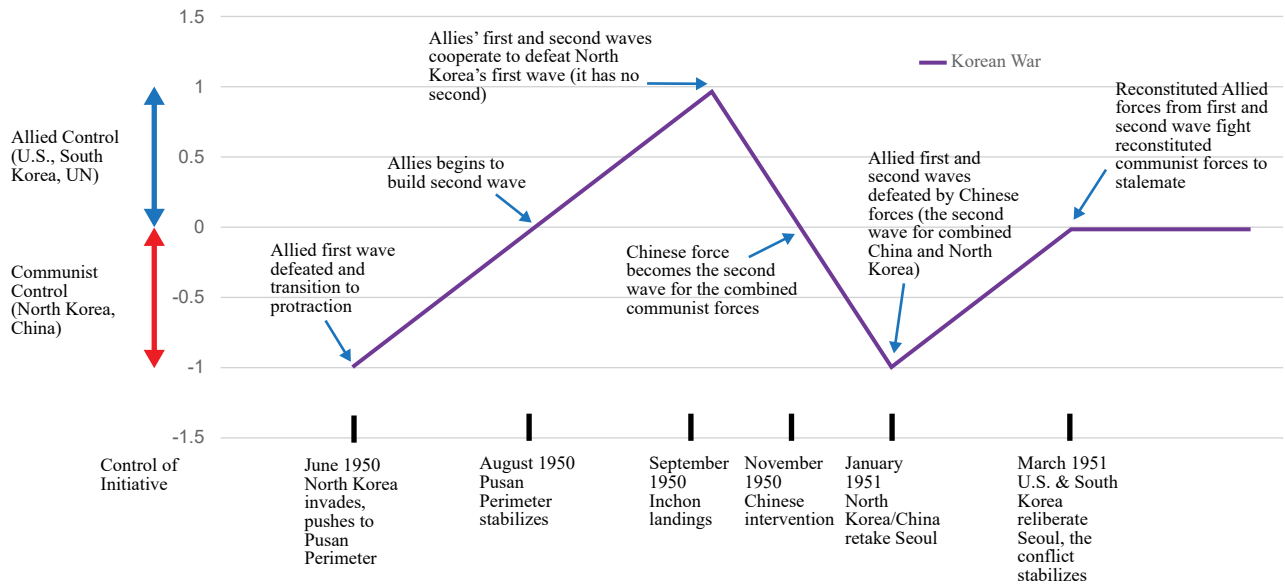
(Figure by authors; data from Institute for the Study of War)

Figure 6. Timeline of Territorial Control in Ukraine

Initiative Over Time: World War II



Initiative Over Time: Korea



(Figure by authors)

Change in control of initiative over time in relation to first, second, and subsequent wave forces: *top*, World War II Pacific; *bottom*, Korean War.

Figure 7. Comparison of Initiative Over Time Between World War II and the Korean War

contrast, Russia had all the potential needed to win this war. It failed in the first half of 2022 because it greatly overestimated its ability; consequently, its strategy to destroy Ukraine's government was infeasible. However, following its initial defeat in spring-summer 2022 (its first-wave forces), Russia had

the opportunity to learn and create an entirely new force (its second-wave forces: newly created forces or freshly mobilized reserves) that would help it win the war, but as Bakhmut and Umanske have shown, it squandered that opportunity. This story has many parallels to our own history in World War II and

the Korean War, as well as how things might unfold in potential conflicts in Taiwan, Korea, or virtually anywhere we may engage in large-scale combat operations.

In World War II, following initial defeats of our first wave across the Pacific, we had to defend to buy time to reconstitute our entire Army and grow a second wave from scratch. In the Korean War, our first wave again suffered initial defeats and was forced into the defense around Pusan. In World War II, our reconstituted and enlarged force, the second wave, regained the initiative, leading to unstoppable momentum against Japan in World War II; the same would have happened in Korea if not for China, whose entry reconstituted and expanded the communist forces. In both World War II and Korea, revisionist nations launched rapid initial offensives, forcing the democracy to defend while reconstituting, much as Ukraine was forced to in 2022—much as may yet happen in Taiwan or Lithuania. As modeled in figure 7, following the democracy's initial defense, initiative either shifted to the side that could better reconstitute or settled into stalemate in cases of equal reconstitution, as in Korea following the Chinese intervention.

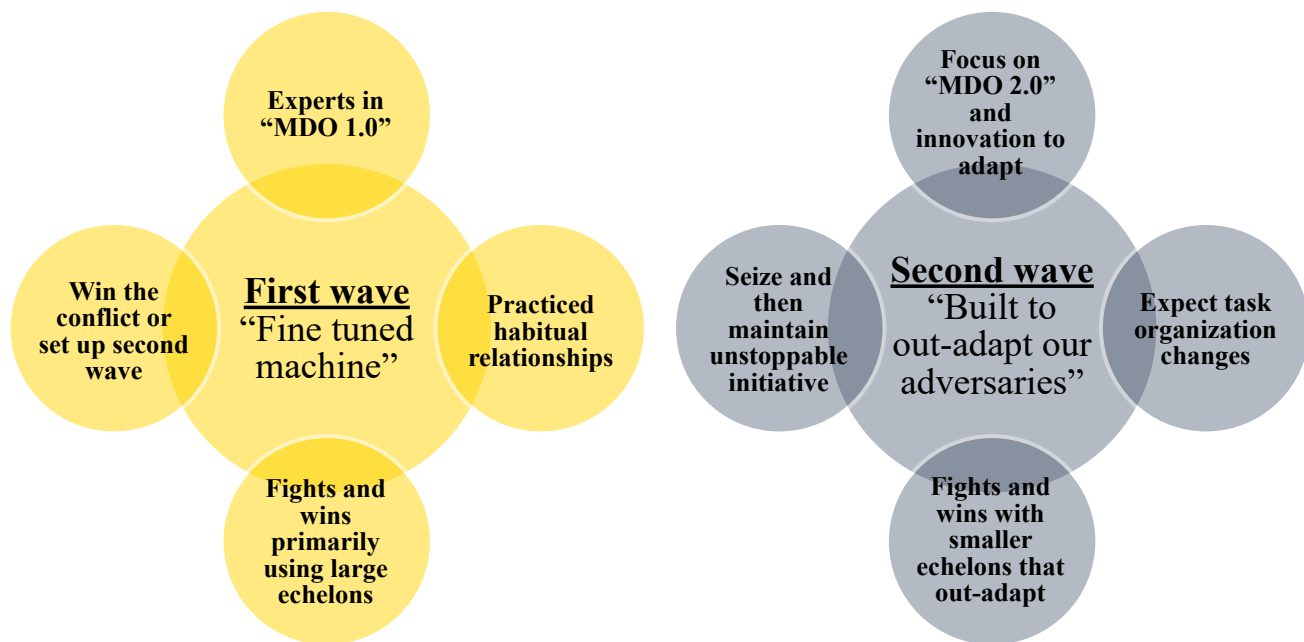
We will likely have another conflict where yet again our first wave forces initially defend to set offensive conditions for some combination of remaining first wave forces and new second wave forces, as Ukraine was forced to. However, as discussed, our reconstitution system is eerily like Russia's, which has been unable to beat a country a quarter its size despite sharing a 1,900 km border.²⁰ One potential difference is that in our next conflict, we could be in direct conflict with China or Russia rather than a nation several times smaller than us. Further, as has been widely discussed throughout our profession, our industrial defense base is not what it was during World War II or Korea, and waiting years for it to retool at scale to enable the arsenal of democracy may be years too late. We need a better approach to reconstitution that does not inherently rely on months to years of buildup and is more than simply regenerating personnel and materiel and sprinkling in some training. We need an asymmetric advantage for our first, second, and any subsequent waves that would allow us to transition to the offense faster than our adversaries and then underpin unstoppable initiative through absolutely superior reconstitution.

The Design of Transformative Reconstitution

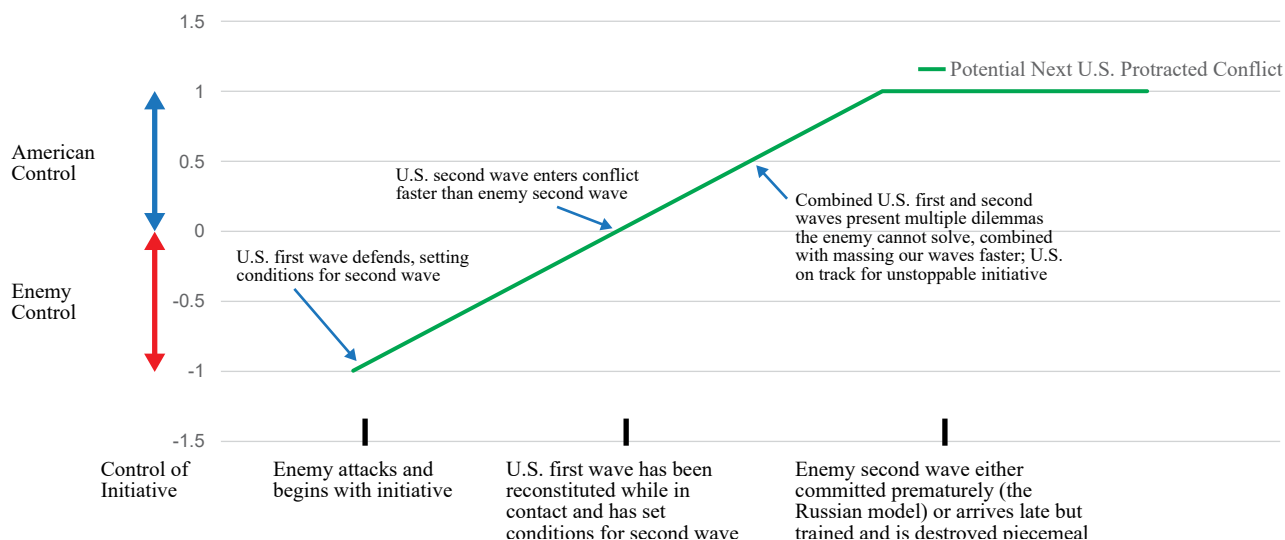
The Department of Defense's force development model centers on the well-known elements of doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy (DOTMLPF-P), yet our reconstitution model focuses just on training, materiel, and personnel.²¹ TR needs to include the other elements of force development. Doctrine, supported by leadership and education, and instilled through organization and training, is the cultural underpinning of our Army and the place to start for designing TR.

Following Russia's initial invasion in February 2022, both sides adapted to the conflict. The lessons learned in electronic warfare, maneuver, sustainment, fires, and more spread through both sides. As we have seen, the Russians generally devolved into simplistic tactics like human wave attacks and excessive reliance on column formations during movement. Put differently, their doctrine, organization, training, and leadership adapted backward. Consequently, when Russia regained the initiative and launched its winter offensive in early 2023, its forces crashed into well-adapted Ukrainian forces; instead, Russia should have adapted forward and hit its opponent with new doctrine and supporting models of organization, training, and leadership. Germany fell into the same trap in World War II when it doubled down on failure by continually relying on blitzkrieg tactics that the Allies had already adapted to. Our better model of reconstitution needs doctrine that can anticipate this adaptation so our reconstituted forces (whether they are our fresh second wave or regenerated first wave) can hit the enemy with something new.

Since official publication of the current Field Manual 3-0, *Operations*, in 2022, our Army has begun transitioning to multidomain operations (MDO) doctrine.²² By the time of our next protracted conflict, we will have likely coalesced on an operationalized form of MDO (or possibly a subsequent doctrine if our next conflict is far in the future). This means that in our next protracted conflict, by the time the initiative swings to us, our adversary will likely have adapted to the standard form of MDO that our first wave employs ("MDO 1.0"). Our implication is that to avoid the pitfalls of Russia in Ukraine and Germany in World War II, our second wave needs to employ something the enemy has not already adapted to, an "MDO 2.0." But MDO 2.0



What We Want Transformative Reconstitution to Provide



(Figure by authors)

Top: a comparison of the first and second wave forces

Bottom: the effect on initiative that transformative reconstitution should provide the combined first and second waves

Figure 8. First and Second Wave Forces and Their Effect on Initiative

will likely require different organization and training, enabled by leadership with the right education.

Reconstituting in contact will undoubtedly be difficult, as seen for Russia and Ukraine, and as our own history has shown, and MDO 2.0 will need to account for that. Thinking back to the 200 to 300 percent turnover in our Army in the European theater during World War

II, as well as to the casualties that Russia and Ukraine have already suffered, our MDO 2.0 warfighting doctrine needs to be effective and teachable. If it is not, we will either default to what our adversary has already adapted to, MDO 1.0, or we will devolve, like the Russians in Umanske. Further, the competing requirements to put our reconstituted or new forces back in the fight but also

needing to keep them out for training will likely lead to instances in which we cannot reach proficiency at higher echelons. As with the 7th Armored Division example or the ubiquity of company-level-and-below operations in Ukraine, MDO 2.0 should be optimized for lower echelons to give us the best advantage.

Supporting MDO 2.0 and its likely focus on lower echelons while remaining a dilemma to the enemy through our inevitable personnel churn has implications for our organization, training, and leadership and education. Specifically, TR should prepare us to frequently change task organizations and become accustomed to more temporary, transactional relations between supporting and supported units rather than the habitual relations we so often strive for. While habitual relations make sense for our first wave forces who may have years together prior to conflict, our second wave needs to be inherently built to out-adapt our adversary, which includes being unphased by frequent task organization changes. Likewise, our leadership and education need to enable our second wave to out-adapt.

In essence, the first wave needs to be a fine-tuned machine, with practiced habitual relationships and expertise in MDO 1.0 to set conditions for a change in initiative with our second wave. In contrast, the second wave needs to seize and then maintain unstoppable initiative by preempting the enemy's adaptation and then continuously out-adapting after contact. Doing so will require our second wave to be different from the start with MDO 2.0 and organization, training, leadership, and education geared toward preparing for uncertainty (see figure 8).

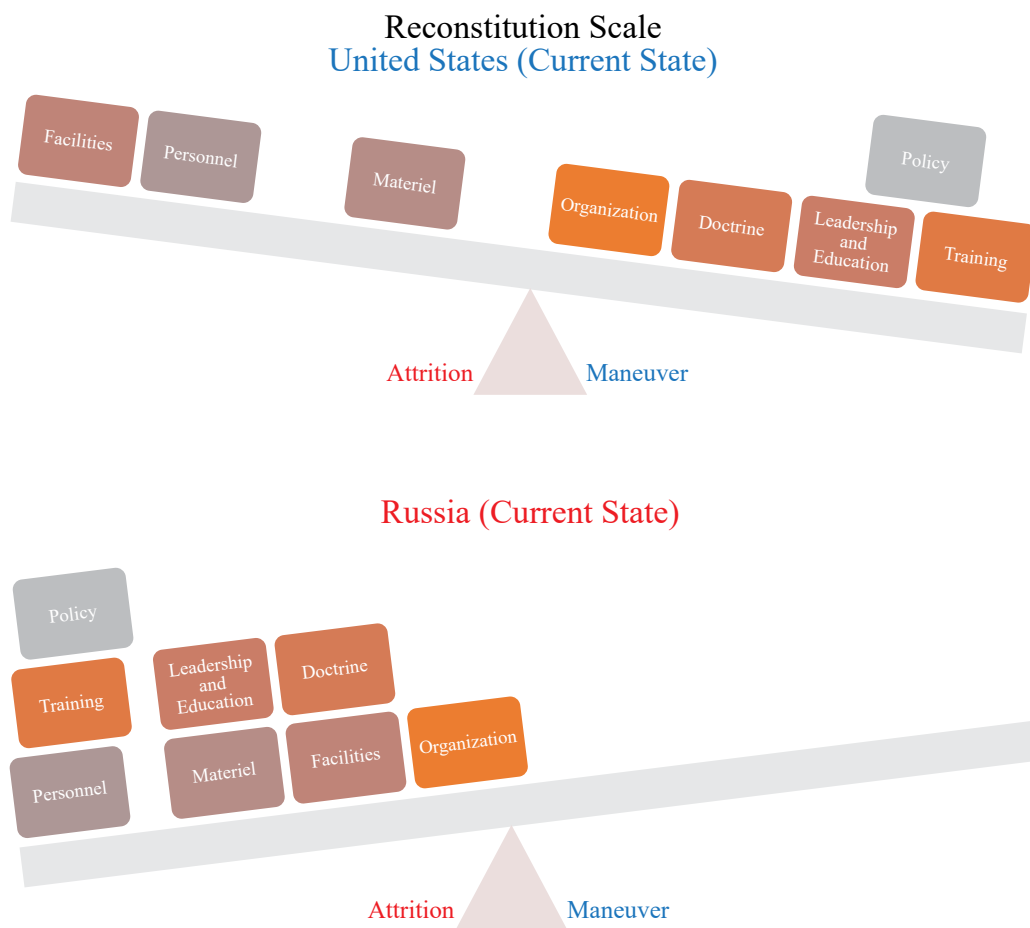
The last two elements of force development, facilities and policy, need to rapidly regenerate the first wave while speeding the second wave to the fight during the window of opportunity to seize the initiative. Fortunately, our Army generally has the facilities to enable rapid expansion because of our dozens of active installations and potentially reopened inactive facilities. The policy side is harder, and things like reinstituting a draft and changes to the industrial base are strategic decisions for our political leadership. However, we can ease this process through having a ready-built list of required policy changes across DOTMLPF-P to support our ability to regenerate, reorganize, expand, and out-adapt adversaries. For these reasons, this article focuses on the other elements of force development.

An Operational Approach to Implement Transformative Reconstitution

Talk is easy, but action can be hard, and our Army needs an operational approach to take us from our current state to TR. The truth of our current state is we have the doctrine discussed previously but are decades out of practice. Further, as frequently discussed in the defense community, our military is oriented to fight short duration, maneuver-centric conflicts, as indicated by our shallow stockages of ammunition, long training pipelines, emphasis on joint operations, and public sentiment against a draft. A lot of this orientation is good—we want to win quickly and decisively and have oriented our doctrine, organization, training, leadership, and policy to enable that. If we are unable to win quickly, we have some depth in materiel (vehicle war stocks), personnel (the Reserve Component [RC], the Individual Ready Reserve, etc.), and facilities but not what we would need for protracted large-scale combat operations. Figure 9 illustrates our current state, along with Russia's, and our respective biases toward maneuver and attrition, respectively.

Our current reconstitution model and the operational approach to achieve the future state of TR are depicted in figure 10. Our operational approach should anticipate our Active Component (AC) constituting the majority of our first wave with the RC (the National Guard and Army Reserve) forming the nucleus of our second wave. For the most part, the AC, focused on controlling initiative, developing and proliferating MDO 1.0, and maximizing current habitual relations, already has the right ingredients for our first wave. What the AC is missing is the experience in the transition to protraction that will allow the combined first and second waves to control and maintain unstoppable initiative. But experience can be resolved through exercises with RC units.

The RC already embodies most of what the second wave needs, particularly the ability to adapt and emphasis on smaller echelons. For instance, their mixture of civilian and military experience and military and domestic operations make the RC highly adaptive by nature. Further, with their limited training days per year, RC forces spend most years training to lower-echelon proficiency, typically platoon to battalion (but up to brigade during combat training center rotations), with variation depending on a unit's place in the readiness cycle. Generally, our RC forces are designed



(Figure by authors)

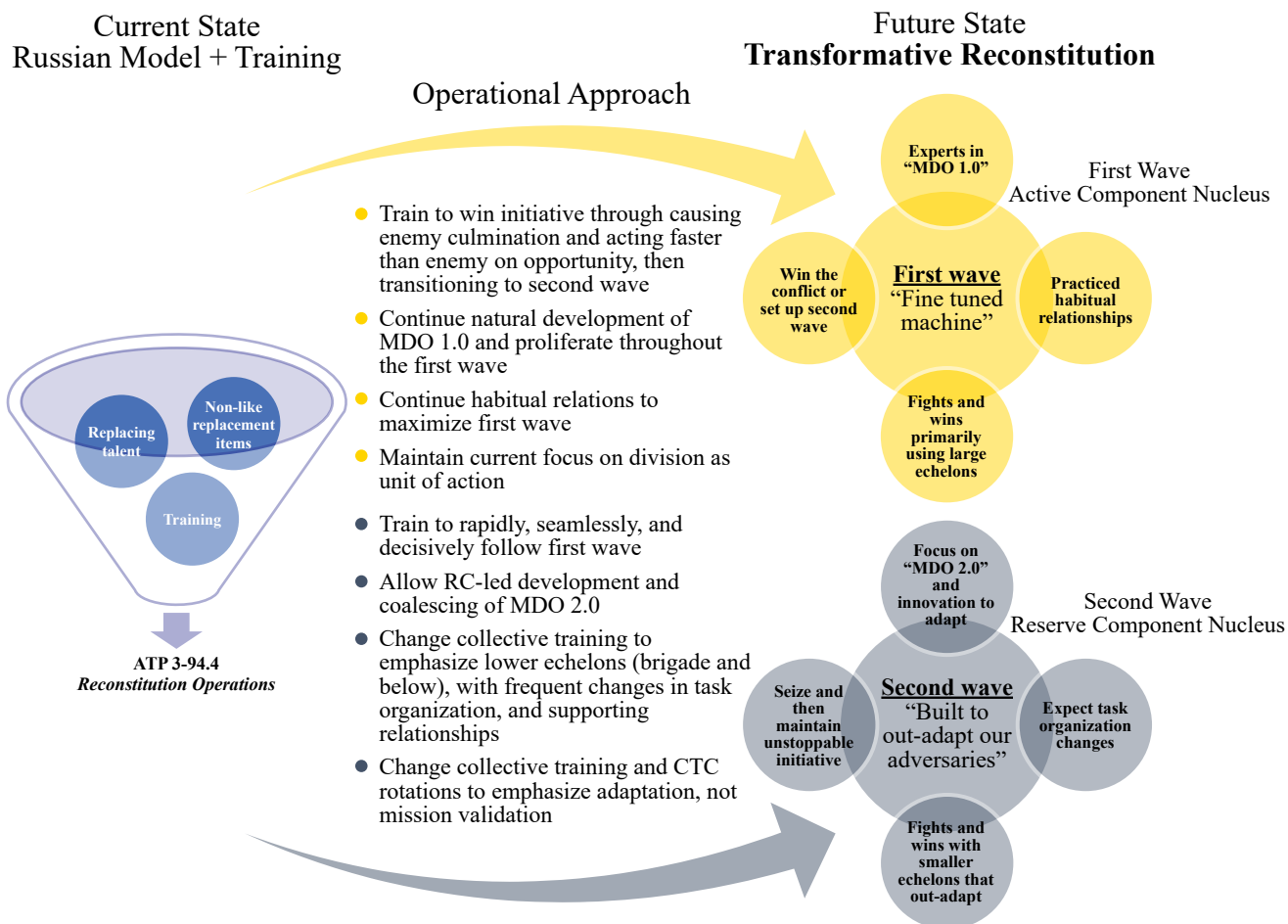
Figure 9. Current State of the U.S. Army and the Russian Army in Reconstitution across DOTMLPF-P

to duplicate AC forces but with fewer training days; turning them into the second wave we need requires deliberate focus on that role to meet the model.

Building the second wave we need will require better integration between RC and AC forces. Fortunately, virtually all these measures can originate in training and exercises. For instance, we can change our combat training center (CTC) rotations so that when RC units follow AC units, both conduct deliberate transition operations like passage of lines and retirements. CTCs can also develop RC units to follow the first wave rapidly, seamlessly, and decisively. For example, scenario scripting can reward superior transitions with fast units facing a smaller delaying force but slow transitions leading to face larger main bodies, simulating acting on windows of opportunity. This emphasis on

experimentation to out-adapt and overcome unexpected changes in the enemy and operational environment will naturally enable the development of a MDO 2.0, which the RC can serve as the proponent for.

CTC rotations for units that do not need mission validation—such as formations not deploying overseas—offer vast opportunity for developing units to out-adapt. This can include breaking traditional CTC norms such as having rotations unexpectedly be completely urban or forcing units to use their succession of command by sending regenerated leaders into different roles if they become casualties. Other examples include a surprisingly large or small opposition force that requires the RC unit to realize the situation and then develop and act on a new course of action. It can also include preparing units for task organization and



(Figure by authors)

Figure 10. Reconstitution in the U.S. Army: Our Current State with an Operational Approach to Reach the Future State of Transformative Reconstitution

supporting relationship changes through mixing elements of different brigades for rotations, or by presenting them with arrays of smaller objectives that require tailored combined arms formations.

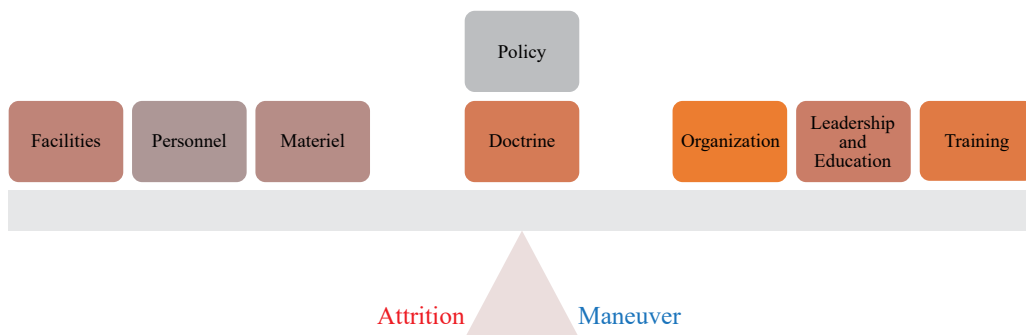
These cumulative changes to CTC rotations and their implied cascading changes in prior train-up will naturally foster the development of an MDO 2.0 that supports a second wave built to out-adapt adversaries. CTCs are keystone in our discussion due to their robust resourcing and their status as culminative events that drive months to years of preparation. They also allow our formations to demonstrate new doctrine and organizational concepts. However, the real critical element is a cultural focus on out-adapting, which can and should also be inculcated inside professional military education

and events outside CTCs. Further, as the nucleus for the second wave and its MDO 2.0, the RC is the natural proponent to lead MDO 2.0's development. Essential to driving this change will be getting away from the desire to have RC units be interchangeable duplicates of AC units since experimentation requires latitude for change. We have all the potential needed to affect these changes; we just need to be bold enough to try.

Conclusion

The Russia-Ukraine War is a reminder that conflict is never one sided, and Russia's fantasy of a quick and decisive victory was almost immediately replaced with protracted war. While Russia has failed to achieve much meaningful gains since summer 2022, it has

Reconstitution Scale U.S. Army with Transformative Reconstitution



(Figure by authors)

Figure 11. Transformative Reconstitution, the Balance Between Our Attrition-Leaning Doctrine and Maneuver-Focused Institution

excelled in its own form of reconstitution, which is just managing to keep the war in stalemate. Specifically, Russia has grown its ground forces in Ukraine from 360,000 to 470,000 and as of October 2023, has even reconstituted units like the 155th Naval Infantry Brigade as many as eight times.²³ We need a better model that suits our maneuverist culture of creating and exploiting a position of advantage during windows of opportunity, and transformative reconstitution aims to provide that for protracted war.

TR is a bold change to our reconstitution model, and there will undoubtedly be hurdles and counterarguments. Institutional inertia is probably our greatest barrier. Further, it is true that our AC and RC forces are already generally aligned with the first and second wave models. TR builds on this reality and deliberately incorporates the RC's strength in lower-echelon operations. But the shortcoming in our current force structure is molding RC forces into interchangeable duplicates of AC forces. TR abandons this because preempting an adversary's adaptation with our second wave requires latitude to experiment so that MDO 2.0 and the supporting organization, training, and leadership develop naturally.

The Russia-Ukraine War is a reminder that hopes for quick victory can rapidly disintegrate to protraction. We are currently caught in a dilemma with an attrition-leaning reconstitution doctrine that seeks to balance supply and demand, like Russia, but with an institution and industrial base more suited to maneuver warfare. TR seeks to balance those and tune the U.S. Army to prepare for protraction in Europe, Korea, Taiwan, or elsewhere. Transformative reconstitution intends to transform us in two ways, first by preparing us now for protraction and force expansion so that our second wave is ready to preempt enemy adaptation. Further, it anticipates combat losses and proactively fosters the development of new forms of doctrine, organization, training, and leadership focused on lower echelons to avoid devolving to our own version of Russia's efficacy dilemma. We are culturally built for maneuver warfare but need balance (see figure 11) to avoid derailment by attrition in protracted conflict. Developing and implementing an asymmetric advantage in reconstitution and force expansion can deter now, and if needed, win the next fight by dominating any transition to protraction. ■

Notes

1. Defense of Ukraine (@DefenceU), "The combat losses of the enemy from February 24, 2022 to July 19, 2024," X, 18 July 2024, 9:40 p.m., <https://x.com/DefenceU/status/1814158448201707888/photo/1>.

2. Ibid.

3. Ministry of Defence (@DefenceHQ), "Latest Defence Intelligence update on the situation in Ukraine – 12 July 2024," X, 12 July 2024, 1:27 a.m., <https://x.com/DefenceHQ/>

status/1811678866672353372; Defense of Ukraine (@DefenceU), "New month—new record: 1,415 russian artillery systems were destroyed in June," X, 1 July 2024, 4:44 a.m., <https://x.com/DefenceU/status/1807741943499112776>.

4. *To Receive Testimony on the Posture of United States European Command and United States Transportation Command in Review of the Defense Authorization Request for Fiscal Year 2025 and the Future Years Defense Program*, 118th Cong. (11 April 2024) (stenographic transcript), 51, <https://www.armed-services.senate.gov/imo/media/doc/41124fulltranscript.pdf>; *To Receive Testimony on the Posture of United States European Command and United States Transportation Command in Review of the Defense Authorization Request for Fiscal Year 2025 and the Future Years Defense Program*, 118th Cong. (11 April 2024) (statement of Gen. Christopher G. Cavoli, U.S. Army, U.S. European Command), 3, https://www.armed-services.senate.gov/imo/media/doc/cavoli_statement.pdf.

5. Cavoli, statement, 4.

6. *Wagner Group: 20,000 Troops Have Died Taking Bakhmut*, YouTube video, posted by "Wall Street Journal News," 24 May 2023, <https://www.youtube.com/watch?v=06BzstpAqhl>.

7. Sergio Miller, "Avdiivka Falls - The Battle for the Durna River Line," Wavell Room, 23 May 2024, <https://wavellroom.com/2024/05/23/the-battle-for-the-durna-river-line-29-april-5-may-2024-avdiivka/>.

8. Ministry of Defence (@DefenceHQ), "Latest Defence Intelligence update on the situation in Ukraine - 31 May 2024," X, 31 May 2024, 2:05 a.m., <https://x.com/DefenceHQ/status/1796467954907037817>.

9. Nick Reynolds and Jack Watling, *Meatgrinder: Russian Tactics in the Second Year of Its Invasion of Ukraine* (London: Royal United Services Institute, 19 May 2023), <https://www.rusi.org/explore-our-research/publications/special-resources/meatgrinder-russian-tactics-second-year-its-invasion-ukraine>.

10. Army Techniques Publication 3-94.4, *Reconstitution Operations* (Washington, DC: U.S. Government Publishing Office [GPO], 2021).

11. Ibid., 1-1.

12. Ibid.

13. Ibid.

14. Ibid., 1-2.

15. Ibid., 4-18.

16. Ibid.

17. Ibid., 1-4.

18. Ibid., 1-9.

19. Ibid., 3-6.

20. "What Countries Are Bordering Ukraine," Ukraine.ua, accessed 12 November 2024, <https://ukraine.ua/faq/countries-border-ukraine/>.

21. Army Regulation 5-22, *The Army Force Modernizations Proponent and Integration System* (Washington, DC: U.S. GPO, 2023), 1.

22. Field Manual 3-0, *Operations* (Washington, DC: U.S. GPO, 2022).

23. Karolina Hird et al., "Russian Offensive Campaign Assessment, March 24, 2023," Institute for the Study of War, 24 March 2023, <https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-march-24-2023>.

Call for Papers

Journal of Military Learning

The *Journal of Military Learning* (JML) is a peer-reviewed semiannual publication that seeks to support the military's effort to improve education and training for the U.S. Army and the overall profession of arms. The JML invites practitioners, researchers, academics, and military professionals to submit manuscripts that address the issues and challenges of adult education and training such as education technology, adult learning models and theory, distance learning, training development, and other subjects relevant to the field. Book reviews of published relevant works are also encouraged.

We are now accepting manuscripts for future editions of JML. Manuscripts should be submitted to usarmy.leavenworth.tradoc.mbx.journal-of-military-learning@army.mil. Submissions should be between 3,500 and 5,000 words and supported by research, evident through the citation of sources. For detailed author submission guidelines or to view past or current editions, scan the QR code or visit JML on the Army University Press website at <http://www.armyupress.army.mil/Journals/Journal-of-Military-Learning/>.



For additional information, send an email to the above address.

