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## The Rising Dominance of the Information Revolution within RMA Thought

by Tripp McCullar

Although scholars continue to debate the definitive terms and significance of so-called Revolution in Military Affairs (RMA), history will eventually suggest that the still-in-progress Information Revolution most radically redefined the western way of war. In *War Made New*, Max Boot masterfully addresses the phenomenon of RMA's and how various military scholars define what constitutes an RMA.<sup>1</sup> Although Boot's piece allocates an entire section for the Information Revolution, it falls significantly short of giving due credit to the impact the Information Revolution will ultimately have on the western way of war. The purpose of this piece is to argue that the Information Revolution will ultimately eclipse most of history's widely-accepted RMAs<sup>2</sup> due to its ability to "empower the weak" by (1) widely propagating strategic weapons technology, (2) rendering traditional military organization near-obsolete, (3) providing open access to mass social mobilization platforms, and (4) bypassing the development of industrialized mobility to achieve strategic effects.

From 1300 to 1500, advances in weapons technology drastically altered the face of warfare. European polities and feudal lords developed new weapons and new tactics which enabled decisive advantages over adversaries.<sup>3</sup> One of the most significant game-changers during this era was the development of gunpowder. Most scholars agree that the advent of gunpowder marked a tremendous RMA. Without question, nations who first acquired it achieved a decisive advantage over those who did not. However, the acquisition, control, and directed employment of gunpowder were centrally-based and a luxury only afforded by wealthy power holders. This tremendous leap in weapons technology and its subsequent proliferation was limited in availability and scope. Conversely, the Information Revolution has allowed for weapons technologies, methods, and TTP's (such as the suicide bomb) to be rapidly and globally circulated "on the cheap." This fluid exchange of information has significantly empowered the weak by allowing "poor man technologies" to be widely accessible to the disenfranchised and marginalized of ethnically-connected global communities. Although the gunpowder RMA significantly altered warfare, its power and lethality was centralized and mostly available to the rich and powerful. As demonstrated most recently by Al Qaeda franchise groups, the Information Revolution has made weapons of mass destruction (WMD) knowledge and employment widely available to any disgruntled teenager with an Internet connection - in effect, robbing the

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<sup>1</sup> Max Boot, *War Made New: Weapons, Warriors and the Making on the Modern World* (New York: Penguin Books, 2006), p. 519.

<sup>2</sup> Norman C. Davis, "An Information-based Revolution in Military Affairs," in *In Athena's Camp: Preparing for Conflict in the Information Age* (Santa Monica: RAND, 1997), p.79.

<sup>3</sup> Christopher Allmand, "New Weapons, New Tactics," in *The Cambridge History of Warfare* (Cambridge: Cambridge University Press, 2005), p. 84.

monopoly on mass strategic violence from the rich and powerful and delivering it to the hands of the masses.

In addition to weapons innovations, history also indicates that armies who were able to effectively organize themselves were enabled to methodically outmaneuver and overcome adversaries. Some scholars have called this the Managerial RMA. Frederick the Great revolutionized the ability to mass combat power by instituting drill, discipline, and maneuver through a rigid hierarchy. Frederick revolutionized warfare by making it a more devastating tactical weapon, maneuvering and concentrating his firepower against enemy weak points. As such, Frederick's managerial and organizational impacts on the Western Way of war eventually earned Napoleon's highest praise for its skill, yet much more so for its boldness.<sup>4</sup> In the current era of so-called global counterinsurgency, the Information Revolution has nearly negated the requirement for a rigid hierarchy to synchronize operations by affording global channels for coordination among networks of like-minded groups and individuals. In Frederick's time, it was necessary to mass and maneuver combat power in order to achieve decisive effects. However, in the current strategic environment many would argue that there is no force-on-force peer competitor with the United States. The current enemies of the United States recognize that they cannot compete in a force-on-force conflict and discard any notion of being able to mass and maneuver combat forces as per Frederick's developments. However, the Information Revolution has afforded a platform for militarily weak adversaries of the United States to incorporate Maoist insurgency methods on a global scale.<sup>5</sup> This ability to coordinate activities across nations and theaters of war has made the enemy lighter, faster, and more nimble than the often cumbersome United States military machine – thus twisting the US's normally-decisive force advantage against itself.

Although Frederick's theories revolutionized the ways in which armies organize and maneuver themselves, the French Revolution ushered in an era which introduced a "high-octane human fuel" to military forces. With the rise of Westphalian states, Western states learned to fuel their armies by mobilizing populations with nationalistic ambitions as citizens and future stakeholders. Napoleon Bonaparte charismatically tapped into French Nationalism to coalesce mass support and mobilization for his army. With revolution still in the air, Napoleon evoked powerful and emotive nationalist imagery of what it meant to be French in order to provide a common vision, honor, and direction to the common Frenchman. In doing this, he also elevated common Frenchmen to be stakeholders in the French nation.<sup>6</sup> Although Napoleon's method was brilliant, it was limited in reach due to the necessity for him to be constantly mobile and access this target populations. Today, the Information Revolution has afforded "strategic voices" to all people, allowing for the rapid, near-instant circulation of ideologies of identity or shared grievance. For example, the jihadist narrative is widely propagated on the Internet, calling Muslims worldwide to join in the struggle. Most recently, the US-born radical Yemeni cleric, Anwar al-Awlaki, has achieved celebrity status and a spot on the CIA's hit list. This is attributed to his powerful and globally-propagated message which has incited international jihadi social

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<sup>4</sup> Jay Luvaas, "Frederick the Great: The Education of a Great Captain," in *H100: Rise of the Western Way of War* (Fort Leavenworth, KS: CGSC, 2009), p. 91.

<sup>5</sup> John Mackinlay, *The Insurgent Archipelago* (New York: Columbia University Press, 2009), p.81.

<sup>6</sup> Macgregor Knox, "Mass Politics and Nationalism as Military Revolution: The French Revolution and After," in *The Dynamics of Military Revolution, 1300-2050* (Cambridge: Cambridge University Press, 2001), p. 57.

movement from Europe and the US<sup>7</sup>, as well as, violence within US, as seen in the 2009 Fort Hood massacre. In this manner, the Information Revolution has bypassed and enabled social mobilization on a level never dreamed by Napoleon.

During the mid-latter portion of the 19<sup>th</sup> century, more technological advances ushered in the Industrial RMA, once again drastically changing the face of modern warfare. During this era, two of the most game-changing developments were the railroad and telegraph. The railroad enabled modern militaries to rapidly mass forces and resources to concentrate them and decisive points while the telegraph allowed for the rapid transmission of information, facilitating more timely intelligence and thus better decisions by battlefield commanders.<sup>8</sup> Although the telegraph allowed for rapid transit of information, its effect was limited to only those who possessed the knowledge to send and interpret Morse Code. Today, the Information Revolution has enabled anyone with a Twitter or Facebook account to send key small character bursts of rapidly-understood information to massive amounts of people, as demonstrated during the social turmoil of the 2009 Iranian elections as well as reoccurring conflicts between Israel and Hezbollah. Additionally, the Information Revolution will eventually (and to some degree, has) trump the requirement to mass combat forces from a centrally-managed entity by allowing dispersed net-centric adversaries to “swarm” toward common causes and objectives then quickly melt back into the environment.<sup>9</sup> This swarming effect, enabled by the Information Revolution, was initially seen in the Balkan wars of the late 90’s and most recently on the battlefields of the Middle East.

In summary, within the past two decades, the still-unfolding Information Revolution has advanced many of the last several centuries’ most significant components of RMA – in effect, eclipsing them. By (1) widely propagating weapons technology, (2) sidestepping the requirements for traditional military organization, (3) enabling strategic communication to mobilize marginalized have-nots, and (3) allowing for the mass global coordination of paramilitary activities, the Information Revolution has drastically changed the Western Way of war. For the future, as the Information Revolution continues to unfold there is little doubt that America’s enemies such as Al Qaeda will maximize its power to spread its ideology and organize the disenfranchised into loosely connected cells and circles of identity.<sup>10</sup> As Al Qaeda’s strategic vision involves inciting a largely leaderless<sup>11</sup> grassroots global social movement, the West must seize the initiative in the war of ideas<sup>12</sup> by developing powerful and emotive counter-narratives which *de-glorify the jihadist movement*<sup>13</sup> then apply them to the social and cognitive domains to which the Information Revolution has opened new spaces. Within this access, the US must aggressively leverage the fruits of the Information RMA to

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<sup>7</sup> U.S. Senate Committee on Foreign Relations, "Al Qaeda in Yemen and Somalia: A Ticking Time Bomb," (Washington DC, 2010), 21. *This report contains reports of US and European Muslims becoming radicalized and traveling to Yemen for terrorist training and support.*

<sup>8</sup> Terry L. Beckenbaugh, "The War for the Union: A "People's Contest" in the Industrial Age," in *H100: The Western Way of War* (Fort Leavenworth, 2009), p. 299.

<sup>9</sup> John Arquilla and David Ronfeldt, "What's Next for Networks & Netwars?," in *Networks & Netwars: The Future of Terror, Crime, and Militancy* (Santa Monica: RAND, 2001), p. 335. *For a brief overview of "swarming," see Arquilla's 2009 Op-Ed in the New York Times at <http://www.nytimes.com/2009/02/15/opinion/15arquilla.html>*

<sup>10</sup> Ori Brafman and Rod A. Beckstrom, *The Starfish and the Spider: The Unstoppable Power of Leaderless Organizations* (London : Penguin Group, 2006), p. 140.

<sup>11</sup> Marc Sageman, *Leaderless Jihad: Terror Networks in the Twenty-First Century* (Philadelphia: University of Pennsylvania Press, 2008).

<sup>12</sup> William Rosenau, *Waging the War of Ideas*, National Security Research Division (Santa Monica: RAND, 2006).

<sup>13</sup> David Kilcullen, *Counterinsurgency* (Oxford: Oxford University Press, 2010).

*attack the brand name* of movements by employing branding and “strategic ridicule”<sup>14</sup> campaigns to tarnish, or even lampoon, the movement and strip it of the allure which attracts desperate young men in their search for glory.

Throughout historic counterinsurgency campaigns, information has always been the most powerful weapon - and in modern global counterinsurgency, the political competitor who the best masters the developments of the Information Revolution will ultimately win the war of the narrative. The lessons of previous RMA's are now re-inventing themselves and being applied within this changing nature of warfare, and even redefining who gets a “speaking role” on the strategic stage. To prevail in global counterinsurgency, the United States must realize and embrace the reality that the so-called *western way of war must rapidly evolve to the new global way of war*, enabled by the Information Revolution – and the enemy may not always be who we expect. Indeed, the Information Revolution shouts to us that the “past is prologue”<sup>15</sup> of wars to come. But this maxim is much better understood by our enemies. As the US continues to long for the era of clean linear wars and backslides towards its comfort zone, our enemies appear to be the real visionaries, who truly view the past as prologue of things to come, and leverage the Information Age most creatively. These are the new rules<sup>16</sup> for the *global way of war*, the fight already being waged by our enemies, and the paradigm that the modern strategic environment will continue to demand.

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<sup>14</sup> J. Michael Waller, *Fighting the War of Ideas Like a Real War* (Washington DC: Institute of World Politics Press, 2007), p. 109.

<sup>15</sup> CGSC Ft. Leavenworth, *H112: Past as Prologue*, lecture by Bradley Carter, PhD. Fort Gordon, Sept 29, 2010.

<sup>16</sup> John Arquilla, "The New Rules of War," *Foreign Policy*, March/April 2010.

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