

TOWARD A COMPREHENSIVE THEORY OF WAR MAKING IN THE DEVELOPING WORLD: A REVIEW ESSAY

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Kenneth M. Pollack, *Arabs at War: Military Effectiveness, 1948-1991* (Lincoln, NE: University of Nebraska Press, 2002).

Miguel A. Centeno, *Blood and Debt: War and the Nation State in Latin America* (University Park, PA: The Pennsylvania State University Press, 2002).

Herbert M. Howe, *Ambiguous Order: Military Forces in African States* (Boulder, CO: Lynne Rienner Publishers, 2001).

Wars are a recurring feature of world history. Since 1800, a new war between established nation-states has occurred approximately every six to ten years.¹ Yet, despite the obvious importance of military power to intra- and inter-state politics, relatively few political scientists have attempted to determine what factors influence a state's capacity to generate military power and make war. Kenneth Pollack's *Arabs at War*, Miguel Centeno's *Blood and Debt*, and Herbert Howe's *Ambiguous Order* seek to remedy this failing by offering three disparate theories to explain the inability of Arab, Latin American, and African states, respectively, to generate strong military power.² These books constitute a significant contribution to the literature on war making for each addresses variants of one of the most important questions in social science and each provides clear and coherent answers to that question with greater elaboration than

¹ John Nevin, "War Initiation and Selection by Consequence," *Journal of Peace Research* 33 (February, 1996): 99.

² Kenneth M. Pollack, *Arabs at War: Military Effectiveness, 1948-1991* (Lincoln, NE: University of Nebraska Press, 2002), Miguel A. Centeno, *Blood and Debt: War and the Nation State in Latin America* (University Park, PA: The Pennsylvania State University Press, 2002), and Herbert M. Howe, *Ambiguous Order: Military Forces in African States* (Boulder, Colorado: Lynne Rienner Publishers, 2001).

similar literature on this topic. However, all of these books suffer from fundamental problems. Specifically, none of these books is fully convincing in its respective claims about which factors explain the inability of developing states to generate strong military power; all of these books suffer from constraining methodologies that avoid interregional comparisons and systematic analysis of intraregional differences; and all of these books undermine their empirical analyses by failing to adequately define and operationalize their variables. Despite their limitations, these books provide a strong foundation for an integrated and comprehensive theory of military power and war making in the developing world. In this way, these books may hold the key to a more complete explanation of how government policy translates into battlefield outcomes for developing states.

This review essay first presents an analytical summary of these books and their respective theories about the factors affecting the generation of military power. Second, it provides several criticisms of these theories. Finally, it identifies avenues through which to improve upon these disparate theories.

Analytical Summary

Introduction to Works

Pollack, Centeno, and Howe underpin their books with the observation that states in the Arab world, Latin America, and Africa, respectively, have consistently proven unable to generate significant military power. Pollack points to the repeated military defeats of Arab states since the Second World War in wars against Israel, Iran,

African, and Western states.³ Centeno emphasizes the near complete lack of total wars between Latin American states as evidence that these states cannot generate sufficient military power to fight such wars.⁴ Finally, Howe points to the high level of intrastate conflict throughout Africa as evidence that African states are too weak to defeat poorly armed insurgencies.⁵ Despite their disparate foci, the authors share a similar initial observation: Arab, Latin American, and African states, with the possible exceptions of Chile, Cuba, and South Africa, are military dwarves that cannot successfully prosecute large-scale and sustained military campaigns.⁶

As mentioned above, these authors also share a common objective in their mutual attempt to determine which factors influence a state's capacity to generate military power and make war.⁷ However, their conclusions are very different. Pollack concludes that the sources of Arab military weakness are deficiencies in what he calls "the human factor," or military effectiveness, which he defines as "the ability of an armed service to prosecute military operations and employ weapons in military operations."⁸ Centeno concludes that Latin American states cannot fight total wars because these states never developed the capacity to wage prolonged wars.⁹ As the author puts it, "the actual disputes have been extremely short, in part because the military capacities of the

³ Pollack, 1-4.

⁴ Centeno characterizes total war by "(a) increasing lethality on the battlefield; (b) the expansion of the killing zone to include not only hundreds of miles of frontlines, but also civilian targets; (c) association with a form of moral or ideological crusade that contributes to the demonization of the enemy; (d) the involvement of significant parts of the population either in direct combat or in support roles; and (e) the militarization of society, in which social institutions are increasingly oriented toward military success and judged on their contribution to a war effort." Centeno, *Blood and Debt*, 21.

⁵ Howe, 1-2.

⁶ Pollack, 1-16, Centeno, *Blood and Debt*, 57, and Howe, 51-53.

⁷ Centeno has a second major objective in his book, which is to explain how Latin American states' inability to fight total wars removes a major stimulant to state development. However, this review essays confines itself to his discussion of the factors affecting the development of military power.

⁸ Pollack, 3.

⁹ Centeno, *Blood and Debt*, 92.

belligerents were rapidly exhausted.”¹⁰ Finally, Howe concludes that the sources of African military weakness are deliberate policies promoted by African regimes designed to degrade the professionalism of their regular armed forces.¹¹

These books constitute part of a tradition of scholarship focusing on war making and military power, much of which developed directly or indirectly out of Charles Tilly’s work on war making and state making that began in the 1970s and the work conducted in the 1980s by Allan Millet, Williamson Murray, and Kenneth Watman on the determinants of military effectiveness.¹² Pollack shares a regional focus with Norville de Atkine, an American specialist in Arab military training, who argues that “Arabic-speaking armies” have been generally unable to generate military power because of cultural and societal attributes that inhibit Arabs from producing effective military forces.¹³ Both authors touch on deficiencies in Arab leadership and information sharing.¹⁴ Centeno’s arguments flow largely from Tilly, who posited in *The Formation of National States in Western Europe* that a state’s fiscal, material, and human resources determines its ability to prosecute major military operations.¹⁵ Moreover, all three of the works reviewed here constitute part of the “lame leviathan” literature pioneered by Thomas Callaghy, Robert Jackson, Carl Rosberg, Victor Azarya, and Naomi Chazan during the 1980s.¹⁶ This literature reflects growing concern over the inability of former

¹⁰ Centeno, *Blood and Debt*, 92.

¹¹ Howe, 28.

¹² Charles Tilly, *The Formation of National States in Western Europe* (Princeton, N.J.: Princeton Univ. Press, 1975), and Allan Millet, Williamson Murray, and Kenneth Watman, “The Effectiveness of Military Organizations,” *International Security* 11 (Summary, 1986): 37-71.

¹³ Norville de Atkine, “Why Arabs Lose Wars,” *Middle East Review of International Affairs* 4 (March 2000), 16.

¹⁴ De Atkine, 18-19.

¹⁵ Tilly, 42.

¹⁶ Thomas Callaghy, “The State as Lame Leviathan: The Patrimonial Administrative State in Africa,” in Zaki Ergas, ed., *The African State in Transition* (London, UK: Palgrave, 1987), Robert Jackson and Carl Rosberg, “The Marginality of African States,” in Gwendolen Carter and Patrick Omeara, eds., *African Independence: The First Twenty-Five Years* (Bloomington, IN: Indiana

colonies to generate military power despite several decades or even a century or more of independence.

Theoretical Arguments

Pollack seeks to determine “what is it that has consistently hindered Arab militaries over the years and so diminished their fortunes on the battlefield?” *Arabs at War* is organized around six separate and highly detailed case studies of Arab militaries: Egypt, Iraq, Jordan, Libya, Saudi Arabia, and Syria. These cases are employed to test nine hypotheses positing that deficiencies in different aspects of military effectiveness are the causes of Arab military weakness: unit cohesion, generalship, tactical leadership, information management, tactical skills and weapons handling, logistics and maintenance, morale, training, and cowardice.¹⁷ These are not original hypotheses; rather, Pollack culled them from the literature on Middle East conflict. This sets Pollack’s book apart from the others reviewed in this essay because *Arabs at War* is the only book genuinely testing competing hypotheses against post-Second World War Arab military history rather than pushing an argument forward from the outset. Moreover, one of the main contributions made by Pollack’s book is that it evaluates strongly held beliefs and assumptions pervading the literature on Middle East conflict and demonstrates that stereotypical perspectives of Arab soldiers, including beliefs that these soldiers are cowardly, are patently false.¹⁸ Following 500 pages of

University Press, 1985), and Victor Azarya and Naomi Chazan, “Disengagement from the State in Africa: Reflections on the Experience of Ghana and Guinea,” *Comparative Studies in Society and History* 29 (January 1987): 106-131.

¹⁷ Pollack, 4-10.

¹⁸ Pollack, 4-10 and 570-573, Erick Hammel, *Six Days in June* (New York, NY: Scribner’s, 1992), 423, Roger Owen, “The Role of the Army in Middle Eastern Politics: A Critique of Existing Analyses,” *Review of Middle East Studies* 3 (1978), 74-75, and George Gawrych, *Key to the Sinai: The Battles for Abu Ageilah in the 1956 and 1967 Arab-Israeli Wars* (Fort Leavenworth, KS: US Army Command and General Staff College, 1989), 30.

analysis, Pollack concludes that consistent deficiencies in four areas are the primary sources of Arab military weakness.¹⁹

First, Pollack determines that Arab militaries are ineffective because their personnel do not possess the technical skills to maintain modern personal, land, and air weaponry. As he puts it:

Most of the armed forces had a poor track record of keeping their weapons, vehicles, and other equipment up and running. Most Arab soldiers and officers showed little appreciation for the need to attend their equipment, with the result that units generally had operational readiness rates of 50-67 percent; rates greater than 70-80 percent were rare in Arab units, while rates of 25-30 were not.²⁰

This deficiency significantly reduces the availability of operational weapons to Arab soldiers. Pollack singles out repeated engagements between the Arab forces under study and Israeli forces. Despite materially outnumbering Israeli forces at the outset of every conflict, Arab forces quickly lost this material advantage to break downs, damage, and other maintenance issues.²¹

Second, Pollack determines that Arab military personnel experience persistent difficulties utilizing modern weapons in military operations. Arab marksmanship is particularly poor, resulting in Arab militaries being out shot and out hit in artillery, armour, rifle, and aircraft exchanges.²² For example, during the Gulf War in 1990-1, the Iraqi Republican Guard fielded artillery pieces boasting superior range, precision, and firepower than the any coalition piece, yet still lost ever single artillery duel with US forces.²³ Pollack reaches the reasonable conclusion that Arab militaries are ineffective

¹⁹ Pollack, 574.

²⁰ Pollack, 567-8.

²¹ Pollack, 568.

²² Pollack, 564.

²³ Pollack, 564.

because they cannot make full use of the weapon systems they employ. This conclusion flies in the face of scholars who seek to explain Arab military weakness as the product of material deficiencies.²⁴

Third, Pollack determines that Arab tactical leaders lack the capacity to effectively lead their personnel. In the author's assessment, Arab junior officers performed consistently poorly in every military operation between 1948 and 1991. As Pollack summarizes:

Arab tactical commanders regularly failed to demonstrate initiative, flexibility, creativity, independence of thought, an understanding of combined arms integration, or an appreciation of the benefits of maneuver in battle. These failings resulted in a dearth of aggressiveness, responsiveness, speed, movement intelligence gathering, and adaptability in Arab tactical formations that proved crippling in every war they fought.²⁵

Non-Arab units repeatedly defeated Arab units of equal or larger size because Arab junior officers robotically followed orders issued by senior commanders despite changing circumstances on the ground.²⁶ Pollack's conclusion dovetails with Norville de Atkine's assessment that an Arab officer "rarely... makes a critical decision on his own."²⁷ Moreover, this conclusion reflects principles developed thousands of years ago in other parts of the world. Indeed, Sun Tzu wrote during the Warring States period in China that, "If the Tao of Warfare indicates you will not be victorious, even though the ruler instructs you to engage in battle, not fighting is permissible."²⁸

Finally, Pollack determines that Arab militaries demonstrate great difficulty sharing information along the chain of command. Information tends to be

²⁴ See, for example, Stephen Biddle and Robert Zirkle, "Technology, Civil-Military Relations, and Warfare in the Developing World," *Journal of Strategic Studies* 19 (June 1996): 171-212, and Christopher Parker, "New Weapons for Old Problems: Conventional Proliferation and Military Effectiveness in Developing States," *International Security* 23 (Spring, 1999): 119-147.

²⁵ Pollack, 557.

²⁶ Pollack, 558.

²⁷ De Atkine, 19 and 20.

²⁸ Sun Tzu, *The Art of War*, trans. Ralph Sawyer (Boulder, CO: Westview Press, 1994), 214-215.

compartmentalized in these forces, largely because Arab officers tend to see knowledge and the ability to control the flow of knowledge as power. De Atkine's similarly concludes that "Arabs husband information and hold it especially tightly."²⁹ As a result, Arab militaries are rarely able to guide their military operations with accurate information. This makes Arab militaries particularly susceptible to surprise attacks, such as the Israeli aerial bombardments that destroyed much of the Egyptian air force on the first day of the Six Day War in 1967.³⁰

Centeno seeks to determine why Latin American states tend not to pursue total wars.³¹ This aspect of *Blood and Debt* is organized around a quantitative analysis of financial, material, and human resources devoted to Latin American militaries. Centeno emphasizes state incapacity: Latin American states cannot fight total wars because these states never developed the capacity to wage prolonged wars. Arguing much like Tilly, Centeno pithily concludes "No states, no wars."³² Flushing out this assertion, Centeno offers two arguments detailing why state weakness precludes Latin American states from generating sufficient military power to make total war.³³

First, Centeno argues that Latin American states cannot tax their populations at sufficient levels to pay for "the type of military apparatus necessary for contemporary warfare."³⁴ Citing gross national product and central government expenditure figures compiled by the Stockholm International Peace Research Institute, the author demonstrates that military spending in Latin America is lower on an absolute and per-

²⁹ De Atkine, 18.

³⁰ Pollack, 562.

³¹ Centeno, *Blood and Debt*, 66.

³² Centeno, *Blood and Debt*, 92 and Tilly, 47.

³³ Centeno, *Blood and Debt*, 92-98.

³⁴ Centeno, *Blood and Debt*, 92-93.

capita basis than every other region of the world.³⁵ Moreover, the author points to figures compiled by Jane's Information Group detailing the miniscule holdings of largely obsolete models of tanks, combat helicopters, fighter and bomber aircraft as evidence that Latin American states have not provided sufficient funds to maintain well-equipped armed forces.³⁶ "Simply put," Centeno concludes, "wars cost money, and the Latin American militaries have not had access to the massive infusion of resources required to equip themselves for anything but the most limited border clashes or police actions."³⁷

In addition, Centeno argues that Latin American states do not possess sufficient soldiers to conduct total wars. As the author rightly points out, "no matter the sophistication of equipment, war requires men... to physically move into and hold territory."³⁸ The quantitative data presented in *Blood and Debt* indicate variation in the military capacity of states in this region, with Cuba, Chile, Argentina, and Peru having the highest military capacity and most states having considerably less.³⁹ Nevertheless, Centeno concludes that these deficiencies in state capacity "make prolonged warfare difficult if not impossible" for virtually all Latin American states.⁴⁰

Howe seeks to determine why African militaries cannot mount effective counterinsurgency campaigns. *Ambiguous Order* lacks the organizational rigor of *Arabs at War* or *Blood and Debt* and employs evidence non-systematically to support Howe's

³⁵ Centeno, *Blood and Debt*, 93-95.

³⁶ Centeno, *Blood and Debt*, 97-98.

³⁷ Centeno, *Blood and Debt*, 96.

³⁸ Centeno, *Blood and Debt*, 96.

³⁹ Centeno, *Blood and Debt*, 96.

⁴⁰ Centeno, *Blood and Debt*, 98. In this way, Centeno's explanation is similar to one put forward by Jackson and Rosberg two decades earlier in a study of African military capacity. These latter authors argued that "military forces in African countries are small in relation to the size or population of a state" and that "the size and fire power of the armed forces can also play a role" in military capacity." Robert Jackson and Carl Rosberg, "Why Africa's Weak States Persist: The Empirical and Juridical in Statehood," *World Politics* 35 (October, 1982): 10.

central assertion that African militaries are weak because African regimes pursued policies designed to deliberately create or condone unprofessional militaries.⁴¹ Howe offers five arguments detailing this claim.

First, Howe argues that African regimes degraded their own states' military power by employing ethnic recruiting patterns in their Armed forces. Fear of other ethnic groups motivates African rulers to place individuals who share their own ethnic loyalties in most important military positions and in a substantial proportion of the rank-and-file positions as well. This argument is similar to Crawford Young's notion that "the very nature of personal autocracy led rulers to build armies according to an ethnic security map."⁴² Howe believes that making ethnicity the prime criterion for selection and promotion reduced the value of military skill.⁴³ As a result, African militaries are frequently staffed by incompetent soldiers who would not otherwise be worthy of serving the state.

Second, Howe argues that African regimes degraded their own states' military power by initiating or greatly expanding military corruption. Jackson and Rosberg similarly argued in the early 1980s that "most African armies are less like military organizations and more like political establishments: they are infected with corruption."⁴⁴ Focusing largely on corruption in the Nigerian armed forces, Howe reasons that corruption wastes defence money on irrelevant equipment, focuses officers' attention on private financial endeavors, and divides already fractious militaries more deeply.⁴⁵

⁴¹ Howe, 27.

⁴² Quoted in Michael Bratton and Nicolas van de Walle, *Democratic Experiments in Africa: Regime Transitions in Comparative Perspective* (Cambridge, UK: Cambridge University Press, 1997): 216.

⁴³ Howe, 37-40.

⁴⁴ Jackson and Rosberg, "Why Africa's Weak States Persist," 10.

⁴⁵ Howe, 40-44. For example, he cites corrupt procurement practices during the 1970s and 1980s, wherein Nigeria purchased equipment designed to counter large-scale land and air attacks perpetrated by other states, including main battle tanks and

Third, Howe argues that African regimes degraded their own states' military power by creating personally loyal parallel militaries that serve as counterweights to regular armed forces. Like the Iraqi Special Republican Guard under Saddam Hussein's regime, parallel forces in Africa are primarily responsible for maintaining the regime's hold on power and tend to siphon the most competent personnel away from the regular armed forces.⁴⁶ Howe cites the example of Kenya's General Services Unit, which is "capable of defeating the entire army by itself."⁴⁷ As with Howe's other arguments, his emphasis on the development of parallel security forces is not unique in the literature. For example, William Reno similarly notes the propensity of African elites to "undermine military command structures in order to create competing centers of coercive power."⁴⁸

Fourth, Howe argues that African regimes degraded their own states' military power by placing ultimate responsibility for state security in the hands of foreign protectors.⁴⁹ African militaries lack motivation to enhance their professionalism because African rulers can generally rely on non-African states, regional military organizations, or foreign mercenaries to protect the regime if and when their armed forces fail to do so. Other authors have similarly argued that long-term reliance on France and Cuba significantly reduced the impetus for African militaries to improve their own war making capacity.⁵⁰ Howe cites numerous examples of military units in several countries being

various models of fighter aircraft, despite the fact that these assets were largely useless against the primary threat to the state: low-intensity land-based insurgency. According to one US official familiar with the negotiations, Nigerian officers declined the more useful and cheaper vehicles because "there wasn't enough money to skim off." Howe, 41-42.

⁴⁶ Howe, 44-45.

⁴⁷ Howe, 44.

⁴⁸ William Reno, "The Changing Nature of Warfare and the Absence of State-Building in West Africa," in Diane Davis & Anthony Pereira, eds., *Irregular Armed Forces and Their Role in Politics and State Formation* (New York: Cambridge University Press, 2003), 324-5.

⁴⁹ Howe, 47-49.

⁵⁰ Jackson and Rosberg, "Why Africa's Weak States Persist," 11.

allowed to atrophy as foreign protectors defended regimes against inter- and intra-state threats.⁵¹

Finally, Howe argues that African regimes degraded their own states' military power by using state armed forces for partisan political purposes. Civilian-ordered domestic deployments to crush political opponents of the current regime encourage militaries to prioritize political loyalty above military competence.⁵² However, citing numerous examples, Howe also demonstrates that domestic deployments can foster intense hatred of existing regimes among soldiers who feel that attacking civilians is unethical or beneath them.⁵³ Howe concludes that both effects reduce the capacity of African militaries to mount effective counter-insurgency campaigns.

Some Fundamental Problems

Before delving into explicit recommendations for an integrated and comprehensive theory of military power and war making capacity, it is necessary to identify deficiencies in the theories outlined above. The authors present clear and coherent theories concerning what factors influence a state's capacity to generate military power and make war with greater elaboration than similar literature on this topic. However, these theories suffer from a number of analytical, methodological, and empirical problems. Collectively, these deficiencies reduce their explanatory utility.

Analytical Problems

⁵¹ Howe, 47-49.

⁵² Howe, 46-47.

⁵³ Howe, 46-47.

The first major problem with these studies is that each author offers an extremely limited explanation of the sources of military power and war making capacity. As discussed above, Pollack begins his analysis with a set of nine hypotheses about why Arab states frequently lose in wars against non-Arab states and concludes that deficiencies in information sharing, tactical leadership, weapons handling ability, and equipment maintenance are the four most important factors determining Arab military ineffectiveness. However, the author fails to specify the relationship between these proximate causes at the level of armed forces and other possible factors affecting military power at higher levels of analysis. For example, demonstrating that Arab militaries suffer from poor tactical leadership does not explain *why* this is such a consistent weakness in Arab militaries. Do Arab states possess insufficient resources to maintain good junior officer training programs? If so, why have Arab regimes not made remedying this persistent failing a priority? Pollack's analysis leaves such questions unanswered.

The state- and regime-level theories put forward by Centeno and Howe provide pieces of the puzzle of military power that Pollack leaves out. It is entirely plausible, for example, that the authoritarian nature of Arab regimes encourages them to promote military officers based on political loyalty rather than technical competence and develop parallel security forces that siphon the most competent personnel away from regular Arab militaries. Indeed, this certainly appeared to be the case with the elite Iraqi Special Republican Guard developed under Saddam Hussein's regime. Similarly, the rigidity frequently demonstrated by Arab junior officers may be the result of fears held by

political leaders that independence of thought and action at lower levels pose risks to their rule. As de Atkine argues, Arab junior officers prefer:

the safe course of being identified as industrious, intelligent, loyal and compliant. Bringing attention to oneself as an innovator or someone prone to make unilateral decisions is a recipe for trouble... Officers with initiative and a predilection for unilateral action pose a threat to the regime.⁵⁴

Moreover, Pollack's discussion of information hoarding reflects a politicization of military information in Arab armed forces up to the highest levels where political leaders devise policy and strategy. Regime and state-level factors could, therefore, help explain the prevalence of Pollack's proximate causes yet he leaves this unclear.⁵⁵

Blood and Debt suffers from the same problem. Save for a single line about regime type, Centeno's state-centric explanation for military weakness has nothing to say about the influence of regimes and policy on military power.⁵⁶ The notion that Latin American states lack the resources to wage total wars is convincing, yet it begs the question of why Latin American regimes have consistently failed to allocate more resources to their armed force? By downplaying the role of human agency, Centeno's argument appears deterministic.

Writing nearly two centuries earlier, Carl von Clausewitz recognized that the decision *and* capacity of states to pursue total wars is conditioned by the political objectives of the regime. A regime drives its state to improve its war making capacity when the regime determines that such capacity is necessary to wage war at sufficient scale and duration to achieve its political objectives. Therefore, the higher the political

⁵⁴ De Atkine, 19.

⁵⁵ Other scholarship suggests the possibility that regimes can severely degrade the battlefield effectiveness of their armed forces through bad policy. See, for example, David Rapoport, "The Praetorian Army: Insecurity, Venality, and Impotence," in Roman Kolkowicz and Andrezej, eds., *Soldiers, Peasants, and Bureaucrats: Civil-Military Relations in Communist and Modernizing Societies* (London: Allen and Unwin, 1982), Gordon Tullock, *Autocracy* (Boston: Kluwer, 1987), and Mark Heller, "Iraq's Army: Military Weakness, Political Utility," in Amatzia Baram and Barry Rubin, eds., *Iraq's Road to War* (New York: St. Martin's 1996).

⁵⁶ Centeno, *Blood and Debt*, 93.

stakes in war, the more war will tend to approximate total war.⁵⁷ Conversely, the more moderate or limited the political goals, the more a war will tend toward a limited form of warfare. Richard Bensele shares Clausewitz' perspective that grand objectives, including pursuit of empire or the desire to stifle the sovereign or imperial aims of other regimes, motivated regimes in Europe, East Asia, and North America to vastly expand their state's material war making capacity so that they could fight wars at a scale and duration that they never could have previously.⁵⁸ At least for these scholars, policy is a key causal factor that explains the material capacity of states to make total war.

In contrast to his state-centric discussion of war making, Centeno seems to acknowledge a role for regimes in other sections of *Blood and Debt*. Indeed, in what would constitute a break from Tilly's work and the work of others in the war making and state making literature like Douglass North and Margaret Levi, Centeno argues that:

states are not actors in and of themselves. They are shells – potentially powerful shells – but nevertheless hollow at the core. The machine of the state needs a 'driver'.... Without such a driver, whether it be state personnel, a dominant class, or even a charismatic individual, the political and military shell of the state has no direction.⁵⁹

This discussion takes place within Centeno's chapter on state development and, although he does seem to acknowledge a role for regimes in this process, he barely touches upon the potential role of regimes when discussing the determinants of war making capacity.

One can also question what affect state weakness has on Latin American military effectiveness. Centeno demonstrates conclusively that Latin American militaries are

⁵⁷ Clausewitz, 580, 593, 603, 610.

⁵⁸ Richard Bensele, *Yankee Leviathan: The Origins of Central State Authority in America, 1859-1877* (Cambridge, UK: Cambridge University Press, 1990), 1-18 and 94-237.

⁵⁹ Centeno, *Blood and Debt*, 166, Tilly, 47, Douglass North, *Structure and Change in Economic History* (New York, NY: W.W. Norton, 1981) and Margaret Levi, "The Predatory Theory of Rule," *Politics and Society* 10 (1981) 431-65.

poorly funded and equipped and relatively small by European standards, but it is still unclear why these militaries are wholly incapable of successfully waging large-scale and sustained wars against each other with these resources.⁶⁰ Indeed, Pollack's analysis demonstrates that terribly under funded and ill-equipped forces, such as the Tanzanian military in 1979 and the Chadian military in 1986-87, could defeat the well-funded and equipped Libyan armed forces, which were hampered by the deficiencies at the heart of Pollack's theory.⁶¹

Finally, Howe provides numerous examples of African regimes purposefully degrading the war making capacities of their states out of fear that strong military forces would pose a threat to their rule. However, his analysis fails to specify and demonstrate exactly how these policy decisions degrade military effectiveness. For example, it is perhaps intuitive that, if African regimes siphon off the most competent military personnel to parallel security forces, African militaries will be weakened. Nevertheless, Howe provides little evidence to demonstrate that African armed forces have actually become less effective as a result of these personnel transfers.⁶² Indeed, in the early twenty-first century, African governance continues to reflect the dynamics observed by Jackson and Rosberg twenty years earlier: authoritarian regimes that rule for long periods of time and hold onto power in the face of constant military threats.⁶³ This suggests that, despite the best efforts of African regimes to degrade their military power,

⁶⁰ An important principle of military power is its inherently relative nature. A state is not simply strong, it is strong or weak compared other states. Therefore, the material weakness of Latin American states may not allow them to make total war on a European scale, but this does not in itself preclude relatively strong Latin American states from launching long-term and sustained military campaigns against relatively weak states in this region.

⁶¹ Pollack, 565.

⁶² Howe, 28-60.

⁶³ Jackson and Rosberg, "Why Africa's Weak States Persist." Moreover, virtually all violent regime change that has occurred in Africa since independence has been the result of coups launched by members of state armed forces.

most African militaries are still sufficiently effective to maintain the political status quo against insurgencies.

Pollack, conversely, details numerous crushing defeats of Arab forces and provides direct links between his hypothesized causes of Arab military weakness and actual case evidence. To a certain extent, the deficiencies in Howe's analysis are to be expected because he approaches the problem of military power from a comparatively high level of analysis. Nonetheless, his inability to bridge the gap between government policy and battlefield outcomes reduces the explanatory utility of his theory.

Methodological Problems

All of these works suffer from two major methodological weaknesses. First is the authors' decision to analyze the military power of states in one geographic region of the world. Second is the authors' tendency to regard states in their chosen region as a uniform group, emphasizing similarities at the expense of systematically examining variations in their capabilities. Each author's decision to focus exclusively on the military capabilities of states in one geographic region limits what their analysis can tell us about these states. Indeed, although this research design permit the authors to identify trends within Arab, Latin American, and African states, the authors would have to compare these states with those of other geographic regions or examine variations between and within their chosen states in order to demonstrate that both the nature and intensity of the deficiencies outlined above are unique to states in each respective geographic area. In other words, the best way to conclusively demonstrate that the patterns they identify are uniquely Arab, Latin American, and African, and therefore justify the authors' limited

regional foci, is to demonstrate that other classes of states do not exhibit the same patterns.

This research design is detrimental because there are good reasons to expect that each authors' arguments may have broad applicability to the states examined by the other authors. Indeed, it is entirely plausible that Latin American and African militaries suffer from deficiencies in tactical leadership, information management capabilities, weapons handling abilities, and maintenance. In addition, African militaries suffer from severe financial constraints so it is plausible that Centeno's arguments could help explain military weakness among these states as well.⁶⁴ Likewise, most Arab militaries also boast budgets far smaller than many Western militaries.⁶⁵ Moreover, bad policy decisions almost certainly degraded the military capacity of Latin American and Arab states. Alternatively, it is possible that all of the arguments put forward by these authors may be unique to their chosen geographic region. In their current form, however, these studies do not specify the generalizability of their conclusions. To be fair, Pollack makes some attempt to generalize his conclusions in the final pages of *Arabs at War* but, in a section that he explicitly describes as "an afterthought," generalizability amounts to merely rewriting his conclusions in more general language without any further testing against the experiences of non-Arab militaries.⁶⁶

The authors also focus on commonalities across the states in their respective regions and tend to neglect variations between and within these states. Indeed, major differences tend to receive passing commentary rather than systematic analysis. Many

⁶⁴ Government of the United States (Department of State), "Military Expenditures, Armed Forces, GNP, CGE, Population, and their Ratios, By Group and Country, 1989-1999," 2004 <<http://www.state.gov/documents/organization/18739.pdf>> [Accessed April 15, 2005].

⁶⁵ Government of the United States (Department of State).

⁶⁶ Pollack, 578.

of the Arab states analyzed by Pollack exhibited considerable variation in their military capabilities over time. For example, Jordan's military capabilities declined progressively since the Second World War. Egypt fought extremely poorly during the Six Day War in 1967, but improved considerably by the Yom Kippur War of 1973. Likewise, Iraq's military performance against Iran improved significantly over the course of the Iran-Iraq War.⁶⁷ Although Pollack does acknowledge these variations in passing, his uniform conclusions do not reflect this diversity.

Centeno similarly downplays variations in Latin American military capabilities. The author devotes insufficient attention to post-revolutionary Cuba, which did develop considerable war making capacity under the determined leadership of Fidel Castro's regime.⁶⁸ In an earlier book chapter on war making in Latin America, Centeno describes Cuba as "the exception that proves the rule" established by his arguments.⁶⁹ However, by neglecting to discuss the Cuban case in detail, Centeno obscures valuable insight into the significant differences in military power produced by this particular regime. The author makes no effort to correct this failing in *Blood and Debt*.

Moreover, although *Blood and Debt* contains data demonstrating significant differences in contemporary Latin American military capabilities, Centeno does not adequately explain how this variation squares with his conclusion that all Latin American states are too weak to make total war against each other.⁷⁰ Simply because Latin American states cannot wage total war on a European scale or against a European power does not necessarily mean that these states are wholly incapable of waging total

⁶⁷ Pollack, 218-221, 355-356, 556, 571-572.

⁶⁸ Jaime Suchlicki, *The Cuban Military Under Castro* (Miami, FL: Institute of Interamerican Studies, 1989).

⁶⁹ Miguel Centeno, "Limited War and Limited States," in Diane Davis & Anthony Pereira, eds., *Irregular Armed Forces and Their Role in Politics and State Formation* (New York: Cambridge University Press, 2003), 93.

⁷⁰ Centeno, *Blood and Debt*, 95.

war in the Latin American context. Indeed, based on Centeno's measures of military capability, it is plausible that a relatively powerful Latin American state, such as Chile or Argentina, could mount a large and long-term military campaign against a state with only half the military capabilities like Paraguay or Guatemala if their governments chose to do so.⁷¹ As a result, painting all Latin American states with the same brush of military weakness leaves significant variations unexplained.

This problem is even more pronounced in Howe's *Ambiguous Order*. Indeed, with some forty-five states in sub-Saharan Africa, this region of the world is simply too large and diverse to support Howe's egregious generalizations. Although Howe acknowledges this problem, he does little to avoid it.⁷² Much like the conclusions reached by Pollack and Centeno, Howe's treatment of sub-Saharan regimes characterizes virtually all these actors as universally detrimental to their states' military capacity. The only exception to this is Howe's limited discussion of the South African Defence Forces (SADF) during the era of Apartheid regimes.⁷³ He argues that the Apartheid governments generally did not try to use the SADF for political purposes, except of course to defend white political rule, and that this allowed the SADF to maintain professionalism when armed forces in countries governed by black regimes could not.⁷⁴ However, Howe's focus on Apartheid South Africa as the single major outlier instead of placing greater emphasis on variations between the policies of different black regimes reveals comparatively little about the influence government

⁷¹ Centeno, *Blood and Debt*, 95.

⁷² Howe, 3.

⁷³ Howe, 51-53.

⁷⁴ Howe, 51-53.

policy may have on the professionalism of African armed forces. As it currently stands, *Ambiguous Order's* conclusions suggest an implausible level of uniformity.

Empirical Problems

All of the works display an important empirical weakness, which stems from the dearth of information concerning how the authors performed their analysis and assessed the evidence employed in their books to support their arguments and conclusions. As a result, the authors' findings depend largely on arbitrary and ill-defined personal judgments about the meaning of significance of empirical data. Pollack provides little information about what counts as evidence for the nine hypotheses outlined in his introductory chapter.⁷⁵ The author provides only approximately half-a-page of description for each concept being tested and does not specify what information he is searching for to determine if his nine deficiencies are present or absent in the six Arab militaries under study.⁷⁶ Many of the concepts captured in Pollack's hypotheses, such as tactical leadership, information management, and cowardice, are complex and difficult to measure without clear articulation. Pollack's failure to fully operationalize his variables consequently puts his conclusions at risk of being idiosyncratic and highly subjective.

Pollack's concept of "tactical leadership" illustrates this weakness. In the introductory chapter, Pollack describes the concept with reference to numerous traits that tactical leaders should possess: aggression, initiative, innovativeness, flexibility, respect for the principles of maneuver warfare, and an understanding of how their

⁷⁵ Pollack, 4-10.

⁷⁶ Pollack, 4-10.

specific mission fits into the overall operation.⁷⁷ Beyond this, he does not define the variable, discuss how it varies, or explain what he will look for when measuring a military's aptitude in this area. Of particular importance for such a multifaceted concept, it is unclear if tactical leaders can be considered incompetent if they possess some but not all of these traits. Nor is it clear which of these traits are more or less important when determining if a tactical leader is good quality or poor.

Pollack's study of Syria during the Yom Kippur War in 1973 illustrates the difficulties posed by this vague definition and operationalization of variables. In his section on tactical performance, Pollack cites statements from Israeli commanders rating Syrian tank crews as an "eight" on a ten point quality scale.⁷⁸ Despite this, Pollack concludes that the Syrian officers leading these tank crews were poor tactical leaders because they failed to employ techniques of maneuver warfare and were out maneuvered by the Israelis Defence Forces.⁷⁹ Thus, one trait seems to have overridden all others in defining the quality of Syrian tactical leadership. In reaching his conclusion, Pollack arbitrarily discounts aspects of Arab tactical prowess and emphasizes the importance of others. This is particularly puzzling because Pollack decides to discount evidence provided by individuals who actually participated in tactical actions against Syrian forces in favour of more general and uncited accounts of poor maneuvering under the leadership of Arab junior officers. This decision requires some form of justification from Pollack and, even better, reference to a clearly articulated set of criteria for determining the quality of tactical leadership. *Arabs at War* contains neither of these.

⁷⁷ Pollack, 6.

⁷⁸ Pollack, 506.

⁷⁹ Pollack, 506.

Blood and Debt also suffers from ambiguity concerning how its author intends to examine evidence. As discussed above, Centeno argues that fiscal spending on the armed forces and the quantity of military personnel and equipment determine the capacity of Latin American states to make war. He provides statistics for each of these factors yet he does not identify criteria by which one can make a reasonable case for military strength or weakness let alone subtler conclusions.⁸⁰ Centeno merely concludes that these resources are “limited” and that, consequently, Latin American states are too weak to pursue large-scale and sustained military campaigns.⁸¹

Moreover, Centeno does not articulate criteria for how to reach a net assessment in cases where values on two or more variables would seem to contradict each other. For example, in a table outlining the personnel and equipment of eight Latin American states, Columbia possesses the second largest number of military personnel but the smallest holdings of equipment like tanks and combat helicopters.⁸² Argentina, conversely, possesses the second smallest number of military personnel but the largest holdings of military equipment.⁸³ These data could support two completely different conclusions but, in the absence of a clear and justified set of criteria outlining the relative importance of military personnel and equipment, it is not possible to determine whether Argentina or Columbia are considered relatively strong or weak.

Ambiguous Order reflects similar empirical problems. Much like the other authors, Howe provides no criteria for what constitutes evidence. This problem is particularly detrimental in Howe’s book because he tends to pepper numerous brief

⁸⁰ Centeno, *Blood and Debt*, 93-97.

⁸¹ Centeno, *Blood and Debt*, 93.

⁸² Centeno, *Blood and Debt*, 97.

⁸³ Centeno, *Blood and Debt*, 97.

examples throughout his discussion of African military professionalism.⁸⁴ As a result, Howe's readers cannot be certain whether, for example, a case wherein Ugandan officers knowingly purchased non-functional tanks is a more or less extreme form of corruption than the Nigerian practice of misrepresenting the size of military units so that officers can pocket surplus salaries.⁸⁵ Unless one knows what constitutes more and less extreme forms of corruption, one cannot form realistic expectations about which African militaries should be rendered least capable by their corrupt practices. This problem pervades all of Howe's arguments. As a result, the military power of all sub-Saharan states appears implausibly equal.

This ambiguity undermines the persuasiveness of these books. The authors share a goal of determining which factors influence a state's capacity to generate military power and make war. However, although the authors do provide plausible theories, the integrity of their analyses is undermined by questions over how they interpret empirical data. Readers must simply take the authors' word on the empirical validity of their claims because the authors do not provide their readers with criteria by which to judge for themselves.

Toward a Comprehensive Theory of Military Power and War Making in the Developing World

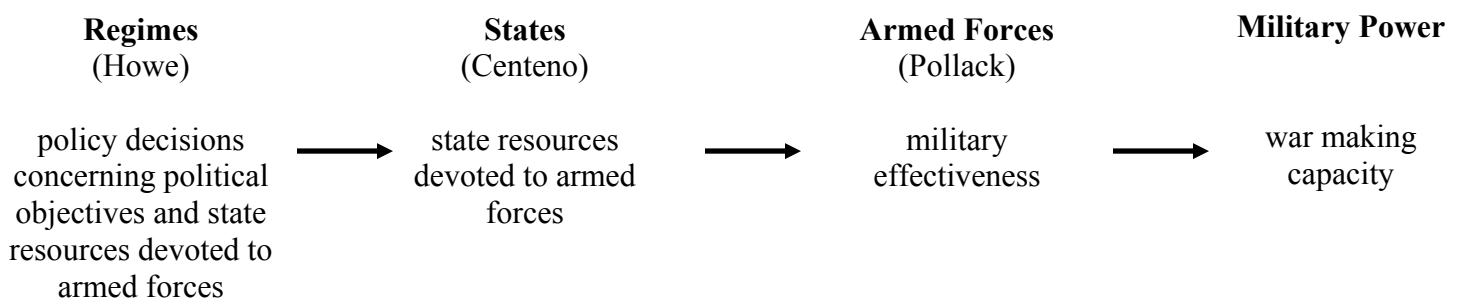
Improving and furthering the analysis contained in these books requires three key revisions. First, these disparate and limited theories of military power should be integrated into a comprehensive theory of military power and war making in the developing world. Second, future scholarship should make inter- and intra-regional

⁸⁴ Howe, 28-50.

⁸⁵ Howe, 41.

comparisons of similarities and differences exhibited by states on factors hypothesized to influence military power and war making capacity. Third, future scholarship should define and operationalize its key variables to a greater extent than did the books reviewed here.

Pollack, Centeno, and Howe each offer a valuable piece to the puzzle of military power and war making capacity. However, by illustrating how factors at multiple levels of analysis plausibly contribute to a state's ability to generate military power, these authors collectively demonstrated that none of their books offers even a reasonably complete explanation.⁸⁶ Taking this into account, the logical next step is to integrate these theories, one at the level of armed forces, one at the level of states, and one at the level of regimes, into a comprehensive explanation of military power and war making capacity. A schematic summary of these linkages could take the following form:



The most important elements of this diagram are the arrows between the three disparate theories of war making discussed in this review essay. These causal linkages require further development and elucidation – impossible here. It, therefore, falls to other scholars to attempt these tasks. This review essay has, however, identified some possible research questions. Through this, a more complete explanation of how government policy translates into battlefield outcomes for developing states could be

⁸⁶ Millet, Murray, and Watman, 38.

devised. This would constitute an important contribution in its own right because existing comprehensive theories of war making are extremely Eurocentric and, consequently, they do not capture the dynamics of war making by developing states in other parts of the world.⁸⁷ This enterprise is consistent with the spirit of these books. Indeed, none of the theoretical arguments offered by these books is unique in the context of scholarship on European war making capacity.⁸⁸ However, these books each constitute a major contribution to scholarship about the developing world. In this same spirit, a comprehensive theory of military power and war making capacity in the developing world would constitute another major contribution.

In addition, scholars could significantly enhance the explanatory utility of future scholarship by improving upon the methodologies employed in the books reviewed here. As discussed above, the authors provide little justification for their decision to exclusively focus on one region of the world and downplay differences within and between states in their chosen regions.⁸⁹ It is reasonable to expect that each authors' arguments may have broad applicability to the states examined by the other two scholars. It is therefore imperative to apply an interregional comparative methodology in order to determine whether Arab, Latin American, or African states possess unique characteristics that explain their generally low war making capacity.

Moreover, future scholarship should devote greater effort to explaining not only the similarities observed within and across regions of the world but also any significant variations in observed patterns. Pollack, Centeno, and Howe could retort that variations

⁸⁷ See, for example, Millet, Murray, and Watman.

⁸⁸ See, for example, Martin Van Creveld, *Fighting Power: German and US Army Performance, 1939-1945* (Westport, CT: Greenwood Press, 1982), Tilly, Rapoport, and Tullock.

⁸⁹ Pollack, 1-13, Centeno, 31, and Howe, 1-20.

in their samples were minor compared to the continuities stressed in their conclusions. However, discussing variation, both among states in a single region of the world and among states in different regions, is still important because variations in military power may hold the key to improving the war making capacity of developing states. There is value in determining, for example, that all Arab states have problems with their weapon handling abilities; however, it is also important to identify which Arab states are best at weapons handling and determine why this might be. Only then can scholars and policy makers understand the paths to military development. Many states in the regions analyzed by these authors constitute important allies and adversaries of Western states. Taking this into account, treating variations systematically would greatly improve the explanatory utility of the theories offered in these books and, in turn, help improve Western policy and strategy.

Finally, future scholarship building upon these studies should avoid the empirical weakness discussed above by clearly defining and operationalizing major variables under study. As discussed above, the authors reached definitive conclusions despite evidence that appeared to be ambiguous and even contradictory.⁹⁰ These authors are better qualified than most to analyze the empirical data utilized in their books, but no scholarship is immune from personal biases. Theories of military power and war making capacity address a core state function and subject matter that is, quite literally, a matter of life and death for soldiers and civilians around the globe. Taking this into account, clearly defining and operationalizing major variables is particularly important because it would permit readers to evaluate the empirical validity of arguments and conclusions independently and, therefore, avoid the current need to simply take the authors' word

⁹⁰ Pollack, 4-10 and 506, Centeno, *Blood and Debt*, 93-97, and Howe, 28-50.

that their analysis is empirically sound. This, in turn, would further enhance the explanatory utility of future scholarship on military power and war making.

Conclusion

Arabs at War, Blood and Debt, and Ambiguous Order constitute significant contributions to the literature on military power and war making. Their authors went beyond commonly held assumptions about the weakness of Arab, Latin American, and African states and not only attempted to address one of the most important questions in social science but also provided clear and coherent answers to that question with greater elaboration than similar literature on this topic. These books, in turn, provoke stimulating questions about how interactions between regimes, states, and armed forces collectively influence war making capacity. None of these studies yet has an equal in the literature. The analysis and recommendations outlined in this essay reflect the essential strength of these works and seek only to further improve upon their generally robust analysis. To sum up, *Arabs at War, Blood and Debt, and Ambiguous Order* exhibit a number of serious flaws yet, apart from these imperfections, these books do warrant reading by both academics and policymakers.