ABSTRACT: Certain kinds of urban areas may become increasingly common for armed conflict in the 21st century. However, current notions that the megacity will emerge as a primary battlespace for advanced armies is an unproven hypothesis. US strategists need to avoid rushing to replace population-centric counterinsurgency with a paradigm of population-centric megacity operations. A preferable path is to develop a long-term and systematic interdisciplinary urban warfare lens based on careful research and analysis that is both historically informed and future-oriented.

It has generally proved easier to demonstrate that defense has played an important role in many aspects of the city than to show that the city has played a role in military science.
~ G. J. Ashworth, War and the City (1991)

One of the major weaknesses of recent American strategy is its relative neglect of an urban imperative. The study of urban warfare continues to remain little more than a sub-field of strategic studies with a literature largely unrelated to the world of contemporary security policy.1 For these reasons, it is a great pity the publication of the US Army’s June 2014, Megacities and the United States Army: Preparing for a Complex and Uncertain Future is such a disappointing attempt to invigorate the relationship between strategy and the city.2 The report’s central premise that megacities – defined as cities with populations over ten million – now represent “the epicenters of human activity on the planet and, as such, they will generate most of the friction which compels future military intervention” is a selective interpretation of the highly complex process of 21st century global urbanization. Moreover, the suggestion that the scale of megacities “defies the military’s ability to apply historical methods” and therefore “fundamentally a new operating environment to which the Army must shape itself and discover new approaches” is exaggerated. Such a view overlooks the continuing value of a body of post-Cold War military research, some of which was, ironically, commissioned by the US Army itself. A final flaw in Megacities and the United States Army is its typology, which by focusing mainly on a systems-analysis methodology illuminates the document’s neglect of...
relevant research material on cities emanating from the long-established field of urban studies.\(^3\)

In light of the above weaknesses, this article argues the US Army would be ill-served to concentrate overly on megacities as a primary strategic environment for three further reasons. First, megacities are not necessarily the principal urban areas in which American forces may be called upon to fight in the future. Rather, middleweight and smaller cities remain just as likely to provide important operational environments in the years ahead. Second, megacities are not *sui generis*; they do not represent a novel military phenomenon. The military processes of operating in any city are drawn from fundamentals of urban warfare tried and tested by land forces since at least the middle of the twentieth century. Future technological developments notwithstanding, most fundamentals of urban warfare are likely to remain relevant for general-purpose forces even in a conglomeration on the scale of a megacity. Third, the US Army needs to embed the study of megacities into a rigorous program of long-term urban war research that is both interdisciplinary in theory and interagency in practice. Such a program must systematically integrate military concerns with relevant aspects of municipal management, urban geography, and city planning.

**Cities as Strategic Sites: The Growing Importance of the Middleweight City**

In terms of demographic disposition, the greatest revolutionary shift of the first quarter of the twenty-first century is the movement of people from countryside to city. In 2007, half the world passed the benchmark of fifty percent of its population being located in urban areas while urban demography now grows at some 65 million every year – a breakneck rate of speed equivalent to the creation of seven new Chicagos annually.\(^4\) Not surprisingly, the urban revolution has spawned a debate on the meaning of this transition for the world’s future economic structure and geopolitical stability.\(^5\) For some analysts, mass urbanization is a prescription for growing anarchy, violent political breakdown, and ecological decline in the developing world. Pessimists foresee a coming era of “feral cities” in which conflict will be “crowded, connected and coastal” and occur in failed megalopolises from Karachi and Dhaka in Asia, to Kinshasa and Lagos in Africa.\(^6\)

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3. Ibid., 4-5, 8-9.
Megacities: Pros and Cons

While such a dystopian future is certainly a possibility for some non-Western cities, much urban studies research tends to view the transition from a rural to an urban world as one of the twenty-first century’s most positive developments since it will drive economic growth and social mobility. Urbanization is seen by many scholars as a solution to alleviating long-term poverty and political instability in regions from Asia through Latin America to some parts of the Middle East and Africa. It is important to note that over 40 percent of urbanization is occurring in Asia, particularly in China and India. As Richard Dobbs has noted, “the new era of cities will actually be the era of Asian cities.” By 2025, 1.6 billion Asians – 50 percent of the global total will live in cities; nine of the world’s wealthiest twenty-five cities will be in Asia with Shanghai and Beijing expected to outrank Los Angeles and Paris, while Delhi and Bangkok will come to surpass Detroit and Barcelona. By the late 2020s, some $30 trillion, or 65 percent of global gross domestic product (GDP), will be generated by some six hundred cities, over a third of which will be in the developing world.

A crucial point for US military strategists to grasp is most projected urban growth in the developing world is not centered on a few megacity “population bombs,” but on a far more dispersed grouping of diverse middleweight cities whose populations range from between 150,000 to ten million. In 2011, the McKinsey Global Institute, a leading authority on global urbanization, observed:

Contrary to common perception, megacities have not been driving global growth for the past 15 years. In fact, many have not grown faster than their host economies and we expect this trend to continue. We estimate that today’s 23 megacities will contribute just over 10 per cent of global growth to 2025, below their 14 percent share of global GDP today . . . Instead we see the 577 fast-growing middleweights in the City 600 contributing half of global growth to 2025, gaining share from today’s megacities.

In 2012, McKinsey further identified an “Emerging 440” cities grouping projected to generate 47 percent of global growth, or $17.7 trillion to 2025 and beyond. Significantly, of this number, only twenty are categorized as megacities with the remainder being middleweight urban centers. Of these middleweights, over 200 are in China; fifty more are located in Latin America; while 39 are found in Africa and the Middle East. In many of these middleweight cities, growth is driven less by population density than by per capita GDP; the size of households actually tends to decline in many developing cities even while the number of households actually rises.

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8 Richard Dobbs, quoted in Susan Glasser, “Letter From the Editor,” Foreign Policy, no. 181 (September/October 2010): 1, emphasis in original.
Contrary to the US Army’s 2014 report, over the next ten to fifteen years, it is by no means inevitable that “megacities will be the strategic key terrain in any future crisis that requires US military intervention.” Instead, the real magnets for urbanization are a “new breed of vigorous middleweights.” For example, over the next decade, the thriving textile city of Surat in India and the Nigerian oil refining center of Port Harcourt are likely to become more important than megacities such as Mumbai or Lagos. None of this means new megacities will not develop from fast-growing middleweights – such as Chennai in India, Lahore in Pakistan, Tianjin and Shenzhen in China, or simply emerge from scratch in a “blank slate” high-technology or “smart city” approach.

However, the point for military strategists to grasp is that, in terms of long-term demographic migration, household size and income distribution, it is the maze of middleweight cities that are poised to be the key urban sites for the next two decades. An alternative structure of urbanization is rapidly emerging, and as the leading social scientist, Saskia J. Sassen, has pointed out, what really matters when analyzing cities is less their demographic size than their politico-economic influence both regionally and globally. In terms of such influence many middleweight cities are likely to become as strategically important as megacities and may even eclipse the latter in terms of economic power and geopolitical significance. By 2025, middleweight-city share of global GDP is expected to jump from 15 to 45 percent and their populations will grow from 430 million to 1.5 billion. Referring to West Africa, the McKinsey Global Institute notes, “we expect large middleweights and some small middleweights to outperform the region’s largest city of Lagos.”

While some writers, such as P. H. Liotta and James F. Miskel, view megacities as unprecedented phenomena, “overwhelmed, dangerous, ungovernable . . . unlike anything the earth has ever seen,” other analysts are more skeptical. As the urban specialist, Joel Kotkin, argues, “the rise of the megacity is by no means inevitable and it might not even be happening.” He points to the evolution of more dispersed urban migration in the developing world based on diversity rather than concentration. It is certainly true that recent patterns of city development are distinguished less by centralization than by decentralized clusters and networks such as those around the metropolis of Shanghai in the Yangtze River Delta in China. Sprawling megacities such as Mumbai, Lagos and Dhaka may well be shambolic, poverty stricken, and crime-ridden, but these features do not necessarily make them centers for future military crises. As Jonathan Kalan points out, given the variations

13 Chief of Staff of the Army, Strategic Studies Group, Megacities and the United States Army, 5.
18 Ibid., 31.
at play in global urbanization, we need to beware simplistic representations of megacities as “the looming development crisis of this century.”

On closer examination, megacities such as Mumbai, which appear to Westerners to be fragile tinderboxes, may prove to be far more complex, resilient, and functional when judged in terms of their indigenous dynamics. For example, despite its poverty and slum living, Mumbai, scene of a devastating seaborne-terrorist attack by Lashkar-e-Taiba (LeT) in 2008, has sought to focus on increasing social mobility by developing decentralized municipalities and promoting suburbanism. Moreover, Mumbai contributes six percent to India’s GDP despite having only 1.5 percent of the national population.23 Similarly, Dhaka in Bangladesh, reputedly “the least livable city on the planet,” has a per capita GDP three times that of the average Bangladeshi peasant and is, in national terms, relatively prosperous.24 Finally, we should remember a city in crisis in one era is not necessarily doomed to a dystopian future. A good example is Medellin in Colombia which, in the 1980s and 1990s approximated a failed city dominated by drug lords, vast criminal networks and socio-political alienation. In the second decade of the twenty-first century, Medellin has transformed itself by reforming a civic leadership that overhauled policing and developed an innovative urban infrastructure program which increased the size of its middle class and reduced its murder rate by sixty percent.25

For the US Army, some cities may well become future operating environments. However, the idea that megacities will become a primary strategic environment for American land power is, to date, an unproven hypothesis. It may be an uncomfortable truth for the authors of Megacities and the United States Army, but in the years ahead megalopolises may be of far less strategic significance than clusters of decentralized, middle-weight metropolises. The available evidence certainly points to the need for military researchers to avoid falling prey to any single form of urban determinism.

Extending the Fundamentals of Urban Warfare

Contrary to the view expressed in Megacities and the United States Army, megalopolises do not “def[y] the military’s ability to apply historical methods” nor are they “fundamentally a new operating environment” that invalidates past research.26 Even a cursory examination of the history of industrialized urban warfare yields a set of enduring characteristics that must be studied by today’s military professionals irrespective of the size of any urban conurbation.27 These enduring characteristics include a dynamic, non-linear environment defying easy military command and

25 Ibid.
26 Chief of Staff of the Army, Strategic Studies Group, Megacities and the United States Army, 8.
control; the frequent fragmentation of combat due to the density and scale of modern city architecture; the importance of direct-fire weapons in clearing streets and buildings; the problem of large civilian populations in cities; the rapid absorption of troops in built-up urban areas; the psychological-physical strain on soldiers engaged in urban fighting; and the need for a combined arms approach to operations.28

None of these features is likely to be rendered obsolete in future years. After all, if one accepts that a megacity is itself an extension of a smaller or middleweight city, then, it stands to reason that urban military operations are highly unlikely to be conjured from scratch but are themselves extensions and applications of known methods. Despite steady technological advances in precision munitions, robotics, and thermonuclear weapons, little that is revolutionary appears to be occurring in urban warfare operational research.29 Potential operations in megacities remain likely to differ only in scale and density from those of the past. Megalopolises will, like all city types, continue to confront military professionals with the time-honored challenge of “an endless variety of structures and facilities the seizure or control of which demands esoteric plans, programs, and procedures, since no two cities are quite alike.”30 For these reasons, most military planners of modern urban operations have wisely focused on the role performed by troops rather than the environment inhabited by them. It is no accident the armies that have succeeded in modern urban warfare – from the Russians in Stalingrad and Berlin through US forces in Manila, Hue and Fallujah to the Israelis in Gaza – have been general purpose forces with a high degree of experience in small unit tactics and combined arms operations.31

If the past of urban warfare remains important to understand, then the interdisciplinary research completed in the years between 1991 and 2004 represents yet another important foundation for future study. It is worth noting that military analysts such as Paul van Riper, Roger Spiller, Robert H. Scales, Alice Hills, and Robert C. Owen published findings on the role of the city in future warfare.32 Much of this work occurred in the early years of globalization and the information revolution, but it is notable for its intellectual rigor and insight and it deserves to be consulted closely in any project concerning the role of megacities in future conflict.

Accordingly, some of the main ideas of the urban warfare scholars of the 1990s and early 2000s are worth re-emphasizing here.

The British scholar, Alice Hills, whose 2004 book, *Future War in Cities* was a milestone in interdisciplinary urban warfare research, has highlighted the reality that military operations in cities remain highly diverse and heterogeneous. She argues that strategists have failed to provide an interdisciplinary, higher-level conceptual framework for policy makers and military practitioners:

> Developing a [Western] strategic understanding of urban operations . . . requires the reconciliation of contradictory and stressful relations, such as those existing between the security imperatives of coercion, warfighting and destruction on the one hand, and humanitarian relief, globalisation and technological development on the other. And it needs the imagination to look beyond current scenarios and interests. \(^{33}\)

For Hills, while a “strategic grammar of urban warfare” has emerged, a strategic logic determined by politics to guide future military operations in cities remains elusive. \(^{34}\) Other analysts in the years between the fall of the Soviet Union and the post-9/11 wars became concerned that populist notions of urban warfare would distort realistic research. Robert C. Owen warned Western military establishments against falling prey to a fascination with *Blade Runner*-style visions of “barbarian megalopolises,” which he believed owed more to Hollywood visions of dystopia than to hard-headed strategic analysis. \(^{35}\) Writing in 2001, Owen argued the real problem facing advanced militaries confronted by urban operations was the paradox that “the [non-state] groups most willing to fight in cities will have the least capabilities to do so, while the ones most able to fight large-scale urban battles will be least willing to do so.” \(^{36}\) Owen drew an interesting parallel between urban operations and maritime littoral warfare which has continuing resonance. He suggested a strategic approach to fighting in large cities might be fashioned from viewing these conurbations as “urban archipelagos” requiring skilled maneuver, containment, or isolation by joint forces. \(^{37}\)

Themes of containment and maneuver were also evident in the work of Robert H. Scales and Paul van Riper and are still useful to consider today. As former senior military practitioners, both writers sought to synthesize operational and strategic concerns in urban operations. Scales advocated a highly discriminate strategy of urban warfare embracing containment of cities and the exploitation of high-technology assets for selective strikes and the seizure of decisive points and nodes using joint forces. \(^{38}\) He suggested high-altitude unmanned aerial vehicles and precision munitions used against point targets might deplete a surrounded city’s resources and wear down an enemy force’s will. \(^{39}\) Scales recom-

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\(^{34}\) Ibid., 244-246 and Hills, *Future War in Cities: Rethinking a Liberal Dilemma*, 26, 225.


\(^{36}\) Ibid., 29-30

\(^{37}\) Ibid.


mended an economy of force approach remarking that, in future urban military operations, strategic planners needed to be constantly aware of one central truth: “America’s treasure house of close-combat soldiers is only marginally larger than the New York City Police Department.”

Given contemporary challenges of downsizing and fiscal austerity this warning is arguably more relevant than ever. Similarly, van Riper, an experienced Marine general, was wary of grinding frontal assaults in urban warfare. He argued in favor of applying a “chameleon” style of urban maneuver in city fighting (blended movement into the city environment) using concepts such as “multi-spectral mobility” (the capability to move combat power rapidly through three-dimensional urban terrain); and “measured firepower” (integrating fire and movement within given rules of engagement).

By the mid-2000s, as America and its allies became engulfed by irregular conflicts in Iraq and Afghanistan, generic urban warfare research declined in the United States. Much of the urban conflict research agenda after 2004 was subsumed by the avalanche of material on counterinsurgency, the stabilization of fragile states, and hybrid warfare at the operational level of war. As a result, in 2015, the major problem facing military thinkers when considering urban military contingencies, namely synthesizing the variance and divergence of urban environments into a usable strategic framework for policy makers, continues to remain unresolved.

**An Inter-Disciplinary Urban Lens**

While an urban strategic lens remains underdeveloped in American studies of armed conflict, the solution to this challenge is not to turn the megacity into a single “unit of analysis,” but rather to study the etiology of city development. Such an endeavor requires a multi-disciplinary research program in which to situate analysis of varied cityscapes with their interactive spatial dynamics and heterogeneous populations.

In short, the real novelty in operating in twenty-first century cities lies less in new military methodologies for megacities than in the essential task of integrating and adapting established doctrine and concepts into a systematic interdisciplinary strategic-level engagement with the field of urban studies. As one major international study notes, “no single disciplinary perspective can capture the inherent complexities of using military force in urban areas.” The effort to develop an urban strategic lens needs to embrace military history, human geography and sociology; city planning and architectural design; municipal management procedures; criminology, policing and the employment of emergency services. Systems-theory as outlined by analysts such as David Kilcullen and favored in *Megacities and the United States Army* may have its uses. However, such an approach represents only one avenue of inquiry for researchers seeking to understand the military implications of the modern urban

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environment’s mixture of demographic and topographical features. It is this unique combination which makes any city environment multidimensional – at once a social organism, a human-made physical form and an economic system.

The integration of urban studies into strategy needs to be conducted with intellectual care and discrimination. Analysts need to distinguish between high-intensity crime by urban gangs and syndicates concerned with profit and forms of low-intensity warfare by armed urban activists driven by politics; and between mass-casualty urban terrorist acts on the Mumbai, Nairobi, and Paris models and well-organized and prolonged campaigns of urban warfare on the Hamas or Hizbollah models. Military strategists also need to treat current postmodernist ideas of a “new military urbanism” based on an ideology of Western “orientalism” that pits “their sons against our silicon” with skepticism. Such work owes more to the science fiction of Judge Dredd – in which megacities replace nations as the world's dominant political units, and high-technology Street Judges battle low-technology urban hordes for supremacy – than it does to mainstream military art.

Integrating aspects of urban studies into strategic considerations has the potential to improve our knowledge in at least three areas relevant to future warfare: examining cities as strategic sites, understanding global and regional city variations, and deriving procedures for city operations from municipal principles of security control. In examining cities as strategic sites, military practitioners and policy makers need to begin to view metropolises as human conurbations reflecting all the complexities of large-scale urban planning. In effect, to master cities, the military strategist must assume much of the mindset of an urban planning executive. In city operations, control of civil infrastructure from water purification and electricity through garbage removal to securing medical infrastructure and public transport are all invested with strategic significance. If city operations are to be a common future environment for American and allied forces, then an urban strategic lens must be developed, which can help determine policy choices on the practicality and size of interventions in cities, formulate rules of engagement, and provide advice on the roles military forces might play in those urban contingencies.

The second area of relevant research, namely, assessing the global and regional variation between cities, has the potential to put megacities into a balanced strategic context. As already noted earlier, a diverse web of middleweight cities is likely to develop in regions such as Asia, Latin America, and Africa as a counterpoint to sprawling, ill-governed megalopolises. Such a process represents a complex pattern of urbanization and requires the closest strategic analysis by defense specialists. In

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this area, military researchers can draw profitably on the work of a range of urban theorists. The latter include Robert Neuwirth and Thomas Sieverts whose work on “shadow cities” and the Zwischenstadt or “cities without cities” respectively highlights the replacement of many centralised urban conglomerations by clustered “city webs” in a checkerboard of dense enclaves and social networks.\(^{50}\) If the city is to be understood accurately as a future strategic environment, then the US Army must invest in research that distinguishes between the global city of influence, the megacity of sprawl, and the emerging middleweight city and between peri-urban, semi-urban, and inner-urban forms of human habitation.

A third area requiring military attention is a study of municipal principles of security control. Evidence suggests in decentralized conditions or in urban areas lacking governance, military efforts to control violence are best concentrated on creating municipal or community-level forms of security.\(^{51}\) For command and control purposes, military professionals can gain insights into cities by studying a law-enforcement typology of coercion, compliance, and voluntarism at local community level. Such a typology reveals control methods ranging from coercive “gated communities” and forcible disarmament; through compliance measures that involve community policing; to voluntarism involving amnesties and citizen neighborhood watch schemes.\(^{52}\)

**Conclusion**

The modern city remains the least understood of potential conflict environments, and strategic theory clearly lags behind military practice. However, classifying one form of urbanization in the form of megacities as primary strategic sites for future American military intervention is not viable. Indeed, such an approach may turn out to be misleading because global urbanization is highly diverse and is, in fact, producing far more middleweight cities than megalopolises. In the developing world, some of these vibrant middleweight cities with their migration clusters and economic hubs may come to assume more strategic importance than stagnant megacities with declining populations. Moreover, having just experienced over a decade of war, the US Army is now entering a period of downsizing and reorganization driven by the demands of domestic fiscal austerity. The American profession of arms therefore needs to be wary of replacing the controversial experiment of population-centric counterinsurgency with the equally untested hypothesis of population-centric megacity warfare.

The quickest way to degrade American combat power will be to deploy large numbers of troops into a megacity without a thorough examination of how the complex dynamics of global urbanization are likely to unfold.

When it comes to cities, large and small, security analysts need to understand there will always be a natural set of tensions between the general purpose role of modern landpower and the unique features of

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\(^{52}\) Ibid.
urban environments stemming from the combination of demography and topography.

There are many diverse kinds of urban contingencies to consider in a wide-range of urban localities: from all-out combat operations through humanitarian relief and the creation of protected enclaves and evacuation corridors to littoral operations. Given such diversity, military professionals need to be careful they do not pursue any single avenue of research that might prove to be a policy cul-de-sac. A close study of the phenomenon of urbanization as a future conflict environment is justified, but a convincing case for the megacity as a primary strategic environment for US forces has yet to be made.