

## **Ethical Implications of Humanitarian Operations in Megacities**

By Rhonda Quillin, Editor, Dept of Tactics  
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### **Abstract**

What do megacities, defined by the United Nations as urban areas with populations over 10 million, and the shifting human environment mean for our national interests and military forces during humanitarian operations? Long term strategy is needed in relationship to megacities, not short term responses, to support individual humanitarian efforts.

Presently more than half of the world's population lives in cities and the shift to urban areas continues to grow<sup>i</sup>. In 1970, there were 2 megacities in the world; currently there are 27<sup>ii</sup> and by 2025 it is anticipated there will be 37 megacities worldwide<sup>iii</sup>.

By 2025, some of these cities will have the needed resources and systems to provide for their populations, however most of the new megacities will be in the developing world. These areas have large numbers of poor, and limited resources and infrastructure to support them.

These types of massive, sprawling urban areas may be unable to provide adequately for the population and may be chaotic and dangerous. When effective government agencies are lacking, this may lead to unprecedented competition and often conflict for food, water, and other necessary resources<sup>iv</sup>.

The impact of natural disasters, infectious diseases, and the emergence of criminal and radical groups presents challenges that will have to be addressed. The role of the military, to provide force when needed, to protect our national interests and afford security for humanitarian efforts has often occurred in open rural environments. The trend to megacities indicates that military operations will occur more frequently in urbanized, highly crowded areas, against those who will be utilizing asymmetric/irregular methods.<sup>v</sup>

How adequate is the US military in anticipating future force requirements in immensely populated areas? The ethical challenges of megacity warfare may show that the nature of war and conflict remains the same but the character of war and conflict is subject to change, permitting the US military to adapt to provide security in the dense, compressed environment of a megacity.

Will the uncertainty of the complex environment of a megacity affect future US decisions to support humanitarian operations in megacities? The incidence of megacities are predicted to occur in increasing frequency in the future, the US Army must have the resources and future force structure to be robust enough to operate in these dense, chaotic environments to protect our national interests.

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<sup>i</sup> United Nations, Department of Economic and Social Affairs. *World Urbanization Prospects*. 2011. New York: United Nations.

<sup>ii</sup> Found at 1950 to 2100 <http://populationpyramid.net/world/2015/>

<sup>iii</sup> Information in this section draws upon material presented by Mark Haas at the J7 Futures Human Geography Seminar. Johns Hopkins Applied Physics Laboratory, Laurel, Maryland, June 18, 2014.

<sup>iv</sup> Liotta P.H., Miskel J.F., *The Real Population Bomb*. Washington, DC: Potomac Books; 2012.

<sup>v</sup> Kilcullen D. *Out of the Mountains: The Coming of Age of the Urban Guerrilla*. Oxford: Oxford University Press; 2013: 27-31.

## Rhonda Quillin Professional Biography

Ms Rhonda Quillin is a US Army Veteran and as the editor for the Department of Tactics for over six years, she has prepared coursework for the tactical and operational levels of war. She is a published writer, edits for academic journals and has authored several scholarly studies. Her recent professional papers include “Media and the US Army in Warfare”, and “The Importance of Unit Climate in Affecting Moral Injury”. Prior to editing for CGSC, she authored and edited federal submissions and journal publications for international pharmaceutical companies. She also has written communications for the Food and Drug Administration and the National Health Institute. She earned a BS from the University of Texas-El Paso and an MFA in Multimedia Communications from Abilene Christian University.

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### **Abstract**

What do megacities, defined by the United Nations as urban areas with populations over 10 million, and the shifting human environment mean for our national interests and military forces during humanitarian operations? Long term strategy is needed in relationship to megacities, not short term responses, to support individual humanitarian efforts.

Presently more than half of the world's population lives in cities and the shift to urban areas continues to grow<sup>1</sup>. In 1970, there were 2 megacities in the world; currently there are 27<sup>2</sup> and by 2025 it is anticipated there will be 37 megacities worldwide<sup>3</sup>.

By 2025, some of these cities will have the needed resources and systems to provide for their populations, however most of the new megacities will be in the developing world. These areas have large numbers of poor, and limited resources and infrastructure to support them.

These types of massive, sprawling urban areas may be unable to provide adequately for the population and may be chaotic and dangerous. When effective government agencies are lacking, this may lead to unprecedented competition and often conflict for food, water, and other necessary resources<sup>4</sup>.

The impact of natural disasters, infectious diseases, and the emergence of criminal and radical groups presents challenges that will have to be addressed. The role of the military, to provide force when needed, to protect our national interests and afford security for humanitarian efforts has often occurred in open rural environments. The trend to megacities indicates that

military operations will occur more frequently in urbanized, highly crowded areas, against those who will be utilizing asymmetric/irregular methods.<sup>5</sup>

How adequate is the US military in anticipating future force requirements in immensely populated areas? The ethical challenges of megacity warfare may show that the nature of war and conflict remains the same but the character of war and conflict is subject to change, permitting the US military to adapt to provide security in the dense, compressed environment of a megacity.

Will the uncertainty of the complex environment of a megacity affect future US decisions to support humanitarian operations in megacities? The incidence of megacities are predicted to occur in increasing frequency in the future, the US Army must have the resources and future force structure to be robust enough to operate in these dense, chaotic environments to protect our national interests.

### **Definition and Location**

More than half of the population of the world presently lives in cities and the shift from rural, sparsely populated villages and smaller towns to urban areas continues to grow.

Megacities are defined by the United Nations as cities with over 10 million inhabitants.

Currently there are 27 megacities and by 2025 it is anticipated there will be 37 of these huge sprawling urban areas worldwide.

All of the projected megacities will be littoral cities and while some of these will have the needed resources and systems to provide for their populations, most of the newly emerging megacities will be in the developing world and much less stable. It is anticipated that they will have large numbers of poor, limited resources and insufficient infrastructure to support them.

These projections of massive, sprawling urban areas in developing countries indicate they may be unable to provide adequately for their population and result in chaotic and dangerous environments. When effective government agencies are lacking or incompetent, this may lead to a level of unprecedented competition and conflict for the basics of food, water, and other important resources.

The impact of natural disasters, infectious diseases and predatory criminal and radical groups presents challenges that will have to be addressed. The role of the U.S. military, to provide force when needed, to afford security for humanitarian efforts and protect our national interests has often occurred in open rural environments and rarely in the dense, complex terrain of a megacity. This type of warfare may be the preferred approach of future opponents in the attempt to disrupt and possibly negate overwhelming American military strengths.

Urban fighting has always been one of the most destructive forms of warfare, however historically it doesn't happen too often, perhaps because both sides realize the potential results of casualties and damage.<sup>6</sup> Will the uncertainty of the complex environment of a megacity affect future US decisions to support humanitarian operations in megacities?

### **Occurrence of Megacities**

Today, there are 27 urban areas that can be defined as megacities. The largest city presently in the world is Tokyo, Japan, with 37.8 million residents. However, Jakarta, Indonesia, is growing markedly and may soon surpass Tokyo. Both cities are huge and sprawling, but the difference between the two is that Tokyo-Yokohama contains the world's largest urban agglomeration economy and residents are supported by strong infrastructure and economics. Jakarta, however, is poverty-stricken and most of the regional government's problems relate to lack of resources.

Today, 6 of the 10 largest national populations are located in Asia, and contain approximately just over 60% of the world's population. Within it, China and India possess the largest populations. India continues to be burdened with extremely high rates of abject poverty and communicable diseases and over 50% of the population is under 25 years old. Shanghai, China, while not the largest metropolitan area in the world, claims the title of the largest city proper. Of the countries containing the largest urban areas in the world, Japan has a better level of social welfare with high living standards, despite being very populous.

### **Largest Cities in the World 2016:**

<b>Rank</b>	<b>City / Urban Area</b>	<b>Country</b>	<b>Population</b>
1	Tokyo–Yokohama	<a href="#">Japan</a>	37843000
2	Jakarta	<a href="#">Indonesia</a>	30539000
3	Delhi	<a href="#">India</a>	24998000
4	Manila (Metro Manila)	<a href="#">Philippines</a>	24123000
5	Seoul	<a href="#">South Korea</a>	23480000
6	Shanghai	<a href="#">China</a>	23416000
7	Karachi	<a href="#">Pakistan</a>	22123000
8	Beijing	<a href="#">China</a>	21009000
9	New York City	<a href="#">United States of America</a>	20630000
10	Guangzhou–Foshan	<a href="#">China</a>	20597000
11	São Paulo	<a href="#">Brazil</a>	20365000
12	Mexico City	<a href="#">Mexico</a>	20063000
13	Mumbai	<a href="#">India</a>	17712000
14	Osaka–Kobe–Kyoto	<a href="#">Japan</a>	17444000
15	Moscow	<a href="#">Russia</a>	16170000 <sup>7</sup>



Two examples of countries with most projected growth are Afghanistan and Nigeria. Afghanistan's population in 2015 was around 36,442,000 and in 2030, the projected size will be 47,361,000. Nigeria in 2015 numbered 206,830,000, the projected 2030 populace will be 293,965,000. The US Army has been deployed in both countries and has experienced military operations in large cities in both countries.

By 2030 there will be 37 cities in the world that will be 2-4 times larger than Baghdad is now. Many of the largest and fastest growing cities will be extremes of wealth and poverty. Consider Lagos, Nigeria, with a present population of 21 million people. It is one of the world's faster-growing cities and more than half of its population lives in abject poverty. This type of poverty is extreme, without personal means or government programs and no social agencies<sup>8</sup>. If the country experiences a major natural disaster, epidemic illness or social unrest, the likelihood of needing foreign assistance is great. This may include the US military in the role of support and protection to non-governmental organizations (NGOs)/intergovernmental organizations (IGOs), transportation assistance and providing medical care and expertise<sup>9</sup>.

### **Challenges – Ethical Impacts**

“If you don’t understand the cultures you are involved in; who makes decisions, in these societies; how their infrastructure is designed; the uniqueness in their values and in their taboos – you aren’t going to be successful.” George C Wilson A Lesson Peacekeeping, *Air Force Times*, 11 March 1996<sup>10</sup>.

Since 1999, as designated by the National Defense Reform Act of 1986, the national security policy of the US has changed, there is an interventionist policy what sees the US as the keeper of the world order, peace, health, stability and a host of other conditions whose relationship to US national security interests is obscure or nonexistent.<sup>11</sup>

The challenges and ethical implications of sprawling urban mass on supporting and defending humanitarian operations during threat, disease or disasters is addressed in US Army doctrine. JP 3-06 defines the Joint Intelligence Preparation of the Operational Environment (JIPOE) in urban areas and sums up the details that an urban OE entails. These include (1) complex physical terrain (2) concentrated infrastructure and (3) dense population while the primary focus needs to be on the city’s inhabitants. It is important to know the citizens through an initial population analysis.<sup>12</sup>

Megacity and 21<sup>st</sup> century warfare will continue as throughout the past 2000 years, meaning political concerns will determine the conduct of war. So the political atmosphere in which the US military fights will remain critical. Contrary to the claims of some theorists, technology alone will not eliminate the fear, confusion, ambiguity, fog and friction of battle. Firepower and maneuver will continue to be the critical element in outcomes; neither one by itself wins war, and battle in a megacity environment will require specific OE considerations. The presence of

illegal transnational organizations (TNOs) and terrorists, whose standards and practices differ, cannot affect our willingness to commit to humanitarian support. When our plans are determined by our adversaries, the only absolute is that we won't win.<sup>13</sup>

Some of the concerns of support in the “black hole”, dense environment of a megacity is that our values and norms may be used to our destruction, such as our restrictive rules of engagement (ROE). Even in the uncertainty of urban warfare, the social considerations are unchanged regarding the civilian populace: to minimize civilian interference with military operations, minimize mission impact on the population, and observe the necessary legal, moral, and humanitarian obligations toward civilians.<sup>14</sup>

The human dimension is the essence of the urban environment – understanding local cultural, political, social, economic and religious factors is crucial to success.

### **Problems in Megacities**

1. Dangerous and Chaotic
2. Unreliable electronic abilities
3. Most of the earth's population in those areas
4. 3(4)-dimensional OE

“The environment in which the land force will operate will most likely be the urban littoral. The emergence of unregulated cities, or zones of disadvantage where traditional rule of law models do not apply, within otherwise functional cities, provides a potential haven for organized crime, terrorists and insurgents, from which they can organize and launch operations.”<sup>15</sup>

Re: megacity engagement - an area that someone can sneak up more easily to harm me, blend in with the masses, electronics I use may not work as well, cannot tell the friends from the foe, and the rules of engagement say I cannot react strongly --

- (1) Will I be overwhelmed? Too close contact to maneuver? Too many. . .
- (2) Will I see unclearly? Not be able to work/respond as trained because of the environment/conditions
- (3) Does the job become unclear?

### **Positives in Megacities**

1. Infrastructure may be available
2. Communications may be assisted
3. Some support from parts of the population (most?)
4. Large city environments favor the defender \*

\*This analysis reflects the US supporting/defending humanitarian efforts

### **Missions in Megacities**

In a megacity urban setting, a black hole environment with a dense, compressed atmosphere, choices become faster, more intense, and have further-reaching results and consequences. Also, behaviors will be compressed and “spill” across more actions, while behaviors to affect more people and situations.

A megacity environment will subvert the need for “more time” or “more space” or a “safe area”, even communications may not be completely manageable because of “dead” areas or blocking of electronics by others.

Megacity warfare/protection/support will utilize latest technology and technical support, latest communication systems on the latest devices, but this isn't what wins battles.<sup>16</sup> The US

has battled in the desert, jungle and cities so the nature of war will continue but the characteristics of tempo, and the importance of technology, technical ingenuity, and above all, leadership will be key.

Over the last 20 years, developing nations have added 3 million new people each week, which is the size of adding the city of Seattle to the planet daily.<sup>17</sup> Looking ahead further, by 2050, the trend will have accelerated and even though there will have been massive shifts in wealth and aging, urbanization may still be the key event in human history. Of 100 births at that time, 57 will be Asian and 22 will be African. How many megacities will both areas contain by then?

### **Preparing for Megacity Mission Support**

We must expect a change in venues of military support because we have had a change in opponents. The future world will be different so each city's newest opponent could be any of an array of adversaries: poverty, terrorism, or catastrophe.

The future population growth will be unevenly distributed and concentrated in third world countries (TWC) and many TWCs will have become gigantic. Many will have become unsustainable, chaotic, violent slums, just as they are now but on a gigantic scale. Ex: Lagos in Nigeria is projected to have a populace of 16 million by 2025.

Conflicts may be moving away from rural areas to megacities where technology enables otherwise innocuous groups to establish networks of influence that affects governments' abilities to retain power and defend the population. The future battlefield may be megacities where the role of the US will be to provide force, when needed, to protect our national interests, afford security for humanitarian groups, or force requirements in immensely populated areas.

The engagement in a megacity will be in a dense, and compressed atmosphere (black hole) where the latest technology and support, communications systems, transportation, and fire power isn't what will win the battle. The nature of battle will continue but the characteristic of tempo and the importance of leadership will increase.

The US Rules of Engagement (ROE) will be challenged in megacities where the cultures vary and the adversary is aware that America's center of gravity is a dead or wounded American. However our culture and ROEs are not dependent on conditions or the environment or character of war and our ethics and behavior does not change depending on our adversaries or conditions in megacity environments.

The potential problems of extremism, no national sense of identity, rampant poverty, no plan forward and unmitigated violence may inhabit the dense, compressed environment of megacities. Will these issues and conditions associated with the megacity environment affect our commitment in humanitarian operations in developing nations that the US has committed to?

### **Conclusion: Long Term Strategy Not Short Term Responses**

What do the perceived problems encountered in megacities mean for our forces? US Army values and norms such as using restrictive Rules of Engagement may be used against troops in the megacity by future adversaries, in essence, using our culture and norms against us. The sheer numbers of troops required may also be the problem. With current downsizing plans, will the remaining force structure be robust enough to even operate on a scale necessary in the megacity environment? A long term strategy is needed to successfully engage in megacity warfare, this includes planning for force structure, training in black hole environments, and knowing the human dimension: culture, political, social, economic, and religious factors in the world.

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<sup>1</sup> United Nations, Department of Economic and Social Affairs. *World Urbanization Prospects*. 2011. New York: United Nations.

<sup>2</sup> Found at 1950 to 2100 <http://populationpyramid.net/world/2015/>

<sup>3</sup> Information in this section draws upon material presented by Mark Haas at the J7 Futures Human Geography Seminar. Johns Hopkins Applied Physics Laboratory, Laurel, Maryland, June 18, 2014.

<sup>4</sup> Liotta P.H., Miskel J.F., *The Real Population Bomb*. Washington, DC: Potomac Books; 2012.

<sup>5</sup> Kilcullen D. *Out of the Mountains: The Coming of Age of the Urban Guerrilla*. Oxford: Oxford University Press; 2013: 27-31.

<sup>6</sup> Scales, Robert H. Jr., *Future Warfare Anthology Revised Edition*. Strategic Studies Institute, US Army War College. Carlisle Barracks, Penn. 2000.

<sup>7</sup> Found at World Atlas at [www.worldatlas.com/citypops.htm](http://www.worldatlas.com/citypops.htm)

<sup>8</sup> Found at [www.citymayors.com/statistics/largest-cities-population-125.html](http://www.citymayors.com/statistics/largest-cities-population-125.html)

<sup>9</sup> JP 3-29. II-39 (4)

<sup>10</sup> Wilson, George C. A Lesson in Peacekeeping, *Air Force Times*, 11 March 1996

<sup>11</sup> Starry, Donn A. Aug2000 *Future Warfare Anthology Revised Edition* Strategic Studies Institute. US Army War College, Carlisle Barracks, Penn.

<sup>12</sup> JP 3-06 A-1

<sup>13</sup> Scales, Robert H. Jr. *A Sword with Two Edges: Maneuver in 21<sup>st</sup> Century Warfare*. STRATEGIC REVIEW Vol 27, #2. Spring 1999

<sup>14</sup> JP 3-06 II-4

<sup>15</sup> McLeary, Paul, Defense News, *US Army Sees 'Megacities' As the Future Battlefield* Aug 31, 2014

<sup>16</sup> JP 3-10 III-8

<sup>17</sup> McLeary, Paul, Defense News, *US Army Sees 'Megacities' As the Future Battlefield* Aug 31, 2014